

Sustainable strategies for consuming on-the-go

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This project was done independently from any
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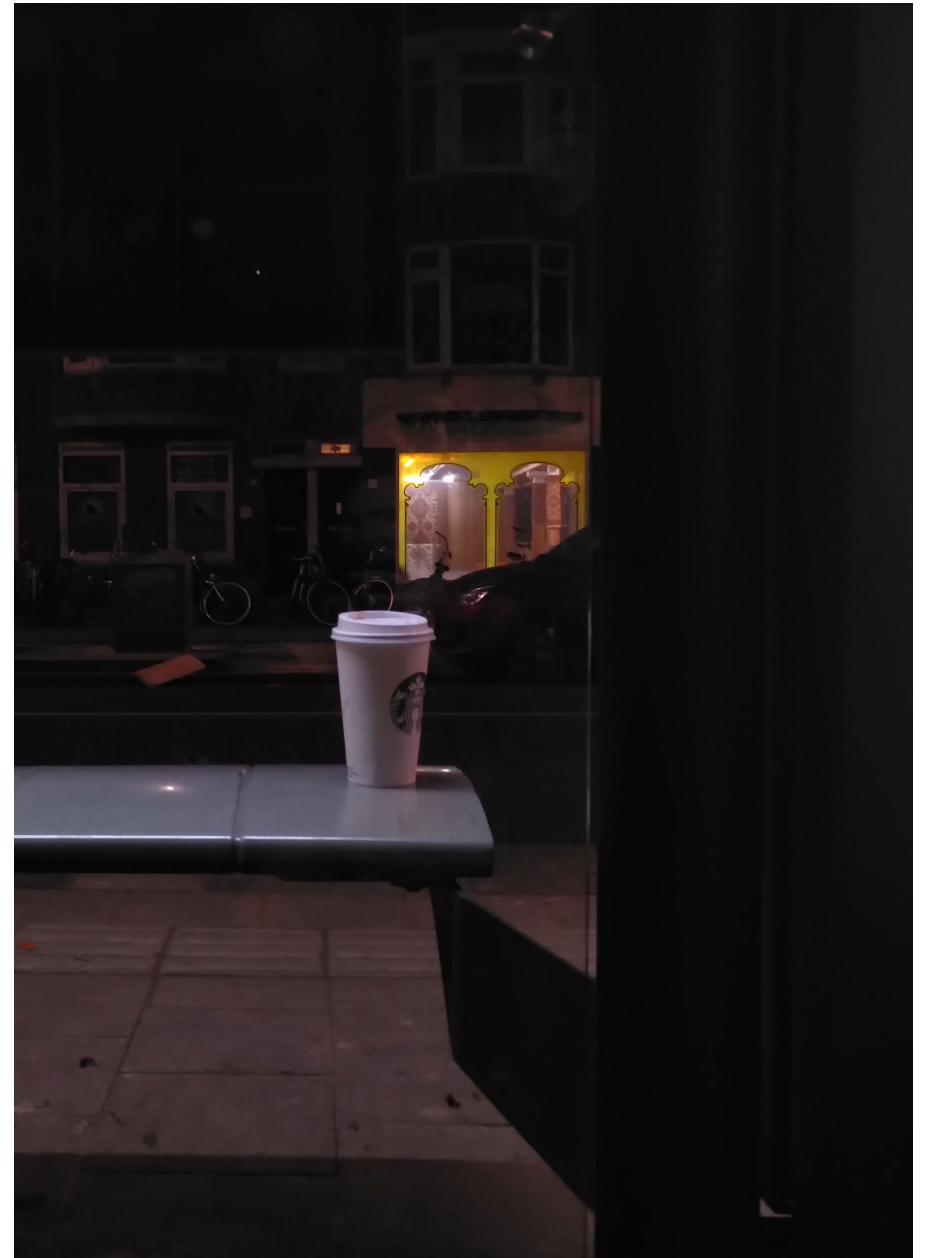
Abstract

The way we consume when we travel has had a bigger influence on the environment than meets the eye. We see the cups being thrown away, but we do not see the overconsumption, the dodging of responsibility for sustainable production and the food losses. Our quest for convenience has led us to behave in the most environmentally unfriendly way possible.

To contribute to the sustainable development goals of the UN and strive for a more balanced world, this project created a possible sustainable strategy for consuming on-the-go in 2036. The desired change is constructed using the ViP-method and Social Practice Theory. In the first part of the report, the current practice is deconstructed and we try to fully understand its impact on the environment. The next chapter uses context factors to make a prediction about the practice of 'consuming on-the-go' in 2036. This context is visualised in a future framework. Based on this overview, in combination with the vision of the project, a desired future is presented in the form of a vision statement. By rearranging the social construct of consuming on-the-go out of convenience to one with a motivation of self-care, the practice arguably becomes a more sustainable, and thus desired, one.

An intervention to get from the current practice to a desired one in 2036 could be a product-service system named 'Tend'. This concept consists of a new system that supports the self-care journey and a digital platform with a product to help actualise your intentions concerning your well-being. The value for the user is added when Tend suggests a consumption that suits your needs at that moment best.

To show how the concept could find its way into reality, a roadmap visualises proposed steps for the service based on the changing context. These parts of implementation are plotted over time and construct a desired final practice in 2036. Afterwards, an impact analysis compares the old practice to the new one and discusses in what ways Tend leads to less negative impact concerning production and more positive impact concerning health and consumption. This validates the importance of such a transition and shows the value of this projects' contribution to a more sustainable consumption on-the-go.



Prefay's

You are about to dive into a report that describes a project that was done by me, Fay. Before taking a leap into these pages, I want to introduce you to the foundations of this mind palace.

"Who are you graduating for?", was a question I got asked a lot. The answer is 'for me'. The process and theme that this project entails are ones that I am incredibly passionate for and still eager to learn a lot about. Even though there are no direct stakeholders, I feel the stakes are high. Using what I learned the past 5 (okay maybe 6.5) years to design for a better future, even though it is just a small part, makes every all-nighter worth it.

During this project, I got all the freedom I needed to do (and enjoy) the process. The fine balance between this and focus on tangible results was kept by the great people around me. Especially the meetings with Matthijs and Charlotte helped me to get the thesis as it is today. I want to thank them

for sharing their knowledge and sending me back to the drawing board a couple of times without any judgement. Equally important was the weekly meeting with my father, Guido, which worked great for me as a designer but also meant a lot to me personally, as a daughter.

The support did not end there. My roommates Sita and Xander were critical of my research at times, reacted truthfully to every idea and eventually made home a place for me to also relax. I want to thank Jonathan for making the beautiful and raw pictures in this report and Stan for helping me with the prototype and the mock-ups. Additionally, my gratitude goes to Koen, Eva and Joanna for going through the report to lift it to a higher level.

Finally, I want to thank Billie Eilish for making the music on her album 'Happier than Ever' that was the irreplaceable source of motivation, focus and mental support I needed to finish this project.





Working from home can be a blessing and a curse.

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Reading guide



To clarify certain sections in the text, I use colours that identify the function of that piece of text. No colour means that the text is part of normal text.

D// The D stands for definition. When a square is pink, a certain term or behaviour is defined.

Q// A Q means quote and is supported with an orange square. This way, the insight shared by third parties are highlighted from the text.

M// M stands for method and explains the way I have researched or approached something. This is surrounded by a yellow box.

In the introduction of every chapter, I visualise where we are in the process (introduced in 1.3) using the minimalistic rainbow below.



In some parts of the project, I use common abbreviations. In the following table, they are spelled out for you to understand.

List of abbreviations	
OTG	on-the-go
CAC	Customer Acquisition Rate
SDG	Sustainable development goal
MaaS	Mobility as a Service
ViP	Vision in Product design
A	used to indicate starting point
B	used to indicate ending point
U	user
UN	United Nations
IPCC	Intergovernmental Panel on Climate Change
SU or SUP	Single-use or Single-use packaging



ONZE KOFFIES

	SMALL	NORMAL	GRAND
ESPRESSO	2.20		
RISTRETTO	1.90		
KOFFIE (ongep)	2.30	2.60	
LATTE MACCHIATO	2.20	2.70	
CAPPUCCINO	2.20	2.70	
KOFFIE VERKEERD	2.20	2.70	
THEE	1.90	2.20	
WARME CHOCOLADEMELK	2.20	2.70	

Warme BROODJES

PANINI	
HAM KAAS	4.40
jeugd Smaat, ham	
CAPRESE	4.40
Italiaanse, tomaat, pesto	
CRUSTY BOULETTE	4.40
kalkoenbolletje, jeugd Smaat, kaas	
CHICKEN CAJUN	4.40
garnituur, paprika, mozzarella, kerriepoeder	
CHICKEN PEPPER	4.40
garnituur, paprika, mozzarella, witte peperkorrels	

SCHIACCIATA	INDIANEN OVERBROOD
SERRANO & MOZZARELLA	5.40
tomaten, kaas, tomaat, pesto	
KIP & SALSA	5.40
maas, gerasmeerde kip	
SALMON & BOURSIN®	5.40
salmon	

KIES JOUW broodsoort

MEERGRANEN	+€0.30
WIT RUSTIEK	
DONKER RUSTIEK	
WIT	



1. Introduction

In this first chapter, the **scope** of the project is set to sustainable consumption on-the-go in 236 and the limits in which the research and design is done are clarified. The **relevance** of each component is strongly related to the health of our planet and ourselves, this indicates why it is important to dedicate time and effort to this subject. The **design goal** integrates this scope with personal ambitions and hopefully a better, more sustainable world. Finally, the **method and framework** propose the manner in which this goal can be reached most successfully within the limited time: Vision in Product design and Social Practice Theory. Describing the method is a great way to define next steps and the framework helps to make sense of certain complex parts of the project.

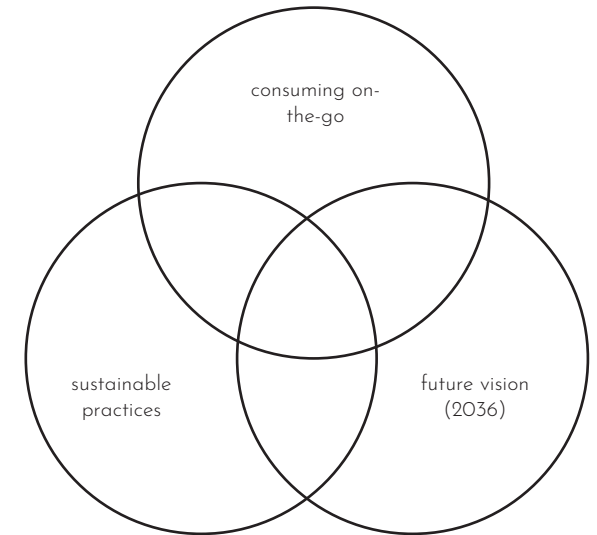
1.1 Scope and relevance

The goal of this project is to understand how people currently consume while being on the move and how they will do that in 2036. Based on this, a valuable intervention is developed to make the practice more sustainable. ‘Sustainable strategies for consuming on-the-go’ is a topic that was carefully composed, at the intersection of personal interests and important themes: consuming on-the-go, sustainable practices and future vision.

Consuming on-the-go

Consuming on-the-go is a practice that is visibly and increasingly common in Western society (Sands et al., 2019). Although definitions of the practice itself in literature seem to be variable in scope (USDA, 2013; Benoit et al., 2016), the common perception of the growth in consumption of beverages and food on-the-go is attributed to the accelerating pace of our world (Rosa et al., 2017; Heider and Moeller, 2012). This faster pace is the result of major changes in our society such as the increase in working women, working hours and extracurricular activities (Janssen et al., 2018; Skoda, 2017). Not only do these macro-trends lead to OTG consumption, OTG consumption also leads to a change in consumer behaviour concerning the intake of food and beverages (Adams et al., 2015). The growing impact of this practice is worth researching and designing for.

D// In this project ‘consuming on-the-go’ is defined as the practice where people move from A to B, during which they buy and consume food or a beverage after they have left A and before they arrive at B. In image 1.1, you can see how this differs from other food consumption types.



Sustainability in consuming on-the-go

The release of IPCC’s Sixth Assessment Report has made it clear once more, sustainability is a major topic right now. One part is the ease in which we generate waste by producing single-use items, defined in Sustainable Development Goal 12: ‘Responsible Consumption and Production’. This SDG is one that encourages people and organisations to tackle waste management and the production of disposables (Gasper et al., 2019). A sector where this is very obvious is the to-go food and drink industry (Hirth et al., 2021) and their impact is growing, because the amount of beverages and food bought and consumed on-the-go is increasing (Heider and Moeller, 2012; Kugelman, 2009). This sector allows people to be flexible, enjoy freedom and efficiency, but the downside is that the product containing

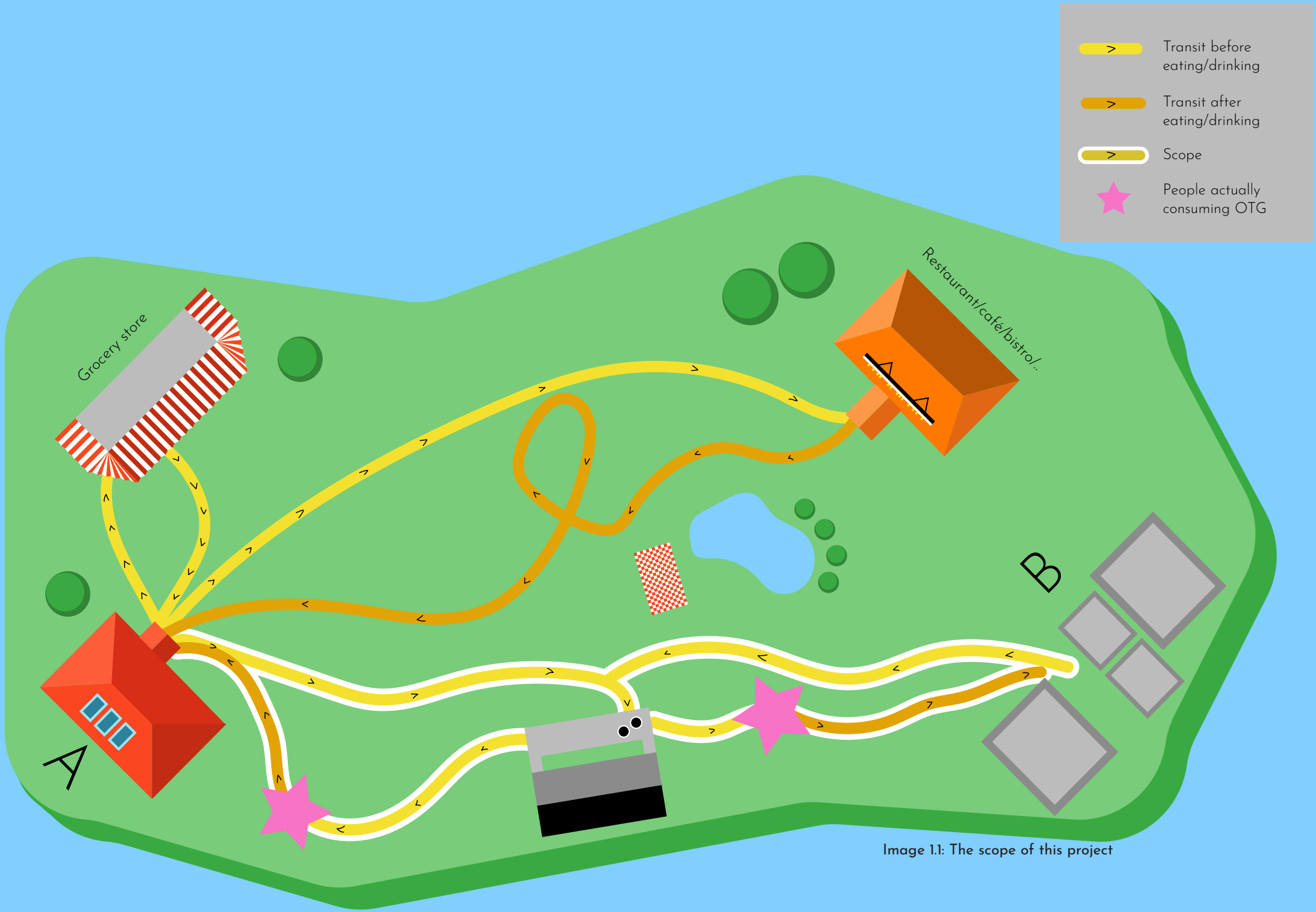


Image 1.1: The scope of this project

the beverage or meal is a standard single-use item with little to no incentive nor opportunity to responsibly dispose of (IntegraFlex, 2018). Eventually, all of this behaviour leads to more litter (Zwerfafval, n.d.) and a bigger pile of garbage that can not be recycled correctly (Smithers, 2020). To design a solution would mean engaging people in a different practice that leads to a reduction of resource usage and trash. The stakes are not only for our planet, but people's behaviour and experience can be heavily influenced by stepping away from business as usual.

The impact does not seem to stop growing as sustainability gains importance on our world's agenda. Trends show there is an increasing market for convenience foods (Sheely, 2008). These are products that are prepared to some extent by the retailer, taking over some of the tasks for the consumer. Ready-made products are the foods and drinks that are completely finished and ready to eat in this category. This is the most popular category to consume on-the-go, showing growth in this market as well (IGD, 2021). Next to that, the current developments in urban planning, technology, consumer and corporate economy lead to believe that this is likely to persist. In essence, food and drinks on-the-go is part of long-term trends towards convenience and other complex social-ecological processes and this raises the issue of packaging and waste (Hirth et al., 2021).

The current practice is known for its excess of single-use packaging and excess production (image 1.2). To tackle SDG 12, we therefore need to intervene and strive towards the minimising of waste in the new wave of foods on the go.



Image 1.2: Picture taken close to the Coolsingel in Rotterdam on 5 February 2022



1.2 Project goal

The goal of this project is to develop an understanding of the foreseen future practice of consuming on-the-go in 2036 and design a more desirable one. Using the ViP-method described in chapter 1.3, a clear vision on how people will behave in this desired future arises. The design should intervene in a manner that effectively guides people from the current practice to the desired one. As described in 1.1, there is a lot to do to make the behaviour more sustainable. That is why eliminating waste streams, minimising impact on the environment and contributing to positive effects will be embedded in this vision. The form of the final design remains open to be the most

effective intervention towards a more sustainable way of consuming on-the-go.

Future vision

I want to reach the primary goal of developing a more desirable practice by 2036. This seems far enough in the future to break with current developments and introduce a whole new practice that holistically improves consumption on-the-go. This time-frame roughly correspondends with similar development projects and the timeframe of sustainable goals of multiple nations. When exactly what kind of intervention is done remains open, so the project can reach the most optimal design.

1.3 Framework and design approach

To design a sustainable practice for 2036, I need a vision that is 'firmly rooted in a deliberately constructed future world'. The 'Vision in Product design'-method is a method that foremost supports the design of the 'raison d'être' and therefore defines the goal prior to the means (Hekkert and Van Dijk, 2011). The process suits this project because of its analytical yet disruptive nature. To make consumption on-the-go a sustainable practice, we need to break with current habits and reconfigure the system as a whole.

To guide the transition of one practice to a more sustainable one, Lenneke Kuijter developed an approach that uses Social Practice Theory as a framework (Kuijter, 2009). In her thesis, she proposes the use of a practice as a unit for analysis and a unit for design. The ViP-method also has a phase that focuses on the analysis of the current situation which they describe 'could be a practice'. In this project, the hypothesis whether 'the ViP-method could benefit from the framework of Social Practice Theory as it can give deeper and broader understanding', is tested.

D// Social practice theory decomposes shared behaviour types based on the action itself, instead of the human that acts it out. From this practice-centred approach we deconstruct 'consuming on-the-go' as a practice that arises through meanings (values or drivers: 'why do people do this'), stuff (products and bodies, 'who and what is involved in this practice') and lastly skills (learned routines, 'how can it be done')(Shove et al., 2012).

In image 1.3, you can see the ViP-method adapted to the requirements of my project. The order and content of these stages correspond roughly with the structure of this report so I will refer back to this method in the introduction of the sections.

In the introduction (chapter 1) above you have already discovered the scope and framework of this project. That was the first step, at the left bottom. From this we go up, then to the right, and down again. In the second and third stage, the practices are deconstructed to understand the system (chapter 2). Congruent with the people, profit and planet trinity, the practice deconstruction (people) is made complete with an analysis of market activity (profit) and the impact on the environment (planet). The deconstruction of the practice is done using Social Practice Theory, building upon the framework of meaning, skill and stuff. Together, this should give a good overview of the system. Fourth, context factors are collected to design a future context in which the system will be situated (chapter 3). From there, desired practices are developed (chapter 4) and the intervention that leads us there takes form in the final design. How this systemic change would take place over time is proposed in the form of a roadmap and its points of intervention in the same chapter 5.

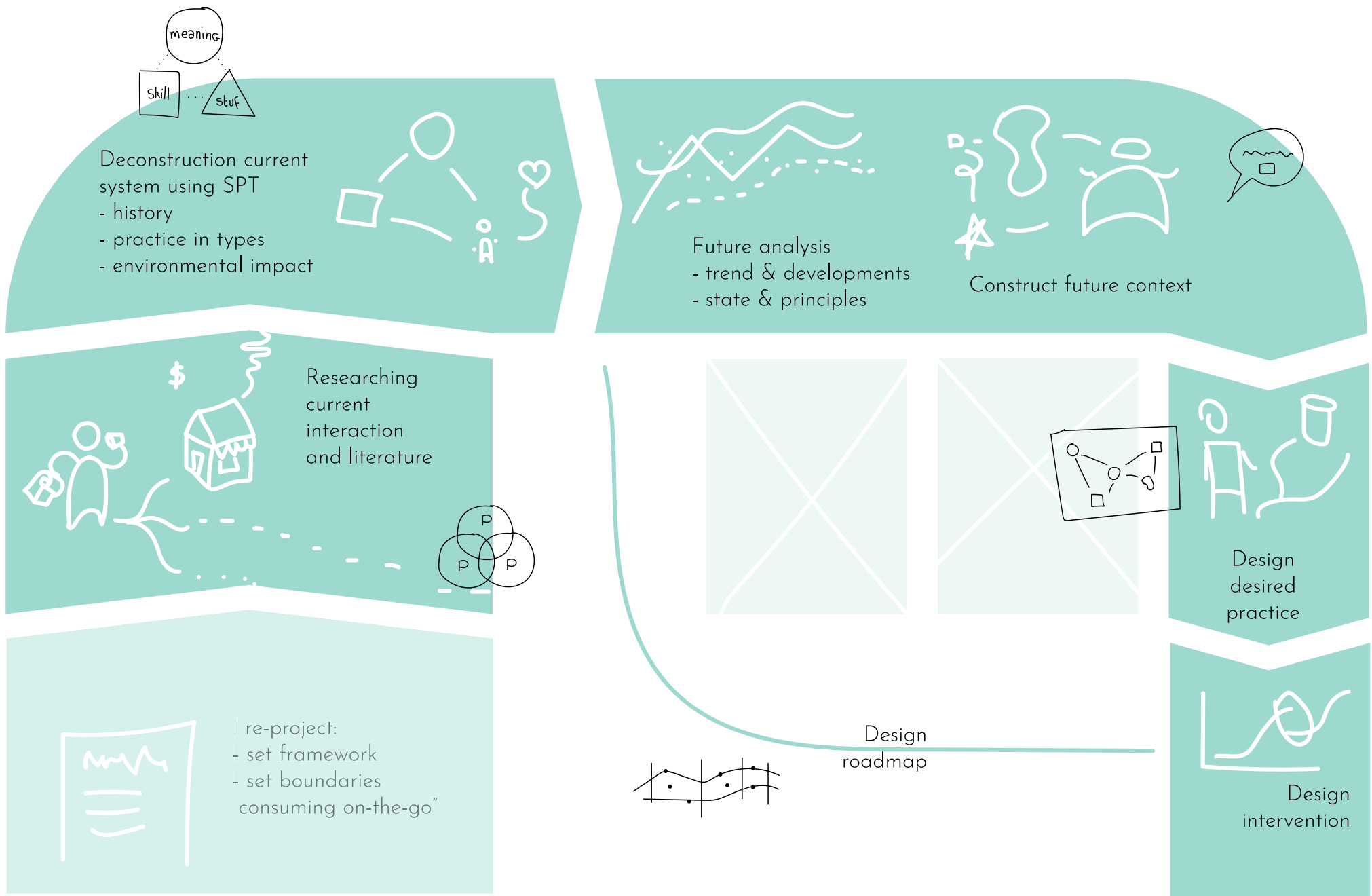


Image 1.3: The ViP process freely adapted to this project

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HEMELSE SMAAK,
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SPALDING
MADE IN THE USA





2. Deconstruction current practice

In order to design a better and more sustainable way to consume on-the-go, we must understand how the current practice works and how it came to be that way. In this chapter, the method of Lenneke Kuijter is proposed to analyse consuming on-the-go. It starts with the **history** that shaped it. After that, the **current shared behaviour** is analysed throughly by using different sources. Qualitative user interviews indicate 4 types of practises that share actions, beliefs and products and these can be distinguished at the end of 2021. Next to discussing the people-side, literature is used to **understand the market** and the **current impact on the world** and why that might be undesirable. This content is used later (in chapter 5) to assess the validity of the concept by comparing the current impact to the impact of the proposed new practice.

To understand the current practice of consuming on-the-go, the analysis uses parts of the framework that Kuijer proposes (2009) in chapter 5 'practice as a unit of analysis' and that is introduced in this reports introduction (chapter 1.3). In the introduction it is stated that the 'disposition of the designer conducting research is basically different from that of a social scientist, whose main concern is to gain understanding of something. This does not mean that the designer does not strive for understanding, but understanding is not the end-result; it is required for the identification of opportunities for intervention' (Kuijer, 2009). However, the ViP-method uses another way to identify opportunities, and these are situated in a future context. That is why this framework will be used uniquely for understanding the current practice but not for the identification of opportunities to design for.

Adapting the method of analysis

Kuijer starts with the importance of framing the practice broad enough to keep an open mindset but not too broad so that it remains possible to analyse within the set time. I do this in the scope as part of the introduction of my project (chapter 1.1) She then goes on to quantify the amount of impact the consumption has on the environment (e.g. amount of liters wasted while showering) and follows this with historic trends. It is interesting for this project to make sense of the sustainable impact in this framework as well, but in a more broader sense where I do not measure the amount of resources wasted but discuss the impact on relevant SDG's. After discussing the consumption indicators, Kuijers goes on to map the history of the practice itself before concluding with an overview of the current practice. Then, the projects

go on to the design-phase and a target level is set for the impact of the new practice. This method is less helpful for my project because the design is not a result of changing this practice based on reducing the impact but rather creating a practice that is inherently more sustainable. In the conclusion of the discussed projects, Kuijers compares the impact of her solutions with the current averages in consumption. This is a good way to validate whether the change is desirable and will be used for this project as well.

In the Implications of Social practice Theory for Sustainable Design (Kuijer, 2009), the development from the industry itself is not thoroughly discussed, even though this is often a major driver for consumer behaviour (Verganti, 2009). I propose to add this and reorganise the insights to create an overview in which sociological understanding of the practice is the priority. In the chapter, the history of consuming OTG is discussed first. Starting with a literature review of the practice itself (people), then insights on

“Designing the future: Online, offline and in person. We don't predict the future, we influence it and we design it”

- Fitch, 2020

the market behaviour (profit) and ending with the consumption indicators (planet). Secondly, the current state of consuming OTG is analysed. This is primarily done with in-depth interviews to get a full overview of the practice. After that, an understanding is made of the current sector and its relations. And finally, a quantification of the current consumption indicators clarifies the impact on the environment.

2.1 The history of consuming on-the-go

Urban policy and the market's desire for growth has led to an increase of convenience foods. Because of a more liberal governance in the Western society, protective retail planning policy was abolished that was an incentive for retailers to downsize retail surfaces (van der Krabben, 2009). Simultaneously, the previous innovation that switched from grocery stores to supermarkets

around 1980 had bled out and the sector was looking for new ways to differentiate themselves (Ross, 2016). Providing higher margins on lower surfaces, Hirth et al. identifies the convenience stores as the answer in their research on the OTG-consumption sector because “the gastro industry’s economic situation itself suggests that stakeholders saw OTG as a way to ‘innovate in what has been quite a traditional [and at the time barely dynamic] sector’” (2021). Selling (partially) pre-made foods and drinks matched the changing lifestyle of the consumer, who responded well towards the new found efficiency (Brewis & Jack, 2005) by utilising the offer in large quantities. The solution is not only convenient for the consumer but also for the grocery sector to capitalise upon. With a push from the corporations, an industry for convenience food and drinks was created and food on-the-go is part of this broader trend towards consumer convenience (Hirth et al., 2021).

The sale of convenience foods undeniably goes hand in hand with single-use plastic packaging which has been defended as a necessity to ensure hygiene and safety (Dallyn & Shorten, 1988; Kamboj et al., 2020). This gained importance due to the urbanisation and the easy spread of diseases in high population areas and more recently pandemics. In addition, extending shelf-life and therefore avoiding food-waste with plastic packaging (ACC, 2015) has been used as an argument in favour of sustainable development.



Poster upload by Lukeruk on dreamstime.com

2.2 Consuming on-the-go currently

Types of practices in consuming on-the-go

M // To understand how people generally behave in the current system, customer journeys were created using the framework of the social practice theory. To inform the research, five in-depth interviews were conducted and four cities were covered for field research (city centre and central train station). Based on this, an extensive overview of the practice emerged, visualised and described in Appendix B.

Thanks to this overview, it was possible for every sub-practice to map why they did what they did (meaning), the products or other things they used (stuff) and the abilities they have to undertake certain actions (skills). And from this, four types of practices emerged. These practices share the same meanings, stuff and skills and are interesting to discuss further.

Type 1: Consuming on-the-go while on a walk

Enjoying a break from the place you are at (like your home or your office) often is accompanied with consuming on-the-go. People link a consumption to a reward or other enhancement of the relaxing experience. The shared meaning is the virtue of taking a physical break that involves low digital interaction and some bodily activity. Skills that become apparent are the ability to assess and allow when your body or mind needs a break. Also the knowledge on where to go to satisfy your needs. There is little stuff involved since the practice is aimed at relaxation and winding down,



Type 1: Two girls taking a break from school



Type 2: Girl going from subway to work



Type 3: Two women shopping in Paris

but a payment method (like card or cash) and keys to reenter the location are necessary. Personal values, budget and the periodicity of the practice determine the luxuriousness of the consumption.

Type 2: Consuming OTG during daily commute

During the daily commute, consumption is mostly avoided because of the meaning that 'these convenience items are a waste of money'. However, other meanings like 'boredom should be avoided at all cost', 'transportation is a waste of time so it better be combined with another task (like eating)' and 'coming into the office you should be energised' are all pushing towards consumption on the go. A skillset for this is very low since the transportation is done habitually and therefore requires low cognitive intervention. Some people however, find it difficult to find their standpoint between the two opposing sets of meanings and need to make a decision, which requires some rational skills. The stuff for this journey relates to 'exceptional commute', namely a container, like a bag, to move the items you need at the destination or during habitual activities during your commute.

Type 3: Consuming OTG during exceptional commute

When transiting from A to B on a non-regular basis, the commute feels exceptional. For example when you go visit your parents, have a date in Amsterdam or want to see Froukje perform in a club. Therefore, set meanings are different and people allow themselves less rational treats. Doing something that is outside of your normal behaviour is also seen as uncomfortable and tools, like food or drinks, that can make the activity more pleasant are considered more openly. In addition to that,

the meaning of 'energising your body is important' is always apparent, but now travel can become an obstacle. Therefore, anticipating this meaning, the choice for consumption is made more rapidly. Stuff involved in this commute are higher in volume and more variable than the first one, since you are dealing with alternative transportation vehicles, not only walking. The practice ends with 'being at another location' which requires the transportation of stuff as well, like a present for your mum, lipgloss or your camera. Lastly, skills are more aimed at planning and flexibility in the transportation activity, whereas making the choice for consumption is almost made for you when providing opportunity.

Type 4: Consuming OTG during travel

During travel, consuming on-the-go shares a lot of features with 'exceptional commute' but the transit is more intense (in time or in length) and often for relaxation or work, for example going on a weekend-trip to Maastricht or a creative week in Paris. People are in unknown surroundings and find comfort in consumption. Just like 'exceptional commute', the transportation of clothes and other items that are needed at the end location can be labelled as stuff. But in this typology, a meaning that gains importance is the idea of 'a buffer'. People do not have enough confidence in the planning and want to account for unexpected delays. In combination with a lack of rush since travelling is usually done as leisure, people calculate their planning with a reasonable time-buffer. When this time is not used to resolve setbacks, it automatically becomes waiting time. In waiting time, people are more likely to consume.



Type 4: A man waiting to get into his hotel

“Impulsiveness increases the effects of value for money perceptions on OTG consumption intention, while health orientation enhances the relationship between customer service and satisfaction”

- Blut et al., 2020

Current sector overview

The overall strategic marketing components of on-the-go consumption include location, merchandise, communication, price, services, physical attributes and personnel (Monash University, 1970). A meta-analysis finds that value for money is the most important determinant of consumer satisfaction of a retail store (Blut et al., 2018). Three context factors moderate the effect of value for money: health orientation, time pressure and impulsiveness. The same research explains that the intention of OTG consumption is related to impuls but satisfaction is more related to health orientation.

Impact on sustainability

The Sustainable Development Goals set a universal agenda for developments until 2030. They are part of a global plan to protect the planet, end poverty and ensure prosperity for everyone. The set of 17 goals provide focus and are a tool to measure efforts of local, regional, national and even international projects.

As described in the introduction of the method used this chapter, designing for sustainability should begin with analysing the current impact. Using the SDG's of the UN is a holistic way to approach environmental impact, but also social and economical impact. The exact SDG that is discussed is mentioned in the box below the title.

Waste (Front-of-store, back-of-store and pre-store)

SDG 2 'zero hunger', SDG 12 'responsible consumption and production' and SDG 14 'life below water'



After the consumption of to-go foods and drinks, the package or container is thrown away. Mostly, the life-span of such a product is very short and its functionality relatively low, only hygiene and convenience. However, this product does need resources to be made, transportation and after use adds to the pile of garbage that can not be reused and is seldom recycled (World Economic Forum,

2016). There seems to be a lack of reflection on the benefits the product delivers and the impact on the environment. And this is not a small problem. For example, single-use coffee cups are thrown away by the 15 billions annually in Europe (Statista, 2019). The plastic soup right now consists of plastic packaging for 40% (Plastics Europe, 2019) but there are no sources yet on what the proportion of take-away containers' waste is (Chua, 2019). If we continue the way we do now, the market for single-use plastic packaging is expected to grow 4.2% annually in the coming five years (Mordor Intelligence, 2021).

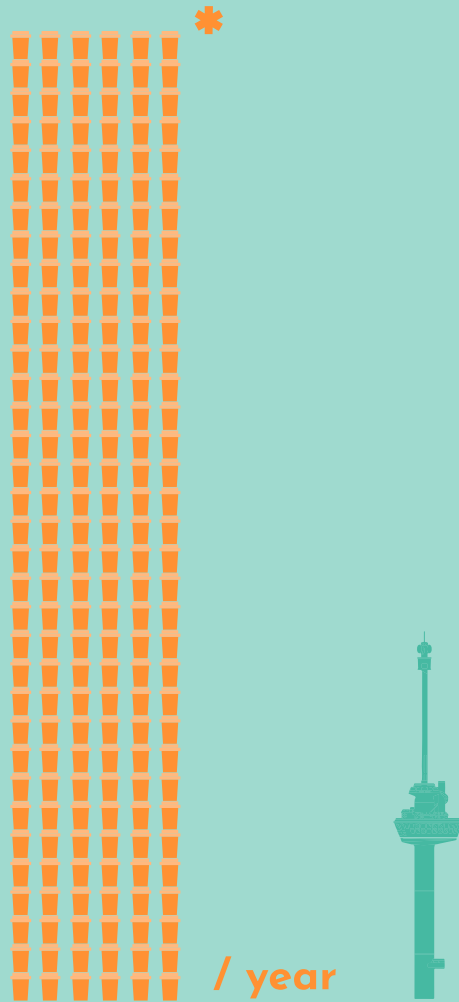
Selling foods or drinks that are finished on order requires a lot of pre-made products. These products are packaged for hygiene, frozen so they can last longer and sometimes packed per portion for efficiency. This all has a negative impact on the environment, without the consumer even knowing.

