

Bridge to inclusion

An exploration of service inclusion for customers with cognitive challenges in Coop supermarkets.



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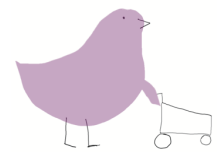
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Abstract

Cognitive challenges are increasingly common, yet everyday environments, including supermarkets, remain difficult to navigate for many people. As awareness of neurodiversity and mental health grows, so does the responsibility of designers to adapt. This thesis examines how service design and inclusive design can be combined to better support cognitively challenged customers, explored through the context of Coop supermarkets in Denmark.

The literature review surfaced a key gap: while theory for designing for more inclusive services exist, practical tools for applying them within service systems remain underdeveloped. It also showed that research on people with cognitive challenges are usually focused on the specific diagnosis, rather than the shared barriers they might experience. And even there, multiple researchers mention a lack of research on inclusion of people experiencing mental challenges. These gaps shaped the project's direction. The Systemic Design Framework was adopted as the main methodology, as it is designed to address complex challenges. Within this, Fisk et al.'s (2018) Design for Service Inclusion framework was identified as a valuable foundation and was further developed and adapted to make it more actionable within the specific context of the project. The goal is to (1) develop a tool to assess if a service is inclusive (2) assess the inclusivity of the current supermarket service, and (3) design a more inclusive service.

First, (1) the designers developed the 'Service Inclusion Bridge', a tool to apply the Service Inclusion theory to real services. Next, (2) the method was used to assess the current service, concluding that the current supermarket service is exclusive for customers with cognitive challenges. Lastly, (3) a portfolio of six interventions for a more inclusive service was developed, tested, and evaluated: a crowd counter, navigation sign, colour codes and numbers, a digital map, an information tablet, and a guide for practical changes. The significance of this work lies in designing for a smaller, often overlooked group in a way that benefits everyone. Equipping future designers with practical tools is a step toward a world designed with more people in mind.

Keywords: Inclusive design, Service Systems Design, supermarkets, cognitive challenges

Table of contents

1. Introduction	10
1.1. From shared interests to a focused research question	11
1.2. The design team	12
1.3. Coop	13
1.4. Methodology	13
1.5. Reading guide	15
2. Literature review	16
2.1. The theoretical landscape	17
2.2. The thematic landscape	23
2.3. Research question	27
3. Explore	29
3.1. Positioning ourselves as designers	30
3.2. Desk research	31
3.3. Service Safari	36
3.4. Journey maps	38
3.5. Interviews as qualitative data and research	40
3.6. Survey	51
3.7. Four pillars of service inclusion - Service Inclusion Bridge	57
3.8. Actors Map	59
3.9. Personas	60
3.10. Value Constellation	61
3.11. Key findings in the explore phase	61
4. Reframe	64
4.1. Validating observation	65
4.2. Affinity mapping	66
4.3. Different perspectives	69
4.4. Meta design mapping	71
4.5. HMW	72
4.6. Key findings in the reframe phase	73

5.	Create.....	75
5.1.	Co-design workshop	76
5.2.	Lotus Blossom and dot voting.....	78
5.3.	Decision matrix.....	78
5.4.	Presenting the solution.....	80
5.5.	Validating ideas with Coop	84
5.6.	Customer Value Constellation.....	85
5.7.	Updated user journey	86
5.8.	Service System Architecture and Service System Navigation.....	88
5.9.	Blueprint.....	91
5.10.	Summary of the create phase.....	92
6.	Catalyze.....	94
6.1.	Prototype and testing	95
6.2.	Recommendations for next steps.....	105
6.3.	Summary of the catalyze phase	106
7.	Discussion	107
7.1.	The goals and results of the project.....	107
7.2.	Interpretation and limitations of results.....	108
7.3.	Comparison with existing literature.....	111
7.4.	Unexpected finding about customers' app-avoidance.....	111
7.5.	Implications of the project.....	111
7.6.	Continuing the journey	112
7.7.	Summary of the discussion.....	113
8.	Conclusion.....	114
9.	References.....	115
10.	Appendix.....	122

Table of figures

Figure 1 Mapped areas of interest	11
Figure 2 Systemic Design Framework	13
Figure 3 Mapping of the design knowledge field and backgrounds, source:	21
Figure 4 General model of multilevel service design, source: (Patrício, Fisk, Falcão e Cunha, et al. 2011)	23
Figure 5 Microsoft's inclusive design toolkit, source: (IxDF - Interact. Des. Found. 2026) Microsoft's inclusive design toolkit, source: (Interaction Design Foundation 2026).....	34
Figure 6 Picture of OXO - inclusive kitchen tools, source: (OXO 2026)	35
Figure 7 Pictures taken while running the 1st service safari.....	37
Figure 8 Observation cards	38
Figure 9 Journey map, detail on the first steps.....	39
Figure 10 Journey map based on service safari, detail on the first steps	40
Figure 11 Picture taken during the interview.....	41
Figure 12 Distribution of feelings in grocery shopping experiences.....	44
Figure 13 Hierarchy graph of code pain points and challenges.....	44
Figure 14 Hierarchical code overview on Sensory overload	45
Figure 15 Reasons of Self-Checkout issues	46
Figure 16 Pie chart of pain points with navigation in supermarkets.....	47
Figure 17 Hierarchical Overview on the code Needs and adjustments	48
Figure 18 Hierarchical overview on the code visual needs	49
Figure 19 Overview on using digital tools in grocery shopping	49
Figure 20 Close up of Mind map, Visual representation of sensory overload and its connection to needs,.....	50
Figure 21 Screenshot of the LinkedIn post about the survey.....	52
Figure 22 pie chart showing how many has each diagnosis.....	53
Figure 23 Survey results - frequency of use across traditional cashier, self-checkout, and self-scan app options.....	53
Figure 24 Survey results - examples of the best and worst parts of grocery shopping experience.....	54
Figure 25 Survey results - aspects of supermarket shopping that feel particularly bad and particularly good	55
Figure 26 Survey results- frequency of stress experienced during supermarket visits..	56
Figure 27 Service inclusion bridge: selected cards and bricks from Enabling Opportunities' pillar. Full version in appendix F	57
Figure 28 Service inclusion assessment based on interviews, survey and service safari	58
Figure 29 Picture taken while using the service inclusion bridge tool.....	58
Figure 30 Actor map	59
Figure 31 Personas based on interviews (Full view in appendix G).....	60

Figure 32 Value constellation map.....	61
Figure 33 Screenshot of the Figma board - finding from observation of the SuperBrugsen and Kvickly.....	65
Figure 34 Analog clustering of interview and survey insights	66
Figure 35 Affinity map based on user journey and identified clusters.....	67
Figure 36 Affinity map based on identified clusters and trend parameters	68
Figure 37 Different perspective activity - selected notes	69
Figure 38 Meta design map in connection to cognitive challenged people and supermarket experiences	71
Figure 39 picture taken during HMW generating process	72
Figure 40 HMW created based on the four pillars of service inclusion	73
Figure 41 picture taken during co-creation workshops while running 10 plus 10 method exercise.....	77
Figure 42 Decision matrix	79
Figure 43 Presentation of the solution in the form of an illustrated journey	82
Figure 44 Customer Value Constellation Map	85
Figure 45 Updated journey map showing emotions and implemented improvements, detail on the first steps	87
Figure 46 SSA detail: Visual representation of the indirect and direct interaction of the customer Full version in Appendix H	90
The Service Experience Blueprint (SEB) is “a multidisciplinary method for designing multi-interface service experiences” 47 and is essential for showcasing the service system. The SEB is used in the Multilevel Service Design (MSD), which “is presented as a new interdisciplinary method for designing complex service systems.” (Patrício et al. 2011).	91
Figure 48 Blueprint: Visual representation of memory effect of the navigation sign	92
Figure 49 screenshot from prototype.....	96
Figure 50 Survey results – distribution of the responses regarding diagnosis	97
Figure 51 table of users responses to whether they would appreciate each intervention	98
Figure 52 screenshot of user testing of 'Guide for practical changes'	99
Figure 53 Table presenting expert evaluation scores by intervention	100
Figure 54 Two versions of the navigation sign prototypes	102
Figure 55 crowd counter prototypes	103
Figure 56 Main screen of the info tablet prototype	105

Learnings Goals

In this master's thesis project, the learning goals contain the objectives of the thesis requirements and personal learning goals. The learning goals for knowledge, skills, and competences form the basis of the overall project's learning opportunities (Appendix 10.3.). In addition to these learning objectives, personal learning goals were added. It was important for the design team to set personal learning goals because they wanted to define their parameters for personal growth, interests, and the personalisation of learning opportunities. Before the thesis and project were written, the following personal goals were set:

- Try out new tools and methods that I haven't used yet
- Learning about the connection between food systems and service design, how can service design promote more sustainable practices in the food system
- Broadening the understanding of accessibility in technology and food systems
- Collaborate with companies that can benefit from our service design skills
- Broadening academic practices for future research and real-life applications
- Write and present a thesis I'm proud of.
- Practicing a healthy work/life balance by doing great time management and practicing healthy group dynamics.

Reflection on the goals:

The design team tried out several new tools and methods, amongst them: different perspectives, a four-pillar framework, meta-design mapping, a survey-style prototype, SSN, and SSA. It was challenging but also very insightful expanding our academic competencies to apply and use new tools. The design team moved from the broad topic of food systems to a smaller, more tangible area within the food system: the supermarket. Therefore, they did not work with food systems directly but met the goal in the context. The goal of broadening our understanding of accessibility and the food system was met by applying knowledge and practices of inclusive design in technology. Because of the process, technology was not thoroughly assessed, but the design team gained a broad understanding of it. Especially in the context of supermarket accessibility, supermarkets were explored. The design team did not collaborate with the company directly but contacted and reached out as much as they could to integrate the service systems of Coop in the design process. All the team members broadened their perspective on academic practices and bridged academia with real life applications successfully. The design team is proud of what they have been doing. The goal of a healthy work life balance has been achieved due to good time management and stress regulation through nature, cats and chickens.

1. Introduction

Finalising the master's program in Service Systems Design at Aalborg University, this thesis report covers the project process, researches how inclusive Coop supermarkets are towards customers with cognitive challenges, and the design of interventions to increase service inclusion.

Most modern citizens depend on supermarkets for food, putting supermarkets in a position of power. Most citizens do not have a choice but to use them, no matter how difficult or unpleasant it might be for them.

Accessibility for customers who experience invisible disabilities like cognitive challenges is often overlooked or down-prioritised, even though many people experience cognitive challenges sometimes during their lives.

If not as a permanent condition, then as a temporary one, like stress or depression. Clarkson et al. (2003) wrote: *"We are all, at various times, rendered disabled by the world we inhabit and that we designed."* As such, this thesis aims to promote fairer access to food by exploring the needs of customers with cognitive challenges and designing a more inclusive supermarket experience. The terms 'inclusivity' and 'cognitive challenges' will be explored in Chapter 2, the literature review.

In this chapter, relevant information for understanding the thesis will be presented, along with an overview of the design team and the process that led to the work in this specific area.

This chapter has the following structure:

- 1.1. From shared interests to a focused research question
- 1.2. The design team
- 1.3. Coop
- 1.4. Methodology
- 1.5. Reading guide

The design team reached out to several potential partners and decided to use Coop as a case study, since supermarkets are a widely used service in people's daily lives. Coop is also known for being innovative and, because it is partly owned by its members, likely to focus on user needs. An official cooperation was not established due to Coop's limited resources. Still, a friendly contact was established who was willing to help by trying to find relevant employees within the Coop organisation for us to interview. While the theme of technology was in focus in the pre-project phase, the explore phase yielded insights that shifted the focus to other aspects of the service.

This process of orientation and vision setting led to a shared vision of contributing through a thesis that can help make supermarket services more inclusive, specifically for customers with cognitive challenges, using Coop as a case.

This led us to the research question: **How can designing for service inclusion support customers with cognitive challenges in Coop supermarkets?**

The goal was to assess the inclusivity of the current supermarket service, design a more inclusive service, and develop a tool to make designing for service inclusion easier for future designers. Within these goals was a hope to raise awareness among designers and stakeholders about the importance of service inclusion, particularly for users with cognitive challenges.

1.2. The design team

As this thesis works with a vulnerable target group, it is important to position the designers, aware of the privileges, power, and biases they hold and how these can influence the project. The design team consists of three Europeans: two women and one nonbinary person. While studying the same master's program, they represent different backgrounds, privileges, and minority groups. They represent both minorities within gender and mental health, as well as majorities, by all being well-educated, European, white people. Each team member has written a statement to position themselves as designers, presented in Chapter 3.1.

Designing inclusively is not simple. It requires challenging deep-seated beliefs, involving the right people, and understanding that empathy alone is not enough. In this project, the team aim to raise awareness of these challenges and stay committed to addressing them.

1.3. Coop

The Coop supermarket chain, Coop Danmark, is one of Denmark's two main supermarket chains. With more than 900 stores across Denmark today, in both rural and urban areas, Coop was relevant for a national study. The chain covers 4 supermarket brands: Kvickley, SuperBrugsen, Brugsen and 365 discount, as well as the conference hotel Severin and the customer relationship company Lobyco. This report focuses on these four supermarkets. With a 159-year history, Coop has been a first mover in Denmark on many fronts (Coop 2026a). From opening the first grocery shop, which historically changed the food availability in the local area, to opening the first self-service supermarket in Denmark, which helped keep the costs down, to introducing the first organic label in the country, the first full product declaration lists, the first rules for animal welfare, and the first allergy-friendly products. Its members partly own Coop Danmark through the organisation Coop Amba. The energy company OK Amba owns the other part. With a strong history as first-movers, national range, and being member-owned, the team sees Coop as a great potential starting point for introducing more inclusive supermarkets.

1.4. Methodology

As the main methodology of this thesis, the Systemic Design Framework is used. The Design Council developed it as a new and more thorough version of the well-known double diamond framework. The Systemic Design Framework is designed to tackle the more complex issues of the modern world by addressing not just the four phases of the design process, but also other factors relevant for a thorough design process (Design Council 2021b). It is illustrated as four quarters surrounding the double-diamond (Figure 2).



Figure 2 Systemic Design Framework

In the first, left quadrant, is the phase **Orientation and Vision Setting**, which marks the start of the design process. Here, the method invites the design team to define personal learning goals, read and discuss the official learning goals, and align expectations. In this project, this phase culminated in a shared vision to contribute to a thesis that can help make services more inclusive.

After this quadrant, the four phases of the process are illustrated. In the **Explore** phase, the topics should be researched, related academic work should be investigated, the vision developed and sharpened, and the team should take a step back to reflect on their

own power and biases as designers and users of some of the same systems they are working with. From this phase, they should also begin to include the marginalised group they are designing for, as emphasised in the framework description (Design Council 2021a).

In the **Reframe** phase, the design team is encouraged to take a look at ‘the big picture’ after exploring and start discussing how to reframe the problem with all the new insights in mind. To create a new, more inclusive service, they need to think outside the box, and that starts here. This is the conversion phase, which ends with a new definition of the problem and leads to the next phase.

In the **Create** phase, the team is diverging again to spark ideas and broaden their minds. Here, they truly ideate. In this thesis, they created ideas for all systemic layers, from the tangible service in the supermarket to the systemic dynamics shaping our society, both enabling and disabling specific options, and the narratives that influence how the service is perceived.

After ideation, it is time to converge again and test some of the ideas. In the **Catalyse** phase, the solution should be made more tangible by prototyping and testing. In this process, new insights are emerging and are used to grow and refine the ideas.

After completing the four phases of the double diamond, it is important to consider **Continuing the Journey**, the right quadrant of the framework. Now is the time to reflect and discuss the process. To help each other evolve as designers, the team should discuss what they learned and what they could have done differently to achieve an even better result. Here, they are also encouraged to revisit the vision to evaluate the process and outcome.

Lastly, the top and bottom quadrants of the Systemic Design Framework should be kept in mind throughout the process. **Leadership and Storytelling** start internally in the group. They should make sure to prioritise the project, and reflect on their own choices, actions and methods throughout the process. By reminding themselves of the story they are part of, the changes they want to see in the world, how they can contribute to getting there, and what steps are next in the process. It is also about sharing the process with the surrounding community, involving users, inspiring others, and being open to thoughts and ideas, which is closely connected to the last quadrant.

Connections and Relationships is about creating empathy with the project and involving stakeholders and the community by helping them understand the process and express their thoughts and ideas. It is about creating inclusive spaces where everyone feels safe and heard.

Using the Systemic Design Framework works well together with an inclusive design approach as it takes different perspectives into account and aims to create design processes that benefit the overlooked, not just the majority.

1.5. Reading guide

This report is structured to take the reader through the full overview of our service design process, from the initial framing of the project to the final conclusions. Below is a brief overview of the following sections to help orient the reader.