Every year, 33% of food produced world-wide goes to waste (WWF and Tesco, 2021). Food waste is a common sensitive subject in a world where people still die of hunger and malnutrition, (Gustavsson et al., 2011) and the number of victims is growing (Frijters, 2021). This is not exclusively attributed to industrial loss but also in-store and consumer waste (Evans, 2014). In Hirth's et al.'s paper, it is even mentioned that back-of-store waste overshadows consumer waste due to increased food hygiene, safety measures and protection of the ingredients during logistics (2021).

Most foods and drinks have a fairly short expiration date and to ensure quality and hygiene, these dates have a bigger margin as

a safety factor (Hirth et al., 2021). This means establishments are not allowed to sell products, even after a relatively short shelf-life. This leads to stores having to throw away unsold goods. There are some initiatives to solve this problem like Too Good To Go and the Voedselbank (Too Good





*With the amount of cups thrown away on a yearly basis in the Netherlands (3.25 billion) you can build 6 towers (cups are 80mm on average) that are this high compared to the Euromast (Scherp; 2022; measurement in a shop).

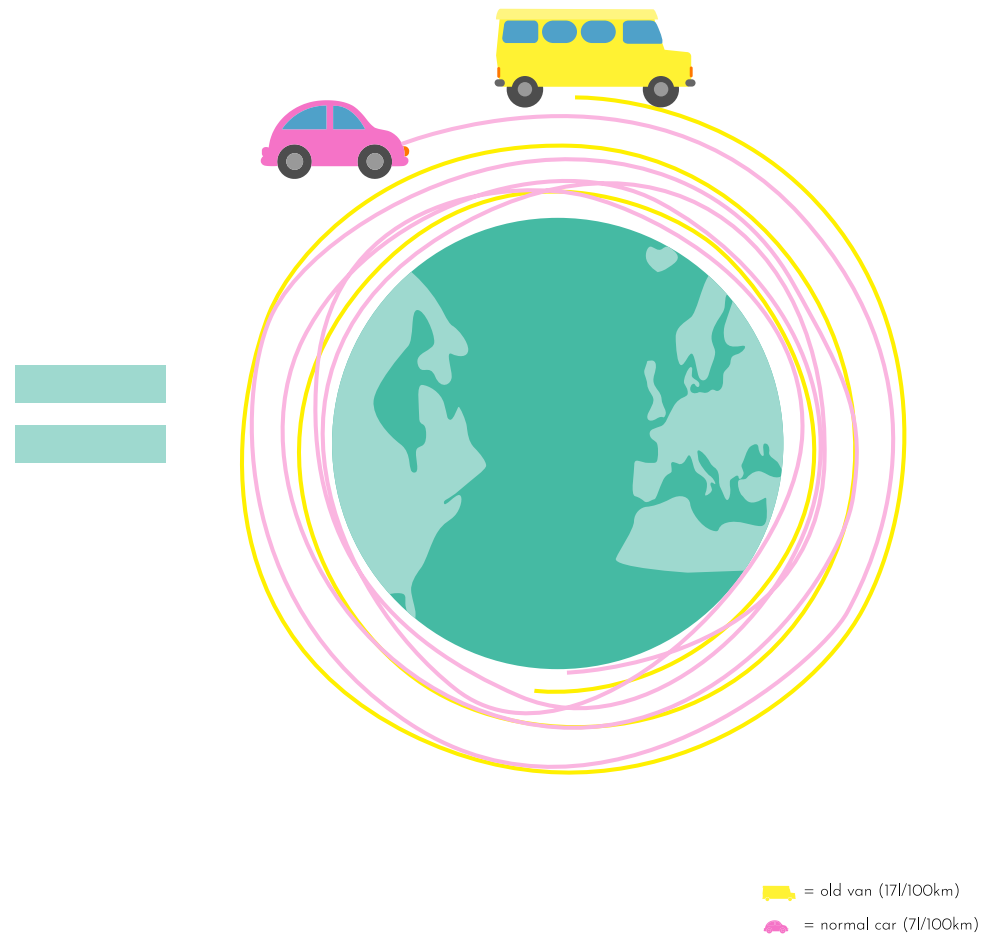


Image 2.1: An example of the impact of single-use cups in the Netherlands. The amount of kgCO₂ used to produce and process the waste of the cups in this small country on a yearly basis is the same as when you drive around the world 2.5 times with an old van or 4.5 times with a normal car. (CBS 2021; Greentripper, 2020; Schep, 2022)



To Go, 2021). Things that are done to prevent this have a big impact on the climate as well like packaging, refrigeration and preservatives.

Waste also happens before it even arrives at the store (pre-store). Larger brands have suppliers that deliver their pre-packaged convenience for them on a daily basis. The order is placed just hours before the delivery has to take place and therefore the suppliers have to produce part of the products in advance. When an order is smaller than expected, the supplier has to deal with surpluses that they can not resell because of the branding on the products. This leads to food waste.

Overconsumption

SDG 3 'good health and well-being' and SDG 12 'responsible consumption and production'.



In addition to the wastefulness of the packaging, on-the-go consumption is also regarded as an impulse-driven practice (Shiv & Fedorikhin 1999). Many factors lead to choices that are not congruent with long-term goals (Sands et al., 2019). A large part of this is simply attributed to the unhealthy and unsustainable product range of convenience stores (Heider & Moeller, 2012). But of course, impulsive unhealthy purchase does not arise from the offer alone since there are healthy and eco-friendly alternatives out there. Behavioural theory suggests that consumer decisions are based on attitude and the translation of that attitude into behaviour. Among the attitudinal variables

are time-pressure (Vermeir & Van Kenhove, 2005) and choice-overload (Iyengar & Lepper, 2000). The behaviour that emerges is often unplanned and based on immediate emotional preferences instead of long-term evaluation (Dholakia, 2000). A study suggest that from takeout and delivery buys, 29% is impulsive (Ford, 2020). All this leads to the purchase of relative vice products (Sprotles & Kendall 1986). Vice products are often unhealthy and they trigger regret (Thomas et al., 2012) and overconsumption (Wertenbroch, 1998).

Irresponsible production

SDG 12 'responsible consumption and production' and SDG 8 'decent work and economic growth'.



In 1953, a consortium of companies arose under the name 'Keep America Beautiful'. What happened? They tried to sensitise the citizens of the US to clean up and recycle single-use plastics with campaigns and workshops. They guilted the consumer and prevented legislation that could ban their current practises. In the documentary 'Broken', this action is allegedly a shield for 'corporate polluters from blame by shifting responsibility onto individuals' (Cechin-De La Rosa, 2019). And

we still see this today: initiatives revolve around improving consumer behaviour by promoting recycling instead of industry responsabilisation of wasteful products. However, 88% of US and UK customers want brands to help in making sustainable choices on a day-to-day basis (Futerra and OnePulse, 2018). Environmental and social impact is simply too complicated or not beneficial at the Point of Sale for a company and therefore avoided. Labels are unclear and transparency lacks, making it almost impossible for customers to be held fully responsible at the moment of purchase, especially on-the-go.

It should be noted that the to-go market provides a lot of employment throughout all kinds of demographics and education levels, from ingredient production to transport and food preparation or sales (Lipow, n.d.). To discharge this sector completely would mean economic destabilisation and this is also undesirable.





Sage Donut
1.80

White Chocolate Brioche Donut
2.80

Brussels Waffle
4.00

Salted Caramel Muffin
3.10

Chocolate Chip Muffin
2.50

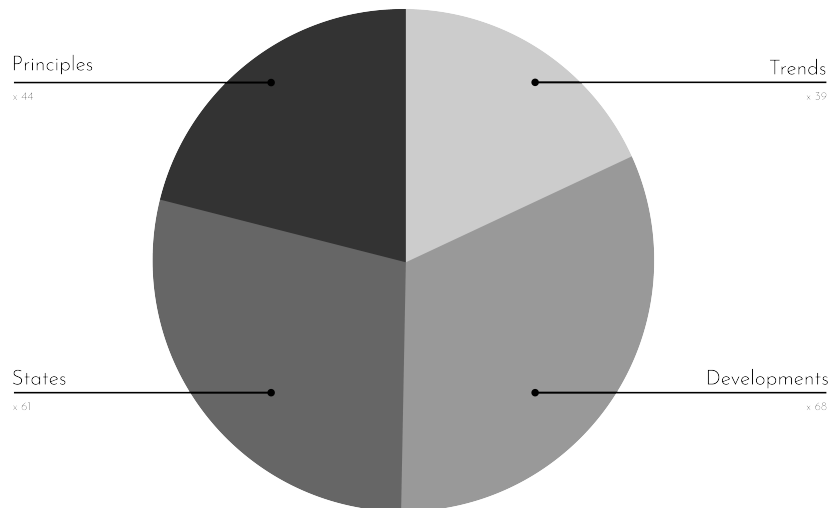
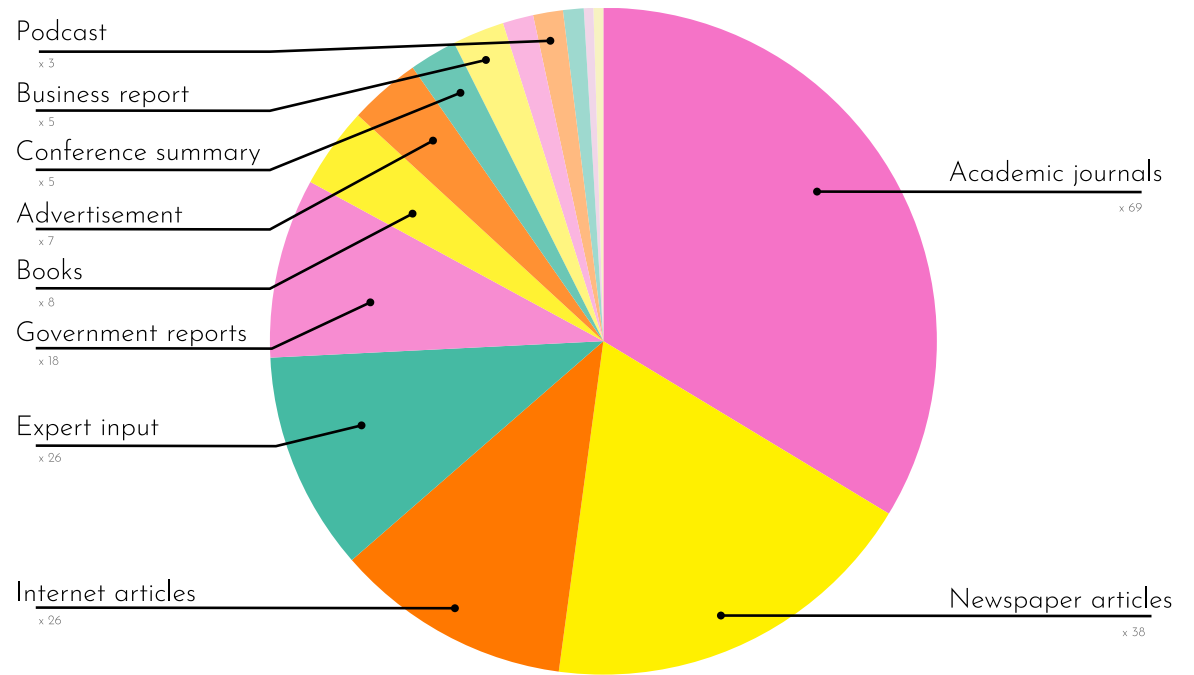


3. Construction future practice

In this phase, the ViP design approach helps to see changes in the system and **develop a future context** in which opportunities for consuming on-the-go in 2036 become apparent. Developing this future context starts with the **collection of factors** that act as building blocks. Part of these factors are world and human phenomena that are evolving (trends and development) and will result in a certain type of behaviour, societal value or product in 2036. Another part are the factors are observable right now and will likely remain the same (states and principles) in 2036. These factors are then **clustered** without losing depth of information or richness. The clusters are **themes** or **driving forces** that together give an understanding of the practice of consuming on-the-go in 2036. From these clusters, a pattern emerges in the form of a matrix in order to develop an **actionable framework**. In every field then a possible future behaviour - a **situational reaction** - is described so it becomes clear where opportunities arise for a more desirable world in the next chapter (5).

3.1 Themes in 2036

M // Out of 205 academic papers, podcasts, expert interviews, newspaper articles and reports, a total of 206 context factors for the year 2036 emerged. Using the ViP-method, these factors were clustered in 12 driving forces that expose emerging patterns. This was all done iteratively, using (digital) post-its and constant feedback.



A good basis for trustworthy clusters is a solid group of factors. In the following pages, these factors can be found in the green tables, supporting the claims made in the text. The quality of the collection of factors can be assessed based on its source or its nature. On the pie-chart above, the colours indicate what kind of source the factors came from. Most of the content came from articles that were either academic, from a news provider or an internet post. The validity of the source is an important indicator for the credibility of the emerging themes. On the pie-chart on the left, the grey-scale shows the nature of the sources. The ViP-book describes that factors can be developments (reflect the changes over time), trends (determine people's behaviors as a consequence to these changes), states (define relatively constant circumstances) or principles (determine stable patterns in the world). A good division of the kinds of factors is desirable.

A. King climate treats all equal

The influence of climate change is clear in all preventive and reactive decision making. People have to react to changing conditions like rising sea levels, wildfires and other extreme weather conditions (1). Also governments and other geographically bound organisations have to deal with migrating groups and changing requirements to keep their people safe (2). This global facing of facts has also led to the public recognition of preventive measures (3). This could be in the form of protective measures, like building dikes and planting a green wall (4), but also in changing behaviours that could mitigate human effects on climate change (5).

1	The projected number of migrants arriving from Central America and Mexico rises to 1.5 million a year by 2050, from about 700,000 a year in 2025.	Lustgarten, 2020
	More than 200 million people might have to give up their homes due to climate change by 2050	Myers, 2002
	Up to 195 million people might need to respond to frequent flooding by 2080. Potential responses include migration as well as upgrading and flood protection.	Strauss et al., 2015; Nicholls et al., 2021
	A world 1-2 degrees warmer could lead to water shortages for 700-1,500 million people	Warren et al., 2006
	We are starting to try and fight the symptoms of climate change	Melbius, 2021
2	A call for setting up effective and appropriate governance mechanisms to be included early in long-term resettlement and re-integration programs to make the process acceptable and enduring for the affected people.	Biermann and Boas, 2008

	Studies predict large migration flows from sub-Saharan Africa toward the Mediterranean, the Middle East, and Europe between 2007 and 2036.	UK Development, Concepts and Doctrine Centre, 2007
3	A call to prepare for the consequences of extreme weather and climate events, interacting with exposed and vulnerable human and natural systems, can lead to disasters.	IPCC, 2012
	Natural phenomena increasingly are granted rights, so they can be publicly defended	Daley, 2019
4	A buffering wall that will span the African continent, extending a total of 4,400 miles with a width of about 9 miles should stabilise soils and keep them moist, it should slow the drying and scouring effects of the wind, and help restore the micro-climate, allowing food crops to grow around the trees.	O'Conner and Ford, 2014
	Coastal resilience by building dikes	Klein et al.
	Making urban areas resistant to flooding	NOS, 2021
	Making transport systems resistant to flooding	Volce et al., 2020
	The possibilities of an urban area to decrease air pollution emissions	Cariolet et al., 2018
5	Circular economy for a more sustainable system	MacArthur, 2013
	Literature and guidance for climate actionT	Epstein and Theuer, 2017
	Designers are rooting for less mass consumption	Junte, 2021
	The energy demand for space cooling globally will more than triple over the next 30 years, and will account for about 37% of global electricity demand growth by 2050.	IEA, 2018
	More institutions granting legal rights status to natural phenomena to awake society's consciousness	Kothari and Bajpai, 2017
	A more plant based diet is adopted to reduce the impact of the meat industry	van Voorst, 2019
	'Desynchronised distributed justice' is an ethical movement that considers the wellbeing of generations to come	Karlsson, 2010

B. Guard government

The government had gone from a leading role to a more reactive, protecting role. Instead of bringing unity and vision to its civilians, they try to pull back on things that might be destructive and guard people from bad effects that other people or organisations cause. Governments decreasingly give direction but only act as guards for existing unwanted scenarios. This position is a direct result of democracy, that made the welfare state a controlling state (6). The loss of executive power is also due to a public distrust in politics (7), which is not surprising since even extreme parties make centred decisions (8). The leadership role for big groups of people is overtaken by brands (see C).

6	Efficient bureaucracy makes the welfare state the controlling state	Bregman and Frederiksen, 2017
	Mild despotism as a result of democracy out of control	Tocqueville, 2003
7	Scholarly inquiry into political trust has been motivated by concerns about declining levels of public trust in politics.	Van der Meer, 2017
	Mistrust, or political cynicism, plays an important role in a representative democracy	Van der Meer and Zmerli, 2017
	People with more education tend to have higher expectations of government performance, and consequently they are more critical and less satisfied.	Cook and Gronke, 2005
	More people with education	Baum and Payea, 2013
8	More centred political parties	Boersema, 2021
	Democratic governments will find it harder and harder to take painful decisions	Bichard, 2011
	People do not want coward politicians to make decisions anymore	De Volkskrant ,2021a
	Small disagreements in politics feel like big conflicts	Appendix E.2
	The way we individualise (J) leads to a police state	Sommer, 2021
	The government tries to protect people from climate change.	van Dinther, 2021; De Volkskrant, 2021b; van Esch, 2021
	People think that the government should protect them from making unhealthy decisions	Jansen, 2021
	People think the government should be responsible for basic healthcare for its citizens	Schelfhout, 2021
B	We (company) have to stay ahead of government regulations because reacting is very costly	Appendix E.6

9	With the decrease of importance of territory, the importance of the national state will erode.	Boomsma and Frissen, 2020
	Authority will be replaced by constant negotiation and leads to the horizontalisation of decision making	Frissen, 2005
	An increase in the importance, volume, speed and scope of cross-border flows of ideas, money, commodities and people challenges the exclusive territorial authority of sovereign states.	Hudson, 1998
10	Agility has a robust relationship with both leader performance (p = 0.74) and potential (p = 0.75).	De Meuse, 2019
11	Neutral is seen as complicit	Bakhitari, 2020
	It is impossible to remain neutral the coming 50 years, especially when sustainability will be such a big topic	Appendix E.7
	Consumers look at us (brand) to make actionable what they find important	Appendix E.6
	We are becoming aware of the responsibility for implicit bias	Holroyd et al., 2017
	White people must feel responsible for racism	Nolan, 2020
	Patagonia and now Lush are quitting social media to support mental health	Alli, 2021
	Advertisements from big brands try to vocalise green intentions	The Coca-Cola Company, 2021 ; Royal Dutch Shell, 2021.
	Google wants to make internet accessible for third world countries to engage everyone in global economy	Pichai, 2021
12	People want to express their identity through consumption behaviour	Reimer and Leslie, 2004; Perez et al. 2010
	Nearly two-thirds (64 percent) of consumers around the world will buy or boycott a brand solely because of its position on a social or political issue, according to the 2018 Edelman Earned Brand study	Edelman, 2018
	People will only come to my coffee store if they agree with my bourgandic values	Appendix E.1
13	Decentralisation is happening in general	Bodo et al., 2021

C. Brand nations

Brands act like political entities by gathering the like-minded and broadcasting a shared vision. This is possible because geographical boundaries are less restricting (9) and nations based on shared location make less sense. Brands can take over because companies have the agility people require from leaders (10). These organisations have to become politically engaged because being neutral is seen as complicit (11) and people want to express their identity through their consumption behaviour (12). It is also an indirect consequence of the decentralisation revolution (13) that rejects central systems and makes room for other 'self-chosen' systems to take their place.

	Decentralisation gives more responsibility on a local level (health and finance example)	Tsofa et al., 2017
	Bank decentralisation	Zheng et al. 2018
	Decentralisation in education gives teachers autonomy that improves quality	Bjork, 2004
C	Consumers Blame Government For Dividing The Nation But Look To Brands To Fix It	Gingiss, 2019
	Increasingly, consumers want to feel that their dollars support businesses that reflect their personal values,	Bergstein, 2017
	It is economically attractive to have purpose and vision as a company	Aziz, 2020
	63% of American consumers were looking to businesses to take the lead on social and environmental change	Elsely, 2018
	Companies, especially tech giants have an increasing influence on society	Persson and Verhagen, 2021
	Facebook is held responsible for the insurrection at the U.S. capitol	Verhagen, 2021

D. Seamless mobility

Different ways of transport are matched so fluently, the transition time and effort is almost neglectable. The connection between different urban areas is improved (14) to connect people's living and working spaces. The network of public transport inside the cities is also improved to support the growing urban population (15) and facilitate the car-free city centres (16). All of this is combined with increasingly personalised (last-mile) transport (17) that makes people even more flexible.

14	By 2040, the quality of the public transport network will have been vastly improved to create an interlinked network within the urban regions, between the Netherlands' major economic hubs and reaching out across the border	Ministry of Infrastructure and Water Management, 2019a
	Transportation infrastructure among cities leads to urban aggregation and diffusion, greatly boosting the regional and national economic development	Jiang et al., 2016
15	Urbanisation will present a huge challenge up to 2040, particularly in the areas designated by the Spatial and Economic Development Strategy where around 720,000 of the total number of 945,000 new homes are planned. An increase in public transport services will be needed to ensure cities' growth does not compromise liveability.	Ministry of Infrastructure and Water Management, 2019b
	Central government and local authorities invest €1 billion to improve urban and regional transport.	EMTA, 2010a
	The future urban area growth (population, economic activity, vehicle ownership, land use and the transportation network) is a main factor in transportation planning	Martin et al., 1961

16	Amsterdam Is Cutting Cars Out of the Picture	O'Sullivan, 2019
	Initiatives in Scandinavia to redesign urban spaces so they are more considered of the needs of humans and nature and less designed for cars.	Rosane, 2021
	Reducing single occupancy cars in the city will reduce energy use in transport in the city.	Banister, 2011
	The World Health Organization found that nine in ten people globally breathe dirty air, contributing to seven million premature deaths every year.	WHO, 2019
17	Increasingly flexible and individualistic travellers require personalised transport	EMTA, 2010b
	45 % of urban areas' streets in the Netherlands is dedicated to cars driving and 10% to parked cars	van Liere et al., 2017
	You can be guided from A to B with one central service through different modes and suppliers of transport.	NS, 2021
D	Trains are automated and therefore more efficient.	ProRail and Deutsche Bahn, 2021
	We are testing the ten-minute train and see that people are calmer because there is less urgency to 'catch' a train, it rather just appears.	Appendix E.7

E. Non-cognitive guidance from A to B

There are technologies developed to completely take over all the thinkwork of moving from one place to another. This development is pushed by the market of Mobility as a Service (18) because the providers have to differentiate somewhere apart from the vehicles themselves. Good tracking is possible through existing technology (19) and is useful for more accurate guidance software. Innovation in types of feedback of communication gadgets lead to non-intrusive direction (20), like bone conduction, electroluminescence and micro-vibrations. People will trust and enjoy this combination of great software and hardware (21).

18	Toyota strategy towards MaaS	Tomoyama, 2019
	Volvo is evolving to become a direct-to-consumer services provider under our new mission 'Freedom to Move'	Volvo Car Group, 2018
	With location and positioning technology continuing to take over new heights including most advanced GPS tracking and a whole contingent of technologies like geo-fencing, Beacons, etc. we can only expect future location trackers to be more powerful.	Deepak, 2021
19	Academic interest in implementing non-intrusive communication using the concept of Subtle Interaction and implementing Calm Technology	Olivera et al., 2013
20	Bone Conduction Headphones Market Research Report growing at a CAGR of 22 % during Forecast Period 2021-2027.	More, 2021

	ORII opens up new ways to interact with your digital assistant. With gestures, voice, and buttons at your disposal, controlling your device screen-free is now more intuitive and accurate than ever.	Orii, 2019
21	User acceptance of mobile services is built on three factors: perceived value of the service, perceived ease of use, and trust.	Kaasinen, 2005
	The factors that influenced the development of trust in automation included age, system usability, and the capability of the automation	Schaefer et al., 2016
	Only integrated hardware and software-engineering approaches meet the increasingly complex requirements of embedded systems and define long-term success.	Jerraya and Wolf, 2005

F. Impulse to convenience

Commercial institutions depend on the amount of profit and will therefore aim for a solid or growing number of sales and higher margins (22). Convenience products proved their consistency in sales (23) and people have accepted the high margin (24). They respond to acute needs and impulse buys (25) and are supported by government policies (26). This leads to an ever-present push for consumers to buy impulsively.

22	You can increase your profit by growing the sales to the existing customers and expanding your customer base	NI Business Info, 2015
	Increasing sales is the most basic way to increase profits.	FreshBooks, 2021,
	An increase in price generates a corresponding increase in revenue and profit.	Boyne-White, 2021
	Despite of environmental concerns, businesses will still be in the constant pursuit of selling something that they can find for free (or less money)	Appendix E.3
	We are moving into people's home because it is a bigger market and there is more profit	Appendix E.6
23	Convenience products are bought frequently	Claessens, 2020
	People look for convenience in their buying-process. For example commerce through voice assistants will be a major role in ordering simple or repeat purchases.	Brandsom, 2020
24	The high profitability of the OTG sector is highlighted by stakeholders regarding their own conventional offers as less and less profitable. Reported as 'struggling' around 2013, Greggs turns away from its 'traditional' bakery business model to specialise fully on the OTG sector	Hirth et al., 2021
	Convenience stores generate higher profitability	Hirsch et al., 2021

25	It is typically a product or service that customers buy frequently, immediately and without great comparison efforts.	Claessens, 202
	Flash delivery might be the future	NOS, 2021
	New initiatives to decrease waiting time while consuming on-the-go	Foodsy, 2021
26	Policy support currently plays a very important role in the development of convenience store industry	Deloitte, 2017
	Hence the shop and commercial district selection attributes relevant to government business support are as follows: convenience	Kim et al., 2018
	PPG 6 (on out-of-town retailing) was published in 1993 and revised in 1996, making it harder for supermarkets to buy land and build out-of-town shopping centres, arguably leading them to favour reinvestment in smaller in-town formats	Hirth et al., 2021
F	For convenience stores strong growth is expected	Hirth et al., 2021
	Motionless payment makes consumption even more convenient. (Past) Cashless payments - (Present) contactless payments - (Future) Motionless payments	Bradford, 2005
	The future of payment could be facial recognition	Whitehead, 2021
	There are technical developments to pay for public transport with your face	Bosman, 2021
	There is no check-out at the world's most advanced shopping technology: Amazon Go	Amazon Go, 2015

G. Mental health engagement

The pursuit of 'time well spent' has everyone engaged. Dull tasks are avoided by relying on services (26) and a common appreciation of your own wellbeing is widely accepted as normal, in your personal life as well as your professional life (27). Next to that, the advancements in tracking together with AI can predict emotional downtimes and accurately manage this through extremely personalised support (28).

26	The next generation experiences time pressure and sees cooking as a task. They rather outsource this and enjoy the experience more often (leading to growth in horeca and to-go foods)	Foodlog, 2021
	Physical shopping is only for leisure. Online retail is the go-to, convenient option.	Thomas, 2021
	Seks is for pleasure, IVF for reproduction	VPRO Tegenlicht, 2021
	There is a growing shortage of handymen because people outsource more (high demand) and there are less people to do it (low offer).	de Waard, 2021
27	People want to be satisfied	Cowen, 2020
	The 'search for happiness' is an ideal of our modern political culture	Cohen, 2004
	Gratitude is strongly and consistently associated with greater happiness.	Emmons and McCullough, 2004
	If working less is good for you, we should do it.	Gmelig Meyling, 2021
	Demand for mental health support continues to increase	Bethune, 2021
	More companies are going to allow flexible working	Appendix E.6
	The idea of a 48 hour workweek is obsolete and people are articulating their desire to be more productive in a smaller amount of time.	Appendix E.3
28	Media technologies are able to interpret our feelings, emotions, moods, and intentions and these abilities result in a form of technological empathy.	McStay, 2018
	Technology is designed to provide social support and to extend traditional care networks	Coyle et al., 2012
G	"I'm happier than ever, at least that's my endeavor. To keep myself together and prioritize my pleasure"	Eilish, 2021
	Even though GDP is frequently used to capture the wellbeing of a society, it was never intended to do that, and as a result it leaves out important aspects of wellbeing like pollution or even happiness	Khan Academy, 2018

H. Focussed physical health

Coincidental physical activity is eradicated almost completely because of seamless mobility (see D) and other ways to make life more convenient (29). However, there is a growing awareness of the importance of physical health because people are growing older and are more knowledgeable about the ailments they (will) have to deal with and there are more lifestyle diseases (30) which results in preventive healthcare as a standard. Designated places and times for fitness will arise to support this desire. Also, people need their eating and drinking to facilitate this desired healthy body. Innovation in the body-tracking-industry allows people to track nutritions and give advice on food and beverage consumption (31).

29	The rise of micro-mobility (like shared E-scooters) will decrease physical activity during last-mile transport by 43%	Glenn et al., 2020
	Urban transport is associated with a large burden of global disease and premature mortality. We report that key health impacts of transport occur via pathways of motor vehicle crashes, traffic-related air pollution, noise, heat islands, lack of green space, physical inactivity, climate change and social exclusion and community severance.	Khreis et al., 2017
	Early evidence from New Zealand indicates that 57% of e-scooter trips replaced trips that would have been undertaken by active modes (e.g. foot, bicycle, e-bike, skateboard)	Fitt and Curl 2019
	Our findings revealed a relationship between convenience-related behavior with overweight and obesity	Dreher et al., 2019
	One of the two important biologic needs for a healthy body is enough movement	Appendix E.5
30	Medical advancements allow people in 2036 to become 85 years old on average with 18% reaching 95 or older.	VTV, 2018
	Because of the aging population, more age-related physical degeneration will take place.	CBS, 2019

	Because of the grow in population and its aging, the percentage of people that is registered with a chronic disease will rise from 50% (in 2015) to 54% (in 2040)	Rijksinstituut voor Volksgezondheid en Milieu, 2019
	Increasing Awareness of the Importance of Physical Activity and Healthy Nutrition	Meyer et al., 2019
	Business push to sell things based on addiction (sugar, fats, caffeine,...) and this creates unhealthier bodies	Appendix E.4
	Climate change alters the circumstances we live in and it is questionable whether our bodies can take this	Appendix E.4
	Preservatives are economically smart but bad for the body and business development will probably stay ahead of regulations.	Appendix E.4
	People switch go from 'reparational health care' to preventive healthcare	Soeterbroek, 2021
	Lifestyle diseases pose a bigger threat on our lives and people will have to act preventively	Appendix E.4
31	More start-ups that use technology to optimise your health	Clear., 2019
	Companies invest in technology to develop holistic health-tracking and data apps.	Van Dijken 2021
	Increasing interaction between health monitoring apps and healthcare providers	Apple Inc., 2021
	The second factor of the two important biologic needs for a healthy body is a balanced diet	Appendix E.5
H	Insurance companies encourage personal physical healthcare through rewards	a.s.r. Vitality app, 2019
	More concerned about calorie intake and portion size, Generation Alpha will drink less alcohol and soft drinks, be used to a sugar tax, and engage with a rise in plant-based proteins.	McCrinkle, 2021
	Globalisation has lead to an increasing risk of pandemics. An epidemic enhances overall personal hygiene in the society and tightened infection control in health care settings	Chan and Yuen, 2020

I. Deep privacy

Kant's basic principles for ethics remain relevant: to behave ethically, people need freedom to choose (32). Privacy is a key condition and therefore holds a high stake to make people feel good (33). This is manifested in a deeper form of privacy online as well as offline (34), which means people still separate their public identity from their private identity, but now also within their private identity make the distinction between 'shareable' private identity or action and a non-shareable one. It gives people the feeling of belonging to a social group (K) while still making a distinction for closer friends. In addition, digitalisation has made it harder to know truth from opinion and asking the right questions to form one's own opinion is a virtue (35) and not trusting unknown sources is normal instead of being suspicious. The complexity of people's daily lives justifies the need for highly personalised views (36) that the individual holds power of sharing over.

32	A rational being must always regard himself as giving laws either as member or as sovereign in a kingdom of ends which is rendered possible by the freedom of will. – Groundwork of the Metaphysics of Morals	Kant, 1785
	People have to learn how to ask the right questions again	Appendix E.2
33	Privacy is going to play a major role because privacy is a moral right.	Appendix E.2
	One reason people value privacy is that it allows them to do or think bad things, which they might enjoy	Gaukroger, 2020
	Privacy is a precondition to make valuable friendships. Without not-sharing, there is less importance when you do share something personal with someone	Appendix E.2
34	Vramilie is een begrip waarbij je bepaalde vrienden hebt die 'dichter bij je staan' dan andere vrienden. Ze worden een soort familie en dit vormt een diepere vorm van connectie en delen van privé-leven.	van Caesbroeck, 2016

	Internet friendship appears to some as modifying the meaning of real friendship and replacing it with something more trivial.	Amichai-Hamburger et al., 2013
	People will need a deeper form of privacy to go offline in real life (like when travelling) and go off-grid	Appendix E.3
	Your private life feels more like work and that is why people will create an 'uber-private' life	Appendix E.3
	Using large, multi-national datasets for high-performance medical imaging AI systems requires innovation in privacy-preserving machine	Kaissis et al., 2021
	People can watch you online without you even noticing and this will spill over into the offline world	Appendix E.2
35	Fake news is growing because the ease of internet access	Mutahi, 2020
	It is increasingly important to correctly translate all the data into valuable information	Biersteker, 2021
	Critical thinking is a widely accepted educational goal.	Hitchcock, 2018.
	Asking the right questions leads to critical thinking	Browne and Keeley, 2007
	The meta-verse is a new digital world to live a different life in.	Slager, 2021
	We need to train kids in coping with information on digital platforms	Appendix E.2
36	Increasingly complex society (context)	Fisher, 2004; Davis and Sumara, 2012
	Context influence personal beliefs	Nurmi, 1993
I	Privacy is more important in a connected world	Bayard, 2009
	Morality helps us to assess the importance of privacy	Kamminga, 2014
	Younger people are pro-active in the protection of their own privacy	de Jager, 2021
	People speak up about their aversion of being put on camera	Bosman, 2021

J. Increasingly individualistic

The self-centeredness of generations has been growing ever since child-centred pedagogic views were accepted as 'good' (38) and democracy has led the individual to believe they are cornerstones of society (39). This is cultivated by social media that lets people take centre stage at all times, and the importance of psychological understanding of the individual (40). It is not illogical: it is a basic human trait to feel like one belongs to a group while wanting to stand out in that group and since the world is increasingly connected, there are more people you have the urge to stand out from (41).

38	The self-centeredness is cultivated. Arrogance has been taught. Ever since you were a child you were told you were special, that you could do anything you want.	Burnham, 2016
	Individual self-reliance, assuming one's own strength and participation are the new goals for the state.	Kruiter et al., 2016
	One of the five pillars for a future, smarter planet is personalised learning plans	IBM Global Education, 2009
	Following rules is not a 'must-learn' for children anymore	Bessens, 2021
	People want to have more consumptions that are specially made for them and no one else has.	Appendix E.1
39	Sweden is selected as a typical case of democratic states which, reflecting processes of individualisation and de-nationalisation, have endorsed individualism and rejected nationalism.	Heinö, 2009
	People will become increasingly individualistic in a democratic political landscape.	Bregman and Frederiks, 2017
	Freedom in democracy is heavily dependant on the ability of every individual to think for themselves	Ely, 2011
	Democracy and individualism go hand in hand, as do the communist version of collectivism and totalitarianism	Hill, 1968
40	Individuals are empowered by social media	Bichard, 2011

	Social media is the markets answer to a generation that demanded to perform	Burnham, 2016
	Cancel culture will be the manifestations of individuals having the power to 'cancel' people or brands.	Reijmer, 2021
	Psychological understanding is more important for all age-groups	Diekstra, 2021
	Overall employment of psychologists is projected to grow 14 percent from 2016 to 2026, faster than the average for all occupations	Career Planner, 2017
41	Fit in but stand out is a socioemotional competence	Kwong et al., 2018
	Individuals define their own identities with regard to social groups and that such identifications work to protect and bolster self-identity	Tajfel, 1978
	The world is increasingly connected, more people have a better connection	Raychaudhuri and Gerla, 2011
	The connection with people in the rest of the world is more valuable and real	Sparkes, 2021
J	Individuals become more powerful and 'noisy'	Bichard, 2011
	People are increasingly prioritizing individualist factors in assessments of their own happiness and life satisfaction thus substantiating descriptions of their society as increasingly individualistic	Steele and Lynch
	'The selfish gene' is part of the evolution theory and claims that the biological urge for a gene to be passed on partially explains humans' individual selfish behaviour.	Dawkins, 1976

K. Serving the social group

The proximity principle elaborates on the idea that people are more considerate to the ones that are close to them. If you can see someone, talk to them and witness their behaviour, it is easier to feel compassion. However, with the changing concept of proximity (42) this consideration is aimed more towards people that have similar beliefs (43). In new digital worlds, it is possible for the younger generation to make the same meaningful connections that people used to only be able to make in real life. This gives everyone the freedom to build friendships with others all around the world that already share basic values and interests.

42	Within the realm of social psychology, the proximity principle accounts for the tendency for individuals to form interpersonal relations with those who are close by.	Newcomb, 1960
	With the increasing use of technological-based communication, it is important to reflect on the impact this may have on the proximity principle.	Proximity principle, 2020
	Digitalisation has led to the possibility to connect with more people. Advocates of electronic communication hailed it as a medium that would create a "global village"	McLuhan and McLuhan, 1994
	Metaverse will employ and connect even more people than digital platforms do right now	Verhagen, 2021
43	It was once believed that children form "friendships" with whoever is available in close physical proximity at school or in their neighbourhoods. It is now clear that the friendships of children and adolescents are based on much more than propinquity (physical or psychological proximity)	Clark and Drewry, 1985
	Research has shown that people of all ages tend to befriend others who resemble themselves. The resemblance may be in terms of physical appearance, common interests, common psychological traits, race or cultural background	Schneider, 2014
K	Nearly two-thirds (62 percent) of dollars donated by American Jews goes to Jewish institutions.	Markoe, 2014
	Since you identify more with your in-group, there is something called in-group favoritism, where you may give preferential treatment to those you perceive are part of your in-group.	Henslin, 2015
	Being in a traffic jam can give people a sense of status and belonging	Wijman, 2021

L. Contributive justice

Meritocracy has come to an end because people are done being measured by their accomplishments. The idea of 'contributive justice' replaced this belief because it provides more meaning to people's lives (44). This is the responsibility each of us has to contribute to civil society. It is manifested in finding more meaning in your job, taking time for volunteer work and gaining social status with kindness. The need for change is fed by the realisation of the complexity of the impact of one's actions (45) and we now know that we are responsible for making the world a better place. Humans will always want to be just, but now that positivism is the new elitist behaviour (46), there is less constraint to actually act upon this desire. Popular beliefs become more hopeful and the new scientists, artists and other influential individuals are appreciated because they view the world in possibilities instead of constraints.

44	Meritocracy (the idea that everyone should have equal opportunities and people who work hard will win based on their merits) is overthrown and 'contributive justice' is built upon it.	Sandel, 2020
	Public opinion of meritocracy is becoming more negative than positive	Grunberg, 2021
	Contributive justice has a normative framework that defends a fairer provision of meaningful work	Timmermann, 2018
	Through an increasingly globalized supply chain, local consumption of goods and services	West et al., 2016
	People do not want to be judged based on their accomplishments any more and meritocracy is therefore no longer maintainable.	Zijlmans, 2021
	'How can we share the enjoyable things we have now with others across time and place' is an important upcoming philosophical question, reflecting contributive justice	Appendix E.2
	Neo-liberalism is over.	Mol, 2021
	People want to find meaning in what they do	Bregman, 2019b
45	Individuals actions have impacts around the world. The carbon footprint can be used to link local consumption to global greenhouse gas emissions.	Mallett et al., 2013
	Guilt occurs when people realize they have violated personal or social standards for behavior. Carbon footprint calculators provide a venue for self-confrontation about the impact of one's behavior on the environment.	Lede and Luyendijk, 2020
46	Positivism is defended in current literature to be a valuable state of mind	Bregman, 2019; Junte, n.d.

3.2 Framework consuming on-the-go in 2036

Gaining clear insight on the main patterns of 'consuming on-the-go in 2036' supports the development of an actionable framework. The situational reactions of people in the future context of consumption on-the-go can be plotted along two key dimensions with each three qualities that all emerge from the themes that are relevant in 2036. The vertical axis, 'community consideration', describes what elements individuals take into consideration when deciding how we consume. The qualities are in an order from purely self-regarding consideration to social or even holistic considerations. 'Guidance in transport' on the horizontal axis reveals the amount of influence from an external party that is allowed to serve the individual on-the-move. From left to right, people lose autonomy but gain support in their journey from A to B. Laying them over each other reveals the context structure and gives understanding of consuming on-the-go in 2036. The different fields will reveal opportunities to design for a more desirable future world.

Community consideration

Care for the herd

The openness of information and empirical evidence of change makes more people aware of their influence on the environment and society. This is because climate change affects everyone (cluster A). Next to that, the belief that we all have the moral obligation to contribute to a better society actually mobilizes individuals (cluster L). The majority of our Western civilization takes their impact into account when making decisions but the success is dependent on the tools given.

Care for the pack

With a growing connection to the world, people find their like-minded and form groups with others that have similar visions and consume alike outside of their geographical boundaries (cluster C). They care for each other and support the shared community and goals (cluster K) but seem neglectant of the bigger picture and hostile towards groups with other visions. This could lead to impulsive, non-cognitive consumption decisions in favor of a brand or business because they feel safe in this context (cluster F).

Care for the self

People are self-oriented and have insight on the possibilities for improving their mental and physical health. This is because we see an increasing focus on people's own mental health, supported by tracking, processing and feedback technology (cluster G). Individuals have also become aware of the importance of physical health since bodily activity no longer happens circumstantially but we do want to live long (cluster H).



Support in transport

Self-steering

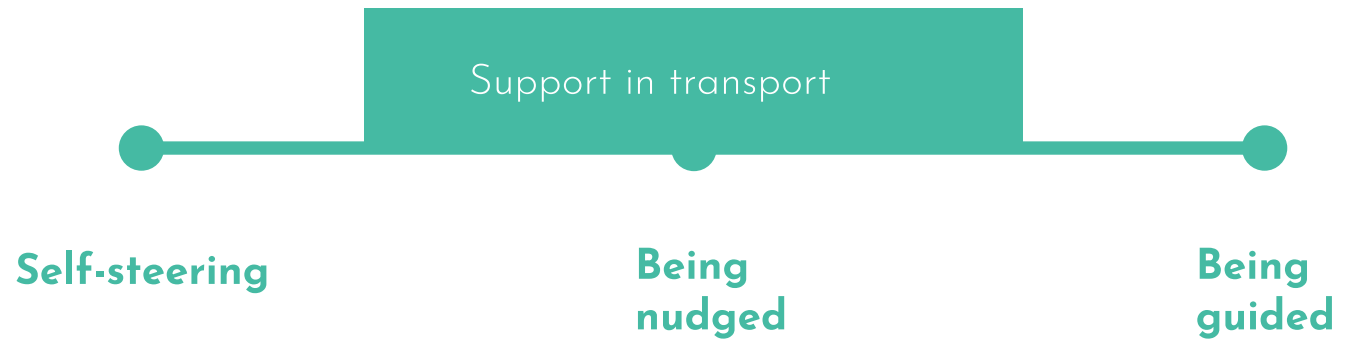
A new wave of privacy, congruent with ancient philosophical wisdom, has led to people requiring a deeper state of privacy (cluster I). Individuals aim to go incognito in real life, avoiding digital tracking while physically being on the move. They avoid being 'part of the flock' to confirm their individualistic views (cluster J). For transportation this means they require full cognitive attention to autonomously move from A to B since the use of third party services often requires the sharing of information somehow.

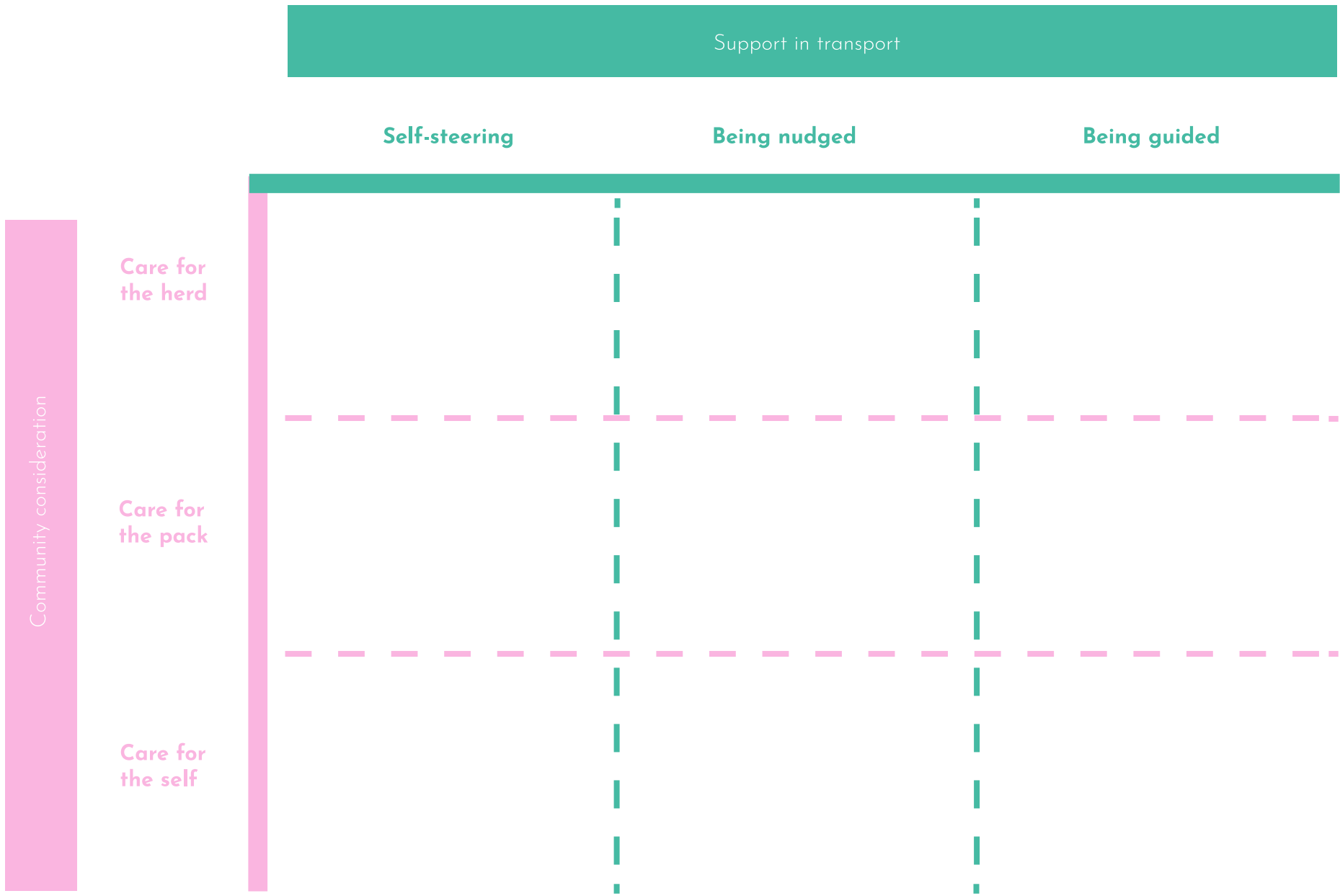
Being nudged

There is an intermediate option that allows people to limit your data-sharing while still using a service to assist them in transport. This guidance based on nudges comes from the desire to be held by the hand without losing autonomy which finds its roots in the governmental system (cluster B).

Complete guidance

Technical advancements and the competing MaaS-sector has led to the possibility to go from A to B without requiring conscious meddling in the process of the user (E). One precondition that is met is the absence of cluster f hick-ups or 'thinking cues' because of the seamlessness of transport (cluster D). This frees up much desired brain-space and allows people to focus on other things.





Framework 3.1: The context of consuming on-the-go in 2036

Support in transport

Self-steering

Being nudged

Being guided

Care for the herd

(1)

(4)

(7)

Care for the pack

(2)

(5)

(8)

Care for the self

(3)

(6)

(9)

Community consideration

Framework 3.2: Numbering of situational reactions in the context of consuming on-the-go in 2036

3.3 Situational reactions

In every field that emerges from this 3 by 3 matrix, a situational reaction can be described based on the different combinations of 'qualities' that arose in chapter 4.3. These will help understand how a person in a certain context can react in 2036.

D// A situational reaction is a form of behaviour that is elicited by the situation and apparent values at that moment. It is not attributed to one person or context. It can be socially shared and therefore resembles a practice.

One can be behaving like (7) on Monday morning whereas he or she was behaving like (2) on Sunday night. For each of these situational reactions, an intervention can be designed to prevent this from happening or push more people towards this behaviour in 2036. In the next chapter, the vision will be held up against the matrix to unravel which situational reaction is the most fruitful to intervene with.

(1) People put much cognitive effort in making their own decisions on how to move from A to B. If they consume, they try to take a holistic approach to deciding what is 'good'. Realistically, it is unlikely that they actually make the right choice because they are preoccupied with transit and the complexity of their personal impact is too big to deal with at that moment.

(2) People move without using the service of third parties to support them. Consumption choices are led by the shared vision of the social group they feel connected to. They are resistant to guidance in transport but simultaneously follow people they view as peers for making choices about consumptions.

(3) People autonomously try to figure out how to go from A to B. When eating or drinking, they focus on their own mental or physical health. They are consistent in their self-centredness. It can be tiresome to figure out transport as well as being conscious of the health decisions you're taking, and therefore it is not easy to behave according to your intent.

(4) There are nudges to help people through their transit and when people consume, they regard all factors in the system. There are constant stimulants to bring you from A to B so being thoughtful of a complex system requires a lot of cognitive focus.

(5) People are assisted in their transit and consume based on the behaviour they see around them of their like-minded peers. A third party proposes routes and actions for the person to voluntarily react to, whereas in consumption they are submissive to the social groups' commands and desires.

(6) People get instructions on how to get from A to B and consume things that are good for themselves. They are conscious of sharing their data and therefore want to keep this to a minimum while being supported in transit. However, it is important for them to take care of their own mental and physical health and to pay attention to this, they need the brainspace they free up by not moving 100% autonomously.

(7) People are completely guided through transport and therefore have the brainspace to be aware of the importance of making conscious decisions concerning everyone and everything. Doing this accurately is unrealistic because of the complexity.

(8) Non-intrusive full guidance gives people the opportunity to consciously think about other things or perform other tasks. They make consumption decisions based on perceived connection to the group they belong to.

(9) Complete support takes over control to lead people through transport. This makes cognitive room for conscious care in consumption for your physical and mental wellbeing. Without the need to be attentive, going from A to B requires no thinking and almost no energy. In this freedom lies the opportunity to act upon their intentions, which are driven by one's own benefits





4. Desired future practice

After understanding the possible reactions per situation in the previous chapter, it is now important to clarify how these practises compare to the desired impact in the world. In the introduction of this report the goals are stated and this gives direction to the way we want people to consume on-the-go. First in this phase, this **vision** for this entire project is discussed: making the practice of consuming OTG more sustainable on an environmental, social and economical level. After that, a prognosis is made to assess how this vision manifests itself in the specific 9 situational reactions that were shown in the framework. The most interesting direction is distilled, so the **focus** is put on the one where there is no indication of sustainable intentions and a lack of cognitive bandwidth. The desired change that entails value for the people and more sustainable behaviour is explained in the form of a **statement**. After this, the statement is translated into the **interaction of the design**, using an analogy as inspiration.

4.1 Vision design

Personal position

As stated in the title and explained in the introduction (2.1), the mission of the project is to make this sector a more sustainable one. The urgency of sustainable development is globally accepted (UN, 2021; Gaefke, 2009) but it is also a personal belief that a balanced world is desirable. Not only do we have to make the global human impact less in general, this current way of consuming on-the-go is one where the intervention could really sensitise people. A redesign of the practice could change human behaviour and by making the transition effortless, we avoid friction with the desire for convenience.

I want to focus on sustainable behaviour instead of sensibilisation or a sustainable intention. This means it would be more interesting to make the only action possible sustainable, than to make people aware of the sustainability of their action. By prioritising making the action sustainable, the intervention will be more effective than a focus on the attitude (Whitmarsh, 2009).`

Situational reaction focus

In all areas of situational reactions, it is possible to design an intervention to make the practice more sustainable. The vertical axis 'consideration frame' has a direct influence on consumption choices which makes it interesting to consider first.

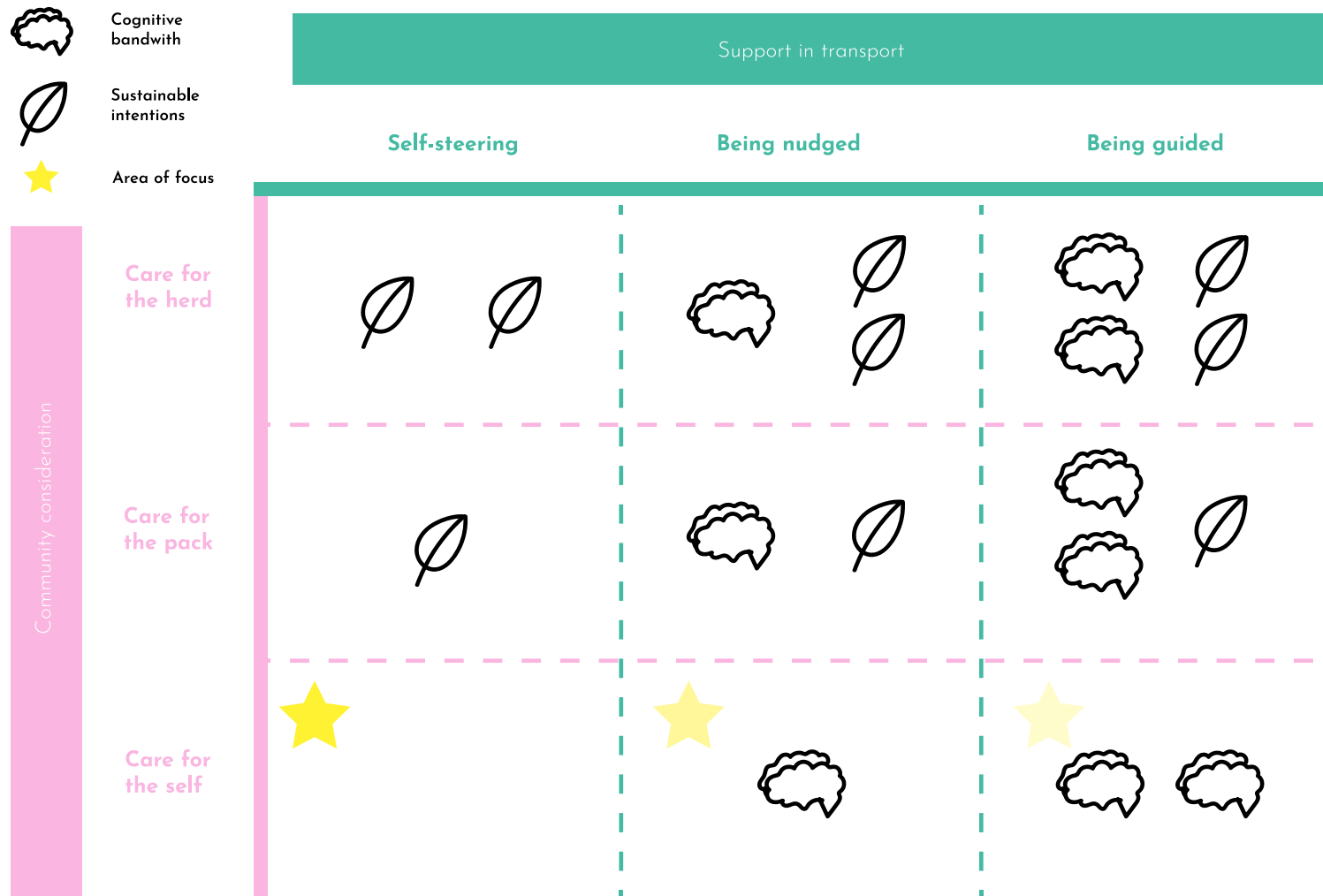
It is most interesting to focus on the area where the impact is most effective. Since the project vision is to make the practice more sustainable, the focus for intervention is on where sustainable behaviour is least likely to happen by itself. We look at two things for that: the intention to behave sustainable and the possibility to translate intentions into actions.

The intention to behave sustainably arises from the community consideration on the vertical axis. In the top fields (1, 4 and 7), people consider their personal impact in the bigger context. They try to take into account what the consequences of their choices are and value best for everyone, also in the future generations. Having a sustainable mindset when you consider 'the herd' is very likely to happen. In the middle fields (2, 5 and 8), one is more considerate of the social group they are in. To facilitate a change in value, the initiative would not lie with the individual but with how the entire collective moves. With these situational reactions, sustainable intentions could be cultivated by group leaders like brands (representatives) or influential peers (Appendix E.3). There are already some examples of this happening and therefore it is quite likely to happen. The bottom situational reactions (3, 6 and 9) intent to focus on their own wellbeing. These fields show no indication to value sustainable consumption since there is no obvious link with self-care.

The possibility to translate intentions into actions is dependent on the amount of brainspace because one has to be aware of their own values on the moment they take action to effectuate them. The horizontal axis of 'support in transit' has the indirect influence that from left to right, you gain more cognitive bandwidth. This could indicate that

choices concerning consumption are more in line with believes and values. However, this is not set in stone since the gained bandwidth could also be used to perform other tasks or to relax. The right fields (7,8 and 9) uses almost no cognition to move from A to B and therefore it is more likely that people put their sustainable intention into action.

The middle (4,5 and 6) uses a bit more cognition and will therefore be less likely but still there is a window for thought. The left situational reactions (1,2 and 3) are so preoccupied with their transport, they need all their focus to go from A to B. Here, the possibility to effectuate your intentions is the smallest because the priority lies with getting to B.



Framework 3.3: Assessing likeliness of sustainable behaviour in the situational reactions in the context of consuming on-the-go in 2036

Focussing on the bottom fields would mean we catch the situational reactions that are the least likely to have sustainable intentions. In these moments, people lack the most interest in caring for the environment and intervening here would therefore have the biggest impact. In the left situational reactions, people are least able to translate their intentions into behaviour. But also in the middle and right, it is not a given that they will reassign their cognitive bandwidth to conscious consumption. Therefore, focussing on situational reaction 3 would be the most interesting with the side note that it could also work for 6 and even 9.

Designing for practices where people care for their own mental and physical health AND have limited cognitive bandwidth (field 3, maybe 6 and 9) would create the most effective intervention.

Statement

To move towards a more desirable world, the situational reaction where people care for themselves and have limited cognitive bandwidth (primarily field 3, subsequently field 6 and 9) must be facilitated while becoming more sustainable when consuming on-the-go. This situational reaction does have the intention to care for one's own wellbeing so making an intervention to actualise this intention is desirable. If this actualisation is made inherently sustainable, the intervention is integrating sustainability in a part of the practice of consuming on-the-go.

“I want people to be able to actualise their self-care intentions while consuming on-the-go and **make this inherently sustainable”**

4.2 Interaction design

In the ViP-method, an analogy is used to ascribe product qualities to the final design based on your vision. This is a creative way to make the step between a desired direction and the concept that supports that. It can also function as a validation tool to check whether the design is aligned with the vision. This analogy arose from finding an existing product that shows the desired interaction that is described in the statement on an abstract level.

Analogy

The design should be to a person what the cross necklace is to its wearer. The owner is focussed on the pendant. That cross is a reminder of faith, hope and a greater plan. It links to the statement in the sense that the user is focussed on actualising their faith. They believe in something and want to carry out that value. What supports this is the necklace, without people questioning its importance.

The wearing of religious symbols on jewellery dates back to the Ancient Egyptians, who wore it as a way to 'ensure divine protection and to indicate devotion' (Glenn, 2021). In the first century, Christianity became widely accepted and wearing a cross was a way to express your beliefs (Devillier Donegan Enterprises, 2006). The shape went from representing a horrific execution device to an emblem of hope and love (David Leonard, 2021).

In religion today, the cross necklace is often worn to celebrate and declare faith. It is commonly given as a gift for religious celebration or as a reminder of one's trust in God. Even though the



shape is widely recognised, variety in the design of the cross can make the religious symbol personal.

But the cross necklace is not always a religious symbol. It can have a unique meaning for the wearer who interprets the symbolism for his or her own lifepath.

Qualities

The cross pendant has a symbolic quality to it and can even represent the owners' belief in a bigger plan. It is declarative, expressing the presence of symbolism even though the interpretation is open. The cross shows that the person who wears it has a certain purpose and the pendant therefore is intentional. All of this proves a certain level of involvement, giving the object a caring quality.

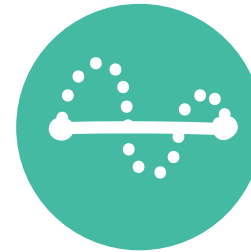
Wearing a meaningful pendant on your chest also works as a talisman. In difficult times, it is encouraging and gives you the strength you need to proceed. But it also has the ability to be corrective in situation where you might behave non-conform to the values you attach to the cross.

The necklace itself has very different qualities. When it is matched well with the appearance of the cross, it is humble and even imperceptible, even though it is essential to the entire product. It simply does what it needs to do and is utterly efficient.

As a whole, a good cross necklace enjoys harmony between the center-stage pendant and the obedient necklace. Wearing it regularly is not a daily active decision but more a habit. The visual appearance can be mainstream but there are unique and personalisable options.



**HUMBLE BUT
ESSENTIAL**



EFFICIENT



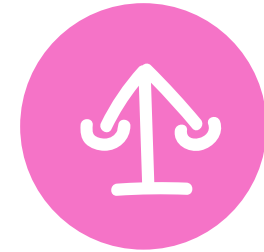
HABIT



SYMBOLIC



INTENTIONAL



HARMONY



DECLARATIVE



CARING



ENCOURAGING





5. Design

In the previous chapter, the vision for a desired future practice was stated as 'I want people to be able to actualise their self-care intentions while consuming on-the-go and make this inherently sustainable'. First in the chapter, the **newly developed practice** is described and briefly reflected upon using the vision and interaction qualities from the previous chapter. Then, to to elicit this new social behaviour an **intervention** is proposed in the form of a product-service system: Tend. The possible particularities are discussed to give the concept depth and show what it could be like. Steps that would be needed over time to get to the new practice are presented in the form of a **roadmap**. Finally, the new practice is compared to the old by comparing the **sustainable impact**.

M// To set out a sustainable concept, Lenneke Kuijer shifts to a practice being the unit of the design cycle. She describes the process of a reconfiguration of an old practice (orange square on the right). However, using the ViP method, you try to disrupt from the old practice and generate a new one (apple-blue-sea-green square on the right). That is why I will also use the original manifesto of Elisabeth Shove who uses practice as a unit of design. Unlike Kuijer, she misses the link with sustainability but she does explain more about innovation by 'making and breaking existing links' (Shove, 2006). Like Shove explains, the configuration of new links between meanings, skills and stuff form the base of the new practice of consuming on-the-go in 2036. To facilitate the change, an intervention is set out in the form of a product-service system.

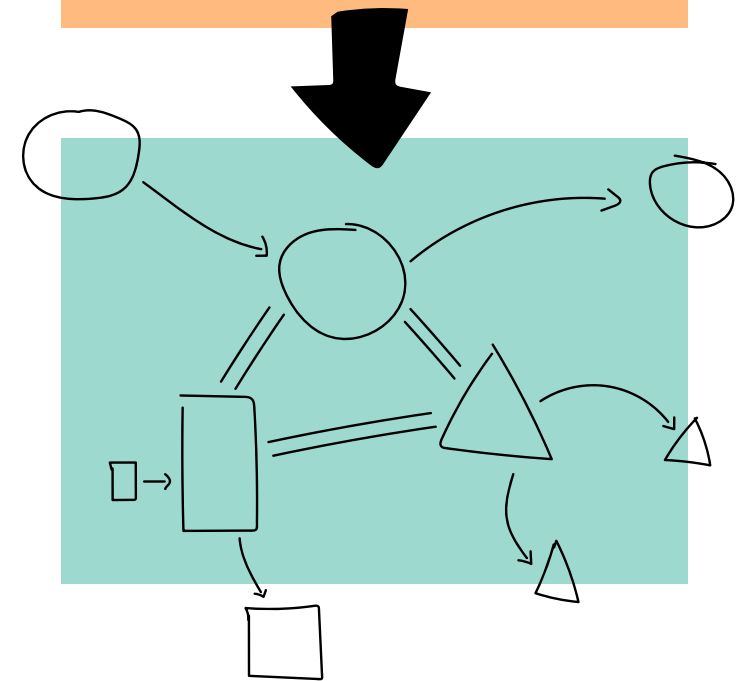
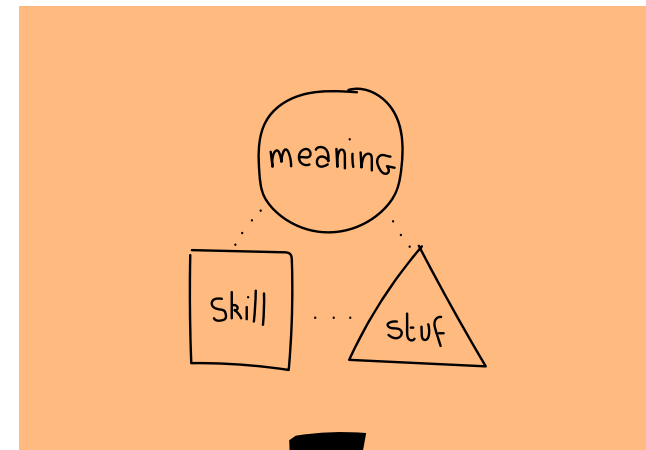


Image 5.1: Systemic overview of an innovative redesign of practices according to Shove (2016).

Consuming on-the-go out of care for your own wellbeing

In 2036, a part of Western population consume on-the-go because they care for their own mental health and physical health. The meaning of the practice has changed from convenience and haste to a value of kindness for yourself and desire to 'be well'. If an intervention would facilitate this transition, it could integrate other values and skills because it has hold of the reins. With this in mind, this chapter proposes a design that acts as an intervention to make the practice of consuming on-the-go more about self-care while integrating sustainability.

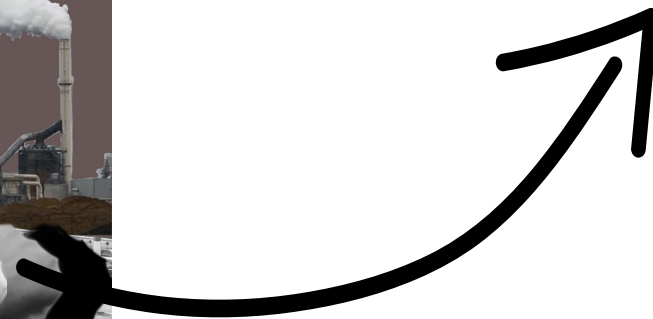


5.1 Introducing a new practice

Tend is a holistic product-service system that monitors the intention of an individual concerning his or her own well-being and makes this a reality by suggesting a consumption that is in line with this intention. This way, people link self-care to consuming on-the-go and this becomes the primary value of the practice. By making this intervention, we have the possibility to implement sustainability. This comes naturally with self-care, namely consuming natural things and avoiding overconsumption. But the service can take it to a new level by focussing first on liquid consumptions and integrating this in more aspects, like the suggestion calculation (have a sustainability factor) and the container in which it is transported (a reusable cup).



Image 5.2 (L): A collage of the current practice, wasteful and full of rush
Image 5.3 (R): A collage of the desired future practice, caring and sustainable





Tend

A holistic service that monitors intentions and supports the ability to care for mental and physical health through personalised ad-hoc suggestions **using a cup as an ID.**

5.1.1 Future scenario

It's Tuesday morning, you have a deadline today and know you still have to do some work. The alarm went off early so when it is 10 AM, you already have done a lot of work. According to your phone, it is time for a break. You know it is best to take a short walk outside and take your Tend-cup with you. There is a small coffee-shop at the end of the street, right where the park starts. There, you enter and hand over your Tend-cup to the young woman behind the counter. She scans it with her phone, smiles and asks "a double espresso?". That would be a great way to stay productive until the deadline so you nod and say: "Yeah, great". She makes the espresso and hands it over. "Enjoy!", she says and you continue your short walk. After hard days work, you send over the report, right before the deadline and lean back in your chair. A message from Stan appears: 'Want to go out for a walk?', it reads. You meet Stan and bring your Tend-cup again. Somewhere near where he lives is a donut-place you both really love and decide to go there. At the till, both of you hand over your Tend-cup and ask for a sugar-glazed donut with it. "Ooo, a hot pure chocolate with oat milk and whipped cream! What a treat!". "Could I get it without whipped cream though?", you ask the barista. He changes it in his app and starts making the drinks. Stan sees the drink and congratulates you as well, realising that you deserve a reward. At that moment, you feel proud of your achievement and enjoy a well-earned drink.

Left blank intentionally for you to imagine the story.

5.1.2 Vision elements

In the vision, it was stated that ‘I want people to be able to actualise their self-care intentions while consuming on-the-go and make this inherently sustainable’. To make sure this intervention effectively realises this, the two core elements need to be fulfilled. People need to be able to care for themselves while consuming on the go and this needs to be made sustainable.

Self-care by consuming on-the-go

In 2036, people go out for a drink or other consumption while travelling from A to B because they care for their own well-being. Instead of consuming on-the-go because it is time-efficient and convenient, people are motivated by their intention to provide themselves with better mental health, physical health or productivity.

The value of your own well-being is already taken into practice when people enter the platform. This is a form of self-care agency, where the user has the skill to initiate health care activities in order to maintain one’s life, health and wellbeing (Denyes et al., 2001; Taylor et al., 2000). These individual beliefs about capabilities can predict behaviour performance (Bandura, 1997) and entering the platform is therefore in itself already a form of self-care. When you make a choice that you want to take better care for yourself, you are already taking better care of yourself.

When you decide to get a consumption on-the-go is also effectuating the self-care intention. Going out to get a consumption on-the-go is actively taking charge of your mental health, by taking a break, and your physical health when you walk or take the bike somewhere and then come back (A to A). Another way of consuming on-the-go is when you actually have to travel from A to B. Then, by making the decision to slow down in your travels, you also already effectuate the self-care intention by letting go of the hurry. This reduces stress and can result in a more relaxed state of mind, eventually improving mental health.

Lastly, the consumption itself can also actuate self-care. A drink can have many functions, especially if you order the right one. Gaining physical health with the right choice of consumption is most straightforward: choose a drink that contains the nutrients you need, providing good things for your body in a balanced manner. You can enhance your productivity with sugar and caffeine or other sources of energy and focus. But it is also possible to support your mental health by containing something that works relaxing or rewarding, like reducing feelings of anxiety with Rooibos tea.

An inherently sustainable practice

When people consume on-the-go because of self-care, sustainability should be integrated as a key feature in this practice. This is done through the consumption itself, but also the way it is made, transported and bought. By introducing a self-care value, overconsumption is already avoided because it is not good for your own well-being. The intervention can also add a layer of responsible production by making the food and drinks that are better for the environment more attractive to choose when you care for your mental and physical health. Making a reusable container link to this practice would also eliminate single-use items at a consumption level.

5.1.3 Qualities translation

In chapter 4.2.2, the desired qualities of the interaction are described using an analogy. These are translated into this new practice.



Caring

Tend allows and encourages people to care for something: their well-being. The service can feel like a warm blanket, reassuring yourself and allowing self-care.



Declarative

Becoming part of the service is a form of declaring to yourself that you are going to take the actions needed to come to a better mental and physical health. Using the product and the service is a way of sharing with the people around you that you find self-care important and are going to work for it.



Symbolic

The Tend-cup itself is not something that actually performs 'self-care' but it is a means-to-an-end and this association can act symbolic for the surrounding.



Encouraging and corrective

Having someone (or something) that supports you in the journey to self-care is important to get the courage to actually do it. The moment the service suggests a drink, it actualises your intentions and fosters wellbeing.



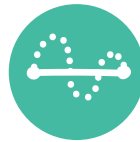
Harmony

The digital design of the Tend-apps and the physical design of the Tend-cup are visually in harmony. They both work effortlessly together when suggesting a consumption.



Intentional

Joining the service allows people to show and validate their intentions. This makes clear that there is a bigger plan people strive towards.