To ground the project in existing knowledge, the **Literature Review** (2) covers the theoretical and thematic landscape related to this thesis. First, the main design areas of service design, inclusive design and related practices are explored. Then, relevant literature about cognitively challenged people, inclusion and supermarkets is explored. Lastly, the research question, based on the gaps identified in the literature, is presented.

The main body of the report follows the phases of our design process. The **Explore** (3) phase documents our primary and secondary research, including desk research, a service safari, journey maps, interviews, a survey, and a range of synthesis tools such as personas, an actor's map, and a value constellation. The chapter introduces the service inclusion bridge, and the results from this using this tool serves as the foundation for the further process

In the **Reframe** (4) phase, designers move from research to interpretation by validating observations, mapping affinities, exploring different perspectives, meta-design mapping, and formulating our How Might We questions using the key findings.

The **Create** (5) phase presents the generative work: a co-design workshop, how ideas evolved using Lotus Blossom and a decision matrix, and how the created solutions were validated with Coop. After that, the process and findings from building an updated user journey, Service system architecture and navigation, and lastly the blueprint are shown. All building toward a coherent service concept.

The **Catalyze** (6) phase presents three different testing processes: sketch prototyping and testing with users, testing with experts and functionality prototyping and testing with users. The chapter also discusses how the design outcomes could be implemented and further developed.

Finally, the **Discussion** (7) and **Conclusion** (8) reflect on the process, the outcomes, and the implications of our work.

2. Literature review

This chapter presents the research landscape of the topic and the theoretical foundation for the thesis. It introduces the main literature used to guide the project as well as the main theory used to assess the level of service inclusion at Coop supermarkets.

First, the area of working with inclusion in service design is explored, covering the following: 'Service design', 'Universal design', 'Inclusive design', 'Service inclusion', four categories describing the relationship between service design and inclusive design and lastly the method of using 'Multilevel Service Design' to design for all logical levels.

Secondly, the research landscape of service inclusion for customers with cognitive challenges in supermarkets is explored. The landscape is presented thematically, starting with cognitive challenges, moving to the inclusion of customers with cognitive challenges, before covering inclusion within supermarkets.

Lastly, the research question, based on gaps found in the literature review, is presented.

2.1. The theoretical landscape

The theoretical landscape surrounding this thesis centres on Service Design as the key area, along with various design theories concerned with inclusivity.

When working on inclusivity in design, the areas of ‘Barrier-free design’ and ‘Accessible design’ should be mentioned. Barrier-free design originates from 1950’s America, where an increasing number of physically disabled veterans motivated the development of barrier-free design in buildings and products (Persson et al. 2015; NeuroNav 2026). This has sparked significant development in physical products, such as remote controls and wider doors. The term Accessible design comes from the 1991 American Disability Act, and is an ISO-standard school of design (Kent 2017; Persson et al. 2015). While it is mostly used for physical accessibility, it has also been used in web design in recent years (Ashley Firth 2024; Atkins and May 2026). While both Barrier-free and Accessible design focus on designing for inclusion, they primarily address physical accessibility and are therefore not used in the thesis.

The theory on which this thesis is built comes from the fields of Service Design, Inclusive Design, Service Inclusion and Multilevel Service Design. Surrounding these areas are Universal Design and Design for all, which inspired the development of Inclusive Design. All are described in this chapter, as well as four categories describing the relationship between Inclusive Design and Service Design.

2.1.1. Service design

Service Design is the cross-disciplinary area of designing services using co-creation and a human-centred approach to ensure the customer’s perspective is in focus, while balancing the needs and resources of the business and everyone else involved (Stickdorn et al. 2018). There are multiple ways to approach service design, and the field's complexity requires structured research to ensure all important factors are considered. Two perspectives of services are: “*services are what a product is not*” and “*Services are a value creation activity*” (Kimbell 2011). In service design, services are mostly viewed as value-creation activities, and Morelli et al. suggest looking at services through three logical levels: service interactions, service as infrastructure, and service as a systemic institution (Morelli et al. 2021).

1. Service interactions are what happen between two or more people. In a supermarket context, the customer creates value by choosing and buying products for a recipe. The interactions facilitate the service's values in the specific context.

2. Service as an infrastructure is what supports the service activity. It is what surrounds and supports the service interaction. In a supermarket context, it is the store layout, checkout options, signs, and shopping baskets.
3. Service as a systemic institution is “creating elements of changes (e.g. policies, scaled-up services) in the institutional system or aligning services to the institutional context” (Morelli et al. 2021). In a supermarket context, it is the implicit rules, e.g. that the customer pays using a credit card or cash. Or the market rules that influence product pricing in supermarkets. The systemic institution organises the activities and processes of the service.

As the complex and broad nature of service design allows for many approaches to a design project, this field is often, if not always, used in combination with other theories to focus the scope of a given project. In the area of working with sensitive user groups, many design theories are available. Universal design is one of the most common ones.

2.1.2. Universal design

Universal design is defined as:

The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design. (North Carolina State University 1997)

This approach was first introduced by Ron Mace, an architect and wheelchair user, who believed that a solution beneficial to a special need is often beneficial for all. There are 7 principles, widely used to describe and approach universal design:

1. *Equitable use: The design is both marketable and useful to people of diverse abilities.*
2. *Flexibility in use: A wide variety of individual preferences and abilities are accommodated.*
3. *Simple and intuitive use: Regardless of the user’s level of experience or knowledge, the design is easy to understand.*
4. *Perceptible information: Regardless of the user’s sensory abilities or the ambient conditions, the design effectively communicates necessary information.*
5. *Tolerance for error: Consequences of accidental or unintended actions are minimized by the design.*
6. *Low physical effort: The design can be used comfortably with a minimum of fatigue.*

7. *Size and space for approach and use: Regardless of a user's body size or mobility, there is appropriate size and space to reach and manipulate the design.*
(North Carolina State University 1997)

Some argue that the term 'Design for all' can be used interchangeably with 'Universal Design'. (Persson et al. 2015). Design for all, is used throughout the design fields, and as the name suggests, the idea is to design everything to be usable by the widest possible range of people. While 'Universal Design' and 'Inclusive Design' both cater to the widest range of users, Universal Design strives for a single solution that serves everyone, whereas Inclusive Design pursues this goal through multiple adaptations (Interaction Design Foundation 2026). As this thesis focuses on all customers with cognitive challenges, a multi-adaptation solution was appropriate.

2.1.3. Inclusive design

Service design can be combined with other design approaches to focus the scope. In this thesis, 'Inclusive design' is used to design a solution that ensures the inclusion of customers with cognitive challenges while also benefiting the broader target group.

Inclusive design aims to systemically restructure environments to eliminate barriers to participation and promote independence for everyone (Leshkov et al. 2024).

Inclusive design is an approach that aims to create products and services that can be used by as many people as possible by considering user diversity throughout the design process. Inclusive design focuses on developing mainstream solutions that are accessible and usable by a wide range of users without requiring specialised adaptations (Clarkson et al. 2003). The benefit of using inclusive design in the design process is that it enables solutions to reach a broader user base, including people who might otherwise be excluded due to physical, cognitive, or situational limitations. This can improve usability and overall satisfaction across the user groups. By focusing on the shared barriers affecting a sensitive customer base, in this case, customers with cognitive challenges, it reveals the systemic inefficiencies that impact the entire customer base.

Our argument is that inclusive design is not simply about access to guidelines and information about people with functional loss. We are all, at various times, rendered disabled by the world we inhabit and that we designed. (Clarkson et al. 2003)

Inclusive design provides benefits but faces real-world challenges. Two of the biggest problems are costs and the longer development time required to do it right (Waller et al. 2015). Research shows that limited budgets, lack of client understanding, and tight deadlines are the main reasons why inclusive design is often ignored (McGinley and Dong

2011). Because of these obstacles, many products still exclude certain users. This shows a significant gap between the goal of including everyone and how products are made in the real world.

2.1.4. The relationship between Service Design and Inclusive Design

Inspired by the original paper on 'service inclusion' (Fisk et al. 2018) (presented in chapter 2.1.5.). Busciantella-Ricci et al. (2020) explored the relationship between service design and inclusive design, aiming to help designers and researchers understand the multiple ways in which the two areas relate.

By doing a systematic literature review, they identify four categories describing that relationship:

1. *Inclusive service design; it means principles and methods of inclusive design, ergonomics and service design are used for designing services.*
2. *Design for inclusive services; it is the design for an inclusive design result that is an inclusive service rather than focusing on the methods and the theoretical framework of the design process.*
3. *Service design for inclusion (or service design for all); it means using service design for democratizing design or at least democratizing service design as a strategic tool for inclusion.*
4. *Inclusive design for service design; it is the inclusive process of designing services through the inclusive design field of knowledge; in this case, the inclusive design attitude, praxis, approach and methods are used to design services.*

The papers in the second category did not include relevant vulnerable users or adequately consider the value of diversity in the design process, according to Busciantella-Ricci and Aceves-Gonzalez (2021), resulting in this category failing to provide an approach helpful to future designers.

Categories	Main field of design knowledge	Background
Inclusive service design (category n. 1)	Ergonomics Inclusive design Service design	Ergonomics in design; User centred-design; Design for all; Universal design; Product design; User experience; Interaction design; Design thinking
Service design for inclusion (category n. 3)	Service design Strategic design Participatory design	Design for inclusion; Design management; Strategic design; Systemic design; Design for social innovation; Design for policy; User experience; Design thinking
Inclusive design for service design (category n. 4)	Inclusive design	Design for diversity; Design for disabilities; Design for all; Universal design; Product design; User experience; Ergonomics in design; User centred-design

Figure 3 Mapping of the design knowledge field and backgrounds, source:

This mapping of the field and background provides an understanding of how all the theories used in working with inclusion in service design are interrelated (Figure 3)(Busciantella-Ricci and Aceves-Gonzalez 2021). Based on these categories and field of knowledge, this thesis works within the third and fourth categories: ‘Service design for inclusion’ and ‘Inclusive design for service design’. As Busciantella-Ricci and Aceves-Gonzalez (2021) explain in their table, the third category: *“consider(s) the contemporary service design discipline as a collaborative and inclusive practice; and from those perspectives that considers services and service design as a tool to alleviate social issues.”* Based on this explanation, this thesis is a collaborative and inclusive practice because it considers the perspectives of cognitively challenged people throughout the supermarket experience and service design as a tool to alleviate a contemporary social issue (as seen in chapters 3.5 and 3.6).

The fourth category is described as *“design for inclusion attitude is adopted to contemplate more inclusive services. This is the case where the approaches known as ‘inclusive design’, ‘design for all’, ‘universal design’ are applied for designing services with inclusive features and values.”* This thesis applies inclusive design approaches to develop a service with inclusive features and values, aiming to reach a broader audience, specifically people with cognitive challenges. It also tries to improve usability and overall satisfaction across the target group.

2.1.5. Service Inclusion

The 2018 paper by Fisk. et.al.: *‘Design for service inclusion: creating inclusive service design by 2050’* defines the concept of service inclusion and presents a framework for designing for service inclusion and thereby tackles the unfairness in services. They define service inclusion as:

Service inclusion is defined as an egalitarian system that provides customers with fair access to a service, fair treatment during a service and fair opportunity to exit a service. (Fisk et al. 2018)

The framework for designing for service inclusion consists of four pillars, all equally important, like all pillars in a bridge are essential to keeping it standing. The pillars are: enabling opportunity, offering choice, relieving suffering, and fostering happiness. Fisk et al. define the pillars:

1. Enabling opportunity as: *“Empowering people by providing access to services and the ability to receive and co-create valued services”*.
2. Offering choice as: *“Providing people with viable choices between different service offerings, along with giving people the choice to opt out of services should they desire”*.
3. Relieving suffering as: *“Providing fair access to essential services that fulfil basic human needs (e.g. the need for water, food, and shelter) in diverse service contexts.”*
4. And lastly, fostering happiness as: *“Encouraging people to experience the pleasure that services can provide (hedonic well-being). This includes co-creating ‘happy’ service interactions by welcoming and accommodating all consumers within a positive environment!”*

The authors challenged service researchers to begin designing for service inclusion to tackle unfairness in services. After this paper was published in 2018, the term ‘service inclusion’ started to appear in academic research, and several other papers working with the topic have been published (Gong et al. 2022; Leino et al. 2021; Maheen Iqbal Awan et al. 2022; Jörg Finsterwalder et al. 2021; Pung et al. 2026). While the focus on service inclusion is emerging, the four-pillar framework appears to be rarely used in academic research. The literature search revealed only one article describing the use of the framework (Fisk et al. 2023). working with the topic have been published (Gong et al. 2022; Leino et al. 2021; Maheen Iqbal Awan et al. 2022; Jörg Finsterwalder et al. 2021; Pung et al. 2026). While the focus on service inclusion is emerging, the four-pillar framework appears to be rarely used in academic research. The literature search revealed only one article describing the use of the framework (Fisk et al. 2023). The research team behind that article includes some of the same researchers who invented the framework in 2018. And while they have in-depth knowledge of the logic behind the four pillars, the article only briefly describes the process of using the framework; therefore, the gap in research on its application remains (Fisk et al. 2023).

2.1.6. Multilevel Service Design

Besides working with the four pillars to enable service inclusion (see chapter 2.1.5.), Fisk et al. (2018) recommend using a multilevel service design method in all design processes and refer to the 2011 paper by Patrício et.al.: *‘Multilevel Service Design: From Customer Value Constellation to Service Experience Blueprinting.’* Patrício et al. propose a set of tools from different fields, used in a specific order, to enable an integrated design

with three hierarchical levels: the service concept, the service system, and the service encounter (Figure 4).

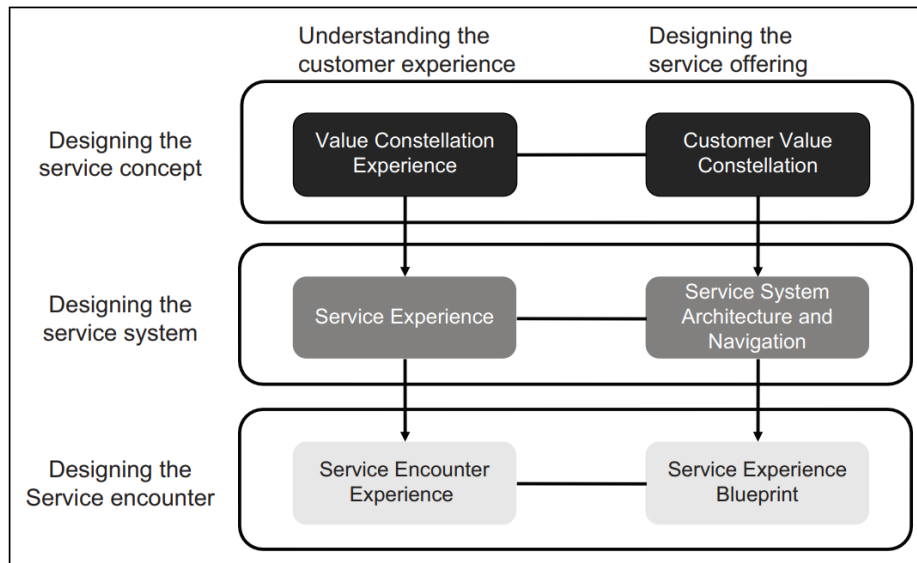


Figure 4 General model of multilevel service design, source: (Patrício, Fisk, Falcão e Cunha, et al. 2011)

First, each level should be studied using both qualitative and quantitative research. Specific methods are then suggested at each level to understand the customer experience and design the service offerings. The Multilevel service design method is used in this thesis, as suggested by Fisk et al. (2018), including all methods proposed by Patrício et al.

2.2. The thematic landscape

A thematic exploration of the research landscape of service inclusion for customers with cognitive challenges in supermarkets is conducted. First, the target group of people with cognitive challenges is explored, then the inclusion of customers with cognitive challenges is addressed, and finally, the area of inclusion within supermarkets is examined, both in general and specifically for customers with cognitive challenges.