Effective and efficient

The positive impact on the environment and your health is clear and can be quantified over time. This can continuously be updated in its accuracy and therefore remain effective.



Humble but essential

The sustainability part is so humble that you don't even notice it. The calculations that suggest a drink take into account the impact on the environment. This is not visible for the user but essential to get an output. Also, single-use cups are avoided with the use of a reusable cup that functions as an ID. Making the cup and the system inherently connected to each other means you can't use one without the other.



Habit

Taking the cup with you when you go out for a walk should not be an active decision but something you just do. Tend links the cup to the practice of self-care while consuming on-the-go and makes this a habit. According to Duhigg, a habit is formed when there is a trigger, a behaviour and a reward (2014). In this system, taking the cup is the behaviour, the trigger would be the break and the reward would be the accuracy of the drink.

What's in a name?

Tend (verb) present participle: tending

/tɛnd/

verb

1. Regularly or frequently behave in a particular way or have a certain characteristic.

2. Go or move in a specific direction

verb (middle English)

3. Care for or look after. Give one's attention to

TEA
COOL
GREEN
BLACK
WHITE
HERBA
TRINE
GIMM
CHAM
CHA
LOND
MATCH
WTER
S



5.2 The concept

To build and understand the intervention made to support the new practice, a proposed design for the concept is made for 2036. Then, the steps that are needed to get there are addressed in a roadmap that could guide the transition.

5.2.1 Tend in 2036

From a user perspective, the interaction starts when you decide that it is time to take care of yourself in a different way. Tend is a digital service that you can sign up for to monitor your intentions concerning self-care as a way to pre-commit. The Tend-system analyses the intentions and translates this into the most effective consumption at the

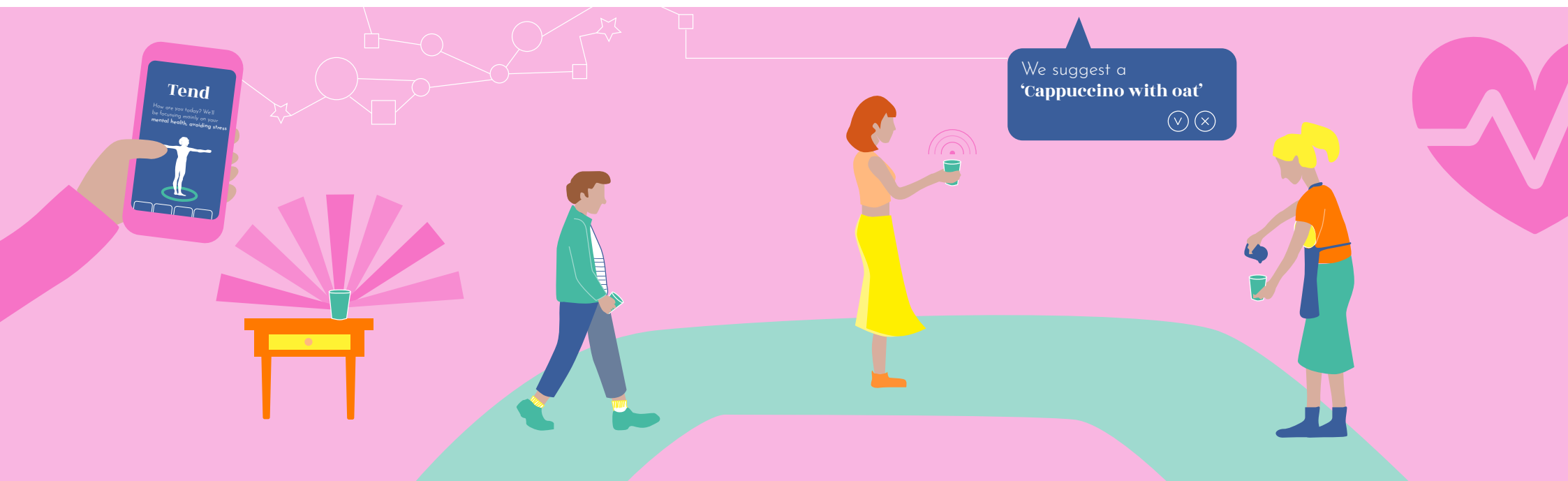
most effective time. The personal Tend-cup is used as an identification medium to link the digital proposal to your actual consumption. The cup is scanned by a barista and they are then informed with the proposed product. This serves as a reminder, as well as eliciting the implementation of the initial intention.

While using the service you connect parts of your digital passport, like your health app, physical monitoring devices and calendar, to the Tend-app so the system can assess apparent intentions of that week. This can be manually overwritten by the user if wanted. When the intentions are assessed, it is translated into the desirable properties of a consumption and its timing to match these intentions. These intentions are combined with a sustainability assessment of each product at

participating shops to come to the right advice. This way, behaving sustainable becomes so easy it could even go unnoticed.

For the process map (image 5.4), this means that the user checks the app periodically to see and maybe adjust intentions. The app can suggest a good time to take a break or the user can do this autonomously. When the owner is notified, they are triggered to take the first step to meet the set intentions. When in a coffee-house or other store, the personal Tend-cup is scanned and proposes a consumption to the barista, based on intentions and environmental impact. This is confirmed by the user and put in the system. The cup is now filled with the right consumption and the owner is closing a value-action gap.

Image 5.4: Process map of using Tend



The Tend application

The Tend service is a digital interaction between the user application, the storefront application, the store onboarding website and the central Tend server. In Appendix F, a visualisation of a high-level solution overview that could be the base of the system is provided in the form that proceeds the communication with a programmer (Jansch, 2021).

The general design of the software should be relaxing and non-intrusive. Using a dark blue as the main colour, the application initiates rest and focus. Secondly, the app uses white and pale pink as additional colours to highlight or clarify certain content. The fonts, icons and blocks are all rounded off so there are no intense corners.

The details of the landing screen and homepage are different in the user application and the store application. In the top row, you see the customer frames as a visual prototype to show the in-app onboarding and the 'Today screen' with the general menu at the bottom. In the other row below, the store-application is presented with the log-in page, a quick guide on how to use Tend and the homepage. In the last frame, the pop-up is prototyped where the product suggestion is communicated with the store staff.

User application

In the user application there is an onboarding wizard and the main features are the manual assessment of intentions and insights on how you are reaching this goal.

The onboarding wizard is the first interaction with the Tend-app. In this step, the user starts by choosing whether they want to link the application



Image 5.5: Prototypes for digital design of the customer app

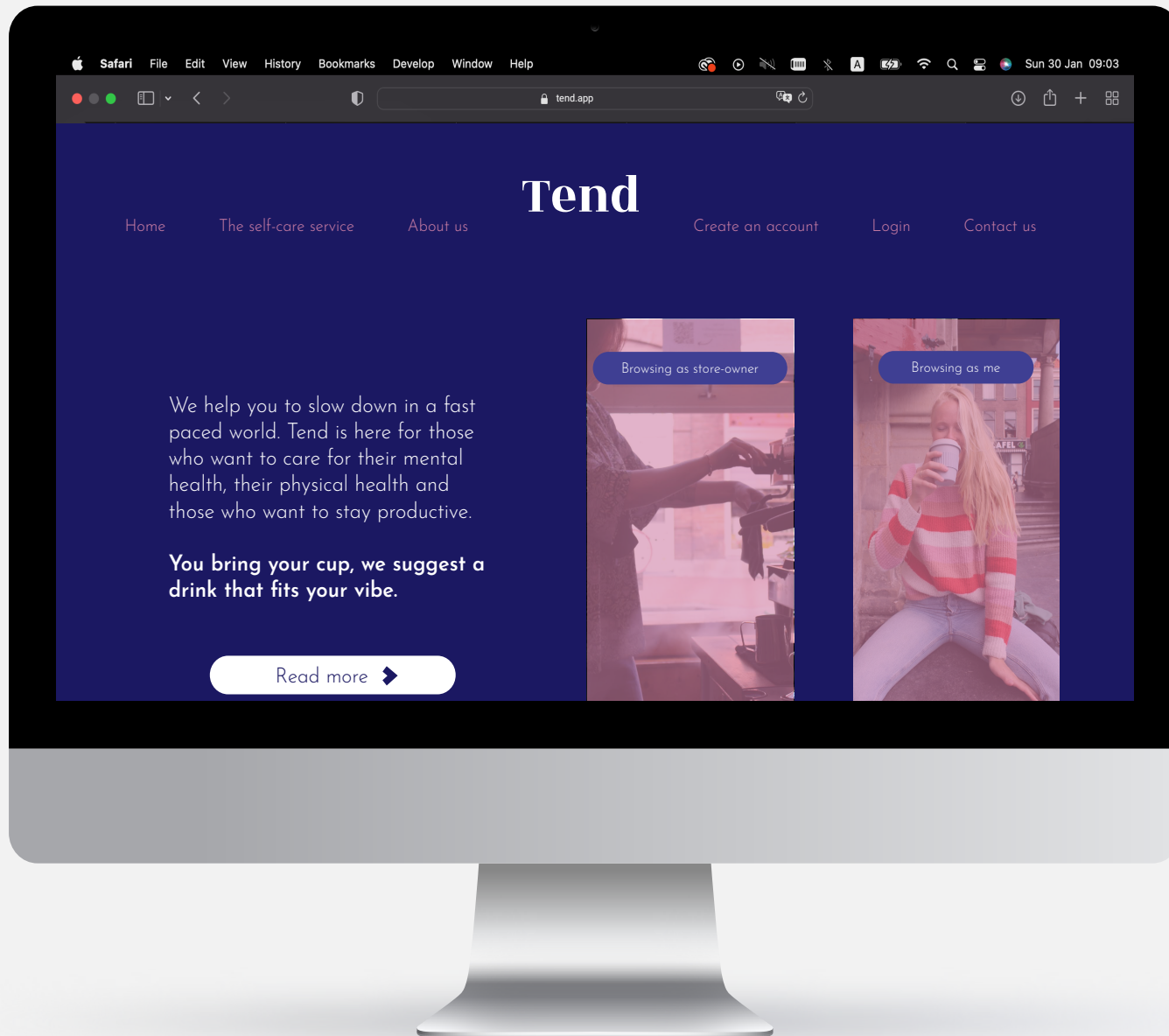


Image 5.6: Prototype for the landing page on a desktop

to their digital passport or whether they want to add information manually. When one links it to their digital passport, they will be redirected to the provider of this medium. In this environment, it is possible to check what kind of information you want to share. This can range from name and demographics, to health monitoring devices and a calendar. All the insights are used to make an assessment of what you (should) find important at certain moments concerning mental health,

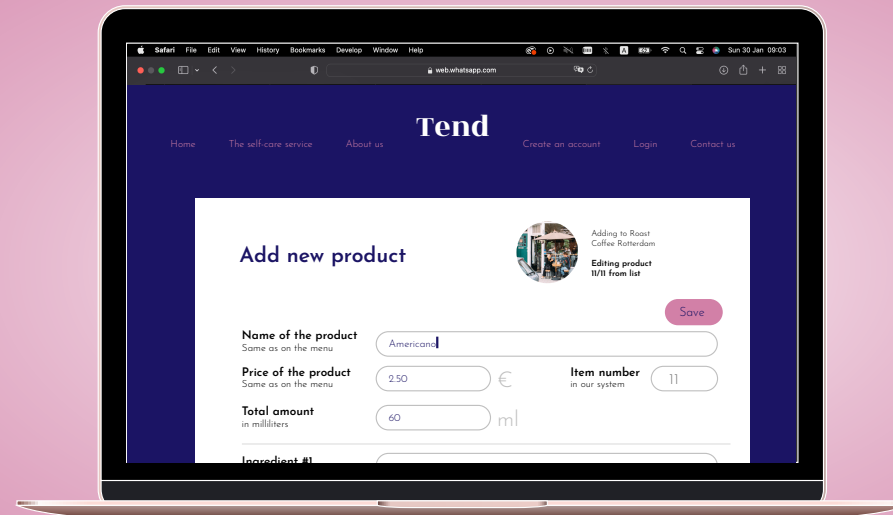
physical health and productivity. If you decide not to link your digital passport, the assessment is based on a series of personal questions.

After onboarding, you enter the home page of the application where you see the main features at the bottom. There, you can answer more questions to update your intentions, gain insights on the effects of your recent actions and discover places and activities that might support you even more.

Store onboarding website

When a store wants to participate in our program, they have to apply online. On our website, they can apply with their store name, location and vision. If we add them to our system, they get login credentials to enter in the storefront application and they get access to their personal page on our website. In the latter, they can add products by filling in the entry form that is designed to assess self-care attributes and environmental impact.

Image 5.7: Prototype for the product add page on a laptop



Storefront application

The storefront application can be entered with the unique credentials provided on the onboarding platform. The main screen has as predominant feature the call-to-action to scan a Tend-cup. Furthermore, there is an option to add products in the app, get an overview of trends in past sales and a prognosis on future sales. When a Tend-cup is close to the device with the app, it will scan the NFC-code and send the customer ID to the Tend-server, together with a timestamp and store ID. The system returns a pop-up with the proposed consumption. This can be accepted or declined. When the store does not have the product anymore or the client wants another consumption, the storefront staff can ask for an alternative offer or select a product themselves in the application. When the consumption is accepted, it is added to the Tend system and the store can make the consumption in the Tend-cup.

Central Tend server

The central Tend system has the important task to approximate the perfect match between someone's intentions and the store's offer. This is done through attributing certain self-care features to product qualities and finding the score that matches with the customer needs at that point in combination with the least environmental impact. The input is the product offer of the store and its qualities, the timing and the intentions of the customer and the output of the Tend-system is the most effective consumption.

Next to that, it also serves as a central database for each consumption of users at specific stores. This is important for the payment at the end of the

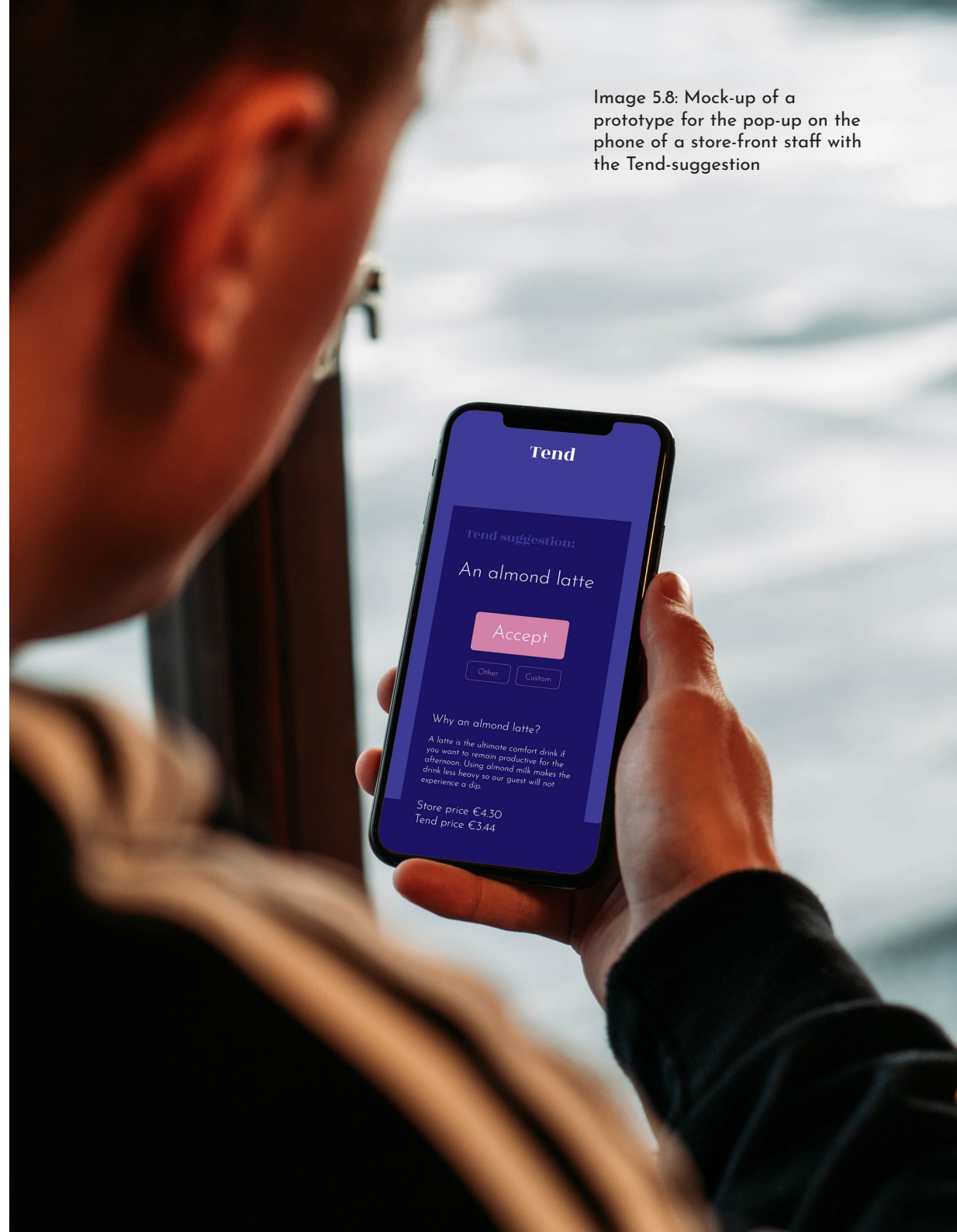


Image 5.8: Mock-up of a prototype for the pop-up on the phone of a store-front staff with the Tend-suggestion



month. Tend then asks the customer to pay 110% of the store-price of the consumed beverages. After that, they pay the stores 90% of the store-price of the beverages that they gave out using Tend.

The third and last function is the one of prognosis. Using the assessment of intentions of their users and the attributes they have assigned to the products, they can make a solid assessment of what they are going to propose in the coming time. These insights are valuable for making the inventory of the stores as accurate as possible. A proposal for the system that could facilitate how this would be done is found in Appendix G.

The Tend Cup

The cup should be made to reuse endlessly, but also to identify the owner without violating privacy. To make it fully circular, it should also be made to be repaired and recycled.

Material

Currently, the best option is stainless steel. This is a very durable material and can be recycled without reduction in quality. It is harmless in use because it has been FDA approved and in production because it does not produce toxic run-off (Ulbrich, 2021). It is resistant to fire, chemical attack and corrosion, making it a trustworthy material that needs little maintenance (BSS limited, 2020).

According to Granta Edupack, stainless steel is an expensive material and therefore should be used very effectively (2021). It is also a non-renewable material, meaning we should use it sparingly. In addition, steel is not biodegradable so it is key to keep it in the loop.

The surface

The inside of the cup should be as smooth as possible, avoiding sharp corners. This is to enable easy cleaning and therefore good hygiene. It is also a preferred shape for baristas, since it guides the beverage (Interview Barista). On the outside, the main goal is hygiene and should therefore also be smooth.

Shape

The design should be double-walled to prevent heat from transferring too fast. This decreases the danger of burning, increases the comfort to hold a cup and makes the experience better since the beverage remains at the serving temperature.

The cup could have a big opening to drink from. To prevent spilling, people are nudged to walk slower and take time to enjoy their beverage. This adds to mental wellbeing, since slowing down gives people some rest.

To make it easy to hold, the overall shape should have a form that prevents the cup from slipping down. The design therefore has a relatively bigger upper part, also adding to the 'big opening' and thus slowing-down experience.

Lid

It would be best to design one standard lid to introduce the product, but later multiple options could be introduced to facilitate different kinds of drinks. The primary lid would probably be a minimalistic design that simply closes the cup when it is not in use. Since the big opening is a desired feature for drinking, the lid will not have a drinking hole and it is purely made to transport a dirty cup and to take a drink with you to another place where you would like to drink it. This also facilitates the practice redesign by taking the rush out of OTG consumption and replacing it with self-care. The lid should be completely leak proof, easy to open and customisable.

Later on, more complicated designs could be made to customise the use and make it feel tailored to the owner. In the image, a lid with a handle is shown that could be easier for people who only want to take a cup when they go out or if they want to clip it to the outside of their bags. Next to that, a bottle-like lid is shown and that would be more desirable if people are more keen on cold drinks when they work out for example.

ID

Making the cup a personal identification medium, we need to add something that can be scanned and have a unique output. This should be done in close proximity to the reader, so no unwanted scans can be done. The tag itself should be unique and therefore non-replicable and one way to do this is to make the content invisible. An NFC-tag at the bottom would be the ideal identification medium. This solution is not visible to the naked eye, is heat resistant up to 120°C and only readable within a range of 4cm (Near Field Communication, 2022).



Image 5.9: Digital renders of prototypes for the Tend-cup and its possible lids

Value exchange

On the image below you can see the value exchange of Tend. This describes what kind of ideas and aspirations the different stakeholders have and how this is manifested throughout the product service system. The primary stakeholders are the user and the store, who interact the most and experience direct benefits from Tend. Secondary stakeholders are institutions like the employer of the user, the insurance company of the user and the government under whom the store operates. Lastly, there are tertiary stakeholders

who benefit but have no direct interaction with Tend. A full overview can be found in Appendix H.

The business logic lies within the idea that an accurate and helpful suggestion is worth something. When the user orders a consumption using Tend, they will pay via the app for 110% of the consumption. Assumingly, the payment of €0.10 to €0.60 is the right value for how well the drink serves your intentions. This assumption is based on the importance of self-care to these customers but requires more validation. The store makes and gives this consumption and gets 90%

of the price. This loss in revenue is made up in the lower amount of single-use cups that need to be bought by the store and the customer acquisition costs (CAC) going down.

Insurance companies and the employer of the user benefits from the healthy lifestyle and this value could be compensated in some financial, advising or promoting form. The sustainable development that the stores make autonomously could be of great value to a government trying to reach UN climate agreements and therefore also could be compensated in some way.

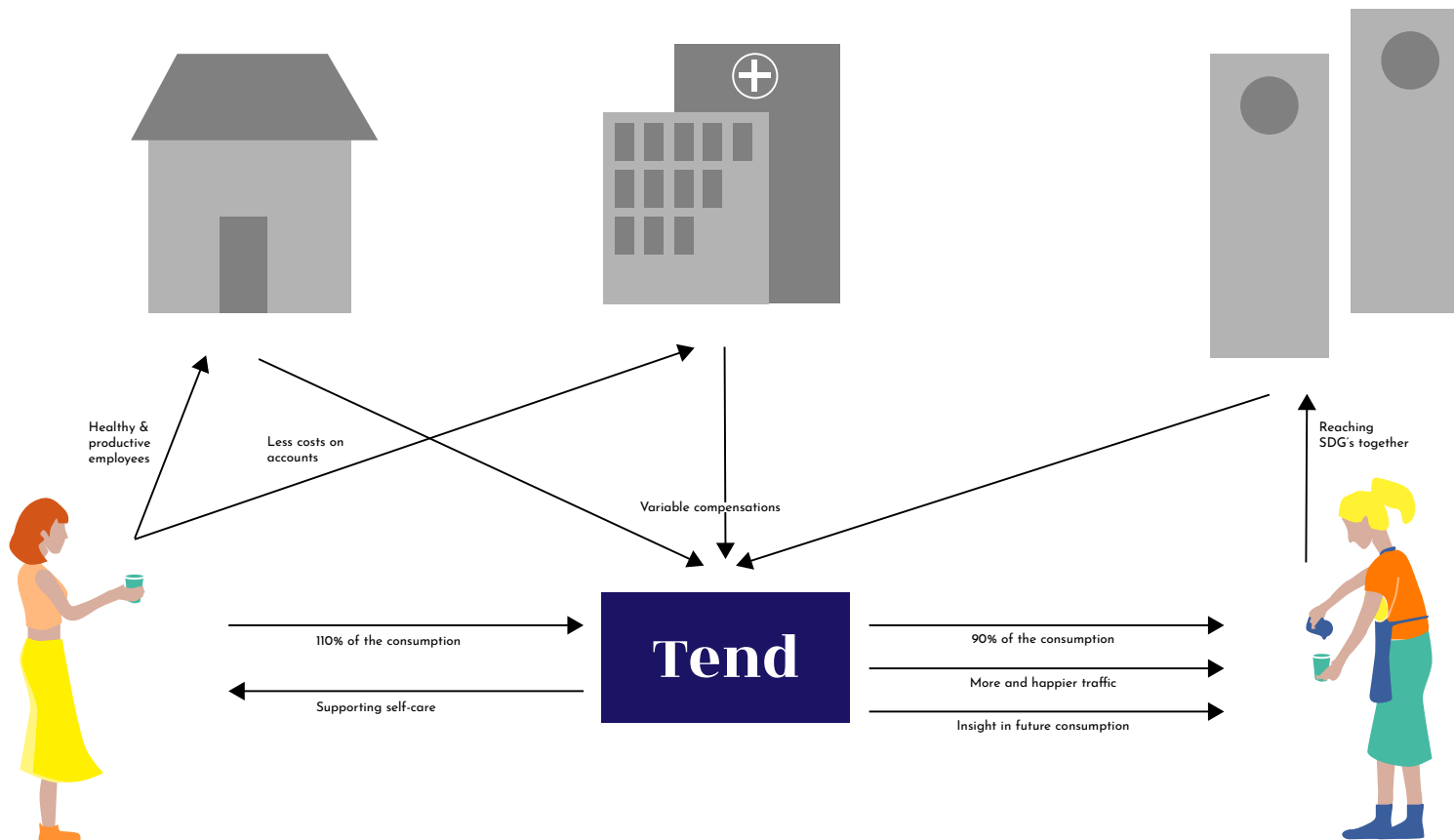


Image 5.10: overview of the basic value exchange

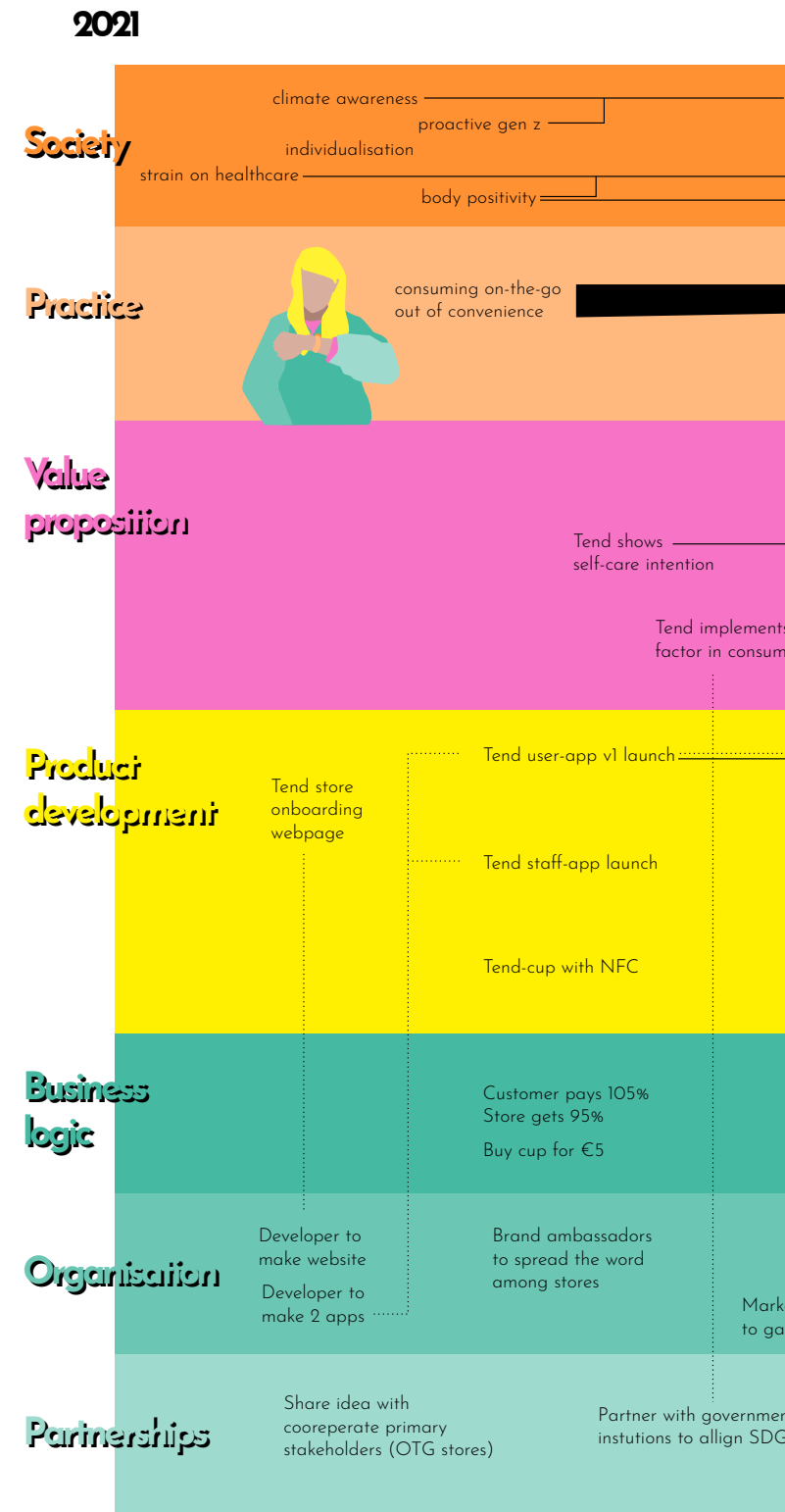
5.2.2 The roadmap towards 2036

On the right you can see the roadmap towards a more sustainable practice of consuming on-the-go in 2036. The intervention in the form of Tend is split up in three major points of intervention that are either slightly ahead of societal change or right at the same time. Each point needs the support of a value exchange addition in the Tend system, supported by a product (the cup) and a service (the consumption advice based on intentions).

The roadmap has three horizons with each 5 years in between. It is initiated after the time of the research of the current practice, the year 2021, and is laid out until 2036. This timing is essential to capture the complex change of practices.

From the top down, the first points of time to highlight are the societal changes that influence the time-pacing of the parts of intervention. These arose from the future practice construction of chapter 4. Then the gradual change in practice is laid out, pinning the points of intervention. Based on these interventions, the value proposition that Tend generates is plotted using the development of products (the physical products as well as the digital products). To support this, the business logic must evolve and create the financial exchange to become an economically sustainable service. Codependent on this and facilitating the value proposition is the organisational strategy: who we hire and when, and our company culture. This is all internal but since we have many more stakeholders, it is also interesting to plot out our external partnerships and how they take shape.

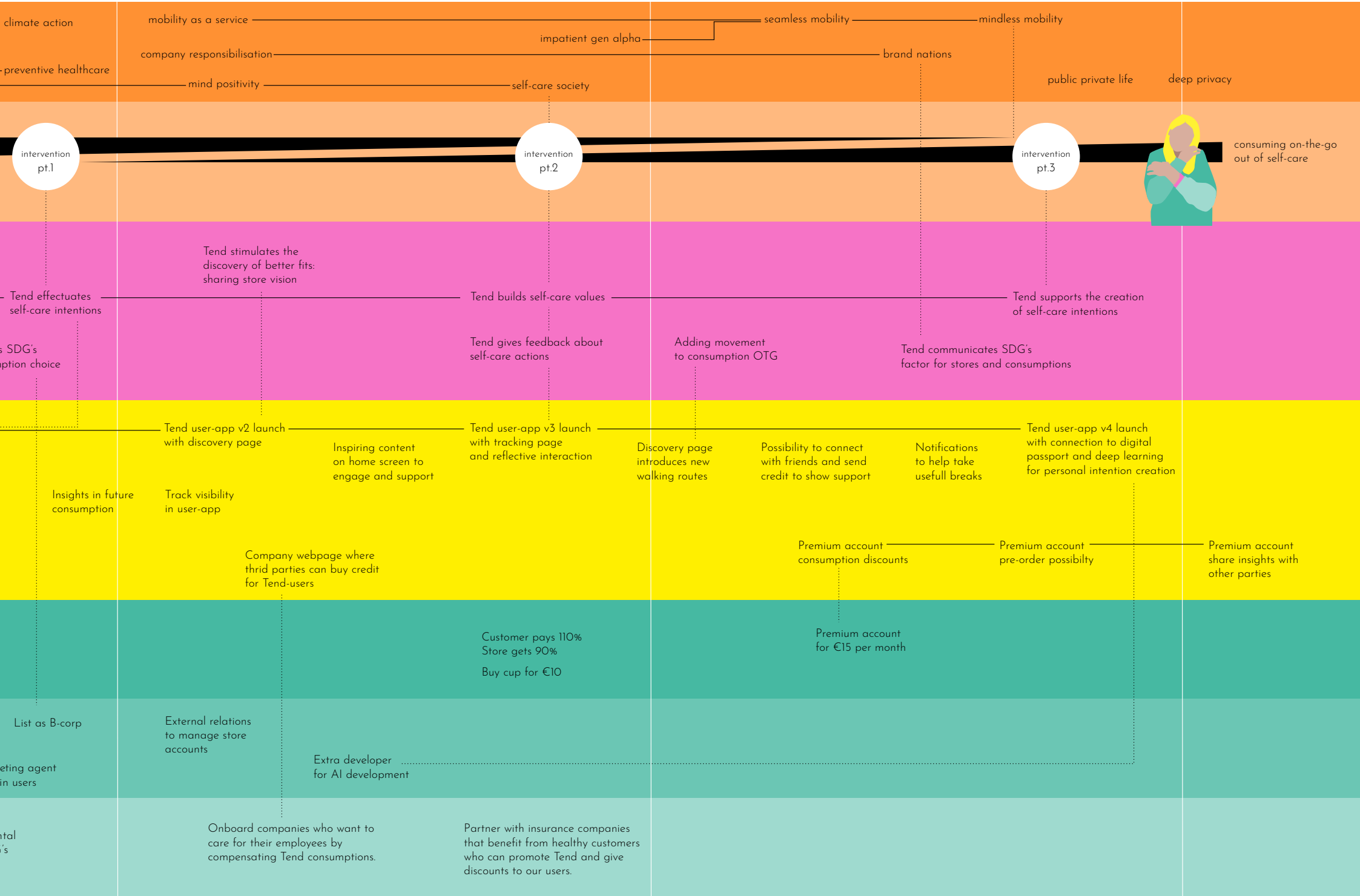
Image 5.11: Strategic roadmap for the implementation of Tend



2026

2031

2036



5.3 Validation

5.3.1 Impact

M// Lenneke Kuijer validates the intervention success by measuring the consumption impact of the current practice and the one of the designed practice. When the impact has significantly gone down, the concept is a valuable change.

In the introduction, waste, overconsumption and irresponsible productions are named as the two biggest drivers of the environmental impact of consuming on-the-go in its current form. In addition to that, the sustainable design principles of H. van Weenen are used to validate whether the change is positive (1999). These consist of 'waste prevention', 'source reduction', 'integral chain control' and 'eco-cycle society'.

Towards reuse

Using a cup as an identification medium means there is a personal attachment to the product. According to Mugge et al., the feeling that a product is irreplaceable leads to a long-lasting relationship. A condition like this is designed when a product and its meaning are inseparable. The Tend-cup does this by making the connection between the cup and the customer ID, so it is really personal. This drives the intention to reuse the same as long as possible (Mugge et al., 2005). By making it robust with a material that only gets more beautiful over use, the materialisation facilitates the intention of using it longer.