2.2.1. Cognitively challenged

Inspired by Microsoft's toolkit for working with inclusive design, the target group of 'cognitive challenged' is used, as it includes everyone experiencing the same barriers, no matter if their challenges are permanent, temporary or situational ('Microsoft Inclusive Design' 2025). Cognitive challenges encompass mental functions. It is a broad definition, but it can be used when talking about difficulties with memory, attention, decision-making, learning, etc. (Region Hovedstaden 2024; Köse 2026). Many who experience this are also having trouble filtering out sensory input (Psych Cent. 2022). This

means that cognitive challenges include a range of conditions, from permanent ones like ADHD, autism and dyslexia, etc., to temporary conditions like stress and anxiety and situational conditions like being exhausted from a lack of sleep. It is not uncommon that people with permanent conditions also have conditions that are considered temporary. It can be that people with ADHD develop social anxiety (Jakobsson Støre et al. 2024) from the constant stress of having to navigate in a society that is not sufficiently inclusive towards them. A 2025 study showed that 46.7% of women and 25.6% of men aged 16-24 often felt stressed or nervous. In the same statistic, 38.3% of women and 28.8% of men aged 25-34 reported often feeling stressed or nervous (Sundhedsstyrelsen 2025). The number of children and young adults getting a psychiatric diagnosis in Denmark has increased in the past 10 years. It is not uncommon that people with permanent conditions also have conditions that are considered temporary. It can be that people with ADHD develop social anxiety (Jakobsson Støre et al. 2024) from the constant stress of having to navigate in a society that is not sufficiently inclusive towards them. A 2025 study showed that 46.7% of women and 25.6% of men in the age group 16-24 years old often felt stressed or nervous. In the same statistic, 38.3% of women and 28.8% of men aged 25-34 reported often feeling stressed or nervous (Sundhedsstyrelsen 2025). The number of children and young adults getting a psychiatric diagnosis in Denmark has increased in the past 10 years (Psykiatrifonden 2024). The most common of these diagnoses are ADHD and autism, which are permanent mental conditions, telling us that designing with a focus on cognitive challenges is becoming increasingly relevant. Approximately 2.5% of the Danish population is registered with ADHD, and *“prevalence and incidence of diagnosed (...) (ADHD) have increased notably over the past two decades.”* (Grøntved et al. 2025). Another example of cognitive challenges is dementia. In Denmark, approximately 100,000 Danes aged 65 and older are diagnosed with dementia, and the number is expected to rise (Danish Dementia Research Centre 2025). This shows that the number of diagnoses is becoming increasingly significant. As the research above shows, conditions related to cognitive challenges are mostly treated in isolation (Psykiatrifonden 2024). The most common of these diagnoses are ADHD and autism, which are permanent mental conditions, telling us that designing with a focus on cognitive challenges is becoming increasingly relevant. Approximately, 2.5% of the Danish population are registered with ADHD and *“prevalence and incidence of diagnosed (...) (ADHD) have increased notably over the past two decades.”* (Grøntved et al. 2025). Another example of cognitive challenges is dementia. In Denmark, approximately 100,000 Danes aged 65 and older are diagnosed with dementia and are expected to rise to 145,000 by 2040 (Danish Dementia Research Centre 2025). This shows that the numbers of diagnosis become more and more significant. As the research above shows, conditions related to cognitive challenges are mostly treated in isolation; this thesis argues for a unified service system approach that addresses shared barriers instead. By using Inclusive Design, the target group is defined by the shared barriers they face, not just their identity.

2.2.2. Inclusion of people with cognitive challenges

Inclusion can be defined as: *“the act of including someone or something as part of a group, list, etc., or a person or thing that is included”* (Cambridge University Press 2026). Social inclusion can be defined as: *“the affiliation to and integration of people into communities”*(Haller 2025). In the article *Inclusion: Historical Perspectives, Inclusive Education and Current Status*, Bhatia argues:

Inclusion-participation of all persons in society in general and particularly in education is essential for the development of people’s potential, welfare and progress to have a cohesive, justiciable, flourishing and progressive society. (2021)

While there are many barriers to inclusion, such as age, gender and ethnicity, he continues to argue that the biggest barrier to inclusion is disability. Inclusion, in general, is widely accepted as a common goal and is reflected in the Sustainable Development Goals nr. 10: Reduce inequality within and among countries (United Nations 2026). The latest progress report shows that discrimination against people with disabilities is still occurring: *“Persons with disabilities face discrimination at 28 per cent compared to the 17 per cent for those without disabilities”*(United Nations 2025). At the same time, the sunflower symbol, introduced in 2021 to represent hidden disabilities, has since become widely used (Wilke and Videnscenter om handicap 2024). The 2024 reports presenting the effect of the sunflower program show that 66% of Danish citizens recognise the sunflower symbol, and 44% feel it has helped them gain a better understanding of people with hidden disabilities. While there is no complete list of disabilities included in this definition, the report categorises users of the sunflower symbol into nine groups, of which seven fall within the ‘cognitive challenged’ definition, indicating that these statistics are highly relevant to the target group of this thesis. Haller (2025) argues that inclusion: *“must be considered one of the most important fundamental values”*. Therefore, we argue that inclusion is one of the most important aspects of service design to contribute to a sustainable, regenerative society.

2.2.3. Inclusion of cognitively challenged customers in supermarkets

Providing access to food is an essential service in our society, and ensuring inclusion in supermarkets helps ensure that everyone has equal access to it. Research shows that how customers feel about grocery shopping influences what they buy, and what they buy influences what they feel about grocery shopping (Tjørnhøj-Thomsen et al. 2023). Customers' emotions are influenced by many factors, including how hard it is for them to decide on which products to buy, and this task gets increasingly more difficult as more brands appear (Spanjaard and Freeman 2012). If customers experience more negative emotions during grocery shopping than usual, they might avoid that specific

store in the future (Spanjaard and Freeman 2012). Potentially resulting in customer loss for the store and a lack of fair access to food for vulnerable customers.

Unfair service systems have always existed and persist in all human societies. They include customer vulnerability, discrimination and lacking access to services (Leshkov et al. 2024). Due to either ignorance or misunderstanding of their needs, customers with disabilities do not always have the best possible service experience. For services that are important to everyday needs, such as supermarkets, the service experience can impact users' everyday lives (Dodds and Palakshappa 2022). While Dodds and Palakshappas' paper on service inclusion in retail focuses on disabled customers shopping for clothes, the authors argue that more research is necessary to create fairer services and better include disabled customers. They also state that further research is needed, specifically on customers with mental disabilities.

Moreover, while in cases involving severely challenged autistic customers, training might be needed to get them to approach the supermarket, there seems to be a gap in research on how supermarkets can adapt to limit the issues customers might face and take on the responsibility of being inclusive. In the intersection of ADHD/autism and supermarkets, multiple research papers focus on using technology to help customers navigate the challenges they experience in supermarkets (Aresti-Bartolome and Garcia-Zapirain 2014; Schmidt and Glaser 2021; Lamash et al. 2017). There are papers focused on helping specific cognitively challenged target groups navigate supermarkets, such as Adjorlu et al.'s paper on using VR to train children with autism to navigate supermarkets (Adjorlu et al. 2017). This approach focuses on adjusting the customer rather than adjusting the service. Moreover, while in cases involving severely challenged autistic customers, training might be needed to get them to approach the supermarket, there seems to be a gap in research on how supermarkets can adapt to limit the issues customers might face and take on the responsibility of being inclusive. In the intersection of ADHD/autism and supermarkets, multiple research papers focus on using technology to help customers navigate the challenges they experience in supermarkets (Aresti-Bartolome and Garcia-Zapirain 2014; Schmidt and Glaser 2021; Lamash et al. 2017). There are papers focused on helping specific cognitively challenged target groups navigate supermarkets, such as Adjorlu et al.'s paper on using VR to train children with autism to navigate supermarkets (Adjorlu et al. 2017). This approach focuses on adjusting the customer rather than adjusting the service. Moreover, while in cases involving severely challenged autistic customers, training might be needed to get them to approach the supermarket, there seems to be a gap in research on how supermarkets can adapt to limit the issues customers might face and take on the responsibility of being inclusive. In the intersection of ADHD/autism and supermarkets, multiple research papers focus on using technology to help customers navigate the challenges they experience in supermarkets (Aresti-Bartolome and Garcia-Zapirain 2014; Schmidt and Glaser 2021; Lamash et al. 2017). There are papers focused on helping specific

cognitively challenged target groups navigate supermarkets, such as Adjorlu et al.'s paper on using VR to train children with autism to navigate supermarkets (Adjorlu et al. 2017). This approach focuses on adjusting the customer rather than adjusting the service. Moreover, while in cases involving severely challenged autistic customers, training might be needed to get them to approach the supermarket, there seems to be a gap in research on how supermarkets can adapt to limit the issues customers might face and take on the responsibility of being inclusive.

Research on Danish consumers shows that companies implementing diversity and inclusion (D&I) strategies are perceived as more forward-thinking and customer-centric (Jacobsen et al. 2025). Consumers also perceive companies as more responsive to market demands.

Our findings underscore that while D&I initiatives in marketing communication are relevant, it is the integration within products and services that matters most to general consumers.

(Jacobsen et al. 2025)

This matters for supermarkets, as they all cater to a wide range of customers, many having multiple supermarkets within reach. As inflation has increased grocery prices by 32% in Denmark since 2021 (Bentsen et al. 2025), many customers are already forced to choose where to shop based on their budget and current offers, making it more important for supermarkets to strengthen their competitiveness.

Experiencing cognitive challenges in a supermarket setting would mean feeling easily overwhelmed, thereby having trouble navigating the service or making the necessary decisions to benefit from the service offered fully. Chances are, if we make the service more inclusive for those who struggle most, we make it better for everyone. While Coop has initiatives to include people with cognitive challenges in the workforce, no official interventions have been implemented to consider how to include them as customers, indicating a potential gap in the service offered.

The design team assume that applying Fisk et al.'s (2018) four-pillar framework to the supermarket context will reveal specific gaps: That supermarkets may offer choice (2nd pillar) but possibly fail at relieving suffering (3rd pillar) when customers are prevented from fair access to essential food services, due to experiencing cognitive challenges in an environment not designed to their needs.

2.3. Research question

Through the literature review, gaps in research and Coop's current service were identified:

It appears that the four pillars of service inclusion framework have been applied only once in research, with a vaguely described process. This allows us to contribute to research by applying the framework in practice and analysing the inclusivity of the Coop supermarket experience for customers with cognitive challenges. Secondly, by further developing the framework and providing a step-by-step guide for using it in practice, we are supporting future designers in designing for service inclusion.

While Coop has initiatives to include people with cognitive challenges in the workforce, no official interventions have been implemented to consider how to include them as customers, indicating a potential gap in the service offered.

These findings formed the research question:

How can designing for service inclusion support customers with cognitive challenges in Coop supermarkets?

3. Explore

In the explore phase, the topic was investigated to gain a deeper understanding from multiple perspectives. Starting from the designers' own presumptions, covering Coops initiatives, followed by what might be the most important part: the cognitively challenged users, those with lived experience and personal stories that lead us to identify which parts of the issues are most important. As suggested in the Systemic Design Framework (Design Council 2021a), to spark inspiration, good examples of inclusive design were also explored. After gathering information, the inclusiveness of the Coop supermarkets was assessed using the four pillars of service inclusion, followed by the final part of the explore phase, in which mapping helped us understand the more systemic connections within the service. To ensure the project's vulnerable target group was approached with respect and not unconsciously misinterpreted, the designers began by reflecting on their own positions, as suggested by the Design Council.

Methods and activities used in the explore phase are:

-  Positioning ourselves as designers
-  Desk research
-  Service safaris
-  Journey map
-  Interviews
-  Surveys
-  Service inclusion bridge
-  Actors map
-  Personas
-  Value constellation

3.1. Positioning ourselves as designers

As suggested in the Systemic Design Framework, it is important for designers to reflect on their own position and to consider perspectives different from their own (Design Council 2021b). As the target group for this project is a vulnerable minority, the designers want to state that they have approached it with empathy and understanding. Aiming to contribute to making daily services, like supermarkets, more accessible and inclusive as part of moving towards a fairer society. It is important to state that they have their own bias and try to be aware of their own privileges and position as designers. They are tackling this by using co-design methods and principles throughout the process, and by ensuring inclusiveness when selecting methods, designing workshops, and handling sensitive data. They also practise continuous reflection on their own choices and beliefs, as suggested in the 'Leadership and storytelling' part of the Systemic Design Framework (See chapter 1.4). They believe that diversity and inclusion are fundamental elements of social sustainability, and that increasing the focus on inclusion will benefit services, society, and the community in the long term.

While each designer is automatically biased by their own personal, cultural and political standpoints, all have reflected on their position as designers. Each team member has written a statement for this project and about the perspective they bring to the research.

- As a designer in this project, I am representing both an underserved group and am privileged with 'power'. As a citizen in a Nordic country growing up in the middle class, getting free access to education and healthcare, I am in that sense very privileged. On the other hand, I represent the target group of cognitively challenged people relevant to this thesis, by having dealt with temporary disabilities like stress and anxiety for most of my life. While I do not experience all the issues discovered in the explore phase of this project, I can very much relate to the feeling of becoming overwhelmed and stressed by grocery shopping. As a close relative to several people with neurodiversity and some suffering from mental illness, I have a life of experience with how society can be exclusive towards people with hidden disabilities. While these experiences give me an understanding of how some people with cognitive challenges might feel, I might also be biased by my own needs and my thoughts about my relatives' needs, which for the most parts, but not always overlaps with the needs that was uncovered in the explore phase.
- I am conscious of approaching design work that aims to serve people whose lived experiences differ significantly from my own. My background in service systems design and graphic design helps me see how products and systems are created. Through personal relationships, work experience, and academic study, I have learned about various disabilities and the everyday challenges they pose. This awareness shapes how I approach this project. I recognize that many systems

and products today aren't designed for everyone. The design industry often reflects the views of people who, like me, do not face exclusion in their daily lives. Designing inclusively isn't simple. It requires challenging deep-seated beliefs, involving the right people, and understanding that empathy alone isn't enough. In this project, I aim to raise awareness of these challenges and stay committed to addressing them.

- I approach my design research and practices with a multi-sustainable perspective where social, cultural, economic, and environmental sustainability are in focus. My background in 'Design + Change' has allowed me to see change and sustainability as a core need to tackle challenges such as the climate crisis, inclusion, biodiversity loss or need-based economics. Therefore, I always try to focus on participatory and empathic principles to improve or create systems within design projects. As a white, able-bodied, female, middle-class queer, non-binary individual, and neurotypical, I bring the perspective of intersectional experiences of oppression and activism for a feminist future and advocating for equal rights for all beings. Due to this standpoint, I see my agency within awareness, activism and challenging the status quo with my existence and standpoint.

With these different perspectives and standpoints, the design team is aiming to bring change and a more inclusive approach to designing services and their systems. In the teams experience, people with cognitive challenges are often an overlooked minority in society regarding service and user experiences. Therefore, the team hope to show with practical tools that inclusion is possible, desirable and economically sustainable.

3.2. Desk research

Together with the literature review in chapter 2, the explore phase began with desk research, and the two chapters cover all the initial exploration of the topics related to this thesis. The desk research method is an essential part of the explore phase and allows designers to create an overview of the research and data collection, and to gain a deeper understanding of the topics. This method is used to start the design process, to understand the complexity of the market, and the topic the designers are working with . The following chapter presents findings from an exploration of Coop's existing work on inclusion, Microsoft's inclusive design toolkit, and good examples of inclusive design. (Stickdorn et al. 2018). The following chapter presents findings from an exploration of Coop's existing work on inclusion, Microsoft's inclusive design toolkit, and good examples of inclusive design.

3.2.1. Inclusion in Coop Denmark

The design team investigated the connection between inclusion and the supermarket chain Coop. The result of this search was that inclusion within Coop's systems is focused on employees. As the Nordic welfare centre points out, 74% of workplaces see it as their responsibility to hire people with disabilities, but only 25% have done so (Spanjaard and Freeman 2012). Inclusion is part of Coop's workplace philosophy. They practice this through a diverse and inclusive management culture and employee composition. They conduct projects such as 'ready to start' or 'Coop Crew' where people with autism or vulnerable young people are offered a training course in-store to enter the labour market (Coop 2021). team investigated the connection between inclusion and the supermarket chain Coop. The result of this search was that inclusion within Coop's systems is focused on employees. As the Nordic welfare centre points out, 74% of workplaces see it as their responsibility to hire people with disabilities, but only 25% have done so (Lindberg 2026). Inclusion is part of Coop's workplace philosophy. They practice this through a diverse and inclusive management culture and employee composition. They conduct projects such as 'ready to start' or 'Coop Crew' where people with autism or vulnerable young people are offered a training course in-store to enter the labour market (Coop 2021).

Further desk research allowed the team to explore the connection of inclusion within Coop Denmark. Coop Denmark has multiple initiatives to ensure the smooth integration of employees into its organisational structure. Coop has a diversity policy that considers:

diversity to be an essential and integral part of running a responsible association and business that supports and promotes the full potential of our leaders, employees and volunteers while reflecting the surrounding community and the customers who shop at Coop. Coop considers the concept of diversity to be part of protecting fundamental human rights, and at the same time, it considers it to be a central element in creating a competitive and future-proof business. (Coop 2026b)

They see diversity as a human right and have four principles:

- *No discrimination: We will ensure processes and workflows that ensure that discrimination does not occur at Coop. This applies to recruitment, employment, employee development, volunteering and among our customers in our stores.*
- *Equal opportunities: We will work to ensure equal opportunities for all employees at Coop. This involves creating a work culture that supports and promotes individuals' ability to increase and utilise their own potential, and thus Coop's potential. We will have a special focus on the underrepresented gender.*

- *Inclusive working environment: We will create an inclusive working environment that includes a broad employee composition, cross-functional collaboration and where employment is based on qualifications and competencies.*
- *Diverse workforce: The Group will strive for a diverse composition in the top management levels and on the board of directors. Furthermore, a diverse composition of employees will be sought across Coop. (Coop 2021)*

Coop Denmark also states that it is aware of gender inequality and wants to highlight openness and transparency in its efforts to foster a good working environment. Coop Denmark has a solid foundation regarding inclusion policies and practices for the workplace and workers. However, the supermarket chain has many opportunities to address cognitive challenges from the customer's perspective. Customers with cognitive challenges are not prioritised in store experiences. Therefore, the design team sees a significant opportunity to address these challenges and contribute to inclusivity from a customer's perspective.

3.2.2. Microsoft's Inclusive Design Toolkit

Microsoft's Inclusive Design Toolkit is a framework designed to ensure products are usable and understandable by the widest possible audience, and recognises inclusion and the value of learning from diversity. (IxDF - Interact. Des. Found. 2026) While the framework was not used as a core guide for this thesis, they developed a diagram categorising disabilities based on shared barriers, including the condition's permanence (Figure 5). This diagram served as inspiration in defining the target group of cognitively challenged customers. Microsoft's Inclusive Design Toolkit is a framework designed to ensure products are usable and understandable by the widest possible audience, and recognises inclusion and the value of learning from diversity (Interaction Design Foundation 2026). While the framework was not used as a core guide for this thesis, they developed a diagram categorising disabilities based on shared barriers, including the condition's permanence (Figure 5). This diagram served as inspiration in defining the target group of cognitively challenged customers.

Microsoft's Inclusive Design Toolkit






	 Cognitive	 Vision	 Speech	 Hear	 Touch / Motor
Permanent	Dyslexic	Blind	Non-verbal	Deaf	One arm
Temporary	Migraine	Cataract	Laryngitis	Ear Infection	Arm Injury
Situational	Overloaded	Distracted driver	Heavy accent	Bartender	New parent with infant
Court	Stressful Situation	Dark courtroom	Interpreter	Noisy Office	Carrying paperwork

Figure 5 Microsoft's inclusive design toolkit, source: (IXDF - Interact. Des. Found. 2026) Microsoft's inclusive design toolkit, source: (Interaction Design Foundation 2026)

The methodology enables and draws on the full range of human diversity by learning from people with diverse perspectives. The toolkit focuses on recognising exclusion, learning from diversity and how solving one problem can make the solution better for many. This toolkit allowed the designers to work with cognitive challenges in a more structured and systematic way because it clarifies that cognitive challenges are a combination of the mental condition, the situation a person is in, and the circumstances they are embedded in.

The toolkit includes an introduction to Inclusive design and a set of 'inclusive activity cards' used to help designers start the creative process while having inclusivity in mind. The website also explores various projects and product processes, and how inclusive design addresses and recognises the different needs of different people. It shows real examples and helps explain how inclusive design can be applied to large-scale projects, principles, or systems.

3.2.3. Good examples

Based on all the definitions, initiatives and statistics the designers encountered, an investigation into good examples of inclusive design projects, tools and products was conducted. The following shows three good examples of inclusive design projects and products.

3.2.3.1. Inclusive app

In 2023, a Danish entrepreneur launched an app named Inclusive to make retail shopping more inclusive for people with disabilities (Municipality of Copenhagen 2024). As a blind man, he experienced certain service needs when shopping and saw a gap in the market for a platform to match disabled people with shops that cater to their specific needs. With this app, an autistic user, for example, could let a tech shop that signed up with the app know that he was in the market to buy a computer, informing them that he would need the music to be off while visiting the store, as well as a patient and well-informed employee ready to tell him all the details he would need to make a decision. Then the tech store could make an appointment with him, being prepared to make the service experience inclusive for the customer. Unfortunately, the app is no longer available, but the concept remains a great example of inclusive design.

3.2.3.2. OXO – inclusive kitchen tools for people with arthritis

Sam Farber was an industrial designer and businessman who created ergonomic handles for peelers and other inclusive kitchen utensils (OXO 2026; Institute of Design 2026). He was a pioneer of his time when he began incorporating more inclusive shapes and forms into industrial design products. Using bold shapes and forms for products was in the minimalistic trend in the 1980s, a brave choice. When Farber and his wife, Betty, prepared vegetables for their dishes, the simple task of peeling them was painful due to Betsy’s arthritis. Farber’s personal need for more accessible tools for everyday tasks contributed to an approach and practice for



Figure 6 Picture of OXO - inclusive kitchen tools, source: (OXO 2026)

inclusive and universal design. The handle’s design of ‘Good Grips peelers’ was inspired by “bike handles and fins” (Institute of Design 2026). This allowed for a better grip thanks to the oversized, rubbery handle and the hollowed-out spots (Figure 6). This design not only allowed people to hold the peeler more comfortably but also reduced pain for those with arthritis and other physical limitations (Institute of Design 2026). What started as a personal need has led to an inclusive design solution that highlights the willingness and need to actively participate in daily chores and tasks as a physically challenged person.

3.2.3.3. Bikurim Inclusive School by Sarit Shani Hay, Tel Aviv

The inclusive school designed by Shani Hay allows people with and without disabilities and challenges to learn together. The space is specifically designed to “integrate students with disabilities into regular classrooms” (Hay 2026). To support the goals of a

pluralistic learning environment, different types of rooms and classrooms, such as physical therapy rooms, yoga rooms, and private study rooms, were designed. This allowed the different needs of students with or without disabilities to be in a space that supports their learning goals and physical and mental challenges.

25% of the students in this school have physical disabilities, emotional challenges or are on the neurodivergent spectrum. Given these challenges and circumstances, the space design focuses on the interaction among these diverse students and “*encourages collaboration while celebrating diversity*” (Education Snapshot 2026). This project also allowed Hay to explore the connections among pedagogy, environments, and different mental and physical needs (Education Snapshot 2026). Colours that calm, and natural wooden materials were used to prevent emotional and sensory overload. Learning is not only done through writing or listening to teachers, but also through practice through play. This is done through Life-skill activity stations. Group circle activities are easier to achieve when a circle is split in half. That allows students who use wheelchairs to join group activities more easily. The approach of combining pedagogy with space design has led to inclusive and universal design solutions, allowing all students to be in a learning environment where their needs are respected and where connection and interaction among students can occur.

3.3. Service Safari

The Service Safari method, a form of immersive, firsthand research, was used to investigate the self-scanning service at 365discount to map the service.

This approach, as described by Stickdorn et. al. (2018), involves researchers actively participating in and documenting a service experience to uncover user interactions, pain points, and areas for improvement. The observation was conducted by the design team and lasted approximately 15 minutes. The process included creating a shopping list using the Coop app, scanning the entrance code, locating, and scanning products, and completing the purchase. Throughout this journey, the team members documented their experiences using notes, photographs, and screenshots in the app, with each member focusing on one method of data collection (Figure 7). At the end of the observation, the results were discussed outside the supermarket, and missing observations were added.

Findings revealed several key challenges in the self-scanning process at 365discount. It was discovered that it is easy to accidentally scan items, which adds stress during the shopping experience. Additionally, holding the phone over the barcode for too long was found to cause an increase in the number of items in the virtual basket, leading to frustration and potential inaccuracies at checkout. While not directly related to the app, observations also highlighted that shelves with special offers are often stocked with

random items from various categories, which could be overwhelming and hard for users trying to find specific products. These problems highlight the need for clearer instructions, better error handling, and improved product organization. These changes will make it easier for users to access and use the product.

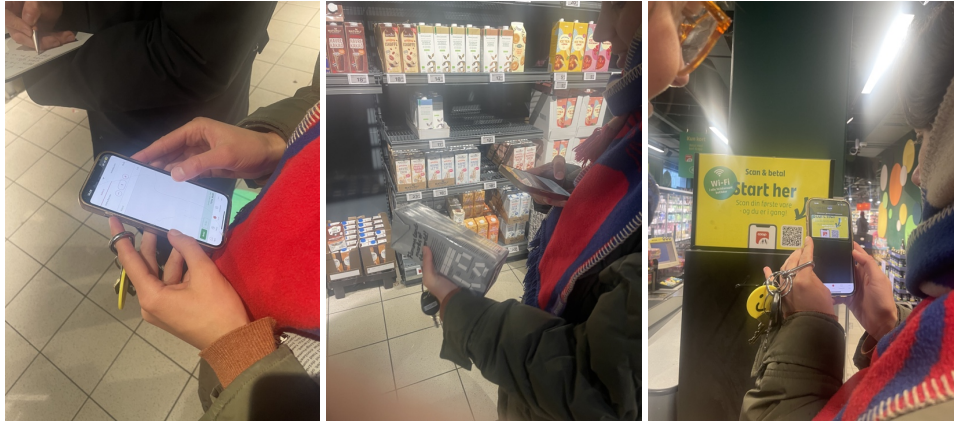


Figure 7 Pictures taken while running the 1st service safari

While the method's provides insights into the 365discount environment, its limitations include the personal experiences of the designers and the limited scope of observing only one specific period, and only at 365discount which might differ from other stores from the Coop supermarkets chain.

Reflecting on the method, it was acknowledged that researchers' perspective may have overlooked certain user needs, underscoring the importance of co-design and iterative testing with cognitively diverse participants (Clarkson et al., 2013). As suggested in the Systemic Design Framework, 'connections and relationships' are an important part of the design process, by involving users in the process and giving them a chance to feel heard (Design Council 2021a). For that reason, the second round of service safari was run, this time the researcher observed a person from the target group.

Using a portable microphone, the person's comments were recorded, while the behavior was observed and noted on cards prepared for the occasion, both for structuring the observation and further analysis. The cards consisted of supporting questions to turn observer attention on behaviors (Figure 8). To create the cards, 4 pillars of inclusivity were used (See chapter 2.1.5.). This observation helped to better understand the habits and pain points of a person with cognitive challenges. It showed that although such individuals face difficulties in a shopping environment, they also develop their own ways of adapting to it. Since the observation took place in a store that the participant visits regularly, some clear patterns could be noticed. These included following a specific route, checking certain areas first and then returning to them, avoiding spots, and

maintaining some habits that have not been adapted over time, such as not using a shopping basket.

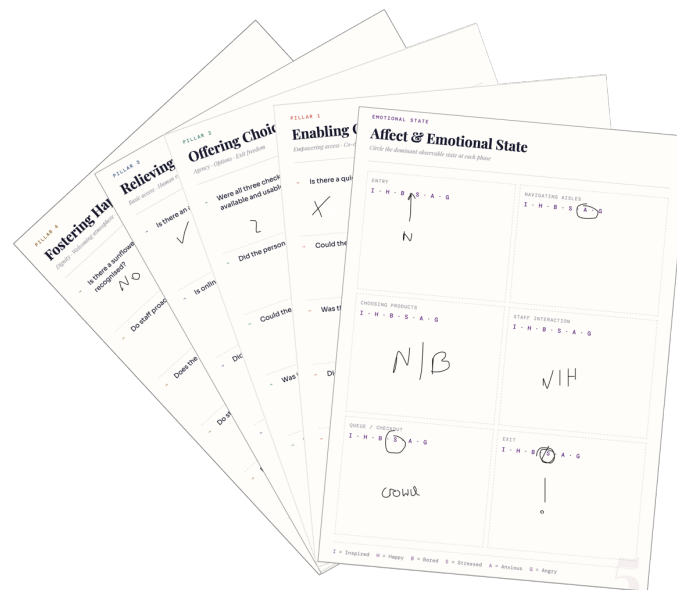


Figure 8 Observation cards

The observation also supported the creation of a persona, which was later used to build a user journey to better understand the overall experience (See chapter 3.4).

While this method was useful in providing initial insights, it is not enough to base conclusions on behalf of the target group. To make the findings more reliable, more observations with different people would be needed.

3.4. Journey maps

To understand what the supermarket service includes and how a user from the target group experiences it, two rounds of journey mapping were made (Figure 9)(See full version in Appendix A). The first one was based partly on assumptions and the designer's personal experience going to the supermarket, and partly on observations from the first service safari and from exploring the app. As Stickdorn et. Al. states: 'it's not an attempt to reflect the full complexity of the service, but more a way of creating a common understanding of the service within the team' (Stickdorn et al. 2018). This perfectly frames the aim of this initial mapping: getting a common understanding within the team. Two types of journeys are represented in this first map. The traditional grocery shopping experience using a paper shopping list and the traditional cashier, and the app-driven experience, using most of the tools the Coop app offers. At this point in the research, it's unclear how often one person would use that many functions in a single shopping

experience, but it helps to understand which functions are available and, therefore, which support options Coop is currently offering through their app.

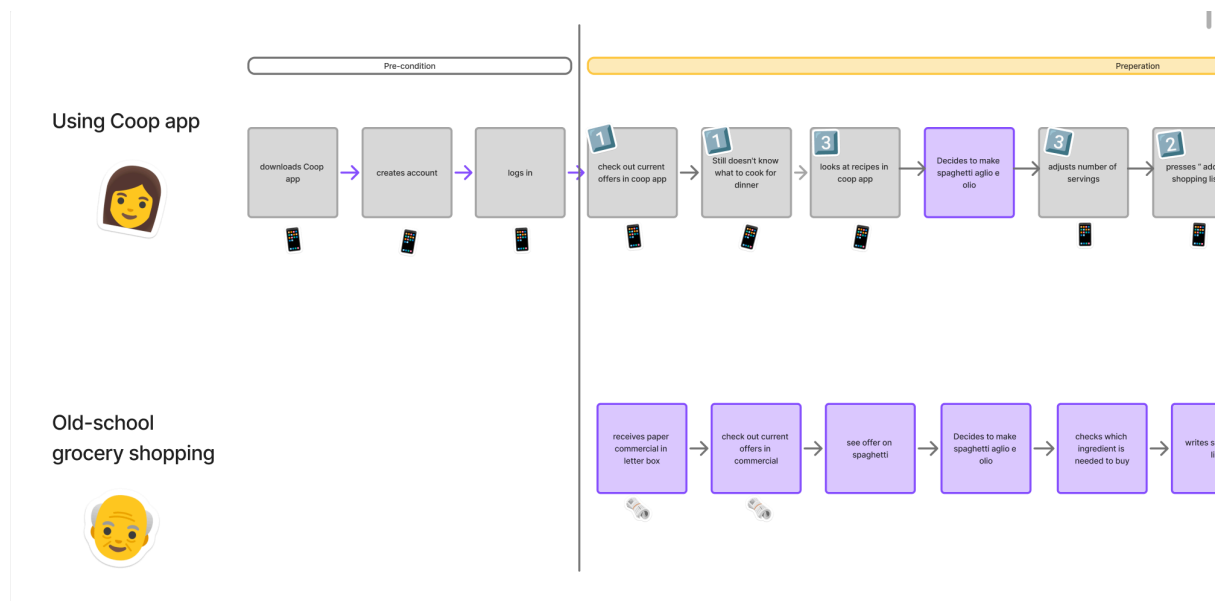


Figure 9 Journey map, detail on the first steps

As seen in Figure 9, there are many more steps in the app-driven journey. All the grey squares are digital interactions, and purple are physical interactions. It appears that using the app leads to more interactions.

Journey mapping is a widely used tool in service design. It is often used only within the team, making the researcher an interpreter and thereby risking missing the potential of fully embracing situated knowledge (Lindeberg et al. 2025). Lindeberg et al. suggest using journey mapping in a participatory manner to realise the full potential.

A second journey map was created by observing a user with ADHD at a Coop supermarket (See chapter 11.2) and then having the user participate in the mapping. This journey map is more detailed than the first one, as it is used to visualise the user's story, including all the emotions they experienced, supported by quotes (figure 10) (See full version in Appendix B). This helped to spot the pain points and opportunities in the user journey.

While the user journey helps us identify and map key insights for the design process, it focuses only on the user, not on other stakeholders or the backend. So, to make sure all direct stakeholders are considered, an actor's map (see chapter 3.8.) and an interview with Coop (see chapter 3.5.2.) were conducted later in the process.