Looking back at the concept proposal, the new service mainly manages the single-use packaging

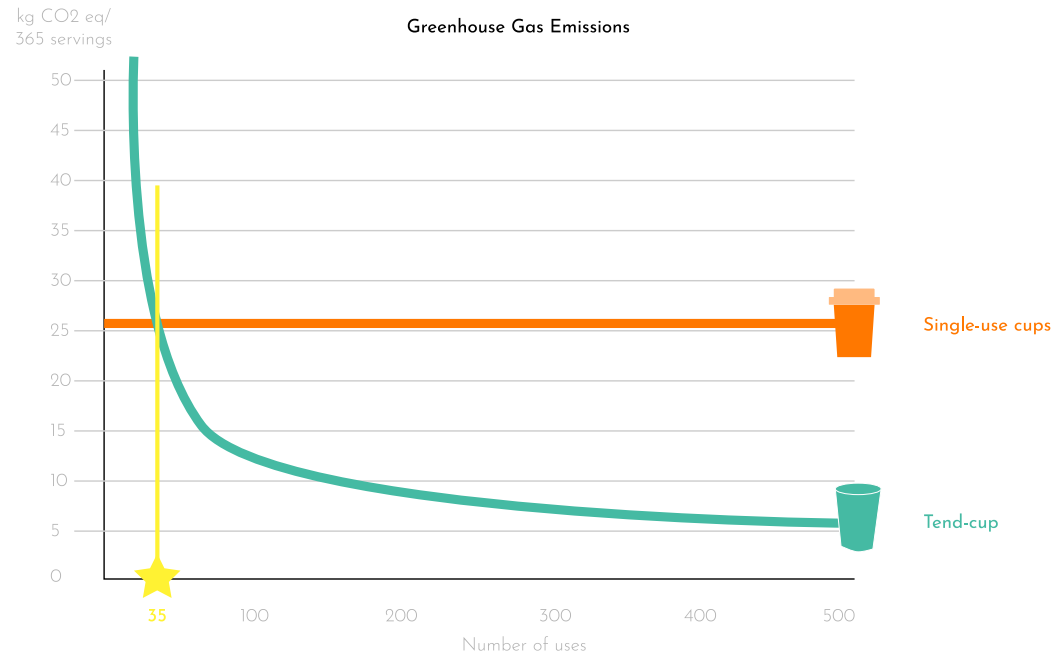


Image 5.12: It would take approximately 35 uses for a Tend-cup to make up for the emissions of a single-use cup (LCA by Martineau, 2014)

of the drinkable convenience product that is made on demand. Since we can only find data on coffee-cups (see image 2.1 on page 27), that is the only solid reduction in environmental impact but one can theorise that all kinds of consumable liquids can go in the Tend-cup (e.g. smoothies, tea, glühwein, proteïne shakes, ..). In image 5.12, the LCA estimates it would take 35 uses for a Tend-cup to be 'better', but this is an indication that disregards ecosystem quality indicators.

With this new service that employs a reusable and recyclable cup instead of a single-use/down-cycled cup, waste is prevented (van Weenen, 1990).

Towards responsible consumption

The Tend-system is designed in such a way that it justifies the consumptions that the user gets and takes away the impulsive nature of the product. When people go out for coffee when they don't really need caffeine, a normal tea or even just a glass of water is suggested. This should result in less food and beverages consumed when it is not really necessary and therefore decreasing the impact on the environment. Preventing overconsumption is the bridge between caring for yourself and behaving sustainably. By introducing a practice that means people only consume the

nutrition they need, the ingredient sourcing is reduced (Hearne and Aucott, 1991).

Towards responsible production

Putting the sustainability-factor in the calculation makes the assesment of the best aligned consumption also more sustainable. Being suggested more gives competitive advantage to the products that have a low, no or even a positive environmental impact. Once shops realise this, they will adapt and take the sustainable vision into practice by switching from or realigning with suppliers, evaluating ingredients and rethinking offers. This gives economic value to truly making products more climate positive. Using a growth-centred approach to sustainability will not only tackle negative climate impact but also facilitate economic stability for those who do well.

Reflecting on the SDG's

In the introduction, it was briefly highlighted which SDG's were interesting to look at during this project. When reflecting upon Tend and all seventeen goals, 'good health and wellbeing' and 'responsible consumption' are both facilitated very well through this service. In addition, the system prevents food loss in the Western countries and when redistributed right it could lead to less hunger in other places. In contrast with popular beliefs, making the practice more sustainable will not decrease economic value but maybe even facilitate growth in the OTG sector. Since a lot of the single-use items ended up in the plastic soup, Tend can also contribute to life below water. SDG 9, 11, 17, 13 and 15 also could benefit a little from Tend and the insights of the reports can be used to better develop the service.



Image 5.13: Hierarchical visualisation of the SDG's that are (positively) interlinked with the project and the concept.

COLADEKOEK

€160

MAKI-CHOCOLADEKOEK

€180

6. Conclusion

To conclude this report and project, it would be valuable to reflect on the outcome and discuss where further details would be of interest. After a short description of the output of the process, the designed practice itself is discussed and compared with the practice in 2021. Then the concept is discussed with its shortcomings and what is necessary to solve them to realise a product-service-system like Tend. The third subject is important to discuss as well because any project shortcomings could stand in the way of the validity of the claims and should be addressed. Lastly, the whole method and framework is put under a magnifying glass to reflect on their value for this project and myself as a designer.

This project set out to improve sustainability in the practice of consuming on-the-go in 2036. From deconstructing the current practice, we learned the impact it has now on our environment and humankind. To break with this and come to a more desirable situation, the future context of consuming on-the-go was sketched and there appeared to be nine possible future situational reactions. The choice was made for the one that was least likely to be sustainable by itself, and for this field an intervention was designed to guide it towards a more desirable practice.



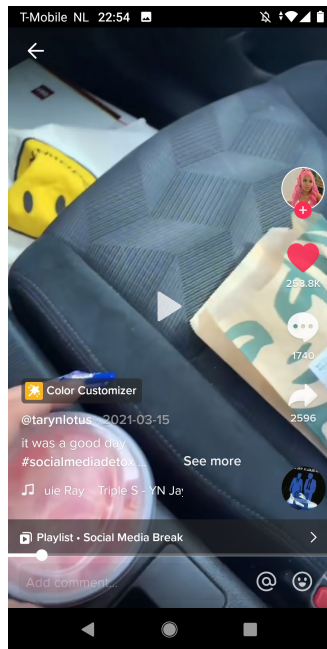
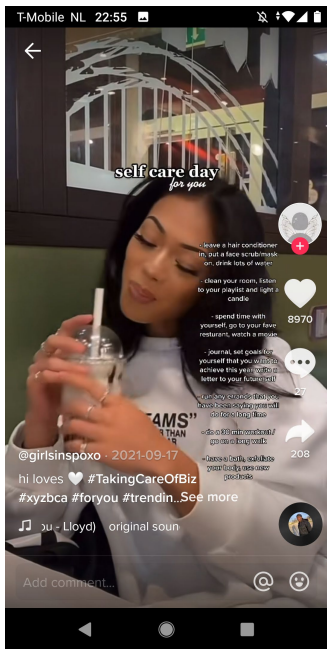
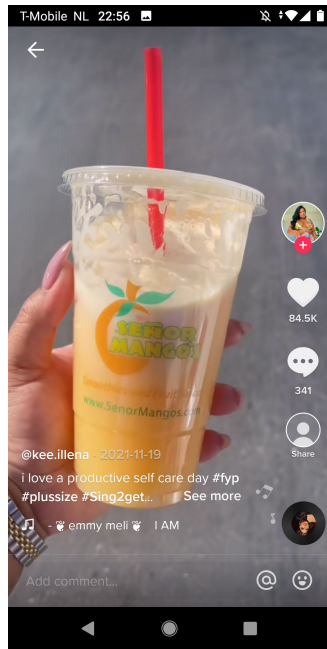
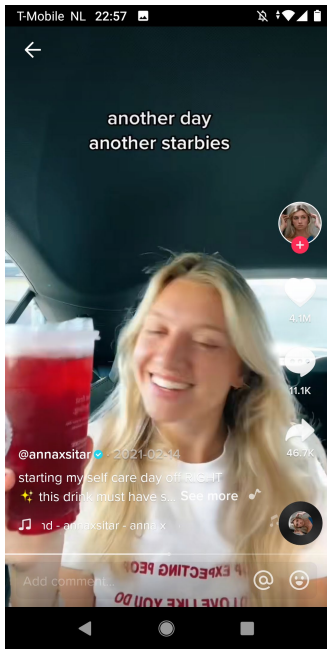
6.1 Reflection on the practice

When looking back at the outcome of the research of the current practice and comparing this to the future practice, some similarities arise. Even though the future construction of chapter 4 was done in complete separation from the first analysis (chapter 3), not all situational reactions are novel.

In type 2, 3 and 4, we see that convenience and immediate satisfaction are the main drivers of consumption. When looking at the situational reactions, this is still a probability since transport only becomes more efficient for the people who want it to be and have the financial resources to engage in this practice (field 7,8 and 9) and thus does not open up cognitive bandwidth for everyone to consume consciously instead of impulsively. Even though the numbers are lower in field 1 to 6, the types of practice are not eradicated completely. This is also the main reason why an intervention in one of these situational reactions is more valuable.

Type 1 has a far more interesting overlap with future situational reactions. The analysis of the current practises revealed a socially shared behaviour that goes out for a snack or a drink on-the-go as a form of caring for their mental health. This has a lot of similarities with field 3, where people have the intention to care for their well-being and go from A to B without strict guidance. It would be interesting for future development to assess how big this group is and compare their current needs to future needs to integrate this in Tend's value proposal. On the next page you can see screenshots from social media of people describing their activity as 'self-care' (collection 6.2).

Learning from this, it is interesting to reflect on the timing in the roadmap. Seeing practices in the current time that resemble the desired one could give a head start but also pose a risk when implementing sustainability within the new practice, because people already associate it with single-use and not the cup as an ID and Tend making the practice more sustainable. A possible solution would be to speed up the process and make the interventions earlier on so the practice is already in place before 2036.



Collection 6.2: Overview of screenshots with OTG consumption as self-care 2022

6.2 Discussion of the concept

6.2.1 Ethics

This concept does pose an ethical risk: the more consumptions Tend suggests, the more money the company and stores make. Also, when the price of the consumption goes up, the reward for Tend goes up.

To avert this risk there are several possible designs in the strategy. Peter Lloyd suggests additions in the organisational construction so the vision is deeply embedded in the company culture (2022). The most promising direction would be to hire a Chief of Ethics, who defends the vision in the C-suite and manages the realisation hereof throughout the different departments. Since this will be costly and not really feasible at the beginning, adding this task to another general managers' portfolio would be a strategic outcome. Next to the internal live-keeping of the sustainable and social mission, listing Tend as a B-corp would give external pressure to pursue the balance between making money and creating a better world.

6.2.2 Hygiene and safety

The project was carried out in the midst of a pandemic. During this pandemic it became even more pressing to consider hygiene as a very important condition for your safety. Companies like Starbucks, Kiosk and the smaller coffee-shops on the TU Delft campus started refusing reusable cups because of the assumed unhygienic connotation these products have. Some sources believe that the importance of hygiene is a public value that is here to stay (Howard et al., 2020; Blagov, 2021)

This might pose a risk for people's disposition on the product, since self-care and hygiene are loosely related. However, over 115 experts agree that reusable systems do not pose a significantly higher risk than single-use products: "Based on the best available science and guidance from public health professionals, it is clear that reusable systems can be used safely by employing basic hygiene" (Greenpeace, 2020). This scientific evidence is not a guarantee for public opinion and could still be a pitfall for a concept that includes a reusable cup.

6.2.3 Business logic

In the concept, a business logic is proposed based on the value exchange. There is no prove whether people are actually prepared to pay money to get support in the way they effectuate self-care. This is assumed based on the future context where mental and physical health gain importance and productivity stays relevant. Even if people would see the value of this suggestion, it is easy to avoid payment. The suggestion is not binding and there is no way of checking whether people actually make use of the suggestion, and therefore it is quite easy to avoid the metrics that make money for Tend. People could use the app for free, scan the cup, get the suggestion and then decline that suggestion to order it themselves. This way the user avoids a fee and the store has a higher profit margin.

I personally believe that people are willing to pay the requested amount if the service you provide is truly valuable but it is important to recognise this flaw in the system that might be fatal for the financial stability of Tend.

6.2.4 Privacy and intention assessment

As seen in the roadmap, the AI that assesses your intentions automatically is released around the same time when deep privacy becomes a factor. It is predicted that people will value the possibility of being 'incognito' and not share all of their data in 2036. In this project, this desire is mostly translated into the public wish to travel under the radar but it could also be interpreted more generally.

In the analysis of the future theme it is explained how a 'deeper' level of privacy can allow people to share personal information in layers. For example, one might have a personal agenda that third parties are allowed to see (your colleagues, Outlook, your financial adviser, Tend, ..) but also a personal agenda that you keep private. The way this distinction is made has a big influence on the data that Tend can use to make an assessment of the intentions. The accuracy of the suggestion depends heavily on this insight. If the deep privacy trend protects more data than this research foresees, the intention assessment is fully dependent on manual input and that would make the concept less realistic.

6.3 Discussion of the project

6.3.1 Validity of the research to uncover current practises

In chapter 3.2.1, types are distilled from 5 interviews and field research. To truly validate the accuracy of this categorisation, more interviews should be done about every type. Ideally, one would find 8 respondents per type of practice to research the socially shared behaviour and meaning behind this. Eventually, to make it even more tangible, the insights could be confirmed with a quantitative analysis and the respective scale of each type can be mapped out. For now, the limited research is a reason to be careful about the conclusions made about the current practice.

6.3.2 Validity of the future practice's impact

To validate the desirability of the intervention, Lenneke Kuijer suggests to assess the impact before and assess the impact after the change in practice. In the deconstruction of the current practice, the impact is analysed but it remains unfeasible to exactly quantify the impact of consuming-on-the-go in our Western society. Even harder is to validate the exact environmental impact of the practice after the intervention. That is why the topics from the introduction are discussed on a general level to indicate a possible improvement. This is no hard evidence but it does give an idea on the value of this project.



Image 6.3: Waste from OTG on the TU Delft



Image 6.4: Group of friends enjoying OTG by the water



Image 6.5: Group of friends enjoying OTG in the park

6.3.3 User and store validation

The concept is built upon a framework of the consuming on-the-go context in 2036. From that framework, certain needs emerged to which the need to behave more sustainably was added because it was the aim of this project. This resulted in the vision to enable people to effectuate self-care while behaving sustainably. The latter part of this statement was treated in chapter 6.3 and 7.3.2 and shows good promise in reaching this vision. The first part was not validated in any other way than the process that preceded it. With more time, it would be good to assess whether the proposed concept actually facilitates the effectuation of self-care and whether the value for the stores is enough to cooperate. This could be done by proposing the setting and the concept in the form of story-telling, asking people to emerge in this context and then asking about the imagined effects of Tend on their wellbeing.

In addition, the roadmap could also have more depth on how to integrate different stakeholders. The roadmap is self-explanatory concerning societal changes over time, how the practice evolves, when the interventions are made and how the product development and organisation should support that. The value exchange evolves but is mainly explained in the previous chapter (5.2.1). The partnership section however, seems to have room for development. Better researched 'next steps' to involve the would increase validity.

6.4 Implications SPT for ViP

The hypothesis that 'the ViP-method could benefit from a framework like SPT to create a different dimension of understanding', can neither be confirmed nor denied but it can be concluded that the combination has led to unexpected insights. Even though the bright pink book has been used for many projects over the last 11 years and a 'practice' is seen as a possible unit of design, implementing Social Practice Theory in this project has been an interesting challenge. Mainly because there was no previous experience with this theory but also because it has been very recently introduced to the designer world and therefore is not yet straightforward in its use. Because of that, there are some implications for future designers that are interesting to set out. The insights are linked to the different steps in the ViP-process and therefore ordered in the same manner as the project.



Image 6.6: Two people consuming OTG, picture taken during field research

6.4.1 Deconstruction current practice

In the first part of the project, it was important to truly understand the complexity of 'consuming on-the-go' and what the social constructs around this were. In the literature used about Social Practice Theory and sustainable design (Kuijer, 2014), the first step was to see the practice as a unit of analysis. Following the lines of this framework, the history of the practice was discussed, then the current shared behaviour and finally the impact of this practice on the environment. The framework of 'meanings, stuff and skills' is used to compare describe shared behaviour in 2021 and eventually to categorise different types.

It was very interesting to start the project with an analysis based on social perceptions instead of individual ones. In previous education at IDE, students are taught to look at interactions, which is individualistic, and systems, which is sometimes too complex to tackle as a whole. Using SPT has been a new experience that made the understanding more holistic but not overwhelming.

6.4.2 Constructing a future context and creating a vision

In the phase that focussed on the future, Social Practice Theory has not been developed enough to form a good support. From the design process of the 2 projects that Kuijer describes in her thesis, it is very focussed on the immediate impact and lacks orientation for the long term.

What is interesting to investigate further is the comparison between 'situational reactions' and practises. The framework in chapter 4.2 showed 9 situational reactions that are described in chapter 4.3. These descriptions indicate overlap because they are socially shared behaviours that one may adopt in a certain situation. It sparks curiosity to see what can be done with this potential common ground.

6.4.3 The design phase

As described in 7.4.2, the ViP-method is very future oriented whereas the proposed techniques for using SPT in sustainable design are not. Therefore the design phase of the ViP-method and the Social Practice Theory are not interchangeable and hard to compare in this project. I did find it interesting to analyse the designed intervention based on the subdivision of 'meaning, stuff and skills' to understand it better but it had no value in the process.

6.4.4 Validation

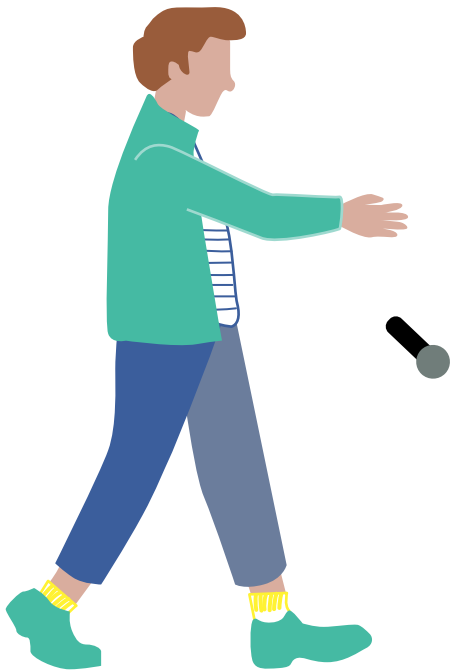
In a previous part of the discussion, it was already pointed out that the validation of sustainable design when using SPT has some limitations. In general, the validation is of sustainability alone and not the desirability of the practice for its users as the added value for them is not discussed. Looking more specifically at this kind of validation in the ViP-method, it becomes clear that it is almost impossible to make an assessment of the impact of a prospective future practice and even harder to make that assessment of a desired future practice. In the ViP-method, the process itself underlies the validity of the outcome but with the iterative nature that Kuijer describes in her thesis, this would not work. Therefore, the use of Social Practice Theory for the validation in a ViP process does not seem logical (yet).

6.4.5 Further research

To discuss the general use of Social Practice Theory in this ViP-process, it is safe to say it was a very educational experience. The unknown territory required constant evaluation and initial enthusiasm is replaced with more careful insights on the possibilities and questionable parts of using SPT in this graduation project. Even though the framework can be used in every step, it does not always provide better understanding and sometimes even unnecessarily complicates a creative process. It would however be interesting to draw upon the previous conclusions in a next project to see whether adjustments can be made to make both theories more effective for sustainable design. This means further research can be done to test the value of a deconstruction of a current practice using the SPT framework, which I believe is the most promising direction. Other than that, it could also be interesting to research further how an impact analysis on the beginning and the end of a ViP-project that envisions sustainability could be of value for the validity. Lastly, a concept can be build up with an SPT framework, using meanings, skills and stuff as parts of the design. I have used this during the process but for me, it was more a creativity tool. However, it is potentially an interesting idea to investigate more.

6.5 Final words

Concluding this report, the three themes that were addressed in the introduction were: consuming on-the-go, sustainable practices and future vision. In the project, a deeper understanding of these three themes was formed. Sometimes, losing one theme out of sight but always realigning at the end, it was an iterative process to design an intervention that would contribute to a more desirable world. To my best ability, I have developed a sustainable strategy for consuming on-the-go in 2036.



Sources

A

a.s.r. Vitality app (1.23). (2019). [Rewards exercise]. a.s.r. Insurance.

Adams, J., Goffe, L., Brown, T., Lake, A. A., Summerbell, C., White, M., ... & Adamson, A. J. (2015). Frequency and socio-demographic correlates of eating meals out and take-away meals at home: cross-sectional analysis of the UK national diet and nutrition survey, waves 1-4 (2008-12). *International Journal of Behavioral Nutrition and Physical Activity*, 12(1), 1-9.

Alli, S. (2021). Lush Cosmetics quitting social media to bring awareness to mental. The Hill. Retrieved November 26, 2021, from <https://thehill.com/changing-america/enrichment/arts-culture/582898-lush-cosmetics-quitting-social-media-to-bring>

Amazon Go. (2015, December 4). [Http://Amazon.Com/Go](http://Amazon.Com/Go). Retrieved November 25, 2021, from <https://www.amazon.com/go>

American Chemistry Council (ACC). (2015). How Can Plastics Help Curb Food Waste? Plastic packaging addresses people's hatred of waste. *Plastics Engineering*

Amichai-Hamburger, Y., Kingsbury, M., & Schneider, B. H. (2013). Friendship: An old concept with a new meaning?. *Computers in Human Behavior*, 29(1), 33-39.

Anderson Jr, W. T. (1971). Identifying the convenience-oriented consumer. *Journal of Marketing Research*, 8(2), 179-183.

Apple Inc. (2021). Healthcare. Apple. Retrieved November 24, 2021, from <https://www.apple.com/healthcare/>

Aziz, A. (2020, March 9). The Power Of Purpose: The Business Case For Purpose (All The Data You Were Looking For Pt 1). *Forbes*. Retrieved November 13, 2021, from <https://www.forbes.com/sites/afdelaziz/2020/03/07/the-power-of-purpose-the-business-case-for-purpose-all-the-data-you-were-looking-for-pt-1/?sh=3c02750930ba>

B

Bakhtiari, K. (2020, September 30). Why Brands Need To Pay Attention To Cancel Culture. *Forbes*. <https://www.forbes.com/sites/kianbakhtiari/2020/09/29/why-brands-need-to-pay-attention-to-cancel-culture/?sh=62f47921645e>

Bandura, A. (1997). The anatomy of stages of change. *American journal of health promotion*

Banister, David. "Cities, mobility and climate change." *Journal of Transport Geography* 19.6 (2011): 1538-1546.

Baty, S. (2006). Brand experience in user experience design. *UXmatters Newsletter*.

Baum, S., Ma, J., & Payea, K. (2013). Education Pays, 2013: The Benefits of Higher Education for Individuals and Society. *Trends in Higher Education Series*. College Board.

Bayard, C. T. (2009). Privacy in the Networked World: A Millian utilitarian appraisal. *Iowa State University*.

Becker, H., Stuijbergen, A., Oh, H. S., & Hall, S. (1993). Self-rated abilities for health practices: A health self-efficacy measure. *Health Values: The Journal of Health Behavior, Education & Promotion*.

Benoit, S., Schaefer, T., & Heider, R. (2016). Understanding on-the-go consumption: Identifying

and quantifying its determinants. *Journal of Retailing and Consumer Services*, 31, 32-42.

Bergstein, R. (2017, February 1). Should Companies Comment On Politics? A Branding Expert Weighs In. *Forbes*. Retrieved November 13, 2021, from <https://www.forbes.com/sites/rachellebergstein/2017/02/01/should-companies-comment-on-politics-a-branding-expert-weighs-in/?sh=188260252f76>

Bessens, K. (2021, Oktober 9). 'Regels zijn regels' is een armzalige manier van samenleven (opinie). *De Volkskrant*.

Bethune, S. (2021, October 19). Demand for mental health treatment continues to increase, says psychologist. *American Psychologist Association*. <https://www.apa.org/news/press/releases/2021/10/mental-health-treatment-demand>

Bhanji, J. P., & Delgado, M. R. (2014). The social brain and reward: social information processing in the human striatum. *Wiley Interdisciplinary Reviews: Cognitive Science*, 5(1), 61-73.

"Bichard, KCB. (2011, Feb 3). Democracy and the power of the individual

[Conference summary]. Ditchely. <https://www.ditchley.com/past-events/past-programme/2010-2019/2011/democracy>"

"Bichard, KCB. (2011, Feb 3). Democracy and the power of the individual

[Conference summary]. Ditchely. <https://www.ditchley.com/past-events/past-programme/2010-2019/2011/democracy>"

"Bichard, KCB. (2011, Feb 3). Democracy and the power of the individual

[Conference summary]. Ditchely. <https://www.ditchley.com/past-events/past-programme/2010-2019/2011/democracy>"

Biermann, F., & Boas, I. (2008). Protecting climate refugees: the case for a global protocol. *Environment: Science and Policy for Sustainable Development*, 50(6), 8-17.

Biersteker, T. (2021). Done with Data [Video]. *Dutch Design Week*. *Dutch Digital Design* <https://dutchdigital.design/articles/ddw-talks>

Bjork, C. (2004). Decentralisation in education, institutional culture and teacher autonomy in Indonesia. *International review of education*, 50(3), 245-262.

Blagov, P. S. (2021). Adaptive and dark personality in the COVID-19 pandemic: predicting health-behavior endorsement and the appeal of public-health messages. *Social Psychological and Personality Science*, 12(5), 697-707.

Blut, M., Teller, C., & Floh, A. (2018). Testing retail marketing-mix effects on patronage: A meta-analysis. *Journal of retailing*, 94(2), 113-135.

Bodó, B., Brekke, J. K., & Hoepman, J. H. (2021). Decentralisation: A multidisciplinary perspective. *Internet Policy Review*, 10(2), 1-21.

Boersema, W. (2021, February 17). Politieke partijen schuiven massaal op naar links. *Trouw*. Retrieved November 13, 2021, from <https://www.trouw.nl/politiek/politieke-partijen-schuiven-massaal-op-naar-links~b184d362/>

Boomsma, D., & Frissen, P. (2020, July). De politiek lijdt aan ernstige ideeënarmoede. Idee. <https://vanmierlostichting.d66.nl/content/uploads/sites/296/2020/07/idee209-Wat-is-politiek---interview-Paul-Frissen.pdf>

Bosman, J. (2021, Oktober 19). Moskoviëten huiverig voor nieuw 'gluursysteem' in metrostation: inwoners kunnen hun reis betalen met FacePay. *De Volkskrant*.

Boyne-White, C. (2021, July 18). How does product pricing affect gross profit and EBITDA? Investopedia. Retrieved November 14, 2021, from <https://www.investopedia.com/ask/answers/O50415/how-does-product-pricing-affect-gross-profit-and-ebitda.asp>

Bradford, T. (2005). Contactless: the next payment wave?. *Payment System Research Briefing*.

Brandsom. (2020, September 15). Voice search, the future of e-commerce? Brandsom Blog. Retrieved November 26, 2021, from <https://blog.brandsom.nl/-eng/voice-search-ecommerce>

Bregman, R. (2019). *De meeste mensen deugen: een nieuwe geschiedenis van de mens* (01 ed.). De Correspondent BV.

Bregman, R. (2019b). Gratis geld voor iedereen: hoe utopische ideeën de wereld veranderen (01 ed.). De Correspondent BV.

Bregman, R. Frederiks, J. (Hosts). (2017, Aug 6). Deze man wordt genoemd als Minister van Sociale Zaken (No. 028) [Audio podcast episode]. In *De Rudi & Freddie show. De correspondent*. <https://soundcloud.com/rudifreddieshow/met-actieonderzoeker-albert-jan-kruiter/sets>

Bregman, R., Frederiksen, J. (hosts) (2017) Deze man wordt genoemd als minister van sociale zaken (No. 28) [Audio podcast episode]. In *de Rudi & Freddie show. De Correspondent*. <https://open.spotify.com/episode/OK7IPECvjtYa0Y7nR6tBYk?si=fNR6j3uOTZO6AhZCaa-FHQ>.

Brewis, J., & Jack, G. (2005). Pushing speed? The marketing of fast and convenience food. *Consumption Markets & Culture*, 8(1), 49-67.

Browne, M. N., & Keeley, S. M. (2007). *Asking the right questions: A guide to critical thinking*. Pearson Education.

BSS limited. (2020, September 4). *Stainless Steel and Sustainability*. BS Stainless Limited. <https://www.bsstainless.com/stainless-steel-and-sustainability>

Burnham, B. (2016). *Make happy* [Show]. Netflix. <https://www.netflix.com/watch/>

Burnham, B. (2016). *Make happy* [Show]. Netflix. https://www.netflix.com/watch

C

Career Planner. (2017). *Job Outlook for Psychologists*. <https://job-outlook.careerplanner.com/Counselors.cfm>

Cariolet, J. M., Colombert, M., Vuillet, M., & Diab, Y. (2018). Assessing the resilience of urban areas to traffic-related air pollution: Application in Greater Paris. *Science of the Total Environment*, 615, 588-596.

CBS. (2019, December). Kernprognose 2019-2060: 19 miljoen inwoners in 2039. <https://www.cbs.nl/nl-nl/achtergrond/2019/51/kernprognose-2019-2060-19-miljoen-inwoners-in-2039>

CBS. (2021). Hoeveel brandstof verbruikt het Nederlandse wegvervoer? <https://www.cbs.nl/nl-nl/visualisaties/verkeer-en-vervoer/uitstoot-en-brandstofverbruik/brandstofverbruik-wegvervoer>

Cechin-De La Rosa, C. (Director). (2019). *Broken* [Documentary]. Netflix and Zero Point Zero.

Chan, K. H., & Yuen, K. Y. (2020). *COVID-19 epidemic: disentangling the re-emerging*

controversy about medical face masks from an epidemiological perspective. *International journal of epidemiology*, 49(4), 1063-1066.

Cherry, K. (2021, February 20). How Can Our Attitudes Change and Influence Behaviors? Verywell Mind. Retrieved December 14, 2021, from <https://www.verywellmind.com/attitudes-how-they-form-change-shape-behavior-2795897>

Chua, J. M. (2019, December 4). Food delivery and takeout like DoorDash and GrubHub is on the rise. *Vox*. <https://www.vox.com/the-goods/2019/12/4/20974876/takeout-delivery-waste-grubhub-recycling>

Claessens, M. (2020, December 28). *Marketing Strategies for Convenience Products - How to market Convenience Products*. Marketing-Insider. Retrieved November 14, 2021, from <https://marketing-insider.eu/marketing-strategies-for-convenience-products/>

Claessens, M. (2020, December 28). *Marketing Strategies for Convenience Products - How to market Convenience Products*. Marketing-Insider. Retrieved November 14, 2021, from <https://marketing-insider.eu/marketing-strategies-for-convenience-products/>

Clark, M. L., & Drewry, D. L. (1985). Similarity and reciprocity in the friendships of elementary school children. *Child Study Journal*.

Clear. (2021, November 10). *Clear: Verbeter je gezondheid datagedreven met bloedglucosemonitoring*. Clear. (NL). Retrieved November 24, 2021, from <https://www.clear.bio/nl>

Cohen, J. (2004, September). *De betekenis van de verlichting in de moderne politiek* [Rede]. ISHSS symposium over Democratie, Culturele Diversiteit en Internationaal Onderwijs.

Cook, T. E., & Gronke, P. (2005). The skeptical American: Revisiting the meanings of trust in government and confidence in institutions. *Journal of Politics*, 67(3), 784-803.

Cowen, T. (2020, October 20). Daniel Kahneman on Cutting Through the Noise (Ep. 56– Live at Mason). *Medium*. Retrieved November 23, 2021, from <https://medium.com/conversations-with-tyler/tyler-cowen-daniel-kahneman-economics-bias-noise-167275de691f>

Coyle, D., Linehan, C., Tang, K., & Lindley, S. (2012). Interaction design and emotional wellbeing. In *CHI'12 Extended Abstracts on Human Factors in Computing Systems*(pp. 2775-2778).

D

Daley, J. (2019, March 1). Toledo, Ohio, Just Granted Lake Erie the Same Legal Rights as People. *Smithsonian Magazine*. <https://www.smithsonianmag.com/smart-news/toledo-ohio-just-granted-lake-erie-same-legal-rights-people-180971603/>

Dalryn, H., & Shorten, D. (1988). Hygiene aspects of packaging in the food industry. *International Biodeterioration*, 24(4-5), 387-392.

David Leonard, S. (2021). *The Meaning of Cross Necklaces* by Stephen David Leonard. *Stephendavidleonard.com*. Retrieved December 6, 2021, from <https://www.stephendavidleonard.com/what-cross-necklace-mean-to-you>

Davis, B., & Sumara, D. (2012). Fitting teacher education in/to/for an increasingly complex world. *Complicity: An International Journal of Complexity and Education*, 9(1).

Dawkins, R. (1976). *The Selfish Gene* (1st Edition). Oxford University Press.

de Jager, N. (2021, December 8). Privacy protest, Universiteit zweert: camera telt alleen. De Volkskrant.

De Meuse, K. P. (2019). A meta-analysis of the relationship between learning agility and leader success. *Journal of Organizational Psychology*, 19(1), 25-34.

De Volkskrant (2021a, November 27). Laffe politiek wordt afgestraft, de kiezer snakt naar dappere besluiten. De Volkskrant.

De Volkskrant (2021b, November 24). De overheid moet verduurzaming Tata Steel faciliteren. De Volkskrant.

de Waard, P. (2021, Oktober 5). Zou het tekort aan klusjesmensen geen reden kunnen zijn het lts weer op te richten?. De Volkskrant.

Deepak, A. (2021, February 10). Future of GPS Tracking Systems. <https://www.roseindia.net/Services/Trackingsystem/Future-of-GPS-Tracking-Systems.shtml>. Retrieved November 14, 2021, from <https://www.roseindia.net/services/trackingsystem/Future-of-GPS-Tracking-Systems.shtml>

Deloitte (2017). Next stop for convenience stores. Deloitte China. <https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/cip/deloitte-cn-cip-convenience-store-en-180214.pdf>

Denyes, M. J., Orem, D. E., & Bekel, G. (2001). Self-care: A foundational science. *Nursing science quarterly*, 14(1), 48-54.

Devillier Donegan Enterprises. (2006). The Roman Empire: in the First Century. The Roman Empire. Early Christians | PBS. PBS. Retrieved December 6, 2021, from <https://www.pbs.org/empires/romans/empire/christians.html>

Dholakia, U. M. (2000). Temptation and resistance: An integrated model of consumption impulse formation and enactment. *Psychology & Marketing*, 17(11), 955-982.

Diekstra, R. (2021, Oktober 19). Iedere middelbare school moet het vak psychologie geven (opinie). De Volkskrant.

Dreher, M., Hoffmann, S. W., Brendel, C., Heser, D., & Simon, P. (2019). Convenience behavior and being overweight in adults: development and validation of the convenience behavior questionnaire. *Frontiers in public health*, 7, 20.

E

Edelman. (2018, October 2). Two-Thirds of Consumers Worldwide Now Buy on Beliefs. 2018 Edelman Earned Brand Study. Retrieved November 25, 2021, from <https://www.edelman.com/news-awards/two-thirds-consumers-worldwide-now-buy-beliefs>

Eilish, B. (2021). Happier than ever. On Happier than ever [Audio file]. Retrieved from <https://www.youtube.com/watch?v=5GJWxDKyk3A>

Else, W. (2018, May 30). Why Your Company Should Be More Socially Responsible. *Forbes*. Retrieved November 13, 2021, from <https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2018/05/30/why-your-company-should-be-more-socially-responsible/?sh=4f738c742c32>

Ely, P. (2011). Examine the role of the subject and the individual within democratic society. *Innervate Volume 3*.

Emmons, R. A., & McCullough, M. E. (Eds.). (2004). *The psychology of gratitude*. Oxford

University Press.

EMTA. (2010, July). Public transport in the Netherlands. Ministry of Transport, Public Works and Water Management. <https://www.emta.com/IMG/pdf/brochure.pdf>

EMTA. (2010, July). Public transport in the Netherlands. Ministry of Transport, Public Works and Water Management. <https://www.emta.com/IMG/pdf/brochure.pdf>

Epstein, A. H., & Theuer, S. L. H. (2017). Sustainable development and climate action: thoughts on an integrated approach to SDG and climate policy implementation. *Interconnections 2017*.

Evans, D. M. (2014). *Food waste: home consumption, material culture and everyday life*. Bloomsbury publishing.

F

Festinger, L. (1957). *A theory of cognitive dissonance* (Vol. 2). Stanford university press.

Fisher, G. M. (2004). Leading in an increasingly complex society. *Technology in Society*, 26(2-3), 371-374.

Fitch. (2020). About Fitch. Retrieved December 15, 2021, from <https://www.fitch.com/about>

Fitt, H., & Curl, A. (2019). E-scooter use in New Zealand: Insights around some frequently asked questions. University of Canterbury: Christchurch, New Zealand.

Foodlog. (2021, May 7). Nederland "ontkookt" - Jongere generaties bestellen en gaan uit eten. Retrieved November 16, 2021, from <https://www.foodlog.nl/artikel/jongere-generaties-ontkoken-nederland/>

Foodsy (2021). Lang genoeg gewacht? Pre-order. Pay. Grab&Go. (flyer). Foodsy

Ford, J. (2020). What percentage of people are impulse buyers? [Dataset]. Answers to All. https://answerstoall.com/object/what-percentage-of-people-are-impulse-buyers/#What_percent_of_supermarket_purchases_are_unplanned_or_impulse_purchases

FreshBooks. (2021, August 26). Boost Your Profits Without Increasing Sales: A How-To Guide. Retrieved November 14, 2021, from <https://www.freshbooks.com/hub/leadership/boost-your-profits-without-increasing-sales-a-how-to-guide>

Frijters, S. (2021, December 4). Steeds meer honger in de wereld, en niet alleen door corona. De Volkskrant.

Frissen, P. (2005, January 10). We leven in een netwerksamenleving. NRC. <https://www.nrc.nl/nieuws/2005/01/11/we-leven-in-een-netwerksamenleving-7720457-a771548>

Futerra & OnePulse. (2018). Consumers are confident they can make a difference in the world [Dataset]. *Forbes*.

G

Gaefke, R. (2009). *Harmony With Nature*. <http://www.harmonywithnatureun.org>

Gans, S. (2020, July 2). Cognitive Dissonance and Ways to Resolve It. *Verywell Mind*. Retrieved December 15, 2021, from <https://www.verywellmind.com/what-is-cognitive-dissonance-2795012>

Gasper, D., Shah, A., & Tankha, S. (2019). The framing of sustainable consumption and production in SDG 12. *Global Policy*, 10, 83-95

Gaukroger, C. (2020). Privacy and the importance of 'getting away with it'. *Journal of Moral Philosophy*, 17(4), 416-439.

Gingiss, D. (2019, February 11). Study: Consumers Blame Government For Dividing The Nation But Look To Brands To Fix It. *Forbes*. Retrieved November 13, 2021, from <https://www.forbes.com/sites/dangingiss/2019/02/11/study-consumers-blame-government-for-dividing-the-nation-but-look-to-brands-to-fix-it/?sh=6da20e096ac4>

Glenn, J. (2021, January 27). "Sacred Adornment: Jewelry as Belief in Ancient Egypt." *Glencairn Museum*. Retrieved December 6, 2021, from <https://glencairnmuseum.org/newsletter/2020/3/6/sacred-adornment-jewelry-as-belief-in-ancient-egypt>

Glenn, J., Bluth, M., Christianson, M., Pressley, J., Taylor, A., Macfarlane, G. S., & Chaney, R. A. (2020). Considering the potential health impacts of electric scooters: an analysis of user reported behaviors in Provo, Utah. *International journal of environmental research and public health*, 17(17), 6344.

Gmelig Meyling, A. (2021, December 8). Misschien ligt het maatschappelijk probleem niet bij te weinig werken maar juist bij te veel. *De Volkskrant*.

Granta Edupack. (2021). [Software]. Ansys. <https://www.ansys.com/products/materials/granta-edupack>

Greentripper. (2020). CO2 calculator. Co2logic. Retrieved 2022, from <https://www.greentripper.org/en?cl=en&ol=0>

Greenpeace. (2022, June). Health Expert Statement Addressing Safety of Reusables and COVID-19. https://storage.googleapis.com/planet4-international-stateless/2020/06/9592036c-health-expert-statement_125.pdf

Grunberg, A. (2021, Oktober 5). Verdiende loon: wie faalt is daar zelf schuldig aan leert onze meritocratie. *De Volkskrant*.

Gustavsson, J., Cederberg, C., Sonesson, U., Van Otterdijk, R., & Meybeck, A. (2011). Global food losses and food waste.

H

Hearne, S.A. & Aucott, M. (1991). Source reduction versus Release Reduction: Why the TRI cannot measure pollution prevention. *Pollution Prevention Review*, Winter.

Heider, R., & Moeller, S. (2012). Outlet patronage in on-the-go consumption: An analysis of patronage preference drivers for convenience outlets versus traditional retail outlets. *Journal of Retailing and Consumer Services*, 19(3), 313-324.

Heinö, A. J. (2009). Democracy between collectivism and individualism. De-nationalisation and individualisation in Swedish national identity. *International Review of Sociology*, 19(2), 297-314.

Hekkert, P., & van Dijk, M. (2011). *Vision in design - A guidebook for innovators*. BIS Publishers.

Henslin, J. M. (2015). *Essentials of sociology: A down-to-earth approach*. Pearson.

Hill, R. T. (1968). VI. Democracy and Individualism. In *The Public Domain and Democracy* (pp. 130-146). Columbia University Press.

Hirsch, S., Lanter, D., & Finger, R. (2021). Profitability and profit persistence in EU food retailing: Differences between top competitors and fringe firms. *Agribusiness*, 37(2), 235-263.

Hirth, S., Boons, F., & Doherty, B. (2021). Unpacking food to go: Packaging and food waste of on the go provisioning practices in the UK. *Geoforum*, 126, 115-125.

Hirth, S., Boons, F., & Doherty, B. (2021). Unpacking food to go: Packaging and food waste of on the go provisioning practices in the UK. *Geoforum*, 126, 115-125.

Hirth, S., Boons, F., & Doherty, B. (2021). Unpacking food to go: Packaging and food waste of on the go provisioning practices in the UK. *Geoforum*, 126, 115-125. <https://doi.org/10.1016/j.geoforum.2021.07.022>

Hirth, S., Boons, F., & Doherty, B. (2021). Unpacking food to go: Packaging and food waste of on the go provisioning practices in the UK. *Geoforum*, 126, 115-125. <https://doi.org/10.1016/j.geoforum.2021.07.022>

Hirth, S., Boons, F., & Doherty, B. (2021). Unpacking food to go: Packaging and food waste of on the go provisioning practices in the UK. *Geoforum*, 126, 115-125. <https://doi.org/10.1016/j.geoforum.2021.07.022>

Hitchcock, D. (2018). *Critical thinking*.

Holroyd, J., Scaife, R., & Stafford, T. (2017). Responsibility for implicit bias. *Philosophy Compass*, 12(3), e12410.

Howard, G., Bartram, J., Brocklehurst, C., Colford, J. M., Costa, F., Cunliffe, D., ... & Wright, C. Y. (2020). COVID-19: urgent actions, critical reflections and future relevance of 'WaSH': lessons for the current and future pandemics. *Journal of water and health*, 18(5), 613-630.

Hudson, A. (1998). Beyond the borders: Globalisation, sovereignty and extra-territoriality. *Geopolitics*, 3(1), 89-105.

IBM Global Education (2009). *Education for a Smarter Planet: The Future of Learning*. Executive Insights. Retrieved from http://www.ibm.com/smarterplanet/global/files/dk_da_dk_education_the_future_of_learning.pdf

IEA (2018), *The Future of Cooling*, IEA, Paris <https://www.iea.org/reports/the-future-of-cooling>

IGD (2021). *UK convenience market. Five years forecast of market growth*

IntegraFlex. (2018). *On-the-Go consumption demands convenient food packaging design*. Graphic Packaging international. <https://www.graphicpkg.com/documents/2018/09/integralflex-brochure.pdf/>

IPCC, 2012: Summary for Policymakers. In: *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* [Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (eds.)]. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK, and New York, NY, USA, pp. 3-21.

Iyengar, S. S., & Lepper, M. R. (2000). When choice is demotivating: Can one desire too much of a good thing?. *Journal of personality and social psychology*, 79(6), 995.

J

Jansch, I. (2021, May). High Level Solution Overview CoronaCheck. Ministerie van Volksgezondheid, Welzijn en Sport. <https://github.com/minvws/nl-covid19-coronacheck-app-coordination/blob/main/architecture/images/hla.png>

Jansen, M. (2021, Oktober 18). 'Verhoog BTW op snoep, doe meer aan preventie' (opinie). De Volkskrant.

Janssen, H. G., Davies, I. G., Richardson, L. D., & Stevenson, L. (2018). Determinants of takeaway and fast food consumption: a narrative review. *Nutrition research reviews*, 31(1), 16-34.

Jebarajakirthy, C., Das, M., Maggioni, I., Sands, S., Dharmesti, M., & Ferraro, C. (2021). Understanding on-the-go consumption: A retail mix perspective. *Journal of Retailing and Consumer Services*, 58, 102327.

Jerraya, A. A., & Wolf, W. (2005). Hardware/software interface codesign for embedded systems. *Computer*, 38(2), 63-69.

Jiang, X., Zhang, L., Xiong, C., & Wang, R. (2016). Transportation and regional economic development: analysis of spatial spillovers in China provincial regions. *Networks and Spatial Economics*, 16(3), 769-790.

Junte, J. (2021, Oktober 19). De Dutch Design Week in Eindhoven draait niet om méér, maar om genoeg. De Volkskrant.

Junte, J. (n.d.). Goed ontwerp: beroepspraktijk moet minder kapitalistisch. De Volkskrant.

K

Kaasinen, E. (2005). User acceptance of mobile services: Value, ease of use, trust and ease of adoption.

Kaissis, G., Ziller, A., Passerat-Palmbach, J., Ryffel, T., Usynin, D., Trask, A., ... & Braren, R. (2021). End-to-end privacy preserving deep learning on multi-institutional medical imaging. *Nature Machine Intelligence*, 3(6), 473-484.

Kamboj, S., Gupta, N., Bandral, J. D., Gandotra, G., & Anjum, N. (2020). Food safety and hygiene: A review. *International Journal of Chemical Studies*, 8(2), 358-368.

Kammaing, J. J. (2014). The moral content of the concept of privacy (Master's thesis).

Kant, Immanuel (1785). Thomas Kingsmill Abbott (ed.). *Fundamental Principles of the Metaphysic of Morals* (10 ed.). Project Gutenberg. pp. 60-62.

Karlsson, R. (2010). Three essays on our planetary future. Lund University.

Khan Academy. (2018). Lesson summary: The limitations of GDP (article). Retrieved November 25, 2021, from <https://www.khanacademy.org/economics-finance-domain/ap-macroeconomics/economic-indicators-and-the-business-cycle/limitations-of-gdp/a/lesson-summary-the-limitations-of-gdp>

Khreis, H., May, A. D., & Nieuwenhuijsen, M. J. (2017). Health impacts of urban transport policy measures: A guidance note for practice. *Journal of Transport & Health*, 6, 209-227.

Kim, W., Hallsworth, A., & Kim, H. (2018). Examining the effectiveness of government policy for retail districts: evidence from Korea. *Sustainability*, 10(5), 1558.

Klein, R. J., Smit, M. J., Goosen, H., & Hulsbergen, C. H. (1998). Resilience and vulnerability: coastal dynamics or Dutch dikes?. *Geographical Journal*, 259-268.

Kothari, A., & Bajpai, S. (2017). We are the river, the river is us. *Economic & Political Weekly*, 52(37), 103.

Kruiter, A. J., Bredewold, F. H., & Ham, M. (2016). Hoe de verzorgingsstaat verbouwd wordt. *Kroniek van een verandering*.

Kugelman, M. (2009). Land grab

Kuijjer, L. (2009). Implications of Social Practice Theory for Sustainable Design

Kwong, E., Lam, C. B., Li, X., Chung, K. K. H., Cheung, R. Y. M., & Leung, C. (2018). Fit in but stand out: A qualitative study of parents' and teachers' perspectives on socioemotional competence of children. *Early Childhood Research Quarterly*, 44, 275-287.

L

Lede, V. K., & Luyendijk, J. (2020). Pessimisme is voor losers: op de rand van een nieuwe tijd (01 ed.). Uitgeverij Balans.

Lipow, V. (n.d.). Food Retail Jobs. *Monster Career Advice*. <https://www.monster.com/career-advice/article/food-retail-jobs>

Lustgarten, A. (2020, December 16). The Great Climate Migration Has Begun. *The New York Times*. Retrieved November 10, 2021, from <https://www.nytimes.com/interactive/2020/07/23/magazine/climate-migration.html>

M

MacArthur, Ellen. "Towards the circular economy." *Journal of Industrial Ecology* 2 (2013): 23-44.

Mallett, R. K., Melchiori, K. J., & Strickroth, T. (2013). Self-confrontation via a carbon footprint calculator increases guilt and support for a proenvironmental group. *Ecopsychology*, 5(1), 9-16.

Markoe, L. (2014, January 16). Study: Most Jewish charitable giving goes to Jewish groups. *The Washington Post*. https://www.washingtonpost.com/national/religion/study-most-jewish-charitable-giving-goes-to-jewish-groups/2014/01/16/11310a9e-7ef7-11e3-97d3-b9925ce2c57b_story.html

Martin, B. V., Memmott, F. W., & Bone, A. J. (1961). Principles and techniques of predicting future demand for urban area transportation. *Mass Inst Tech Dept Pub Wks Jt Hwy Res*.

Martineau, G. (2014). Comparing reusable mugs with single-use coffee cups (LCA). CIRAIG.

McCordle, M. (2021). *Generation Alpha*. Hachette UK.

McLuhan, M., & MCLUHAN, M. A. (1994). *Understanding media: The extensions of man*. MIT press.

McStay, A. (2018). *Emotional AI: The rise of empathic media*. Sage.

Melbius, D. (2021, December 3). 4.800 kanonnen versus het klimaat. De Volkskrant.

Meyer, D., Jayawar, M. W., Muir, S., Ho, D., & Sackett, O. (2019). Increasing awareness of the importance of physical activity and healthy nutrition: Results from a mixed-methods evaluation

of a workplace program. *Journal of Physical Activity and Health*, 16(4), 259-266.

Ministry of Infrastructure and Water Management. (2019, February). Public transport in 2040. Rijksoverheid. <https://www.government.nl/binaries/government/documents/publications/2019/06/13/public-transport-in-2040-outlines-of-a-vision-for-the-future/Public+Transport+in+2040.pdf>

Ministry of Infrastructure and Water Management. (2019, February). Public transport in 2040. Rijksoverheid. <https://www.government.nl/binaries/government/documents/publications/2019/06/13/public-transport-in-2040-outlines-of-a-vision-for-the-future/Public+Transport+in+2040.pdf>

Mol, A. (2021, Oktober 23). Het wereldspel is uitgespeeld: hoe het neoliberale beschavingsmodel aan invloed verliest (opinie). *De Volkskrant*.

Monash University. (1970). Retail mix. In *Marketing Dictionary*. <https://www.monash.edu/business/marketing/marketing-dictionary>

Mordor Intelligence. (2021). Global single use plastic packaging market. <https://www.mordorintelligence.com/industry-reports/single-use-plastic-packaging-market>

More, A. (2021, June 2). Bone Conduction Headphones Market Size, Growth 2021 Regional Trend, Future Leading Players Updates, Industry Demand, Current and Future Plans by Forecast to 2027. *The Express Wire*. Retrieved November 14, 2021, from <https://www.newschannelnebraska.com/story/44014464/Bone-Conduction-Headphones-Market-Size,Growth-2021-Regional-Trend,-Future-Leading-Players-Updates,-Industry-Demand,-Current-and-Future-Plans-by-Forecast-to-2027>

(Mugge, R., Schoormans, J. P., & Schifferstein, H. N. (2005). Design strategies to postpone consumers' product replacement: The value of a strong person-product relationship. *The Design Journal*, 8(2), 38-48.

Mutahi, P. (2020). Fake news and the 2017 kenyan elections. *Communicatio: South African Journal of Communication Theory and Research*, 46(4), 31-49.

Myers, N. (2002). Environmental refugees: a growing phenomenon of the 21st century. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 357(1420), 609-613.

N

Near-field communication. (2022, January 13). In Wikipedia. https://en.wikipedia.org/wiki/Near-field_communication

Newcomb, T. M. (1960). Varieties of interpersonal attraction. *Group dynamics: Research and theory*, 2.

NI Business Info. (2015, January 1). Strategies to improve sales and profitability | nibusinessinfo.co.uk. Retrieved November 14, 2021, from <https://www.nibusinessinfo.co.uk/content/strategies-improve-sales-and-profitability>

Nicholls, R. J., Hanson, S. E., Lowe, J. A., Slangen, A. B., Wahl, T., Hinkel, J., & Long, A. J. (2021). Integrating new sea-level scenarios into coastal risk and adaptation assessments: An ongoing process. *Wiley Interdisciplinary Reviews: Climate Change*, 12(3), e706.

Nolan, S. (2020b, June 1). Black and Brown People Have Been Protesting for Centuries. It's

White People Who Are Responsible for What Happens Next. *Time*. Retrieved November 13, 2021, from <https://time.com/5846072/black-people-protesting-white-people-responsible-what-happens-next/>

NOS. (2021, January 3). Flitsbezorgen de toekomst? Jumbo wil in ieder geval de boot niet missen. NOS. <https://nos.nl/artikel/2411791-flitsbezorgen-de-toekomst-jumbo-wil-in-ieder-geval-de-boot-niet-missen>

NOS. (2021, July 1). Italiaanse gletsjer ingepakt om smelten te voorkomen. Retrieved November 11, 2021, from <https://nos.nl/video/2387555-italiaanse-gletsjer-ingepakt-om-smelten-te-voorkomen>

NS [TBWA\NEBOKO]. (2021, May 17). NS | Waar ga jij naartoe vandaag? [Video]. YouTube. <https://www.youtube.com/watch?v=JXJ8HGtJODo>

Nurmi, J. E. (1993). Adolescent development in an age-graded context: The role of personal beliefs, goals, and strategies in the tackling of developmental tasks and standards. *International Journal of Behavioral Development*, 16(2), 169-189.

O

O'Connor, D., & Ford, J. (2014). Increasing the effectiveness of the "Great Green Wall" as an adaptation to the effects of climate change and desertification in the Sahel. *Sustainability*, 6(10), 7142-7154.

O'Neill, M., Yoder Slater, G., & Batt, D. (2019). Social work student self-care and academic stress. *Journal of Social Work Education*, 55(1), 141-152.

O'Sullivan, F. (2019, October 7). Street by Street, Amsterdam Is Cutting Cars Out of the Picture. *Bloomberg.Com*. Retrieved November 14, 2021, from <https://www.bloomberg.com/news/articles/2019-10-07/how-amsterdam-is-closing-the-door-on-downtown-cars>

Olivera, F., Rivas, A., & Iturriaga, F. (2013). Subtle interaction for a non intrusive communication. In *Ubiquitous Computing and Ambient Intelligence. Context-Awareness and Context-Driven Interaction* (pp. 215-222). Springer, Cham.

Orii. (2019, December 27). ORII Official. The Voice Powered Ring for Communication & More. <https://orii.io>

P

Perez, M. E., Castaño, R., & Quintanilla, C. (2010). Constructing identity through the consumption of counterfeit luxury goods. *Qualitative Market Research: An International Journal*.

Persson, M. & Verhagen, L. (2021, Oktober 19). Europarlement opent aanval op techreuzen vanwege de ontwrichtende invloed van de bedrijven op de maatschappij. *De Volkskrant*.

Pichai, S. (2021, Oktober 5). 'Er is meer nodig om internet toegankelijk, betaalbaar en nuttig te laten zijn voor elke Afrikaner'. *De Volkskrant*.

Plastics Europe. (2019). Use of plastic. Plastic Soup Foundation

ProRail & Deutsche Bahn (2021, Oktober 5). Proef tot 2025 op Betuweroute met zelfrijdende goederentrein. *De Volkskrant*.

Proximity principle. (2020, November 15). In Wikipedia. https://en.wikipedia.org/wiki/Proximity_principle

R

Raychaudhuri, D., & Gerla, M. (Eds.). (2011). *Emerging wireless technologies and the future mobile internet*. Cambridge University Press.

Reijmer, L. (2021, December 4). Meilandjes gecanceld? Nee, dit zijn de wetten van de marketing (opinie). *De Volkskrant*.

Reimer, S., & Leslie, D. (2004). Identity, consumption, and the home. *Home Cultures*, 1(2), 187-210.

Rijksinstituut voor Volksgezondheid en Milieu. (2019, June). Hoeveel mensen hebben in de toekomst een chronische aandoening? Staat van Volksgezondheid en Zorg. <https://www.vtv2018.nl/aandoeningen>

Rosa, H., Dörre, K., & Lessenich, S. (2017). Appropriation, activation and acceleration: The escalatory logics of capitalist modernity and the crises of dynamic stabilization. *Theory, Culture & Society*, 34(1), 53-73.

Rosane, O. (2021, February 8). Sweden Imagines Life After Cars With 'One-Minute Cities.' EcoWatch. Retrieved November 14, 2021, from <https://www.ecowatch.com/sweden-cars-urban-spaces-2650404191.html>

Ross, A. (2016, September 9). The Surprising Way a Supermarket Changed the World. *Time*. Retrieved December 15, 2021, from <https://time.com/4480303/supermarkets-history/>

Royal Dutch Shell (2021, December 3). Wij maken miljoenen kilometers schoner. Verander mee (advertentie). *De Volkskrant*.

S

Sandel, M. J. (2020). *The tyranny of merit: What's become of the common good?*. Penguin UK.

Sands, S., Maggioni, I., Ferraro, C., Jebarajakirthy, C., & Dharmesti, M. (2019). The vice and virtue of on-the-go consumption: An exploratory segmentation. *Journal of Retailing and Consumer Services*, 51, 399-408.

Schaefer, K. E., Chen, J. Y. C., Szalma, J. L., Hancock, P. A. (2016). A meta-analysis of factors influencing the development of trust in automation: Implications for understanding autonomy in future systems. *Human Factors*, 58, 377-400. doi:10.1177/0018720816634228

Schelfhout, A. (2021, Oktober 18). 'Voer een nationale zorgverzekering in' (opinie). *De Volkskrant*.

Schep, E. (2022, September). Verbod op Gratis Eenmalige bekers. CE Delft. <https://open.overheid.nl/repository/rnl-3296752c-b016-4aad-a85c-4e8e9aafdb4b/1/pdf/bijlage-3-ce-delft-verbod-op-gratis-eeenmalige-bekers.pdf>

Schleckser, J. (2020, June 28). What's the Right Customer Acquisition Cost for Your Business? Inc.Com. <https://www.inc.com/jim-schleckser/whats-right-customer-acquisition-cost-for-your-business.html>

Schneider, B. (2014). *Friends and enemies*. Routledge.

Sheely, M. (2008). Global adoption of convenience foods. *American Journal of Agricultural Economics*, 90(5), 1356-1365

Shiv, B., & Fedorikhin, A. (1999). Heart and mind in conflict: The interplay of affect and cognition in consumer decision making. *Journal of consumer Research*, 26(3), 278-292.

Shove, E. (2006). *Towards Practice Oriented Product Design [Slides]*. Lancaster. <https://www.lancaster.ac.uk/fass/projects/dnc/media/towards%20popd.pdf>

Shove, E., Pantzar, M., & Watson, M. (2012). *The dynamics of social practice: Everyday life and how it changes*. Sage.

Skoda, E. (2017). On-the-go: the trend that's here to stay. Electronically published at: <https://packagingeurope.com/on-the-go-food-convenience-trend>, accessed, 2.

Skowronski, J. J. (2019). *Autobiographical Memory and the Self*.

Slager, S. (2021, Oktober 19). Als het aan Facebook ligt, lopen we straks allemaal rond in de metaverse. *De Volkskrant*.

Smithers, R. (2020, September 23). "Lunch on the go" habit generates 11bn items of packaging waste a year. *The Guardian*. <https://www.theguardian.com/environment/2019/may/14/lunch-on-go-habit-generates-11bn-items-packaging-waste-year-uk>

Soeterbroek, A. (2021, Oktober 18). 'Met reparatiegeneeskunde alleen kom je er niet' (opinie). *De Volkskrant*.

Sommer, M. (2021, December 4). Maatwerk leidt uiteindelijk tot politiestaat. *De Volkskrant*.

Sparkes, M. (2021). *What is a metaverse*.

Spotswood, F. (Ed.). (2016). *Beyond behaviour change: Key issues, interdisciplinary approaches and future directions*. Policy Press.

Sprotles, G. B., & Kendall, E. L. (1986). A methodology for profiling consumers' decision making styles. *Journal of Consumer Affairs*, 20(2), 267-279.

Statista. (2019, March 29). EU28: estimated yearly consumption of single-use coffee cups 2015, by country [Dataset]. D. Coppola. <https://www.statista.com/statistics/988854/consumption-of-coffee-cups-by-country-in-europe/>

Steele, L. G., & Lynch, S. M. (2013). The pursuit of happiness in China: Individualism, collectivism, and subjective well-being during China's economic and social transformation. *Social indicators research*, 114(2), 441-451.

Strauss, B. H., Kulp, S., & Levermann, A. (2015, November). *Global mapping choices report*. Sealevel. Retrieved November 11, 2021, from <https://sealevel.climatecentral.org/uploads/research/Global-Mapping-Choices-Report.pdf>

Sunstein, C.R. (2014). *Nudging: A very short guide*. Consumer Pol'y.

T

Tajfel, H. (1978). The achievement of inter-group differentiation. In H. Tajfel (Ed.), *Differentiation between social groups* (pp. 77-100). London: Academic Press.

Taylor, S. G., Geden, E., Isaramalai, S. A., & Wongvatuny, S. (2000). Orem's self-care deficit nursing theory: its philosophic foundation and the state of the science. *Nursing Science Quarterly*, 13(2), 104-110.

The Coca-Cola Company (2021, December 4). *Kies ons*. Wij zijn niet nieuw en daar zijn we

trots op (advertentie). De Volkskrant.

Thomas, L. (2021, April 6). UBS predicts 80,000 stores will close in the U.S. by 2026. Community Info Share. Retrieved November 23, 2021, from <https://cinfoshare.com/more-retail-pain-ahead-ubs-predicts-80000-stores-will-close-in-the-u-s-by-2026/>

Thomas, M. & Desai, K. & Seenivasan, S. (2012). Vice and Virtue Food: Perceived Impulsiveness and Healthfulness of 100 Food Items. SSRN Electronic Journal. 10.2139/ssrn.2160503.

Timmermann, C. Contributive Justice: An Exploration of a Wider Provision of Meaningful Work. Soc Just Res 31, 85-111 (2018). <https://doi.org/10.1007/s11211-017-0293-2>

Tocqueville, A. (2003). Democracy in America: and Two essays on America. Penguin UK.

Tomoyama, S. & Toyota Motor Corporation. (2019, February 6). Toyota's Connected & MaaS Strategy. https://global.toyota/pages/global_toyota/ir/financial-results/2019_3q_competitiveness_en.pdf

Too Good To Go. (2021). Join our Social Impact Company. <https://toogoodtogo.org/en>

Tsofa, B., Molyneux, S., Gilson, L., & Goodman, C. (2017). How does decentralisation affect health sector planning and financial management? a case study of early effects of devolution in Kilifi County, Kenya. International journal for equity in health, 16(1), 1-12.

U

UK Development, Concepts and Doctrine Centre (DCDC), The DCDC Global Strategic Trends Programme 2007-2036, 3rd edition (Swindon, UK: Crown Copy-right/MOD, 2007), http://www.mod.uk/NR/rdonlyres/94A1F45E-A830-49DB-B319-DF68C28D561D/O/strat_trends_17mar07.pdf (accessed 6 September 2008), 29.

Ulbrich. (2021, April 22). Stainless Sustainability: The Circular Economy of Metal. <https://www.ulbrich.com/blog/stainless-sustainability-the-circular-economy-of-metal/>

UN. (2021). Sustainable Development. SDG UN. Retrieved December 14, 2021, from <https://sdgs.un.org>

USDA. (2013). Food Expenditure Data. <https://www.ers.usda.gov/data-products/food-expenditure-series/>; Heider, R., & Moeller, S. (2012). Outlet patronage in on-the-go consumption: An analysis of patronage preference drivers for convenience outlets versus traditional retail outlets. Journal of Retailing and Consumer Services, 19(3), 313-324.

V

van Caesbroeck, J. (2016, July 11). Family, als vrienden familie worden. Psychologies magazine België. Retrieved November 24, 2021, from <https://www.psychologies.be/nl/family-als-vrienden-familie-worden/>

van der Krabben, E. (2009). Retail development in the Netherlands: Evaluating the effects of radical changes in planning policy. European Planning Studies, 17(7), 1029-1048

Van der Meer, T. W. (2017). Political trust and the "crisis of democracy". In Oxford research encyclopedia of politics.

Van der Meer, T. W., & Zmerli, S. (2017). The deeply rooted concern with political trust. In Handbook on political trust. Edward Elgar Publishing.

Van Dijken, P. (Host). (2021). Gezonder leven? Zo kunnen data en apps je daarbij helpen. (No. 1) [Audio podcast episode]. In TNO Insights. TNO. <https://www.ad.nl/branded/gezonder-leven-zo-kunnen-data-en-apps-je-daarbij-helpen~ab20962e/>

van Dinther, M. (2021, December 2). Systeem met premies moet meer 'groene' boeren kweken. De Volkskrant.

van Esch, C. (2021, November 24). Ambitieuze doelstellingen en een ministerie voor het klimaat. de Duitse formatie is bijna rond. De Volkskrant.

van Liere, B., Beens, O., & Knol, A. (2017, August). Van wie is de stad. Milieudefensie. <https://milieudefensie.nl/actueel/van-wie-is-de-stad-pdf>

van Voorst, R. (2019). Ooit aten we dieren. Podium Uitgeverij.

van Weenen H. (1999). Design for sustainable development. Unknown binding, Ireland.

van Weenen, J.C. (1990). Waste Prevention: Theory and Practice (thesis). Delft Technical University.

Verganti, R. (2009). Design driven innovation: changing the rules of competition by radically innovating what things mean. Harvard Business Press.

Verhagen, L. (2021, Oktober 19). Facebook medeverantwoordelijk voor bestorming van het Capitool. De Volkskrant.

Verhagen, L. (2021, Oktober 20). Facebook creëert tienduizend Europese banen voor zijn Metaverse. De Volkskrant.

Vermeir, I., & Van Kenhove, P. (2005). The influence of need for closure and perceived time pressure on search effort for price and promotional information in a grocery shopping context. Psychology & Marketing, 22(1), 71-95.

Victoria State Government. (2002). Healthy mind: Wellbeing. Better Health Channel. <https://www.betterhealth.vic.gov.au/health/healthyliving/wellbeing>

Volce, C. J., Soares, D. D. C., Velasco, M. F., & Fontenele, H. B. (2020) Population support for making an urban area and its transport system resilient against flooding. Revista AIDIS de Ingeniería y Ciencias Ambientales. Investigación, desarrollo y práctica, 13(3), 1007-1021.

Volvo Car Group. (2018, July 4). Volvo Car Mobility launches mobility brand M. Volvo Cars Global Media Newsroom. Retrieved November 14, 2021, from <https://www.media.volvocars.com/global/en-gb/media/pressreleases/234576/volvo-car-mobility-launches-mobility-brand-m>

VPRO Tegenlicht. (2021). Freezing fertility [Video]. NPO 2. <https://www.vpro.nl/programmas/tegenlicht/kijk/afleveringen/2021-2022/freezing-fertility.html>

VTV. (2018). Levensverwachting | Volksgezondheid Toekomst Verkenning. VTV 2018. Retrieved November 25, 2021, from <https://www.vtv2018.nl/Levensverwachting>

W

Warren, R., Arnell, N., Nicholls, R., Levy, P., & Price, J. (2006). Understanding the regional impacts of climate change. Tyndall Centre for Climate Change Research Working Paper, 90.

Wertenbroch, K. (1998). Consumption self-control by rationing purchase quantities of virtue and vice. Marketing science, 17(4), 317-337.

West, S. E., Owen, A., Axelsson, K., & West, C. D. (2016). Evaluating the use of a carbon footprint calculator: communicating impacts of consumption at household level and exploring mitigation options. *Journal of Industrial Ecology*, 20(3), 396-409.

Whitehead, J. (2021, February 22). Face Pay: Is the Future of Payment with Facial Recognition? ArganoUV (United Virtualities). Retrieved November 25, 2021, from <https://weareuv.com/face-pay-is-the-future-of-payment-with-facial-recognition/>

Whitmarsh, L. (2009). Behavioural responses to climate change: Asymmetry of intentions and impacts. *Journal of environmental psychology*, 29(1), 13-23.

Wijman, E. (2021, Oktober 23). Kantoor, auto en file geven de mens status. *De Volkskrant*.

World Economic Forum, (2016). "The New Plastics Economy: Rethinking the future of plastics," *World Econ. Forum*, vol. 1, no. January, pp. 1-36,.

World Health Organisation. (2019, July 30). Air pollution. *Who.Int*. Retrieved November 14, 2021, from https://www.who.int/health-topics/air-pollution#tab=tab_1

WWF & Tesco. (2021). Driven to Waste: Global Food Loss on Farms. WWF UK. https://wwf.panda.org/discover/our_focus/food_practice/food_loss_and_waste/driven_to_waste_global_food_loss_on_farms/

Z

Zheng, Z., Xie, S., Dai, H. N., Chen, X., & Wang, H. (2018). Blockchain challenges and opportunities: A survey. *International Journal of Web and Grid Services*, 14(4), 352-375.

Zijlmans, M. (2021, December 4). De hele (werk)dag langs de meetlat. *De Volkskrant*.

Zwerfafval. (n.d.). In *Wikipedia*. https://nl.wikipedia.org/wiki/Zwerfafval#cite_note-4

Appendix

A: Project brief

Personal Project Brief - IDE Master Graduation



Sustainable Strategies for consuming on-the-go _____ project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date 15 - 09 - 2021 _____ 17 - 02 - 2022 _____ end date

INTRODUCTION **

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

'Sustainable strategies for consuming on-the-go' is a topic that I composed to carefully address sustainable consumer behaviour, future vision and people in transit. The release of IPCC's Sixth Assessment Report has made it clear once more, sustainability is a major topic right now. One part of this is the ease in which we generate waste by producing single-use items. A sector where this is more obvious is the to-go food and drink industry. This sector allows people to be flexible, enjoy freedom and efficiency. The flip-side is that the product containing the beverage or meal is a standard single-use item with little to no incentive to responsibly dispose of this. This leads to a bigger pile of garbage that can not be recycled correctly. To design a solution for this would mean a reduce of resource usage and trash. The stakes are not only for our planet, but people's behaviour and experience can be heavily influenced by stepping away from business as usual. That is why, in a socio-cultural context, this would be a very interesting topic to research and design for.

// Defining the 'to-go sector': In this brief, I understand the to-go sector as an industry that provides foods and beverages that are consumed in transit. In image 1, a rough sketch of the current food-eating system and people's movement around it. The line indicates the current frame of consuming on-the-go.

On a meta-level, it will be valuable for addressing human impact on climate change and understanding behavioural change in this area. Although the scientific evidence is present on how a lack of action will negatively affect our way of living, the exact consequences are still unknown. However, it is clear that everyone will be faced with unprecedented natural disasters if we do not undertake action.

A level that is more graspable are the current stakeholders in the to-go sector. In Image 2 you can see a rough sketch of the stakeholders that first come to mind. These are consumers of take-away food and beverages and the providers hereof. The first party enjoys the flexibility and wide availability of different kinds of cuisines, while the other party is economically benefiting and expanding their brand awareness. A less apparent stakeholder is the one responsible for the after-math: the waste. Currently, most containers are single-use and therefore disposed directly after consuming the product. This is done often on-the-go so waste is made on public ground, meaning it ends up on the street or in public trash cans. The municipality managing these streams are have an interest in reducing the problem as well.

On a more practical level, the people involved in my project gain insights and can support me. My chair, Matthijs, is interested in the mobility side (the to-go industry) and can support the strategic future vision. Charlotte values the road towards more sustainable consumer behaviour and can guide me in the research on user habits and social interactions. I hope to involve many organisations that can learn from, and act on my insights throughout my project. These being: governmental organisations, environment activists, providers of current solutions, users of current solutions and peers that want to make a positive impact in this sector.

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IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30 Page 3 of 7

Initials & Name F.A.M. de Grefte _____ Student number 4448634 _____

Title of Project Sustainable Strategies for consuming on-the-go _____

Personal Project Brief - IDE Master Graduation



Sustainable Strategies for consuming on-the-go _____ project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date 15 - 09 - 2021 _____ 17 - 02 - 2022 _____ end date

INTRODUCTION **

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

'Sustainable strategies for consuming on-the-go' is a topic that I composed to carefully address sustainable consumer behaviour, future vision and people in transit. The release of IPCC's Sixth Assessment Report has made it clear once more, sustainability is a major topic right now. One part of this is the ease in which we generate waste by producing single-use items. A sector where this is more obvious is the to-go food and drink industry. This sector allows people to be flexible, enjoy freedom and efficiency. The flip-side is that the product containing the beverage or meal is a standard single-use item with little to no incentive to responsibly dispose of this. This leads to a bigger pile of garbage that can not be recycled correctly. To design a solution for this would mean a reduce of resource usage and trash. The stakes are not only for our planet, but people's behaviour and experience can be heavily influenced by stepping away from business as usual. That is why, in a socio-cultural context, this would be a very interesting topic to research and design for.