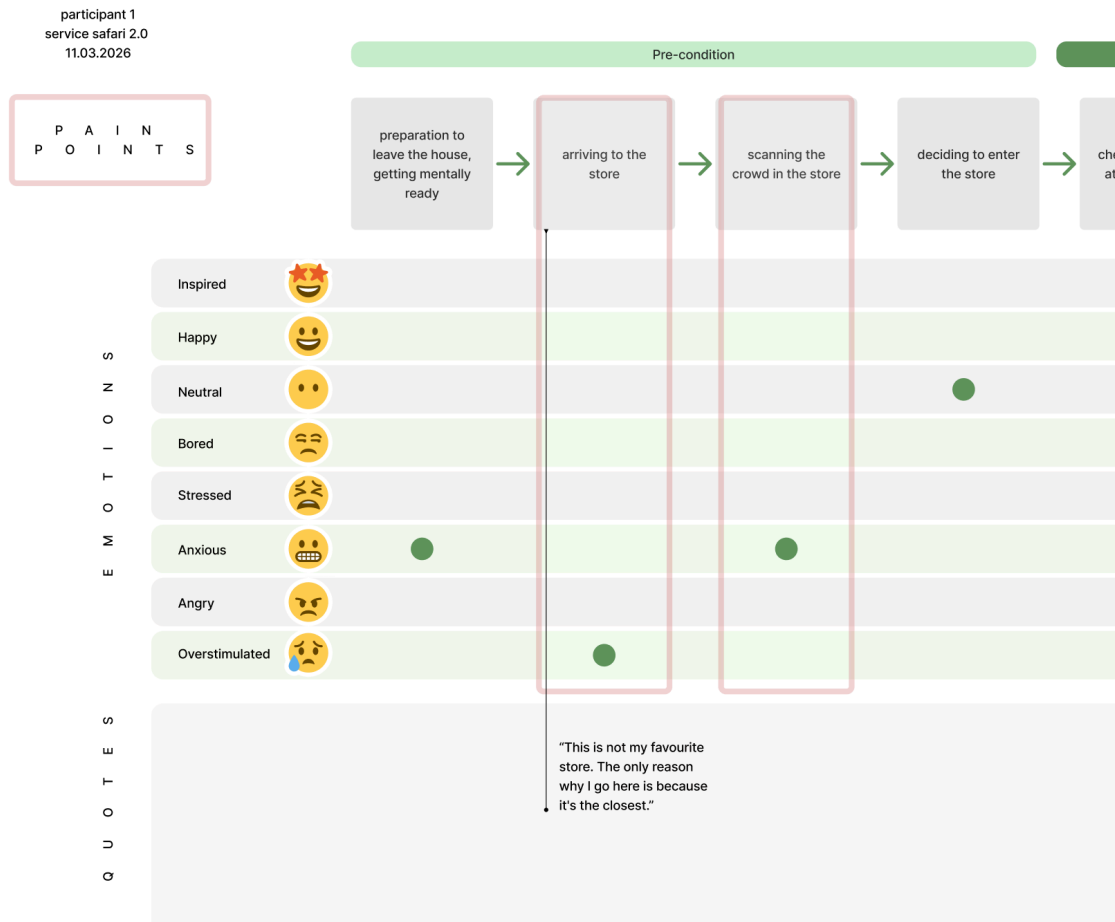


Figure 10 Journey map based on service safari, detail on the first steps

3.5. Interviews

Qualitative research in design projects is a significant element for data generation and collection that has *“the essence [...] to discover, in the sense of revealing what is not obvious and naming it for the first time”* (Carmen de la Cuesta Benjumea 2026). One of the main techniques to obtain data in qualitative research is conducting interviews (Carmen de la Cuesta Benjumea 2026). Interviews *“have an exploratory objective, to delve into the unknown that is, a subjective experience; hence, it will be more of a conversation than an interrogation.”* (Carmen de la Cuesta Benjumea 2026). In qualitative research with people with cognitive challenges, this technique is even more important because the target group is a minority often overlooked in supermarket experiences.

In this project, semi-structured interviews with cognitively challenged people were held. In total, the design team conducted eleven interviews (Appendix C). The goal for these interviews was to understand the experience of people with cognitive challenges, to include their perspectives in the process, and to identify pain points, challenges, and

needs. In consideration of cognitive challenges, the interviews were designed so participants would not have a heavy mental load during the interview. In practice, that meant that the interviews were shorter, between 15 and 30 minutes, including a small icebreaker and six to nine questions. The icebreaker was meant to start the interview with a light topic and served as a warming-up technique. Icebreakers are commonly known and used in group settings and “*tear down barriers that sometimes form within student groups and organizations, and offer a low-risk way for group members to become better acquainted.*” (United States Office of Educational Research et al. 1990). In this project’s case, the icebreaker was a small game called ‘kiss, marry, kill’ in a grocery store edition. The participant had to choose which category they would rather: kiss, marry or kill. The categories were ‘busy store’, ‘check out’, ‘messy shelf’ and ‘selfscan app’, and each ‘Marry, kiss or kill’ action had an icon connected to it and (Figure 11).



Figure 11 Picture taken during the interview

Participants for the interviews were drawn from the design team’s network. Friends, colleagues, and acquaintances were asked to participate. As a result of an open call posted on one of the designers’ workplaces’ Facebook pages, nine participants were recruited. The designers interpreted this as strong resonance with the topic and interest in improving supermarket experiences.

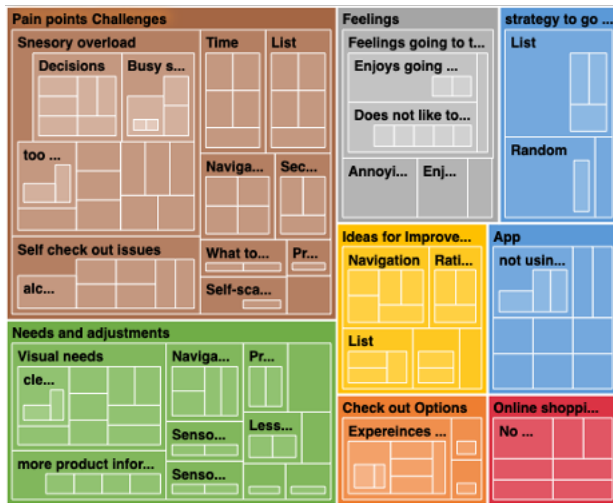


Figure 12. Hierarchical coding structure used to analyze the interviews

Amongst the interviewees, there were several cognitive challenges represented: four with ADHD, three people with dyslexia, two with anxiety, two with autism, two with stress, one with dyscalculia, obsessive-compulsive personality disorder, and one with migraines. Most of the participants had multiple diagnoses.

During the interviews, voice recordings were made with participants' consent. For the analysis, NVivo was used, a tool for transcribing, adding codes, and

visualising qualitative data. When all the interviews were transcribed, they were uploaded to NVivo. While reading and marking patterns, topics, and insights, several codes were specified. The codes served to visualise those patterns and insights. The code list is as follows:

- Pain points and challenges
- Feelings
- Strategy to go grocery shopping
- Needs and adjustments
- Ideas for improvement
- App
- Online shopping
- Check out options

As the graphs in Figure 12 show, the main codes had several subcodes summarised under a single umbrella code. The parameters and codes were set based on the designers' goals to understand people with cognitive challenges' experiences. The graph clearly shows that codes with pain points and challenges take up the most space and have the most subcategories. The design team interprets this as validation of the survey results (chapter 3.2.1), and the significance of people with cognitive challenges' visibility in supermarket experiences. This statement also underscores the importance of being understood and heard.

Due to some technical issues, only 10 interviews could be transcribed and listed. In analysing the results and data, the design team has been using the 11th person's perspective to validate the points. This allowed the team to keep the data from the lost transcript and include the perspective from the 11th interview.

3.5.1. Results of interviews

The team focused on analysing the codes ‘pain points and challenges’, ‘needs and adjustments’, ‘app’ and ‘feelings’ due to the richness and quantity of the data. Due to the complexity of the data, some codes were not analysed in depth. For example, the data from the icebreaker and its results would have made a well-rounded addition to the grocery shopping experience. Unfortunately, the time required for data analytics was underestimated, and the project's progress was prioritised over it. Therefore, the focus of the results was the largest dataset and the most stressful points identified by the interviewees themselves. The codes mentioned several times, with strong emotional intensity among most participants, has been categorised as important.

3.5.1.1. Feelings

A major insight is that five of eleven interview participants dislike or hate the supermarket experience (Figure 12); As one of the interviewees said:

I don't really enjoy going to the grocery store but I can manage it. I always go with the list because I find it very overwhelming to figure out what to eat on the spot – Interviewee

The main reasons are sensory overload, too many people in the store, or indecisiveness. Four of the participants enjoy going to the grocery store because it inspires them to cook as this quote mentions:

I really like walking into a store and looking at all the different products and getting inspired by it. I love it when they have new products that I haven't seen before the little weeks of like Greek week or Spanish week are always I always get excited - Interviewee.

Two of the eleven people have neutral feelings about supermarket experiences, as they do not mind them or see *them* as a necessity.

I would say that it's okay because I have to do it. But if I don't know the exact product that I'm buying, then I would spend quite some time to like read the labels and like searching for the specific item because I don't know, I never thought of like in connection to dyslexia. – Interviewee

All in all, interviewed participants are leaning more towards a negative experience with supermarkets. Their pain points lie more in sensory overload, navigation, and decision-making (Appendix C). However, if they have good experiences with grocery shopping, those experiences are strongly shared, and their needs and pain points lie elsewhere, such as navigation or product information. These widely spread experiences are also deeply reflected in the diversity of diagnoses and cognitive challenges the participants face.

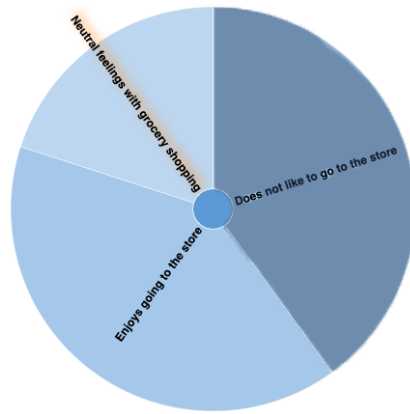


Figure 12 Distribution of feelings in grocery shopping experiences

3.5.1.2. Pain points and challenges

The code 'pain points and challenges' had several subcategories, such as sensory overload, divided into decisions, busy store, time, list, self-checkout issues, navigation, what to eat and cook, sections and shelves, self-checkout, prices and product quality (Figure 13).

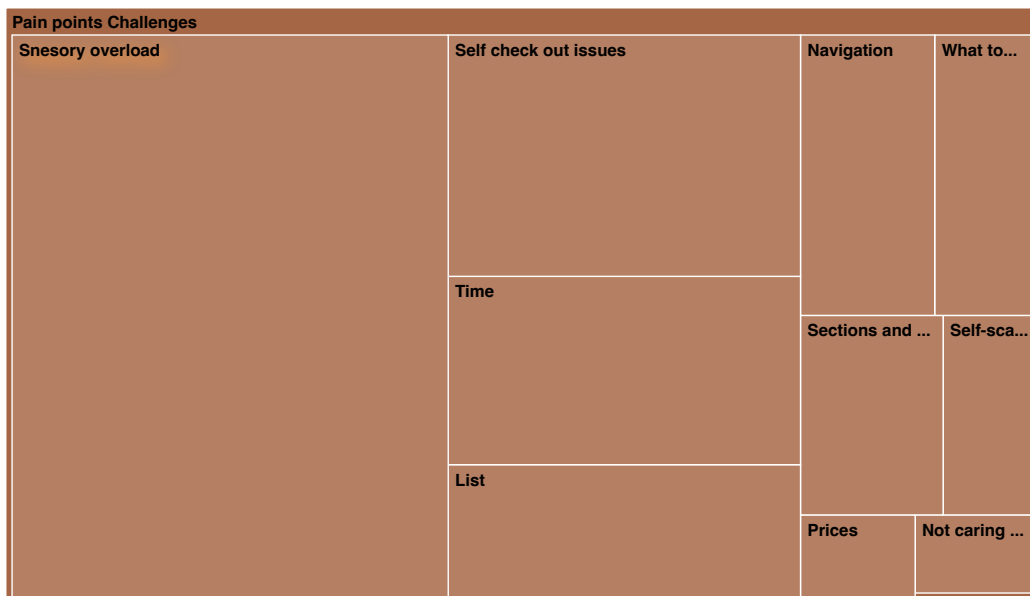


Figure 13 Hirearchy graph of code pain points and challenges

The main issue in this category was sensory overload, which is further divided into 12 subcategories. The pain point, sensory overload, was mentioned 26 times in ten interviews (Figure 13). Within these 26 times, it was mentioned nine times, that the store is too overwhelming. The pain point was mentioned four times because of other people, as mentioned in these two quotes:

It stresses me out a lot to find out that people have to push me every time I have to look at something. If two minutes pass, I'll be pushed away. And then I have to look here again, and then two minutes pass, then I'm pushed away again. – Interviewee.

Six times it was mentioned that decision-making was a challenge. Mostly because of sensory overload from too-bright lights and other aspects of the store's layout (Figure 14).

very bright space loud space – Interviewee



Figure 14 Hierarchical code overview on Sensory overload

Five interviewees reported checkout problems, including taking too long to pack, anxiety or self-consciousness, and technical difficulties with the terminal as mentioned:

... But the problem is basically I get kind of, um, anxious. Or... Not anxious, but self-conscious... Mm-hmm. ...about other people waiting for me. Because I just have this... Because it's been, like, my whole life I'm, like, much slower than everyone else at doing things. I'm rather sensitive about that. I'm very worried about being slow. – Interviewee

Almost 50% of the interviewees mentioned that they face difficulties or stress at the self-checkout as shown in Figure 15. These two quotes focus on this pain point:

... don't work the way you expect them to work like the self-checkout it has some like you put the item a bit fast or like it doesn't recognize the weight of the item. – Interviewee

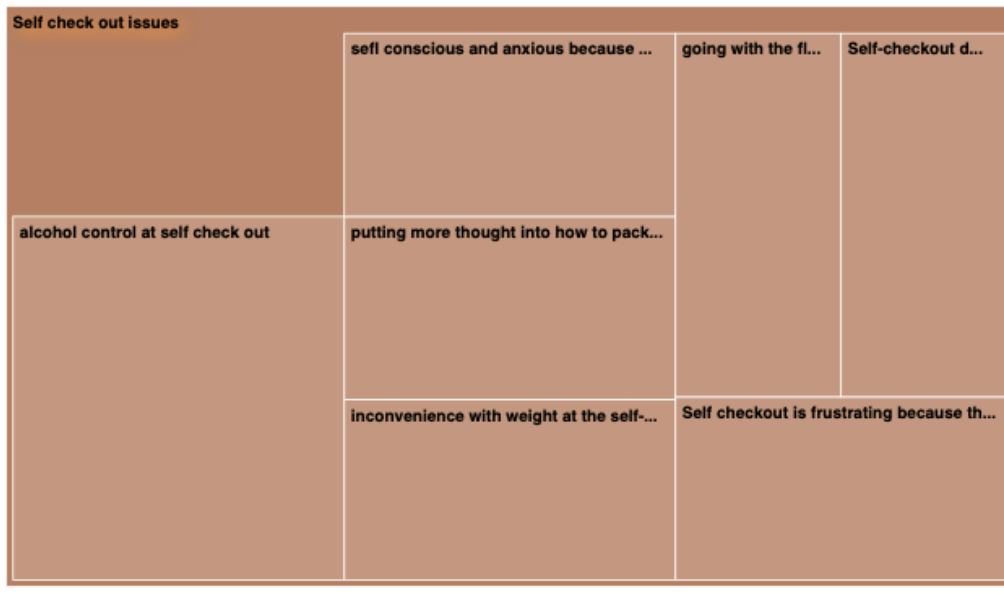


Figure 15 Reasons of Self-Checkout issues

Another important pain point is time: four participants mentioned they do not want to spend so much time in the supermarket because they are stressed by being in the store, do not know the store, or spend longer there due to cognitive challenges. Seven participants mentioned that they have struggles and fears of wasting too much time in stores (Appendix C).

That, especially it's a larger supermarket or a supermarket I don't know so well. Or if I'm doing something a bit out of routine, like cooking something different, [...]Then it's like, I can just waste really long time staring at the shelves and maybe walking back and forth to different shelves or around the whole shop and going back to a, this number of shelves I was looking at. And I can, I can waste often, like, ten minutes, sometimes twenty minutes or more. – Interviewee

On another note, it was mentioned seven times that the interviewees struggle with time management in stores due to the unknown layout, comparing items, and spending time finding specific items. This is mentioned as follows:

“I would spend quite some time to like read the labels and like searching for the specific item because I, I don't know, I never thought of like in connection to dyslexia.” – Interviewee

Navigation has been mentioned in most of the interviews several times, four times listed in the interviews, and can be seen in Figure 16. Most of the challenges come from being lost in a store, difficulties with navigation, or because item placements are different in each store. This is mentioned here:

So, they are not all together. And it was on one side, it was the milk and eggs. And the other one was cheese and yogurt and those things. And for me, it's the same category. But, they were on the opposite sides of the stores. I was like at the beginning so lost where to find something that, because for me they are the same kind of in my mind. – Interviewee

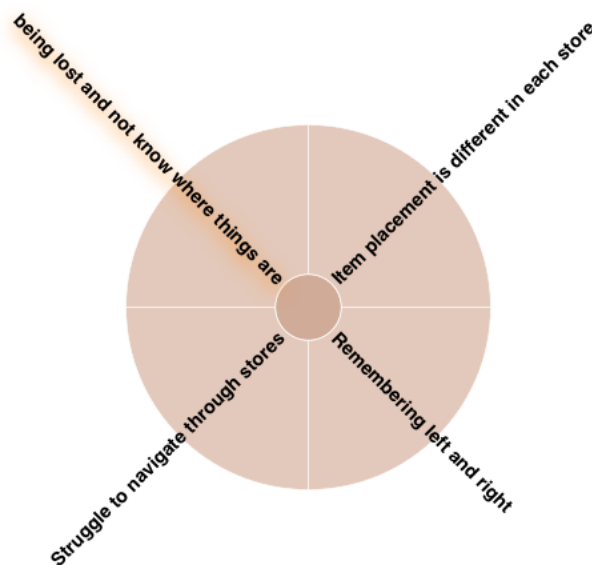


Figure 16 Pie chart of pain points with navigation in supermarkets

3.5.1.3. Needs and adjustments

The second most mentioned code is ‘needs and adjustments’, which is closely connected to the ‘pain points and challenges’. As shown in Figure 17, the connections between the two codes are clear. The codes ‘needs and adjustments’ and ‘pain points

and challenges’ are both focusing on sensory overload and are therefore, connected and influenced by each other.