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Initials & Name F.A.M. de Grefte _____ Student number 4448634 _____

Title of Project Sustainable Strategies for consuming on-the-go _____

B: Interview guide

Wat wil ik leren van deze gesprekken?

- > Wanneer halen mensen on-the-go
- > Waarom zijn ze op dat moment in transit (patroon? B timing, A timing, wachttijd)
- > Waarom halen ze dat?
- > Hoe voelen mensen zich als ze 'in transit' zijn of als ze wachten op de 'transit'
- > Beschouwen ze consumeren als 'nuttig'?
- > Clockless consuming: zien mensen het eten on-the-go als een echte maaltijd? Hoe valt het in hun consumptie-patroon?

Interview Guide

Technische dingen

Dingen opnemen - zoom gesprek recorden of geluidsopname op tafel leggen

Plaatjes klaar hebben om gedachten te triggeren?

Guide

He! Fijn dat je mee wil doen aan dit interview. We gaan er meteen mee beginnen maar eerste heb ik nog een aantal huishoudelijke mededelingen. Ik wil dit gesprek graag opnemen zodat ik naar bepaalde dingen die worden gezegd kan refereren om het onderzoek te onderbouwen. Het zou dus ook kunnen dat ik in een presentatie een keer een fragment gebruik om een bepaald inzicht te onderbouwen. Vind je dat oké?

Top! Dan zet ik nu de recording aan. Verder wil ik ook graag dat je alles zegt waar je aan denkt zodat ik je gedachtengang kan volgen. Je hoeft je nergens zorgen over te maken want niks is fout en ik leer overal graag van.

Oké dan gaan we nu beginnen met het onderwerp. Zoals je misschien wel al wist gaat het over eten en drinken 'on-the-go'. Met on-the-go bedoel ik dingen die je op locatie A koopt, deze zijn dan helemaal klaar om op te eten of drinken, en vervolgens consumeer je hetgeen je gekocht hebt op B. Dus ik heb het bijvoorbeeld niet over diepvries maaltijden of een koffietje op het terras, maar meer over een croissant halen voor je de trein op stapt. Is dat duidelijk of zal ik nog wat meer voorbeelden geven?

Dan is nu mijn eerste vraag aan jou of je je kan herinneren wanneer je voor het laatst iets te eten of te drinken heb gekocht en het toen 'on-the-go' hebt opgegeten? Kan je dat moment weer even voor je halen?

Waar was dat?

Weet je nog waar je heen ging? En waar je vandaan kwam?

Moest je ergens op een bepaalde tijd zijn? Wanneer ben je dan weg gegaan bij de vorige locatie?

Was je alleen? Wie was er nog meer bij?

Op welk moment besloot jij 'ik ga daar even kijken of ik iets kan kopen om te eten of drinken'? Kwam je toevallig langs die plek of had je vooraf al bedacht dat je daar heen wou?

Wat heb je gekocht? Wist je al dat je dat wou kopen voor je naar binnen ging? JA - heb je dat ook daadwerkelijk gekocht? Meer? Minder? Iets anders? NEE - had je wel een bepaalde product categorie in je hoofd? JA - Heb je je daar aan gehouden? NEE -

Kan je je herinneren hoe je je voelde voor je naar binnen ging? En hoe je je voelde toen je weer naar buiten kwam?

Wat vond je fijn aan de ervaring?

Wat vond je minder fijn aan de ervaring? Wat zou je verbeteren?

Zou je kunnen inschatten hoe vaak je ongeveer iets te eten of drinken koopt on-the-go? Bijvoorbeeld per week? Ik wil over de rest van de ervaringen ook nog even praten.

Is dat altijd op verschillende plekken of altijd ongeveer op dezelfde plek? Kan je me vertellen welke plekken je je allemaal kan herinneren van de afgelopen maand(en)?

Op plek X, weet je nog waar je vandaan kwam? En waar je heen moest? Ervaarde je toen tijdsdruk?

Hoe voelt het voor jou om te reizen? Is dat leuk? Waardevol? Stom?

Kan je je herinneren wanneer je de beslissing maakt om wat te halen?

Hoe zou jij het eten en drinken omschrijven wat je dan haalt?

Wat waren zoal de redenen om op die momenten dat te halen?

Zijn er bepaalde gevoelens die je vaak doormaakt als je dit doet?

Wat voor een nut heeft het om op dat moment iets te eten of te drinken te halen?

Hoe past het binnen de rest van je maaltijden?

Hoe sta jij tegenover die ervaring? Sommige mensen zijn bijvoorbeeld trots als ze een broodje on-the-go halen, andere mensen schamen zich misschien voor de donut die ze kopen. Kan jij je daar in vinden? Wat zijn zoal argumenten daarin?

Ik denk dat ik wel ongeveer voor me zie wat er allemaal gebeurt op zo'n moment. Maar het lijkt me toch fijn om nog even systematisch een overzicht te maken van wat er allemaal gebeurt. Kan je de verschillende stappen benoemen van jouw 'on-the-go'-moment? Je mag beginnen en eindigen waar je zelf denkt dat het zou kunnen.

Hoe denk jij op dat moment na over prijzen?

Heb je een bepaald budget per maand ervoor?

Weet je ongeveer wat je eraan uit geeft?

Is de prijs eerlijk? Waarom wel? Waarom niet?

Wat zou je in de toekomst graag hieraan veranderen? Of is het goed zo? En waarom is het dan goed zo?

Nu ik een beter beeld heb van hoe je het doet wil ik wat dieper in gaan op de ervaring van 'on-the-go' consumeren.

Kan je me vertellen waarom jij volgens jou iets koopt en op eet of drinkt 'on the go'?

Een paar vragen geleden hebben we een overzicht gemaakt van alle stappen. Zullen we daar even doorheen gaan nog een keer zodat je kan vertellen wat je meestal voelt bij welke stap en waarom dat zo is.

Wat vind je zo fijn of stom aan consumeren OTG?

Kan je één hele slechte ervaring delen van iets kopen 'on-the-go'? Wat ging er mis?

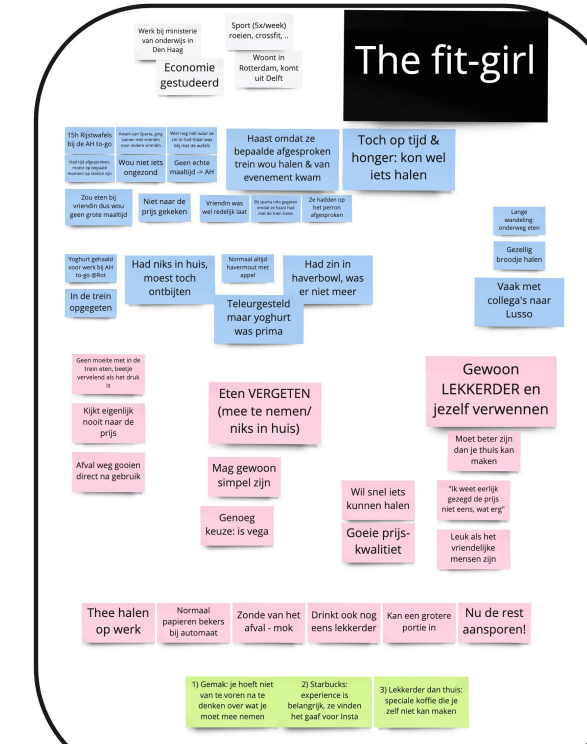
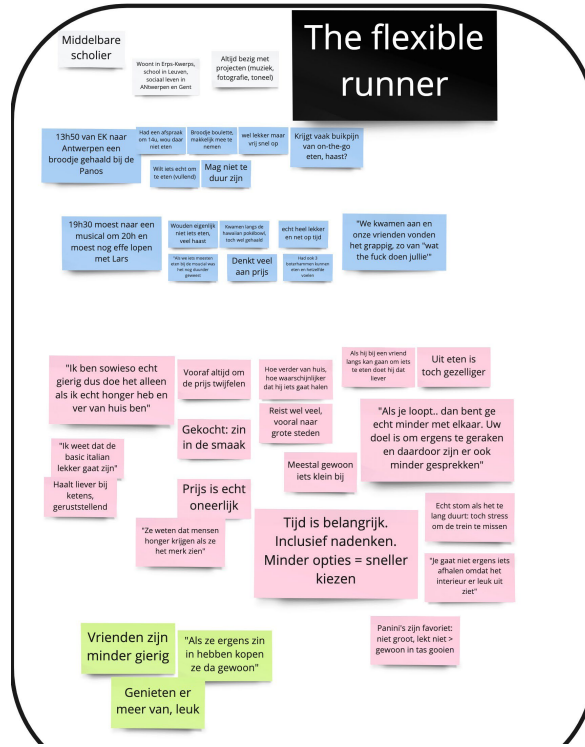
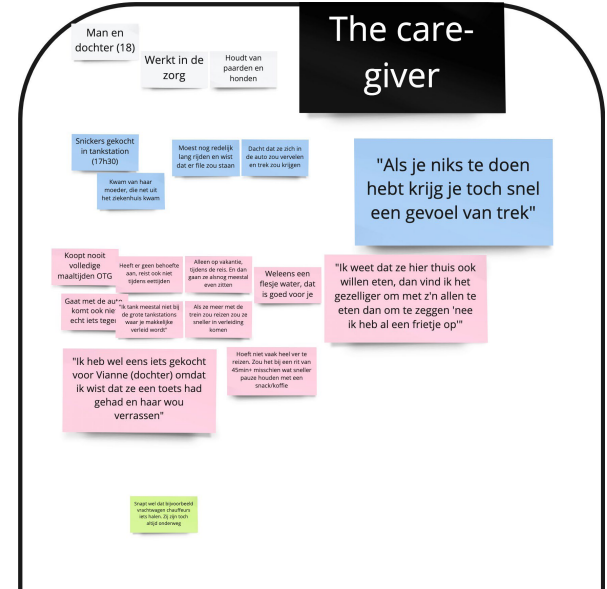
Zie je wel eens andere mensen OTG halen? Wat doen ze dan? Waarom denk jij dat ze het zo doen?

Als laatste lijkt het me nog interessant om te horen hoe jouw ideale ervaring eruit zou zien? Hoe zou je het in de toekomst graag willen doen als alle horeca naar jou zou luisteren?

Dat was het! Bedankt!

C: Research insights

C.1 User interviews



C.2 Field research notes

VELD onderzoek 23/9 (do)

① Amsterdam Zuid - 9.50

Starbucks had opvallend veel zit plekken en promote 'zitter' studenten kom voor of n.v. college koffie drinker en krijg -20%." → verdienen ze meer geld aan zittende klanten? Mis je bij ou-tu-co de 'bijverkoop'? Zitter = meer rust om iets te eten en drinken → zijn studenten meer vatbaar voor kantinen en impuls aankopen? Of willen ze mensen jong aanspreken zodat ze jouw met 'by default' kiezen? Of misschien zijn studenten niet echt deelgroep door de extreem hoge prijs en kunnen ze met kortinc deze deelgroep orbij trekken zover wilt meer te verliezen in andere deelgroepen.

Er liep een grote man die eruit zag alsof hij met 2 in handen lekte. (bouwvak, timmerman, elektricien, ...) hij was een klein broodje aan het eten (kies broodje, vermoedelijk) en had nog 2 broodjes gekocht en in zijn handen. Voor later? Vrijwel plot alsof denkt te

Mevrouw, rond de dertig, Arabisch uiteljk maar erg Nederlandse kledergaest. Ze had heel veel haast. (liep snel, fronsend). Had een koffie in haar rechterhand en in diezelfde hand een zakje met een croissant tussen haar vingers. Oudehand. Ze rookte in haar koffie met een stotje terwijl ze liep.

② Metro lijn 51 van Zuid naar Centraal - 10.10

De metro was redelijk druk, meeste mensen konden niet zitten NIEMAND was aan het eten of drinken. Snap ik wel want mensen zaten er inmiddels meer. Shaltes op (1 + 7 min). Ook wieselden de tranen enorm dus toen ik een stotje water nam was het lekker.

Er was een bordje van de vervoerder - je mag niet eten en drinken maar een hinderlijke gewen om al je warme drank hebt moet je eren deksel op doen voor de veiligheid.

③ Amsterdam centraal - 10.30

Buiten de poortjes heeft nog bijna niemand iets bo-go. In 'n handen neemt je direct bij het ~~stela~~ de permiss komt. Buiten de poortjes is ook meer zitplek.

@ Starbucks doen ze standaard bo-go zaken. Hier zitten 3 koppels (30-30-60) eten met papieren (plastic) bekens maar ze consumeren wel hier.

Er bestelde een aantal meisjes (in duo's - 15-20) veel special by drinks (refreshe, frappuccino) en lichte door heel blij met te zijn. Sommige maken meteen een foto, andere lachen als ze hun eigen naar lezen.

4 vrouwen op daarret (grote koffie) bestelde koffie (1 iemand ook een taartje) in to-go bekens, geen verdueren. Een een tafel zitten op hun telefoon.

De Binnen de poortjes: veel mensen die lance reizen maken (grote koffie) zijn hier aan het wachten. 1 koppel eet frietje en kijken film, ander stelletje drinkt uit een pte sap en snelt met haast.

Mevrouw (22) eet rustig een broodje en luistert muziek, een haast.

Gezin (m+v+kind (7)) haast friet bij smullen, kind krijgt een ijse. Ze lopen daarna meteen naar het perron.

Man (55) kleine volkoffie, bekens + deksel + serviette met koffie (loopt vastje)

Stelletje hadt koffie en een verpakking, hield daarna naar een bord (it was een het schrijven en nu zijn ze weer hals)

Mevrouw (38) redelijke haast, warm broodje in d'r hand.

2 middelbare vrouwen puntzak friet, 2 minuten voor vertrek in sprinter richting schiphol.

Op het perron 7 v.d. 10. wachtende bobbe koffie / broodje
→ man klopt broodje snel weg voor hij op de trein stapt.
2 vrouwen nemen wat van het leuken op het station, nemen nu de koffie mee in de trein. (ic-Amham)
Meisje komt net aan lopen met koffie in de hand.
Brain vertrekt pas over 7 minuten.

Meisje komt uit de trein met leeg bekersje, loopt om naar de afvalbak, gooit het bij rest.

Meisje met croissant oet rustig op een bankje op het perron zitten terwijl er een trein stapt.

12:30

Weer beneden in de gang - 20+ mensen aan het eten, voornamelijk broodjes. Meeste zittend op een stationbankje. Een rij bij de bankjes NS-zavent #1 zit in z'n handen van tde-zweg, sushi f-kone some NS-zavent #2 bestelt iets bij julie's (broodje?) weer man (38) pizza punt op papieren bordje van New York pizza

④ Trein Amst - Utrecht - 12h46

Niet heel druk, iedereen kan zitten, enorm stil!

Meisje met Louis Vuitton tas en tattoo's had een broodje, wat op voor we vertrokken en nu zit ze op d'r telefoon

Meisje (26) groot stuk stobbrood en ~~kel~~ starbucks beker die ze hield enorm, kijkt tijdens het eten of er toe naar Surin en of er toe op haar telefoon.

NOG EEN KEER NAAR RIJZEN:

- AUTO DROP
- SNACK AUTOMATEN
- FEBO
- TREIN TROLLEY'S

⑤ Utrecht centraal stationshel - 13:15

Zit bankjes voor doner compagnie, burcerहित a smulleus w veel gebruikt om op te eten veel dames duo's, een comend duo, u sdo eten - man blijft niet heel lang zitten.

AH toco beken naast vuilnis bakken oezet

Kindje in wandelwagen met een pelje sap

meisje eet koelje kiosk al lopend door het station

2 vriendinnen ontmoeten elkaar voor het perron, 1 had eten oezeld

jongen heeft datje zetje snaep oezeld (27 jaar oud)

jongen met broodje oezeld recht het perron (kijkt oezelend omeoed)

Vrouw (55) heeft kaffie oezeld en oet nu rustig zitten

jongen (20) koopt frikadellen broodje bij AH toco, komt brite

neemt 2 hep, oozit verpaktint weg, eet lopend de rest op

Oude vrouw o man halen simpel stobbroodje bij AH toco en oen

neten door naar het perron (ic-rokodon)

Koppel heeft 2 smoothies a 2 broodjes en oet neten naar

het perron (ic-rokodon)

NS-man (ik den conductor) heeft oel bekersje - is het van

de medewerkers? orintt chillend op een bankje

Meisje met milkshake van de MeuQanz

Meisje eet grote belegde beoelkte terwijl ee man het perron

loopt

jongen heeft me orintt ice TEA (nu wil ik oet)

Vrouw heeft kaffie en zetje oezeld, maar hze hande zijn

te vd. Nu moet ze oeen eibbe om het op te eten

meisje met iced cepurainho van de hemz

→ houdt hem heel schuin, kan door

debel en vastheid v.d vloerstof.

Vrouw met vlem in water (226 er niet fit urt)

jongen met blik energic (226 er niet oezeld uit)



Leaving

The practice of 'leaving' starts with an intention to leave. This arises in multiple situations which I have divided into 'having to leave' and 'wanting to leave'. Both can be done planned, based on the time you want to exit the current space or based on the desired time of arrival at the place you want to be. Depending on these time-constraints, people can experience rush or even stress. When the timing is of no importance, and neither is the duration of your transit, people tend to feel more relaxed in transit.

Before the actual departure, 'leaving' can also contain the act of 'planning your transit', 'communicating your transit' and 'collecting items you want to relocate or use while you are in transit'.

Having to leave

The practice could start by the necessity to leave. This can have two reasons that are equally common. The first one is that people leave because the location they are currently at (location A) is no longer welcoming them. The second reason to leave location A is because they are required to be at location B.

Wanting to leave

People that want to leave are usually looking to take a break from the place they are at.

Being in transit

'Being in transit' is a very common practice of people moving from one place to another. This can be done with different transportation means, otherwise you walk. The different means can range from private (own car, bike, ..) to shared (Felyx, Bird, ..) to public (bus, train, ..).

Using different means can lead to different degrees of comfort. When eating or drinking, the level of enjoyment is very dependent on the comfort of the vehicle. Things like having your hands free, the shaking of the vehicle and the amount of attention needed to commute safely are all factors in this comfort.

Using different means also proposes different amounts of flexibility and

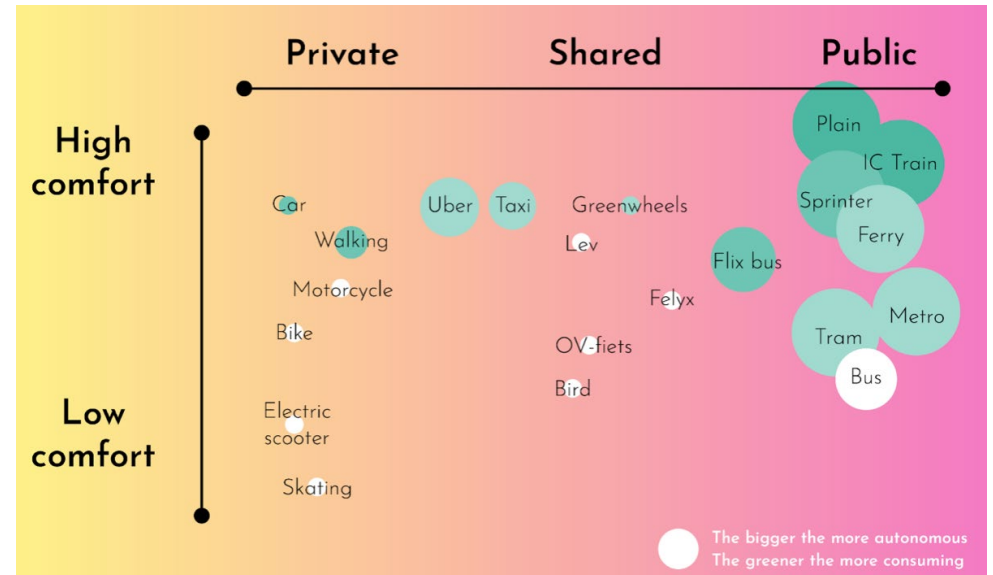


Image D.2: An overview of transport modes, linked to comfort and consumption

waiting times. With a lower amount of flexibility in transportation and stricter schedules, the possibility of waiting increases. This has influence on the time available for other activities which consequently is a factor in the consumption of to-go foods and drinks.

Intending to get consumption

The intention to get a consumption can arise anywhere, at any time. Sometimes people plan for it before they even leave, sometimes they are triggered during transport by certain nudges but more often the idea arises during waiting time.

"Needs are anticipated, controlled, denied, postponed, prioritised, planned for, addressed, satisfied, fulfilled, and gratified. Desires, on the other hand, are overpowering; something we give in to; something that takes control of us and totally dominates our thoughts, feelings, and actions."

Timing consumption for efficiency

We live in a world where people are constantly looking for the most efficient

way, because time is a valuable thing. If it is possible, we try to combine tasks to 'save time'. Energising yourself with foods or drinks and going to a certain place are two actions that are perceived essential. If you combine them, it is per definition more efficient.

Needing a consumption

People can experience an energy deficit indicating that they lack nutrition. They can also experience hunger or thirst as a way of their body anticipating this deficit. We call this physical experience homeostatic hunger.

People are also capable of consciously anticipating hunger, knowing that they are going to need food or hydration before their body even tells them. This can be through reasoning: 'I skipped breakfast, I will probably be hungry around 11', 'I am usually hungry 30 minutes after my work-out' or 'I drank too much last night, I will probably be needing a lot of high-sugar drinks'.

Wanting a consumption

New literature calls it 'hedonistic hunger' when people think they need a consumption but actually experience a form of mental hunger which can be related to senses (eye hunger, touch hunger, ..) or a search for comfort (finding comfort in food, eliminating boredom, ..).

Getting consumption

Entering the establishment

For consuming on-the-go, the ease with which you can find and enter the establishment is key to the practice. When people are in a hurry, they want to be as efficient as possible. When people are on the route to relax, it is because they want to feel welcome.

Deciding what to get

The choice of what establishment is entered usually indicates to some extent what the product is that is chosen.

The paradox of choice becomes apparent in the assortment of these convenience foods and drinks establishments. People have increasingly personalised diets, where they require specific nutritions or avoid a certain

category. This generally means that the assortment has to grow, to expand the choices. On the other hand, it is unnatural to have so many choices and people might experience stress from the abundance of possibilities.

Choice becomes harder because of the unknown experience you are going to have with the product. The insecurity about how it tastes can be more uneasy than when it tastes bad. One way this phenomenon is avoided is by buying something you have already bought before. But in case a novel purchase wants or has to be made, the following factors can be considered: price, value for price, general needs or preferences (no lactose, sweet tooth) and time to take-out (how long until you leave the store with your consumption).

Ordering/taking the chosen product

In consuming on-the-go there are ready-made convenience products, and products that need to be made on the spot (but usually not from scratch).

The first one is made in advance, either by the establishment itself or by a provider. They are always pre-packaged and usually the consumer can take the product out themselves. An advantage for the consumer is that it is fast. The disadvantage is the quality and freshness of the product (which often go hand in hand) that is compromised upon. The (mis)planning of which leads to an undesirable amount of waste.

When a product has to be finished on order, it is mostly just the composition of pre-made elements. For example, putting the already aged and sliced cheese on an already baked piece of bread. Even though the quality typically rises, the timing decreases.

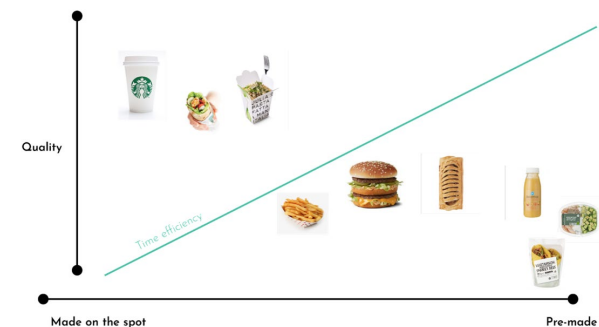


Image D.3: The effects of pre-made on quality and time-efficiency

Paying for the product(s)

Traditionally, people pay for their food and drinks to a shop clerk. The representative scans the products or reads the price manually and shares the total costs. This amount is then paid by the customer, predominantly by electronic payments - namely 85% at the end of 2020. Since 2006, it is possible to scan and pay autonomously in the Netherlands. Thanks to 'self scan' technology, you don't need any interaction with an employee anymore. This allows for a more efficient process and thus faster transaction. Having an account or paying later is avoided by almost all businesses.

Leaving the establishment

People who are consuming on-the-go leave the establishment after they have bought something but not consumed it inside. Sometimes, when you did not find the desired consumption, changed your mind or were unable to choose, you can leave empty handed.

Consuming the product

Eating or drinking what you bought

Experiencing the product

Disregard the product

A common experience with foods and drinks on-the-go is the lack of awareness of the experience. People tend to disregard the smell, taste and nutritional value of the product and forget that the practice ever took place. A reason for this could be that humans are not capable of multitasking. When they need to think about, or be actively engaged with their transit, they have less attention for the experience of consumption. It is also common for people to want to kill the feeling of boredom even more by looking on their phone or engaging in social activities.

Homeostatic experience

Biologically, food and drinks that have the right nutrition can make you feel energised. The digestion can make you feel a bit energy-deprived, especially for certain types and amounts. Once the valuable elements are absorbed, the body uses them to perform tasks.

If the food-type is not desirable for your body, it can be rejected. This can make people feel ill and nauseous. Also, eating or drinking too fast can make a person feel uneasy or even bad, physically as well as mentally.

Hedonistic experience

Some people view the exclusivity and higher quality of a consumption that has been made for you as a luxury and therefore experience it as a reward. This feeling is usually self-cultivated by allowing yourself such an expense on special occasions like completing a task or motivating yourself for a next task.

This can also counteract. When you allow yourself to make an expense, without feeling convinced that you deserve it, you might feel regret or shame.

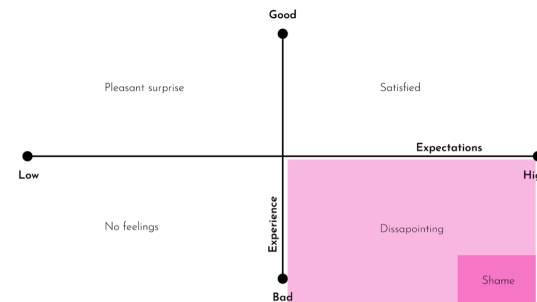


Image D.4: The consequences of expectations and experiences

Disposing of waste

Conform

The practice of 'disposing waste' correctly has been made increasingly more simple over the years to stimulate the behaviour and ensure a clean environment. People that make use of public trash cans or take waste home with them behave conform to the social norm.

Non-conform

Some people have not adopted this behaviour or are simply rebellious. They dispose of the waste where it suits them best without aiming for a specified container. This is also known as littering.

E: Future expert interviews

E.1 Horeca - 9/11/2021

“Zo lekker dat het weer open is allemaal” vind hij bullshit. Mensen waren boos toen het dicht was en vinden het alleen maar normaal dat het weer open is. Ze denken dat ze recht hebben om op een terrasje te zitten en te genieten.

Collega's, of uitbaters van andere horeca gelegenheden in Delft, verhogen allemaal hun prijzen om te compenseren voor het afgelopen jaar verlies. Dat is slecht want mensen willen helemaal geen €4 betalen voor een cappuccino. Zo jaag je alleen maar klanten weg want ze komen gewoon naar mij, waar het normale prijs is met heel lekkere koffie.

! COVID heeft de samenleving helemaal niet zo erg veranderd

Houd van zijn klanten. Lekker bourgondisch. Doe maar veel vlees en veel kaas en een lekkere bonbon. Ze zijn uit dus ze willen zichzelf verwennen en of het dan ongezond is maakt niet uit. Anders dan die stomme vegan-tentjes waar het eerste wat je op de kaart ziet tofu is. Rob is daar een tegenhanger van. Daarom vindt hij ook niet dat hij zijn assortiment moet aanpassen om meer klanten te trekken want hij wil gewoon niet voor iedereen zijn.

! Voor elke trend in de horeca is een tegenbeweging die evenveel slaagkans heeft door gewoontes vast te houden.

Soms zitten er mensen die dan allemaal dingen gaan eisen. “Mag ik een ijscappuccino maar dan warm”. Ik wil best wat voor mensen doen maar moet m'n grenzen steeds vroeger zetten. Ik geloof er niet in, ik heb wat ik heb en daar ben ik trots op. Bovendien lijkt het voor sommige mensen ook een sport geworden. Ze komen hier dan vaker, gaan lekker zitten, en bedenken wat ze anders willen dan het gewone assortiment. Sommige willen me ook letterlijk advies geven: “Ik zou het zus doen, ik zou het zo doen”. Wat een gezeik. Bovendien denk ik ook dat als mensen hier vaker zitten ze een soort 'own' krijgen. Alsof ze een deel van mij bezitten. Daar ga ik tot een bepaalde hoogte in mee maar er was een man die consequent om 16h55 vroeg of hij nog even een koffietje mocht doen. Dat heb ik uiteindelijk de kop in moeten

drukken. Ben niet met hem getrouwd. Ik ben hem niks schuldig en hij heeft geen onvoorwaardelijk recht op mij.

! Als mensen vaker bij een zaak zitten krijgen ze gevoel van ownership wat tot periodieke uitgaven leidt maar ook tot het gevoel van 'verhevenheid' leidt.

! Mensen denken dat als ze geld uitgeven dat het ook op hun manier moet. Alsof ze recht hebben op mij en niet op mijn assortiment

! Als mensen een consumptie laten personaliseren oefenen ze een gevoel van macht uit. Gekocht met geld.

Met mensen die iets afhalen heb ik dat nooit. Zij zijn blij met wat ik kan bieden en accepteren dat als goed. Dat is ook een soort compliment.

! Mensen die OTG halen zijn humble. Ze oefenen weinig tot geen gevoel van macht uit

! Hoe komt het dat mensen die ergens niet blijven (take-away), meer respect laten voor de zaak dan mensen die gaan zitten en daardoor een gevoel van zeggenschap krijgen.

E.2 Filosofie - 13/10/2021

Informatie management

“Mensen moeten leren om net als Socrates de juiste vragen te stellen”

We hebben in onze wereld steeds meer informatie verzameld. Als je naar artikelen kijkt die de stroom aan data op het internet evalueert, groeit het nog elk jaar. Het wordt nu cruciaal om om te leren gaan met die informatie, om de juiste dingen eruit te schiften. Op social media en andere platformen kun je tegenwoordig alle meningen vinden, hetzelfde onderwerp langs verschillende kanten belicht. De kunst is om samen te stellen wat jij vindt.

Dit moet op sociaal niveau aangepakt worden. We leren kinderen tellen, een

eitje bakken en seksuele voorlichting, het is ook noodzakelijk om ze de digitale vaardigheden bij te brengen. Veel mensen weten namelijk niet dat er ook gevaren aan zijn.

Dit is belangrijk omdat wan-informatie vaak niet te onderscheiden is van echte informatie. Ook krijg je digitale bubbels waarin algoritmes je steeds dezelfde mening voorschotelen waardoor je kan gaan geloven dat iedereen hetzelfde denkt.

De essentie van filosofie is dat je zelf vragen blijft stellen. Dit is meer dan ooit belangrijk bij deze digitalisering en overload van informatie omdat je je eigen beredeneerde opvattingen moet hebben, niet die gepusht zijn door AI.

Ongelijkheid

Een eeuwenoude vraag van de filosofie is: tot welke ordegraote is ongelijkheid oké? Het kan namelijk voordelig zijn, en eigen aan de mens, om niet hetzelfde te zijn als je medemens. Maar door huidige ontwikkelingen zie je een steeds grotere segregatie, wat deze vraag nog dringender maakt.

Door globalisering zie je namelijk dat we steeds meer in contact komen met elkaar. Dit brengt goede dingen met zich mee - samenwerkingen, leren van culturen, interdisciplinaire teams - maar geeft mensen met slechte intenties ook meer kans om anderen uit te buiten. Dit, samen met het financiële fenomeen dat geld geld maakt, zorgt voor een grotere kloof tussen arm en rijk.

Een grotere kloof levert grotere spanningen op. Een politiek verlies - al is het maar klein- voelt alsof je gelijk niet meer mee doet omdat de meningen zo haaks op elkaar lijken te staan.

De meeste mensen zijn het eens dat ongelijkheid tot een bepaalde hoogte oké is, maar op een bepaald punt niet meer. De grootte waarin het nu is werkt als benzine en kan heftige conflicten veroorzaken.

Distributieve rechtvaardigheid

Hoe kunnen we de dingen waar we nu plezier van hebben delen met anderen:

synchron: mensen op andere plekken op de wereld, dieren en anderen met bewustzijn

dyssynchron: toekomstige generaties

“Ik zie steeds meer eten en drinken wat we OTG kunnen consumeren, meer gemak voor iedereen. Dit staat averechts op de thematiek rondom resource management”. Wat is het voordeel van consumeren OTG (snel iets halen, meteen je needs fulfillen) ten op zichten van even wachten en in de supermarkt iets halen of thuis iets te eten? Staat dit in balans met de prijs die anderen ervoor betalen? Als mensen hun huis kwijt raken door overstromingen of brand...

Het is wel een filosofische vraag: hebben mensen en dieren die nog niet bestaan evenveel recht als wij? Meer? Minder? Het voelt oneerlijk om de aarde op te maken maar hoe kan je er een oordeel over vellen?

Digitalisering & privacy

Ook door de huidige digitalisering is het steeds moeilijker om te zien wie je bespied en wie niet. Online kunnen mensen met je mee kijken zonder dat je het door hebt. Dit slaat ook over naar de echte wereld, waar bedrijven je smartphone tracken en camera's je gezicht herkennen. Zelfs overheden gebruiken de online aanwezigheid van hun burgers in digitale oorlogscoering. Je kan dus stellen dat individuele privacy onder vuur licht. Het ergste is dat men het niet kan zien, hoe kan je je er dan tegen beschermen?

Waarom is het tegengaan de ondergang van privacy dan zo belangrijk? De ethiek is het erover eens: privacy is een moreel recht. Dat heeft niks met wetboeken te maken - hoewel het er ook in staat - maar tegen principes die jou een individu maken. Kant's ethisch systeem heeft als basis dat als men ethisch wil kunnen handelen, men vrije keuzes moet kunnen maken. Door het meekijken van anderen in jouw gedrag, ga je je (onbewust) houden aan sociale normen en ben je dus niet meer vrije keuzes aan het maken. Het gaat zelfs zo ver dat ze je gedrag beïnvloeden (welk bestek koop je online, welke serie kijk je) en dan is het nog duidelijker dat je geen volledig vrije keuzes meer maakt. Ook andere filosofische stromingen zijn het er mee eens dat privacy een belangrijk begrip is. Het utilitarisme stelt dat een privé-leven hebben mensen gelukkiger maakt. Je ziet ook vaak dat beroemdheden helemaal niks moeten hebben van de continue blootstelling. Daarnaast is privacy een belangrijke bouwsteen om vriendschappen aan te kunnen gaan. Als je alles met iedereen deelt is het privilege van iemand in vertrouwen nemen weg en is een vriendschap minder waardevol.

! Is dit al begonnen? Hebben mensen al zoveel lopen delen op Instagram en andere social media dat vriendschappen minder waardevol zijn omdat het privilege van informatie delen over jezelf bijna niet meer uniek is?

E.3 Technology - 13/10/2021

Heeft ook artikels over sociologie doorgestuurd omdat "dat bepaald welke technologische ontwikkelingen de overhand krijgen": <https://superflux.in/index.php/work/how-will-we-work/#> & <https://www.vn.nl/marguerite-van-den-berg-betaald-werk/>

Kijk naar celebrities, zijn vaak koplopers. Elite neemt vaak voortouw.

Welke dingen zijn waardevol waar we nu nog niet voor betalen? Kunnen die gecommmercialiseerd worden in de toekomst?

Off-the-grid

Mensen gaan manieren vinden om meer in privacy te reizen om uit te weg te gaan dat hun data wordt verzameld. De zonnebril-hoodie voor online, om te zorgen dat je incognito van A naar B kunt.

Zoals de stilte-coupé is ontwikkeld voor mensen die in stilte willen reizen, komen er vast ook middelen om onder de radar te reizen. Dit kan openlijk (een gezamenlijke oplossing) or privé, als een soort ad-blocker voor je 9292.