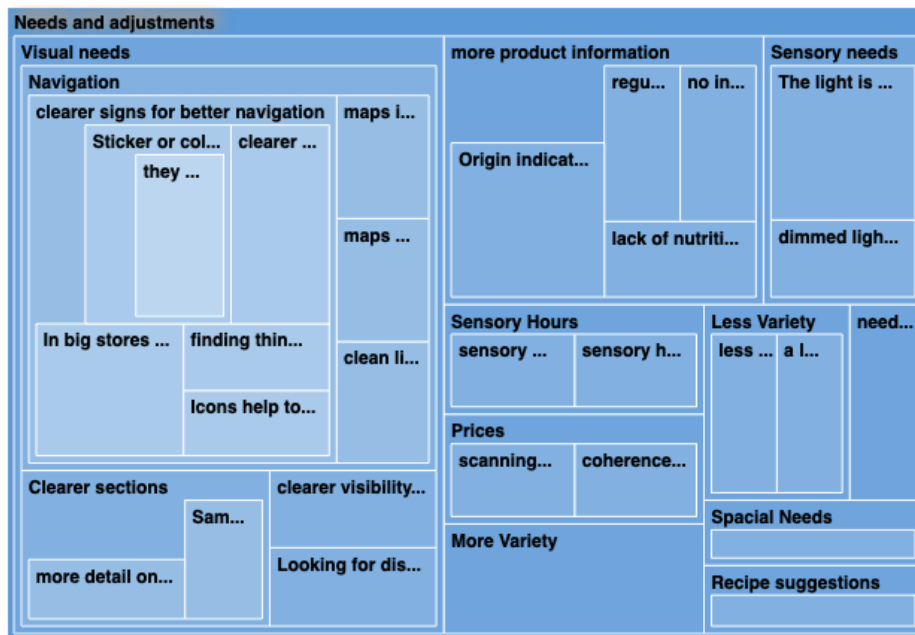


Figure 17 Hierarchal Overview on the code Needs and adjustments

The main categories within ‘needs and adjustments’ are: ‘visual needs’, ‘more product information’, and ‘sensory hours/adjustments (Figure 17). As visually represented in Figure17, ‘visual needs’ are the largest group with 18 codes. Across the 18 codes of visual needs (Figure 18), participants voiced their needs 13 times regarding better navigation. This code is divided into the categories ‘clearer signs for better navigation’, ‘maps’, and ‘clean lines’. This subcode ‘clearer signs for better navigation’ got mentioned 9 times with its specifications listed as (Figure 18):

- Three times ‘stickers and colours’
- Two times ‘clearer signs and bigger boards’,
- Two times ‘big and clear label’
- One time ‘icons help for better navigation’
- One time ‘clearer signs for better navigation’

The subcode ‘maps’ is mentioned three times and ‘clean lines’ one time. They voiced this through:

clearer signs or bigger icons – Interviewee

it's like my eye goes to the not the letters, but to the signs. So the icons as well, it would be much easier for me, I think. [...] I'm gonna read it, yeah, but it have if I have different colors with signs of it, yes, it's easier for me – Interviewee

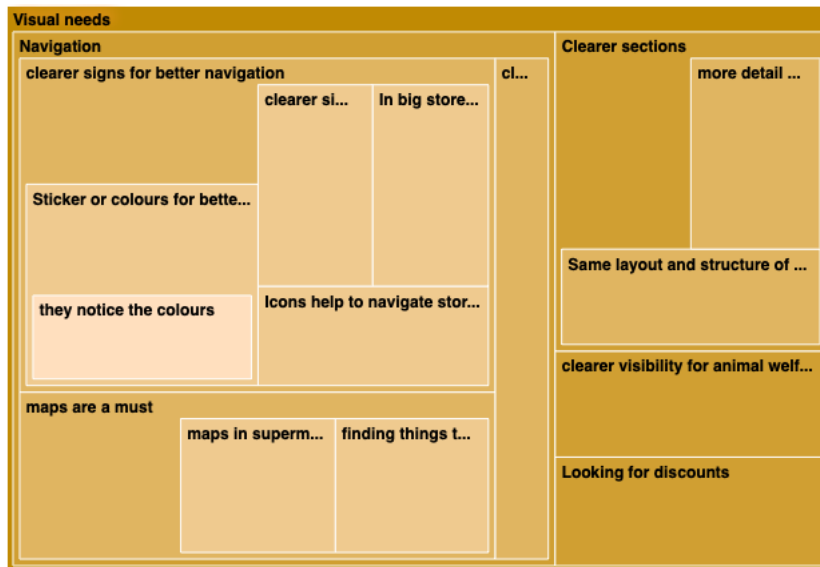


Figure 18 Hierarchical overview on the code visual needs

As shown in Figure 18, the second largest group is ‘more product information’ with six mentions. Five times, ‘sensory adjustments’ such as ‘sensory hours and sensory needs’ were mentioned. The rest of the mentioned subcategories are for example, ‘less or more variety’, ‘prices’, ‘special needs’ or ‘recipe suggestions’. Those categories were too small, to group them and categorise them further.

3.5.1.4. App

Another aspect the designers have been analysing is the digital component of the Coop app and its usage (Figure 19). 66% of the participants stated that they are not using the app because they have not tried it, have had bad experiences, or are trying to avoid further digitalisation of grocery shopping. Participants who have tried grocery shopping apps reported mainly using them for item listings, translation, and other grocery services. Two participants mentioned using other apps for grocery shopping, such as the Nemlig app.

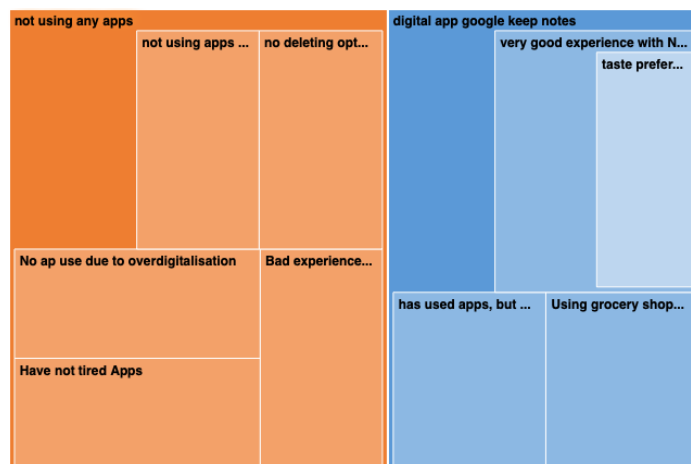


Figure 19 Overview on using digital tools in grocery shopping

Most participants reported not using grocery shopping apps, largely due to concerns about excessive phone use (Chapter 3.6.). This finding strongly influenced the design team's decision to limit further exploration of digital solutions. Interestingly, many participants had never considered using an app for grocery shopping or incorporating more digital tools beyond self-checkout technology or basic grocery list functions.

3.5.1.5. Reflections

An interesting result of the analysis is that most of the pain points, needs, and struggles the interviewees have been describing are highly interconnected within the overall supermarket experience. As shown in Figure 20, with the different connection points, most of the sensory overload is reflected in the needs and adjustments.

Another aspect worth mentioning is the diversity of needs and focus points across cognitive challenges. The interviewees have a diverse range of cognitive challenges; while not including every challenge, they are covering the common needs. Nevertheless, the interviews offered a wide range of perspectives within the user group and yield very meaningful and valuable insights. When it came to ideas or solutions that arose in the conversation, the participants were very open to thinking outside the box, exploring new technologies or perspectives, and sharing vulnerable struggles with the interviewer.

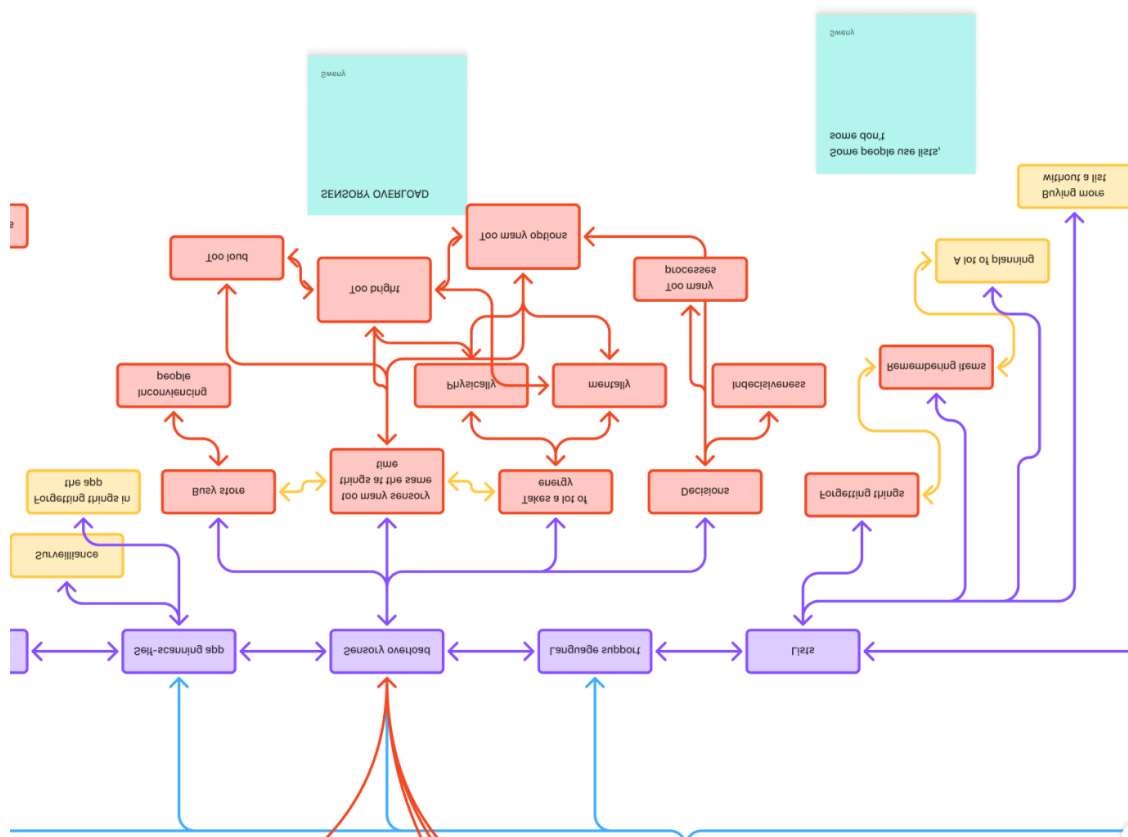


Figure 20 Close up of Mind map, Visual representation of sensory overload and its connection to needs,

3.5.2. Coop interview

To get an inside perspective from Coop, an employee was interviewed. As they do not have a dedicated department or employee working with service experience or inclusivity in general, an interview with an HR employee who works with inclusion in the workforce was conducted instead.

The employee confirmed that Coop doesn't work with the inclusion of customers, but the individual stores can choose to run initiatives if they feel like it. The employee highlighted sensory input as the main issue for the cognitively challenged and explained which daily activities in the store might pose challenges for the target group. Sensory hour was suggested, along with additional information about limited flexibility and staffing in some of the smaller stores. Sensory hours are a couple of hours on a chosen day when the cashier sounds are switched off, the lights are dimmed, and no music is played during shopping hours. It was implemented in some supermarkets in Germany and the UK due to customer demand and local needs (Hadfield 2023; NDR 2026). When asked what a perfect solution for a more inclusive experience would be, it was suggested that an employee guide the customer through the supermarket, noting that this would be resource-intensive.

In the end, the interview resulted in findings that confirm the insights from the desk research regarding Coop's lack of initiatives to include customers with cognitive challenges. It also supported the idea of low-sensory hours, which several user interviews suggested as well. Knowledge of what employees do during non-peak hours and daily task flexibility are also main findings of this interview.

3.6. Survey

To investigate how users with cognitive challenges experience grocery shopping in general, a questionnaire with both qualitative and quantitative questions was made. The questionnaire included introductory questions that, in addition to gender, age, nationality, residential country, and educational level, asked whether respondents experience cognitive challenges and whether they have a diagnosis that could explain why. This was to check the validity of the data. Since the intended respondents would have cognitive challenges and might also struggle to complete a questionnaire, the spelling and logic were checked several times, including by testers outside the team, before distribution. The questionnaire was distributed on LinkedIn, through personal messages to relevant people in the designers' network and in several relevant Facebook groups (Figure 22).



Figure 21 Screenshot of the LinkedIn post about the survey

This resulted in a total of 102 responses, with 90% of respondents living in Denmark and the remaining 10% being other Europeans (Appendix E). The respondents are distributed across several age groups from 18 to 65 years. 90% of respondents have at least one of the suggested diagnoses that lead to cognitive challenges (Figure 21). This indicates that the dataset is of sufficient quality to tell us something about the target group being researched. The results led to several insights that supported the findings from the findings.

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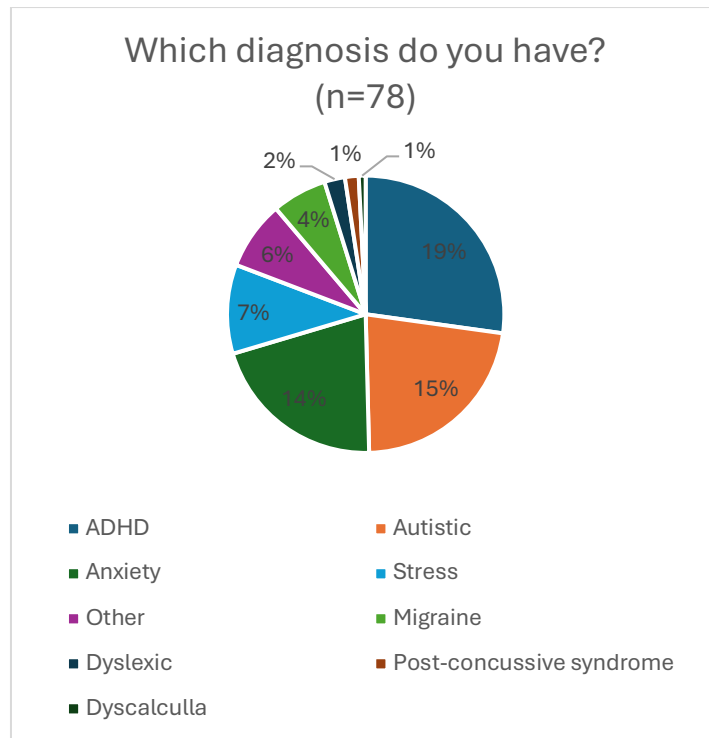


Figure 22 pie chart showing how many has each diagnosis

First, it showed that the respondents still use the traditional cashier more than the self-checkout or self-scan app (Figure 23), but not necessarily because they prefer it.

How often do you use the different check-out options at the supermarket? (n=71)			
	Traditional cashier	Self-checkout	Self-scan app
Always or Mostly	42%	31%	18%
Sometimes or Half of the time	35%	35%	11%
Rarely or Never	22%	33%	70%

Figure 23 Survey results - frequency of use across traditional cashier, self-checkout, and self-scan app options

34% of respondents who reported they primarily use the traditional cashier said they do so to avoid recurring issues with the other options. One of the respondents wrote:

I can't bear that the others (self-scan options) never work and you subsequently have to wait for help anyway.

To further support this finding, another respondent with ADHD explained why they rarely choose the self-checkout:

Because birthday cards weigh too little for the scale in Føtex to register them, because the staff has to check you if you have bought a bottle of

white wine, or you are taken out for a check-up, so you have to wait for a staff anyway.