"Ik ken programmeurs die hun smart-phone thuis laten als ze het openbaar vervoer nemen"

Privatisering publiek eigendom

Met de druk op het milieu en natuurlijk kapitaal gaan bedrijven op zoek naar dingen die ze wel nog kunnen verkopen om toch aan hun economische groei te komen. Het bedrijfsleven zoekt continu naar dingen die nu vanzelfsprekend en gratis zijn maar waar mensen wel aan gehecht zijn, dus bereid voor te betalen.

Bijvoorbeeld een abonnement op 'de juiste lucht voor een goede ademhaling' of 'privé transport ook opnemen in een MaaS, hoeveel stappen je zet door publieke ruimtes'.

De-growth

Tegenover het vorige principe staat een tegenbeweging die op zoek is naar het coöperatief maken ipv privatiseren. De groei als wij die kennen is namelijk niet vol te houden en wiskundig volledig onrealistisch.

Banen in de toekomst

Hierop verder bordurend is het idee van de werkweek achterhaald, maar zijn we toch nog steeds op zoek naar groei waarbij je van 9 tot 5 continu productief moet zijn. Door onze burgerlijke gehoorzaamheid komen we hier niet publiek tegen in opstand maar zoeken we privé wel naar uitwegen. Mensen gaan de kantjes ervan af lopen en creatief om met contactmomenten zodat het bedrijf vermoed dat ze de hele dag bezig zijn.

"Ogenschijnlijk veel doen, maar strategisch werk vermijden"

! Komt dit door technologie: robotisering vraagt van ons dat we een kenniseconomie worden maar 8 uur per dag nadenken is veel moeilijker dan 8u per dag fysiek bezig zijn

Dubbel leven

Vroeger had men een dubbel leven: werk & privé. Maar aangezien je privé leven steeds meer gezien wordt als werk (mensen worden brands, netwerk en vriendschap mengt, ..) is dat dubbel leven niet meer zo duidelijk. Mensen lossen dit op door een soort uber-privé leven te genereren waarin ze zich écht niet bekeken voelen door de maatschappij. Hierbij hoort het onder-de-radar gedrag van 'off-the-grid' maar ook de filosofie van 'degrowth'.

E.4 Society - 12/11/2021

Life-style diseases

Welvaartsziektes komen steeds meer voor en we reageren er alleen maar op in plaats van het te voorkomen.

Oorzaken

Bedrijven spelen in op verslaving

Klimaatverandering zorgt voor onnatuurlijke en extreme omstandigheden

Kostenbesparing: efficiëntere voedsel en drank productie met langere houdbaarheidsdatum door gecentraliseerd proces

Individueel: We zijn te koppig om ons gedrag aan te passen, dit is een bedreiging voor onze gezondheid en vitaliteit. We doen het onszelf aan.

Maatschappelijk: het financieel belang van bedrijven is te groot om een tegenbeweging te starten

Over 5 jaar zullen we hier de biologische effecten allemaal van merken en zijn er veel ergere ziektes die dieper geworteld zijn in ons lichaam. Dan komt eerst de vraag hoe we de verschillende symptomen gaan behandelen. Pas een aantal jaar later beseffen we dat ook hier preventief mee omgaan belangrijk is en zullen we ons afzetten tegen bedrijven en organisaties die dat niet serieus nemen.

E.5 Biology - 12/11/2021

Mijn project

Kijk naar de hypotheses die je op dit moment hebt.

“Vroeger kon je een kanon afvuren in een station en dan kon je nog geen flikker krijgen. Nu struikel je zowat over de hamburgers, hete thee en Hema’s”.

Hoe veranderen aanbieders?

Hoe gaan ze zichzelf ‘displayen’, waar zijn ze zichtbaar

Hoe verpakken ze hun consumpties?

Wat is de kwaliteit van hun producten?

Hoe veranderen consumenten?

OTG is nu nog een luxe product: je hebt het vaak niet nodig en het is een soort verwen momentje. Door de bewustwording van het belang van bewust eten (trend) kan het gedrag veranderen naar het kopen van gezondere alternatieven

Hoe verandert (de legislatie van) de overheid?

Het is belangrijk voor de productiviteit van een land dat de burgers gezond zijn. Daarom kan regelgeving op het vlak van aanbod en communicatie omtrent ongezonde snacks strenger worden in de toekomst. ‘Het verbieden ven verleiden’.

In lagere inkomens, of ‘slechtere’ wijken, eten mensen vaker ongezond en halen ze meer convenience foods ipv zelf koken. Als ze meer ruimte hebben (minder geldzorgen), kunnen ze beter voor zichzelf en hun naasten zorgen.

Menselijke biologie

Dan gaat het over je lichaam en wanneer dat gezond is. De twee hoofdfactoren zijn een gebalanceerd dieet en voldoende beweging

Gebalanceerd dieet en OTG

Het consumeren OTG is vaak niet echt nodig en meer een vorm van verleiding. Ik zie dat het steeds meer gebeurt maar het hoeft niet echt. Vaak is het een soort gemakproduct. Ik denk dat er ook niet zoveel voedingswaarde in het huidige assortiment zit.

Als de consumptie-graad wel stijgt maar de voedingswaarde niet is het natuurlijk niet goed voor de mensen. Ze eten meer maar minder gezond en dat is slecht voor je lichaam.

Voldoende beweging en OTG

Dit kan twee kanten op. Aan de ene kant zijn transportmiddelen steeds meer voor de hand dus hoeven mensen minder zelf te lopen en te fietsen. Dat betekent dat ze minder beweging krijgen uit noodzaak en is slecht voor je lichaam.

! Zijn er meer transportmiddelen voor handen waardoor mensen minder lopen

Aan de andere kant kan een broodje halen buitenshuis of kantoor een wandeling teweeg brengen die je anders niet had gemaakt. Je zorgt dan voor je lichaam met als ‘excuus’ de consumptie.

Biologie als kringloop

De kern van biologie is dat alles een kringloop is. Het leven en de dood van alle organisme is een ecosysteem. Het is erg lastig om OTG als kringloop te

zien omdat het zo complex is. Bovendien onderzoekt biologie vaak één plek, meer nog dan één product.

Toekomst van werk

Ook als technologie dingen overneemt blijft er steeds nieuw werk voor mensen komen. Ik denk dus niet dat we per se minder hoeven te werken. De vraag is wel hoe ze gaan werken want dat heeft invloed op hoe mensen reizen.

Hoe regelmatig en wanneer gaan ze naar kantoor? Blijft het woon-werk verkeer een gewoonte of zullen mensen flexibeler omgaan? > is 'daily commute' nog een begrip als we niet meer dagelijks gaan? En wat voor een impact heeft dat op consumeren

Hoe lang gaan mensen reizen? Willen mensen door de urbanisatie in dezelfde stad werken of maakt het juist niet meer uit omdat iedereen met elkaar verbonden is? > als mensen verder van hun werk wonen worden treinreizen langer en gaan mensen waarschijnlijk meer OTG consumeren

Hoe gaan mensen reizen? Wordt de ontwikkeling van de duurzame auto genoeg om mensen in privé-transport te houden of gaat het openbaar vervoer zo'n stappen maken dat het populairder wordt? > In privé-transport is commercie moeilijker aan de man te brengen. Als mensen meer met openbaar vervoer reizen is het makkelijker ze te verleiden door opportuniteit > kortere en minder laadtijden van elektrische auto's zorgen ervoor dat mensen eigenlijk alleen nog thuis hoeven op te laden en maakt het idee van een tankstation redelijk overbodig

! Wat is de toekomst en trends van openbaar vervoer?

! Gaan mensen verder van hun werk wonen?

E.6 Big OTG retail #1 - 10/11/2021

About us: sometimes I think that we are actually more a cup-brand than a coffee brand. We are the third place for people. A place to come home when you're not home. We create an environment that is recognisable all around the world and this gives people comfort. This reflects in the consumption choices themselves because 54% (in the US). The experience has to be uplifting.

Vision on sustainability

We have to, because

-> You have to be changing your organisation before politics changes the regulations. It is more expensive to adapt to rules because then you have to be quick and that leads to bad organisation. Unforeseen laws lead to speed and makes organisations move faster then is good for them

-> Consumer intentions are driving the vision as well. They want brands to make actionable what they find important. If you make the ideas behind your products desirable, it becomes a USP and the offer stands out.

We want to, because

-> Starbucks has the genuine desire to do good.

- Green - I don't want to pollute the planet

- Consumer - we want to give the people what they want, where and when they want it. That is why we have highly customisable products which is often really complex for us as a business.

But on the other hand

People are obsessed with the waste, like coffee-cups and stirring sticks, even though this is only 1% of the problem. Brands should be brave enough to confront their consumers with the things that are really important, challenge them and open the debate. We have to make our customers understand the entire story and that is why we have to become better at story-telling and get them around our table.

What we're doing

Now

Next step: localised production. During the pandemic we found that having a central production has a very high risk and only rewards the financial picture. We don't want to have all our eggs in one basket anymore and de-risk the production.

Future

On the 2-3 year horizon we have some blue-sky initiatives but the technology is not there yet.

We want to elevate the brand's action to meet the expectations of the most

conscious people. The 'premium' attention is necessary if you want to be at the price we are at. We have to be at that level.

We are moving into people's homes because this is a bigger market. Also, this is where convenience meets consciousness, especially concerning sustainability and self-care. This is why we are starting to expand our line for at-home consumption like beans and cups.

We see a change in habits in where people consume. More offices allow flexible working and your living area has to fulfil the same requirements as a working area. We have to meet the customers where they are and that is why we are moving to urban residential areas.

> a comfortable environment to work or wind down

> fulfil digital needs

We want to meet the changing needs throughout the day and that is why we have to make a multi-purpose formula. The spaces should be like Swiss army knives where the lights can change.

Morning: habits

Midday: treating, rewarding, remaining productive

Evening: indulgent

What we've tried

Re-usable: borrow a cup. they're extending the project but now only 10% gets used. People are still utterly focussed on convenience.

but.. there was once a protest from Extinction Rebellion in London. They shut down the entire city, fighting for a better policy against climate change. We instructed all our employees to explicitly ask whether they wanted to use their own cup but actually no one thought about that. People can yell all they want but they only want change when it is convenient for them.

E.7 Big OTG retail #2 - 10/11/2021

Geschiedenis & organisatie

Vroeger werden in stations de ruimtes verhuurd door Servex in naam van de NS. In 2004 kreeg OTG een groeispurt. Vroeger waren stations namelijk onaangename plekken met criminaliteit en weinig faciliteiten. Toen is er veel geïnvesteerd om de ruimtes aangenamer te maken, waardoor het

aantrekkelijker werd om er te ondernemen. Er zijn toen tot 2012 steeds meer formules bij gekomen, zoals hema en starbucks. Op dat moment heeft NS een hereiking gedaan van wie ze zijn omdat het bedrijf versplinterd leek. Ze zijn gaan focussen op de beste treinreizen en stations van wereldklasse. Het bedrijf heeft dus twee takken: NS trein en NS station. In dat laatste zit retail, waar Floris deel van is. Hij is één van de drie onderdirecteuren en is verantwoordelijk voor commercie in stations. Ze hebben nu een systeem waarbij ze een deel aan de markt overlaten en de behoeftes die daardoor nog niet worden vervuld op te nemen in NS diensten (schoonmaak, WC's, wachtruimtes,..). Ze hebben een deel externe exploitatie en een deel zelf in beheer (AH to-go, Kiosk, stationshuiskamers en Julia's). Dit is hoe het in heel Europa werkt, kijk maar naar SSB.

Visie

1. All-day relevance: portfolio moet de hele dag de klant voorzien in behoeftes.
2. People: we willen de beste werkgever zijn. We hebben nu namelijk een generatie die anders denkt over werken en bij ons lopen de werknemers uiteen van 16 tot 56.

3. Verantwoord retail:

1. De vraag & markt verandert: je kan niet meer neutraal zijn. Het is raar om geen verantwoordelijkheid te nemen als je zo'n grote impact hebt op mensenlevens. Duurzaamheid blijft ook een belangrijk thema de komende 50 jaar, het is urgent!

2. We voelen ons verantwoordelijk: NS in een bedrijf met hoge duurzaamheid-waarde, die nemen wij over ook al is het complex. Treinen is natuurlijk inherent gelinkt aan duurzaam reizen maar het is ook CO2-neutraal bij ons. We zijn ook een staatsdeelnemer, dat betekent dat het ministerie van financiën aandeelhouder hebt, maar we hebben dus wel een link met Den Haag en dan kunnen we niet opeens helemaal geen verantwoordelijkheid nemen.

Duurzaamheid

Super complex probleem. NS trein krijgt prioriteit over NS retail bij besluiten. Toch is de algemene NS visie dat duurzaamheid belangrijk is maar het is veel complexer voor ons dan voor treinden. Daarom beginnen we met low-hanging fruit.

- Service: Korting bij herbruikbare beker

- Assortiment: kleinere zakjes suiker, meer gezonde producten

- Productieketen: hoe dingen worden geproduceerd, bv rainforest alliance
- Energieverbruik: verlichting (led verlichting), koeling (deurtjes voor koelkasten), automatische deuren, warmtebakken (deurtjes voor werknemers)

Het is allemaal heel logisch maar het kost telkens wel veel geld. Het zijn ook maar kleine stapjes, dingen die we morgen kunnen veranderen.

We hebben voor over 20 jaar ook een visie: paris-proof zijn en de plastic pact. Alle kleine stapjes dragen hieraan bij maar het grotere beeld moet ook geschetst worden. Daarvoor hangen wij ook af van ministeries en NS algemeen. We hebben zelf ook Lotte Wezel die ons hierin ondersteunt.

Over het verduurzamen van de zelf-zorg OTG

Ik mis hierin dat de KPI's nu nog voornamelijk gaan over euro's. Onze balance sheets in vergaderingen draaien om geld en niet om duurzaamheid of sociale impact.

Kees Klomp over geld economie

> Het is nog niet normaal om rekening te houden met duurzaamheid of sociale impact in de bestuurskamer, dat kan namelijk niet gemeten worden
 > Zolang er geen meetbare impact is van het verbeteren van deze dingen in de bedrijfswereld is het moeilijk om hier echt rekening mee te houden. De klant gaat uiteindelijk misschien wel minder kopen als je niet duurzaam bent maar dat is weer niet de kern.

Reistijd naar O

Wij werken volgens de regeling van de trein en deze station retail is heel anders dan high street retail. Als er een rij staat bij een gewone winkel dan doe je er een kassa bij, als er drie mensen in de rij staan bij de Kiosk verlies je de derde klant.

Als de reiziger binnenkomt in het station heeft die ongeveer 7 minuten de tijd. Dit is onderverdeeld in aankomst-domein, reis-domein en commercie-domein. Dit laatste heeft gemiddeld 3 minuten tijd van de reiziger (behalve bij heavy users, die hebben maar 30 seconden nodig want die hebben zo'n exact beeld bij de trein). Onze stille belofte is dat jij je trein nooit mist door ons. Dit wordt vertaald in de open ontwerpen, dat we op de perrons zitten en dat alles van glas is. Als mensen worden gerustgesteld dat ze hun trein halen zijn ze ook

rustiger in hun aankopen.

Interessant fenomeen bij de 10 minuten trein: elke 10 minuten een trein zorgt ervoor dat mensen méér rust vinden in het reizen maar minder in het consumeren tijdens deze reis. Waar ze voordien wisten 'mijn trein gaat om 7 over', zijn ze daar nu minder zeker van. Ze voelen minder controle op de tijd en dat is essentieel voor commercie op het stations.

Types van NS reizigers

- Zakelijke reizigers = van werkplek naar werkplek met de trein
- Forens = van wonen naar werk of omgekeerd
- Student = van wonen naar educatie of omgekeerd

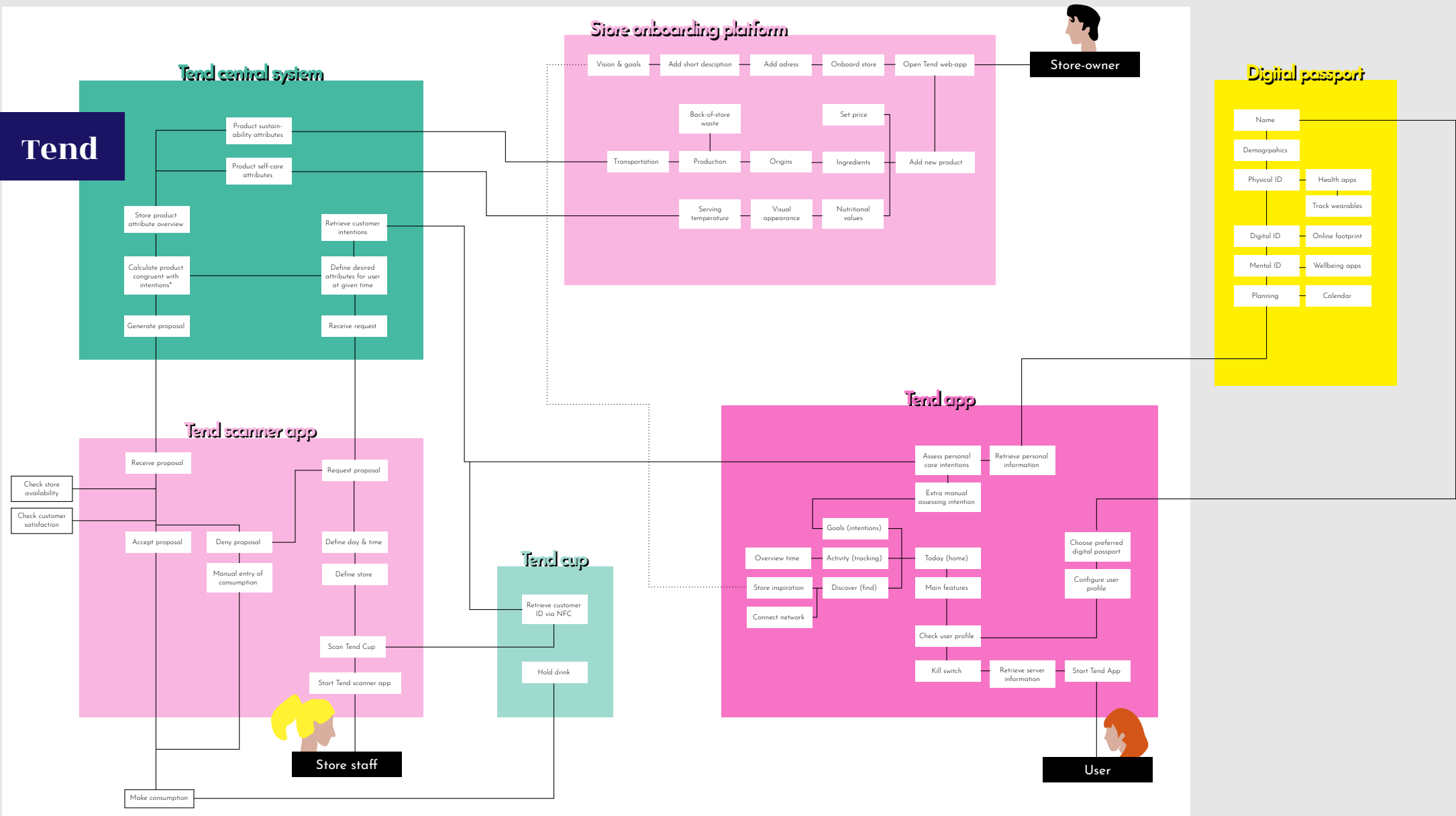
=> Je moet op B zijn met een tijdslimiet dus je wilt garantie dat je er op tijd bent. Dan ben je afhankelijk van timing en wil je dus controle over de tijd.

- Sociaal recreatief = gewoon gezellig even ergens heen, plezier

=> tijd is minder van belang + recreatie zorgt voor meer aankopen

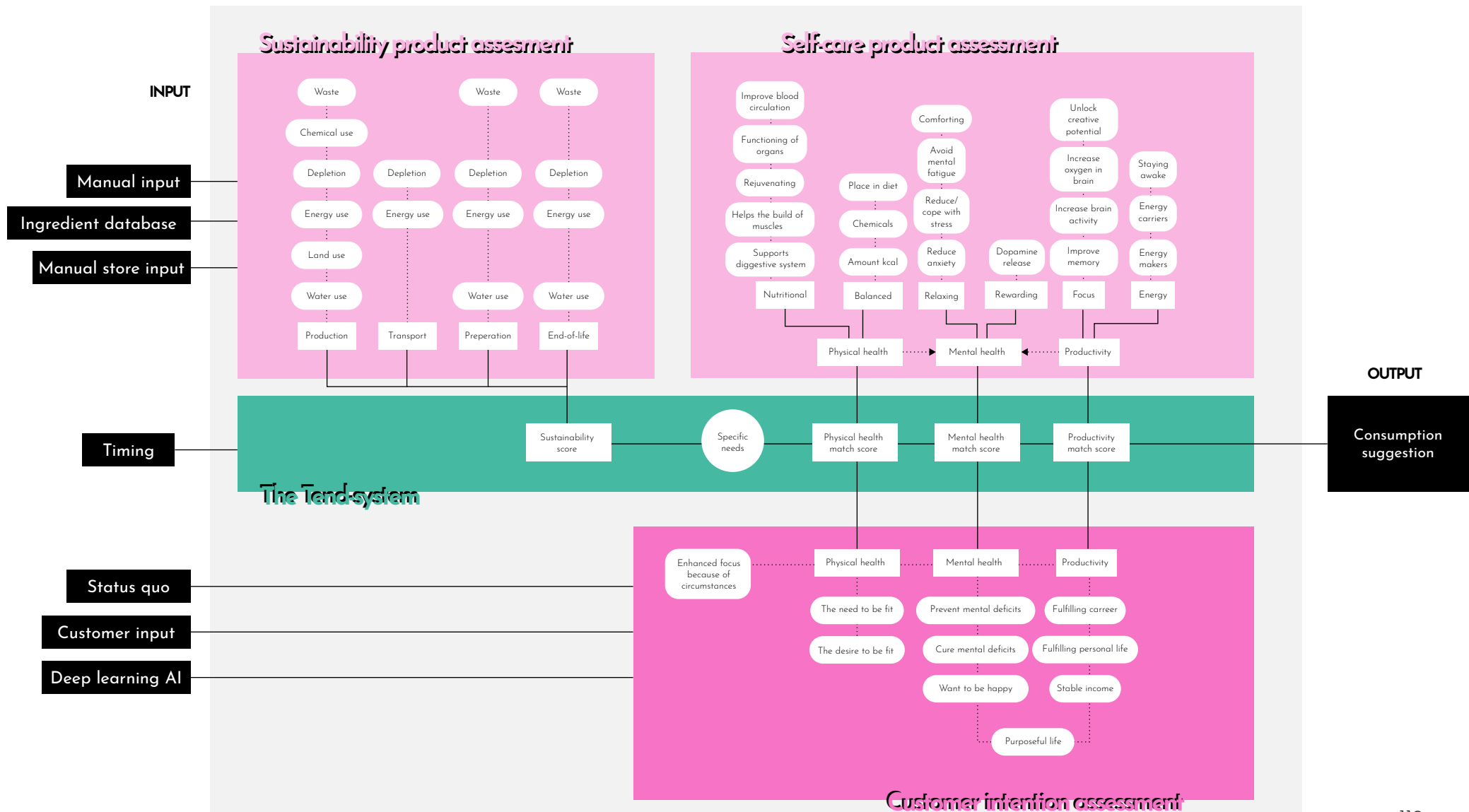
Kiosk gaat niet verplaatsen uit het station. Of ze passen zich aan aan de seamless mobility (nog sneller mensen helpen) of het belang van de trein 'halen' moet verdwijnen.

F: High Level Solution Overview



G: Calculations proposal

G.1: Overview



G.2: Details

Sustainability score

Beverage ingredient (per 100ml)				
Subject	WF	Feature	Calculation	Explanation
Production	20%	18% Energy use to grow the product	Numeric	Does it cost a lot of energy to make
		18% Energy use to process the product	Numeric	
		18% Water use to grow the product	Numeric	Does it cost a lot of water to make
		18% Water use to process the product	Numeric	
		18% Land use	Numeric	Do you need a lot of land per product
		10% Use of chemical aids	Binary	Do the farmers use chemical pesticides or grow aid
Depletion	20%	30% Loss in production	Numeric	Food waste
		30% Rapid deterioration of the product	Binary	Food waste
		30% Scarcity of the product	Binary	
		20% Monoculture	Binary	
		20% Ground depletion	Numeric	
Transport	20%	20% Custom temperature needed	Binary	Check transportation accuracy
		0% Distance from origin	Numeric	
		10% Transport mode (resource -> production)	Numeric	
		10% Distance traveled (resource -> production)	Numeric	
		10% Transport mode (production -> packaging)	Numeric	
		10% Distance traveled (production -> packaging)	Numeric	
		10% Transport mode (packaging -> warehouse)	Numeric	
		10% Distance traveled (packaging -> warehouse)	Numeric	
		10% Transport mode (warehouse -> coffee shop)	Numeric	
		10% Distance traveled (warehouse -> coffee shop)	Numeric	
Preparation	20%	30% Energy use to prepare the product	Numeric	
		30% Water use to prepare the product	Numeric	
		10% Other products used to prepare the product (reus)	Binary	
		30% Water used to clean tools		
Waste (end-of-life)	20%	50% Food waste after preparation	Numeric	
		50% Other products used to prepare the product (singl)	Binary	
	100%			* focus can change in accordance with govermennts

Self-care score

Subject	WF	Features	WF	Sub-features	WF	Sub-sub features	Weighing	Possible ingredients	More explanation	
Physical health		Nutritional		Supports digestive system	average	High in fibers	3 point scale	Lemon		
						Binary	Ginger			
							3 point scale	Sawweed; milk, eggs		
							3 point scale	Kombucha; Kefir; L5		
					Helps with muscle building	average	Proteine	5 point scale	Milk; soy; beans	
							3 point scale	Omega 3		
							5 point scale	Dairy; almond; soy; rice; leafy greens		
							3 point scale	Shitake mushrooms; milk; cruciferous vegetables		
					Prevent aging	average	Magnesium	5 point scale	Almonds; peanuts; cashews; soy milk; spinach; oat; banana; dark chocolate; milk	
							3 point scale	Blueberries		
					Keep organs working	average	Theobromine	3 point scale	Cocoa (70%)	
							5 point scale	Omega 3		
							3 point scale			
							3 point scale	carrots; tomatoes; milk; mango		
					Increase blood circulation	average	Blood thinning	Binary	Ginger	
							5 point scale	Banana; dark chocolate; spinach; nuts		
							5 point scale	Magnesium (healthy blood)	Almonds; peanuts; cashews; soy milk; spinach; oat; banana; dark chocolate; milk	
				Balanced	Amount of kcal	average		Numeric	Cardemom	
					Amount of chemicals	average		Numeric		
	Productivity			Focus		Place in diet	average		?	
			Increase oxygen in brain		average	Increase blood circulation*	Score	Dried fruits; banana; avocado; spinach		
							3 point scale	Cardemom		
							Binary	Berries		
					Activate brain functions	average	Stimulants	3 point scale	Eggs	Synthesis of neurotransmitters
							3 point scale	Citrus fruits; black currants; strawberries; broccoli; potatoes; paprika's		
							5 point scale			
							3 point scale	Neuro-protective functions		
							?			
							3 point scale	Choline	Shitake mushrooms; milk; cruciferous vegetables	
					Unlock creative potential	ONLY W	Hallucinogen drugs	Binary	LCD; psilocybin; DMT	
							3 point scale	Theobromine	Cocoa (70%)	
					Improve memory/learning	average	Flavonoids	3 point scale	Cocoa (70%)	
							5 point scale	Vitamin C	Citrus fruits; black currants; strawberries; broccoli; potatoes; paprika's	
							3 point scale	Adaptogen	Rhodiola Rosea; mushroom; maca root; ashwagandha	
							3 point scale	Dexamfetamine		
					Energy makers	average	Natural sugars	5 point scale	Honey	
							?			
					Energy carriers	average	Good sleep	5 point scale	Cocunut water; milk; fruits	
							5 point scale	Electrolytes	Apple; banana; coffee; broccoli; brewers yeast	
			Staying awake	average	Temperature	Numeric	Coffee; green tea			
					5 point scale	Caffeine	Green tea; black tea			
					5 point scale	Theanine	Cocoa (70%)			
					3 point scale	Theobromine	Cocoa (70%)			
					3 point scale	Adaptogen	Rhodiola Rosea; mushroom; maca root; ashwagandha			
					3 point scale	Modafinil				
Mental health		Relaxing		Reduce anxiety	average	Magnesium	3 point scale	Rooibos		
						Binary	Bone-broth	slows down the production of norepinephrine		
						5 point scale	Antioxidants	low blood levels of antioxidants have been linked to the development		
					Reduce/cope with stress	average	Adaptogen	3 point scale	Rhodiola Rosea; mushroom; maca root; ashwagandha	
							3 point scale	Theobromine	Cocoa (70%)	
							Binary	Sage		
					Avoid mental fatigue	average	Energy*	Binary		
							3 point scale	Adaptogen	Rhodiola Rosea; mushroom; maca root; ashwagandha	
					Conforting	average	Temperature	Numeric		
							3 point scale	Fatty foods		
		Rewarding	Dopamine release	average	Theanine	5 point scale	Green tea; black tea			
					5 point scale	Sugar				

H: Full value exchange

Supporting self-care (Tend <-> user (U))

The first and foremost meaning of Tend is that of self-care. Conscious love and good will for your own health is why the user decides to make use of this application. This is first insinuated (see 6.1.1 Actions) and then manifested in three different ways: mental health, physical health and productivity (Becker, et al., 1993; Victoria State Government, 2002).

Physical health through consumption is a straightforward idea. There has to be a balance in what your body needs to reach certain goals (a healthy maintenance of weight, lose weight, gain weight, gain muscle strength, gain endurance, ..) and what you put in your system by eating or drinking. There is a lot of research that can support finding the right consumption attributes to go with a certain goal. For example, proteins should support the rebuilding of muscle, whereas vinegar induces calorie burning and green tea may help reduce heart disease risk.

Supporting people to be productive is an important part of mental health since doing fulfilling work gives people a sense of purpose. It is also a way to give people a stable income and avoid financial insecurities, which would be terrible for one's psyche.

Mental health through consumption is a bit more complicated. The meaning of the drink can be 'a reward' or 'comforting' but the types of beverages that act rewarding can give negative mental effect after consumption. For example, one might reward him or herself with a double chocolate milkshake after a big presentation but feel bad about the unhealthy aspects of this god-send liquid. By using a smart system that tells you when you deserve a reward or when you are allowed to comfort yourself, you are using a social setting and the doubt and negative feelings afterwards should be avoided (Bhanji and Delgado, 2014). Other incubators of mental health are the absence of stress and enough sleep, which should be balanced out with the 'productivity' and 'physical health' aspects.

The best way to integrate these meanings into the consumption attributes is to have an AI-driven system that learns from each individual user. This way, a complex chain of values, actions and their consequences are mapped and the most suited assessment can be made. Until then, the system should have some base-values to start from.

More and happier traffic (Tend <-> store)

The store's desire is to do good business and satisfy their customer needs. Using Tend, they increase their traffic by using the platform's visibility. On the user-app, people can see the vision of the shop and are more inclined to go there instead of other shops. Tend facilitates the discovery of new and smaller shops, while simultaneously providing the customer and store with the best fit. They can also more accurately support people in their consumption needs because the system gives them the just-right suggestion. This is a guarantee for people to leave the store happy and ascribes a more positive feeling towards the place that helped them feel this way (Baty, 2006).

In general, changing consuming on-the-go as a convenience-driven practice to a self-care practice will hopefully generate an increase in traffic all over, since convenience is based on coincidental circumstances and self-care should be constant (Anderson, 1971; O'Neill et al., 2019).

Insight in future consumption (Tend <-> store)

Tend's system is not reactive but proactive in assessing people's intentions. In the application, the user sets goals and the link with a digital passport is made to predict what the customer needs in the future. This way, Tend can act preventively and facilitate a stable form of self-care. This insight is not only useful for the customer, but also for the store. Tend communicates the general findings with the stores that are on the platform and they can do a more accurate wholesale order. If the Tend-app foresees that the second week of January will have a burst of people who need the support of muscle

gaining beverages, the stores can put more protein rich ingredients in stock and hold off on the chocolate and whipped cream. When the insights are used correctly, the stores avoid waste and avoid money and resource losses.

Business logic (U <-> Tend <-> store)

Because the Tend vision is embedded in the attributes of the consumption, it is only logical to make the business model dependent on the accuracy of our predictions. The user pays his or her consumption via the Tend-app on a monthly basis. This will feel like a small investment to facilitate self-care and linking the payment to the consumption is a great way to keep the service itself 'free'. In addition, the customer only has to bring the Tend cup to the store and should not be distracted with payment methods or other devices to use this service. The price per consumption for the end-user is 110% of the store price. At the end of each month, Tend pays the stores the consumptions they have provided to the Tend-users. This is 90% of the store-price. Since retailers often have a 66% profit margin, they will only lose 16% of their income whereas they should have to spend 20% of this income on customer acquisition costs (Schleckser, 2020) which they do not have to do now. It is therefore economically more viable to sell via the Tend-app.

Healthy and productive employees (U <-> employer <-> Tend)

The company where the user works benefits from a healthy, happy and productive employee and can therefore for example buy credits for their employees at Tend as part of their salary or as a reward system.

Less costs for the unhealthy (U <-> insurance company <-> Tend)

Insurance companies also benefit from healthy customers and can provide a discount on their services when people use Tend, which is great publicity.

Reaching government SDG's (stores <-> government <-> Tend)

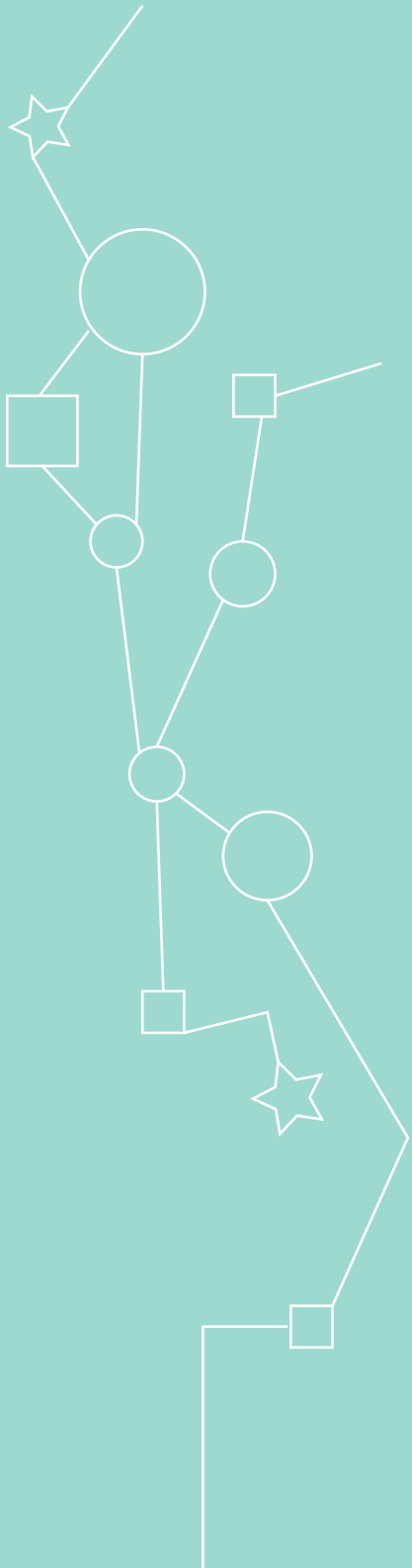
Since the stores gain economic value from integrating SDG's in their business, the government under which the store is operating will benefit from small actions leading to a bigger sustainable change.

Further stakeholders

Lifestyle and gym coaches can extend their support through the use of the Tend-system, thereby making their work more effective. They can also recommend the system to users or offer a special deal combining both services.

Friends and family of the user are happy because the desire to see one's loved one happy and healthy is easier to accomplish with the Tend-app. These tertiary stakeholders can encourage and discuss usage or simply send credit to show their support.

The suppliers of the stores are also affected by the stores usage of the Tend-app. Since the store will gain more insights in the desires and needs of their (possible) customers, they can make more accurate decisions on their own produce acquisition. The sustainability assessment of Tend will also be transparent, leading to more environmental products for the store.



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