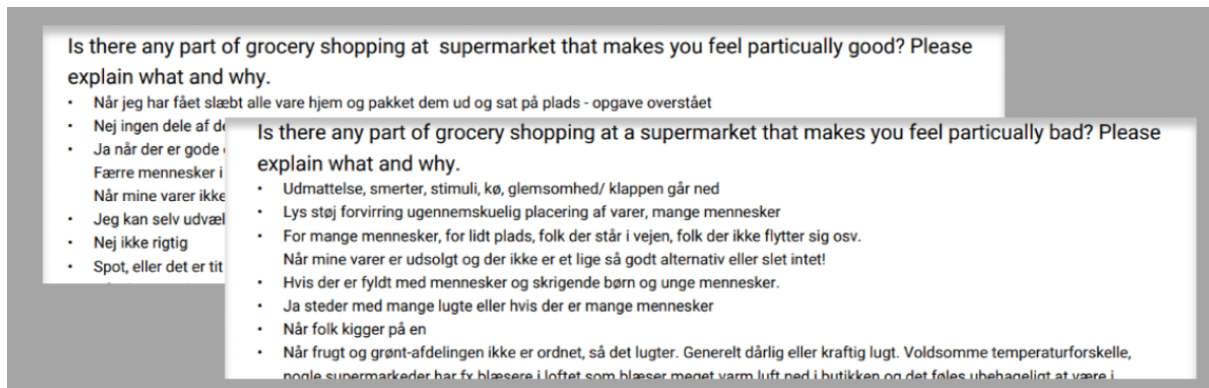


Figure 24 Survey results - examples of the best and worst parts of grocery shopping experience

In the last part of the questionnaire, respondents wrote about the best and worst parts of the grocery shopping experience (Figure 24). The data was analysed, categorised by similarity and results from both questions were placed in a table, prioritising similar statements, but from opposite points of view (Figure 25). E.g. In the first row, we see that 30 mentioned ‘other customers’ as part of grocery shopping, which makes them feel particularly bad. Next, we see that eight mentioned that ‘No or fewer other customers’ were part of grocery shopping, which makes them feel particularly good. These statements support each other. In general, categorising shows both potential pain points to target and opportunities to improve the service.

Is there any part of grocery shopping at a supermarket that makes you feel particularly bad? (n=55)	Count	Is there any part of grocery shopping at a supermarket that makes you feel particularly good? (n=54)	Count
Other customers	30	No or fewer other customers	8
Other – very different things (the cashier mixes my items with other customers’ items, I’m bored, new designs, etc.)	18	Other - Very different things (feeling useful, ending up buying healthy, if I remember everything, etc.)	10
sensory stimulation (especially sounds, smells and lighting)	17	Less sensory stimulation	4
The wanted item is out of stock	12	Discounts	11
Bad structure / wrong prices	11	When it's structured/correct prices/signs	10
Too many options	8	Feeling inspired to buy and/or cook	11
Queue	7	Self-scan options	2
Rude or distracted employees	3	Being recognised by employees / positive greetings	3
Nothing	1	Nothing	9

Figure 25 Survey results - aspects of supermarket shopping that feel particularly bad and particularly good

The few respondents who often use the self-scan app also report a need for a hassle-free service and for avoiding queues and other people, but their phrasing suggests the app actually helps them meet some of those needs.:

It's faster, no queues and no social contact.

These needs are found across the entire target group, so it’s interesting to take a deeper look into why 70% rarely or never use the self-scan app. Out of this group of respondents, 51% reports that it’s either because they just haven’t tried it, or because they do not have the mental energy to try it.

It feels like an extra step, so I just never tried it.

One even writes:

Never got started with it. But could probably be of help

All these answers show us that the app's potential is not fully realised, and that there are mental barriers even to getting people to try it.

When asked how often respondents feel stressed when going to the supermarket, on a scale from 1-5, 64% answer 4 or 5 = always (figure 26), indicating that it is common for the target group to feel stressed when going to the supermarket.

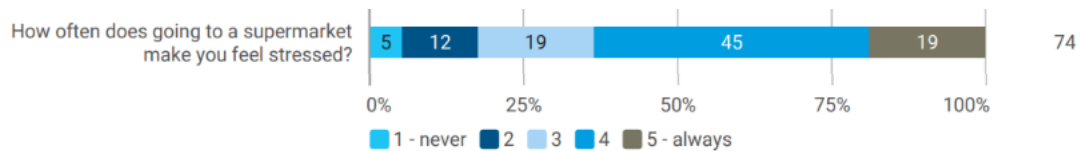


Figure 26 Survey results- frequency of stress experienced during supermarket visits

Some of the main needs that are being uncovered through the questionnaire are:

- A hassle-free service (including no issues with tech, all items in stock, items are easy to find, no counter-intuitive structure or signs).
- Avoiding sensory stimulation (noise, smell, bright or flickering light).
- Avoiding queues
- Avoiding other people

Some of the main potential that the respondents feel motivated by:

- good offers
- feeling familiar with the store (e.g., recognisable structure)
- knowing when peak-hour and off-peak-hour occur.

Generally, the data yielded many important findings, but we also encountered some challenges along the way. One respondent from the designers' network said that she had answered the questionnaire, but that she had answered that she did not experience cognitive challenges, even though she is diagnosed with ADHD. She had misunderstood the question. It does not seem to be a general problem, as most respondents indicated they have a diagnosis, but this reminds us that even though we tried to explain the definition, some respondents might have interpreted it differently or even skipped reading it. When analysing the results, we also realised that the questions about how often they use the traditional cashier, vs the self-checkout, vs the self-scan app were not designed properly and challenged the reliability of our data. Framing it as three individual questions rather than one combined meant there was a risk that respondents would have chosen 'always' for several solutions. To fix this issue, we checked and found that three respondents had done exactly that. The responses were removed from this specific part of the survey.

3.7. Service Service Inclusion Bridge

To assess how inclusive the current service at the Coop supermarkets are the framework of service inclusion proposed in *Design for Service Inclusion: Creating Inclusive Service Systems by 2050* (2018) was used. The framework outlines four key pillars of service inclusion: enabling opportunities, offering choice, relieving suffering, and fostering happiness as presented in chapter 2.1.5 As the framework provides no guidance on application, the design team decided that each pillar should be interpreted and expanded with specific criteria, putting the pillars into the context of supermarket services. To clarify each criterion and enable future use of the tool, a set of cards was created, each posing a guiding question for its respective criterion (Appendix F).

The pillars are visualised as a bridge, with each pillar supporting the inclusive service system and itself constructed from smaller operational criteria, referred to as ‘bricks’. Each brick represents an aspect of the supermarket experience (Figure 27). This structure enabled evaluation of both physical and digital touchpoints in the shopping journey.

ENABLING OPPORTUNITIES

Empowering people by providing access to services and the ability to receive and co-create valued services



Figure 27 Service inclusion bridge: selected cards and bricks from Enabling Opportunities' pillar. Full version in appendix F

Results are communicated through a colour-coding system: a solid colour indicates a criterion is fulfilled, a striped colour indicates it is partially fulfilled, grey indicates it is not fulfilled, and a grey checkered pattern is used when a criterion cannot be assessed based on available information (Figure 28). The assessment was based on findings from the service safari, surveys and user interviews (Figure 29).

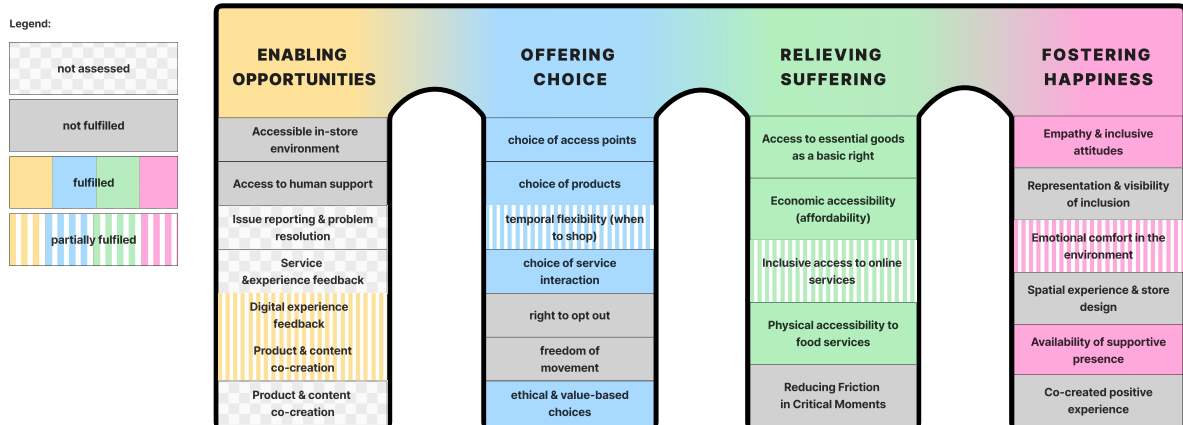


Figure 28 Service inclusion assessment based on interviews, survey and service safari

The visual approach makes it straightforward to identify strengths, gaps, and areas for improvement. The results reveal a deficit in the ‘Enabling opportunities’ and ‘Fostering happiness’ pillars, suggesting that while some functional aspects of the service are in place, it falls short in supporting active participation and creating a positive, inclusive experience. This was the basis for the further development of the project.

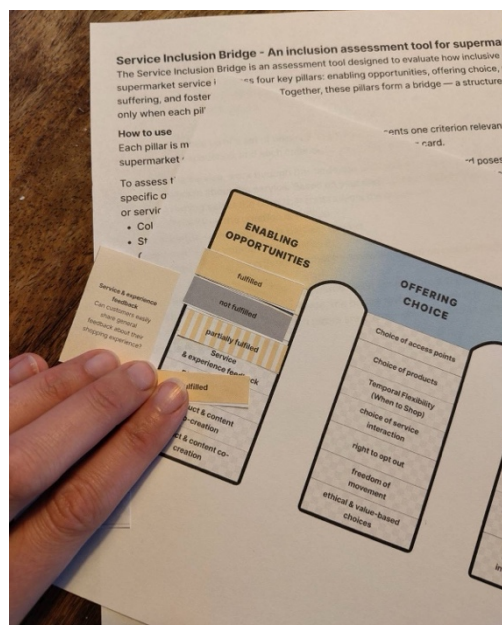


Figure 29 Picture taken while using the service inclusion bridge tool

3.8. Actors Map

An actor's map was created to identify and visualize the relationships between various human and non-human actors within the Coop environment. To understand how different groups affect customer experiences, frontstage employees who interact directly with customers, backstage employees who operate behind the scenes, partner organizations, and other stakeholders were examined. Analysing how these groups influence one another helps to build an understanding of the service ecosystem (Stickdorn 2018). The mapping process involved categorising stakeholders into two areas: direct influence and indirect influence, with the cognitively challenged customer positioned at the center (Figure 30). The actors mapping process revealed a complex ecosystem within Coop supermarkets, where the customer experience is shaped by human actors and service providers. A key insight was the decision to include close relatives and roommates as important actors in the map, as they can both directly influence and be influenced by individuals with cognitive challenges during grocery shopping, e.g. if the cognitive challenged customer feels unable to shop because of their needs not being met in the service experience, their relatives or roommates might get the extra tasks of grocery shopping for them. Additionally, no other non-human actors were identified, apart from support animals and service providers. This mapping exercise was crucial for identifying opportunities to improve inclusivity in later stages of the process. However, it also has limitations. While the map illustrates relationships between actors, it does not explain the quality or nature of these interactions (Jacob 2026).

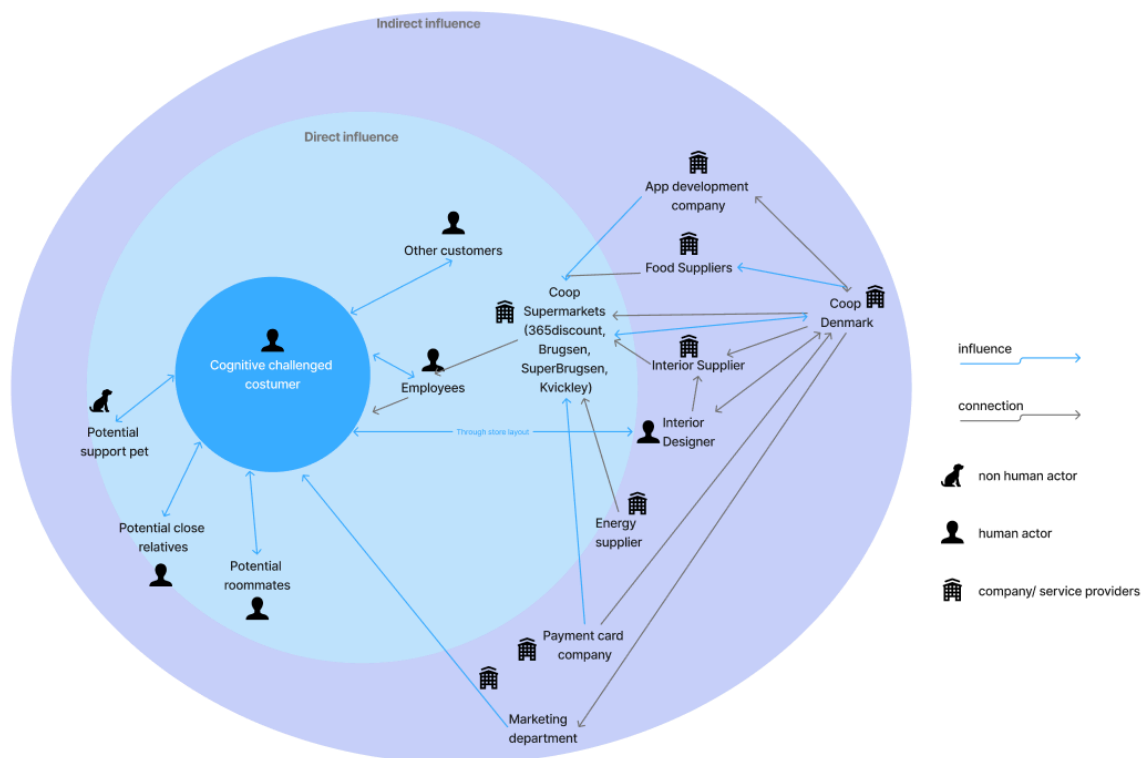


Figure 30 Actor map

3.9. Personas

Personas were created from qualitative research, primarily interviews, by identifying recurring behavioural patterns across participants, including their specific goals, motivations, and coping strategies in supermarket environments. As the project scope focused on in-store shopping, both personas reflect this context. This approach allowed the team to move beyond designing for an abstract "average user" and instead ground decisions in the lived experiences of distinct user groups (Pruitt and Adlin 2006). Two personas were created deliberately to represent different types of cognitive challenge: one neurodivergent user - Anna, with ADHD and dyslexia, and one user experiencing episodic conditions that affect sensory and social comfort - Casper, with migraine and anxiety. They showcase experiences that are often overlooked (Figure 31). They serve as a foundation for the future validation processes. During the create phase, they were used to develop updated user journeys that clearly and actionably illustrate the needs of underrepresented users. However, because they rely on qualitative data, they may not fully represent all users and can sometimes oversimplify their experiences (Chapman and Milham 2006). Overall, personas were valuable for embedding inclusive thinking in the design process but needed to be treated as evolving hypotheses rather than fixed truths.

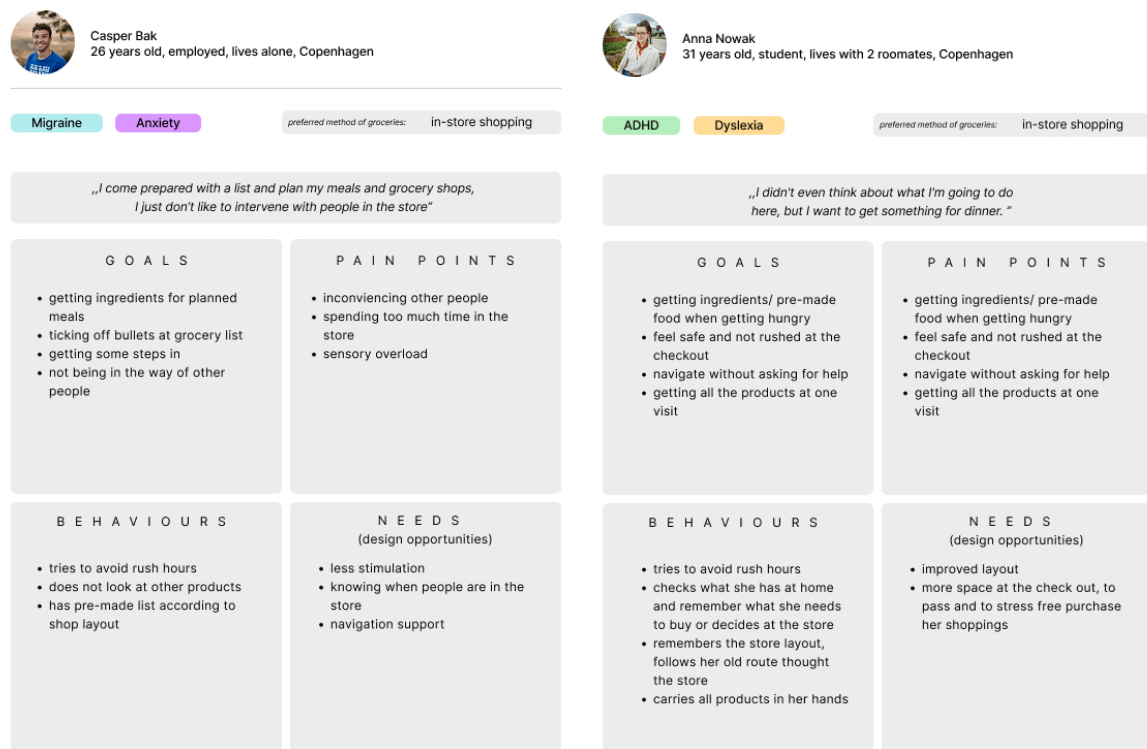


Figure 31 Personas based on interviews (Full view in appendix G)

3.10. Value Constellation

As part of understanding the service concept level, a value constellation map was created.



Figure 32 Value constellation map

The map describes the values in the current customer service (Figure 32). The value constellation experience is, according to Patrício et al. (2011), co-created through interactions between the customer and all the service organisations that enable grocery shopping.

In this context, the most important service organisation is the supermarket, but the producer of a specific product also influences the service experience by making it easier or harder for the customer to select a product that meets their specific needs. E.g. one of the interview participants told us that she partly bases her product choices on their environmental impact, including whether they are locally produced. This information could be made available and easy to decode by the supermarket, but the item's producer also influences how accessible it is and whether they choose to highlight it on the packaging.

Depending on the payment method chosen, a bank might also be involved. When using the self-scan app, the customer must pay with a credit card or MobilePay, while the self-scan checkout often offers the same options and does not always allow cash, thereby excluding the bank.

As Patrício et.al. (2011) suggest, this map allows us to see which other service organisations are involved. In this case, it is the supermarkets, producers and banks.

3.11. Key findings in the explore phase

During the explore phase, the inclusion of customers with cognitive challenges in supermarkets was explored, and several important findings were revealed. First primary and secondary data were retrieved and analysed, before mappings drawing from several sources of data were used to discover more findings.

Through the interview with the Coop employee and the actors' map and value constellation, it was revealed that there are multiple layers of Coop concern influencing the individual shopping experience, aside from the producers of the items in the stores. The number of employees working at a specific store affects the flexibility of the tasks

they must take on during the day and might challenge some initiatives, depending on the need for employee involvement.

The key findings about the customer experiences were that customers with cognitive challenges face several issues when grocery shopping. Five of eleven interview participants hate or dislike the supermarket experience. While there are many individual needs related to these experiences and some even contradictory needs, several common needs across multiple of the respondents were identified, including a need for the service to be less sensory stimulating, better navigation of the stores, less friction with the check-out options, easier access to product information and needs regarding the number of products available:

- Both the interviews, survey and service safaris revealed that many users experience sensory overload when shopping. This means they get overwhelmed by the sensory input encountered when grocery shopping. This effect can intensify when other people are present, leading some cognitively challenged customers to shop more strategically to avoid them. Sensory overload can be provoked by bright or flickering lights, sudden, loud, or continuous noises, and by having to process information in these environments, such as making decisions or navigating the store.
- The need for better navigation was expressed several times. For many cognitively challenged customers, this includes a logical structure of the store and better or more signs. This need is linked to the finding that many customers feel safer and more comfortable when they recognise the grocery store, they visit. E.g. if it is the one they usually visit or one with the same design and structure. Visual aids, such as colour codes, icons, and maps, were mentioned as ways to improve navigation.
- From the survey, it was revealed that many customers with cognitive challenges feel stressed at the checkout. There are particular concerns about having to stand in lines or about the friction at the self-checkout.
- The interviews revealed some customers needing easier access to information about animal welfare related to animal-based products and environmental information in general, as they were concerned with making ethical choices and stressed out about the barrier to finding and comparing this information.
- The interviews also revealed that for some customers, too many products were an issue, as it complicated the decision process; for others, it was too few products that stressed them out, risking not getting the specific item they wanted.

Most of the issues found are interconnected, influencing one another and making the combination of these issues more difficult to overcome, creating a negative feedback loop. For example, when a customer feels overwhelmed by the sensory input of fluorescent lighting and background music, they become less tolerant of issues with the

self-checkout. Or how some respondents report feeling increasingly anxious and stressed if they sense other customers stressing around them. Overall, these issues cause many customers with cognitive challenges to feel stressed and other negative emotions when grocery shopping, which prevents them from getting the full potential of the service offered.

All the data gathered was used to assess the inclusivity of the supermarket service using the Service Inclusion Bridge method. It revealed a lack of inclusion, especially in two areas: Enabling Opportunities and Fostering Happiness, suggesting that while some functional aspects are in place, the service is not supporting participation and fails to create a positive, inclusive experience.

Fisk et. al. define service exclusion as:

referring to unfairness that occurs when services (service providers or service systems) deliberately or unintentionally fail to include or to adequately serve customers in a fair manner. (Fisk et al. 2018)

As such, the most important finding of the explore phase is that the supermarket service is exclusive towards customers with cognitive challenges.

4. Reframe

In the reframe phase, the design team worked together to systemise all the insights from the explore phase before categorising, analysing, and prioritising the findings to create a shared understanding of the results. To break out of the current materialistic system that continuously prioritises profit over people, the design team changed their work setting and tried out new methods. Wanting to avoid falling back on the inherent need to search for meaning and letting habits drive toward familiar solutions. Doing so was hoped to prevent overlooking something that could truly change the status quo. The designers met in a private space with a view of a garden to relax the nervous system and remind them how easy it is to gain new perspectives, simply by changing up the team's meeting habits. The designers challenged themselves to try out new methods to shift the perspective and reframe the problem. The methods suggested in the Systemic Design Framework were reviewed, as none in the team had tried them before, and one was chosen to implement in the reframe phase.

Methods and activities used in the reframe phase are:

-  Validating observations
-  Affinity mapping
-  Different perspectives
-  Meta design mapping
-  HMW

4.1. Validating observation

As part of the reframing process, additional validation observations of the remaining Coop supermarkets were carried out in SuperBrugsen and Kvickly to compare insights and reflect on them using the knowledge already gained. The analysis focused on layout, space, accessibility, checkout areas, customer flow, and signage. Designers collected observations by taking pictures and taking notes to later gather them in Figma and analyse by adding stickers and notes (Figure 33). The findings were very similar to the first service safari, regardless of whether the store was a discount or regular supermarket. Layouts differed between stores, while Kvickly had clearer signage, likely because the store is larger, although it relied mostly on text without icons. Both stores had narrow aisles, which can affect accessibility. At the same time, both offered large self-checkout areas with many stations, which may feel less stressful for people with cognitive challenges, as the pressure spreads across multiple customers. These additional observations were conducted to gain a more complete overview. It helped fill the gaps and led to clearer conclusions.



Figure 33 Screenshot of the Figma board - finding from observation of the SuperBrugsen and Kvickly

4.2. Affinity mapping

Affinity mapping is widely used “as a design and management tool for generating innovative insights and ideas for problem-solving. This method is used for exhaustive understanding and organization of large amount of data and helps in creating new patterns of thinking.” (Gupta et al. 2016). In the context of Universal and inclusive design, affinity plays a vital role in gaining an overview of the emotional needs and aspirations of the target group (Karwowski et al. 2011).

First, the insights and coding results from the survey and interviews have been collected, placed on post-its, and then physically clustered (Figure 34). The main categories were products, other factors, decisions, sensory overload, check out options, interactions, and layout/navigation. The team grouped the clusters based on the number of insights. The blue Post-it indicates ‘opportunities’, the yellow ‘pain points’, and the green ones ‘other factors’. The clustering made clear that there are many different insights and pain points within a supermarket experience, but also that some insights are more numerous, as well as the intensity and pressure across the different areas of the supermarket experience.

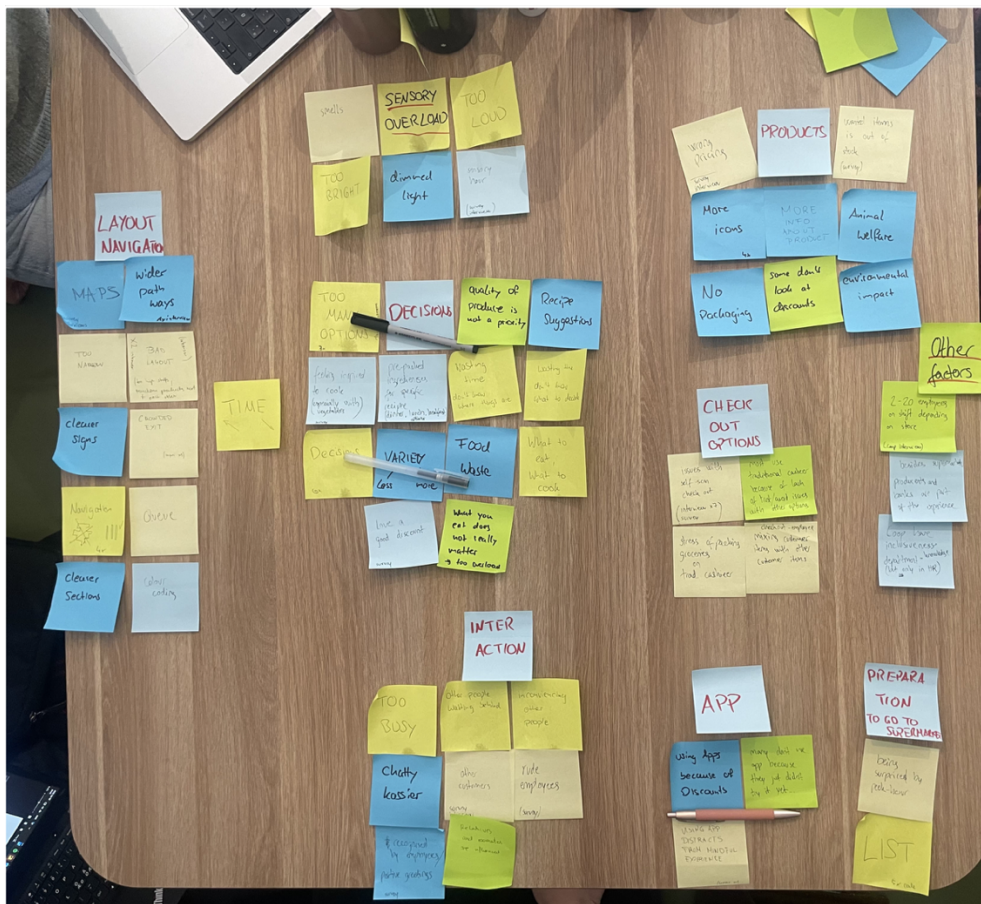


Figure 34 Analog clustering of interview and survey insights

The design team has also been using the mapping tool alongside a matrix. That decision was made because they wanted to see which insights and observations play a role in the user journey, as well as in specific parameters and codes. The group used two different parameter-sets of the tool combination. The first matrix (Figure 35) combined the user journey with the parameters created during the clustering session. The second matrix (Figure 36) included the additional parameters of tool/idea, condition approach, and insight. Those subcategories were created to determine whether there is a trend across the parameters. The trend would mean that more opportunities or tools were mentioned within the clusters.



Figure 35 Affinity map based on user journey and identified clusters

The row of the cluster shows the main categories, such as sensory overload, interaction, and navigation. On each row, the different user journey steps are shown, such as 'entering the store', 'getting items' or 'check out'. As shown in Figure 35, the main

clusters centres on products/navigation, checkout options and decisions, and interaction. For the second matrix (Figure 36), navigation/layout, products and decisions have the most insights.



Figure 36 Affinity map based on identified clusters and trend parameters

The combination of the affinity mapping and the matrix has been an insightful and interesting creation because it challenged the team to rethink the clusters and insights, and to test their own understanding of their research so far. The team discovered that many opportunities and pain points lay within ‘navigation and products’, as well as in ‘interactions and decisions’. The clustering helped the designers understand where the data points to and what is interesting to them. However, one risk of this method is that it can generalise and overlook some important insights, as the quantity of insights speaks louder than the quality of some more valuable insights. The designers sought to gain a better overview of the qualitative data and to incorporate emotions, challenges, and aspirations as much as possible into the clustering. Based on this overview of insights, the team decided to move forward with the main insights on navigation, layout, interactions, and product visibility.

4.3. Different perspectives

The ‘different perspectives’ activity from the Systemic Design Framework toolkit was used to examine the challenge from new perspectives and to set the stage for new ways of looking at both the issue and possible solutions (Design Council 2021b). As a starting point of the activity, the team agreed on the main issue, as confirmed in the explore phase: Supermarkets are exclusive towards people with cognitive challenges. From there, each prompt card from the toolkit was discussed, with notes taken on post-its. Then each designer re-read the notes and voted on which thoughts had expanded their thinking on the issue, and which invited the most possibilities. Lastly, the designers discussed where the collective excitement lies.



Figure 37 Different perspective activity - selected notes

From the prompt card ‘Turn a negative into a positive’, the idea of creating a supermarket that the customers would look forward to visiting formed (Figure 37). A supermarket that would be perceived as relaxing instead of stressful or making grocery shopping fun instead of a necessary task. As the idea of the exercise was to get different perspectives and fresh ideas, the quality or feasibility of these ideas was not discussed until later in

the process. At this point, it was concluded that while this idea seems thrilling, it might be an unrealistic bar for success, given the high level of stress and the current issues uncovered. To reach the highest level of quality in the solution, it is prioritised to start by making the supermarket experience tolerable before striving to make it enjoyable. As Fisk et al. describe the importance of the pillar 'relieving suffering' within the four pillars of the service inclusion framework, it is both shortsighted and naive to focus solely on improving well-being, thereby neglecting that basic well-being might not be covered to begin with (Fisk et al. 2018).

From the 'set a new purpose' prompt card, two ideas formed: using the supermarkets as a training ground for people with social anxiety and adding an educational layer to the supermarket experience (Figure 37).

Regarding a question about moving from managing to enabling, the design team talked about how, in order to fix the issue long-term, it's not necessarily enough to design an inclusive solution for Coop, but Coop should learn how to work with service inclusion themselves, to truly keep developing their services in a more inclusive direction on all operational levels. The discussion also led to how literal the needs that the target group had vocalised should be taken. The Henry Ford saying, "*If I had asked people what they wanted, they would have said faster horses*", reminds us that the designer's job is to come up with the best solution, which can be far from what the user thinks they need. So, when the research shows a need to avoid other customers, it is necessary to dig deeper. The question of why so many of the users want to avoid other customers came up in the discussion. Going back to the research, there are a range of reasons for this, including overstimulation, fear of being a nuisance to other customers, and, mainly, being stressed out by seeing other people who seem stressed when grocery shopping. The option of designing to help customers with cognitive challenges avoid other customers is very focused on what the target group thinks they want, but approaching the issue with a more systemic focus might get us closer to eliminating the root cause. E.g. looking into why the customers report wanting to avoid each other.

There was interest in solutions with an educational or communal approach, as well as in the complexity of the issue. The communal approach kept appearing, but it also directly contrasts with research showing that many in the target group want to avoid other customers. It seems like an unnecessary hindrance to the project's overall aim to go against this need. An educational approach might be more realistic depending on how it is applied, but it is hard to assess further without the actual idea for a solution. While the overall results of this activity were great discussions from new and different perspectives, the complexity of the issue was both a common interest and an important area for further exploration, leading the team to map and visualise it.

4.4. Meta design mapping

The meta design map or nest is a method for understanding and placing services or products within the context, systems, and paradigms. It was created and further developed by Mathilda Tham, Åsa Ståhl and Sara Hyllén-Cavallius (*Oikology - Home Ecologics* 2019). It shows three layers: the local or tangible layer, the system layer, and the paradigm layer, which indicates global, intangible assumptions, behaviours, or unwritten rules. After desk research and data analysis, the design team used this method to place their understanding in context, drawing on what the team already knew, understood, and observed across the different systemic layers (Figure 38). The nest also showed unseen and unwritten layers, such as ‘predefined opening hours and locations’ and ‘effectivism’. The nest also revealed unseen and unwritten layers, such as ‘predefined opening hours and locations’ and ‘effectivism’. The ‘predefined opening hours’ were a condition the designers had not given much thought to, as they had taken this aspect of grocery shopping for granted. It was interesting to realise that opening hours are a fixed rule that must be followed, and that they had not considered them until this point in the design process. This insight led to a broader understanding of the research and of what the designers might not have seen. The other example is ‘Effectivism’. It is mainly known within political science and can be defined as “*a theorizing position with practical aims, seeking to make effective the ideal norms that guide it.*” (Sosnowski 2025). In the context of supermarket experiences, effectivism can also be seen as a driving force for change and an influence on the status quo. In practice, integrating inclusive approaches in supermarkets results in a better experience for a larger group of people. The design team included effectivism in the paradigm because it is also connected to current practices and stages in supermarkets, as well as their lack of inclusivity. This tool gave the group a broader understanding of what they are working with and of how important it is to place and position products in context.

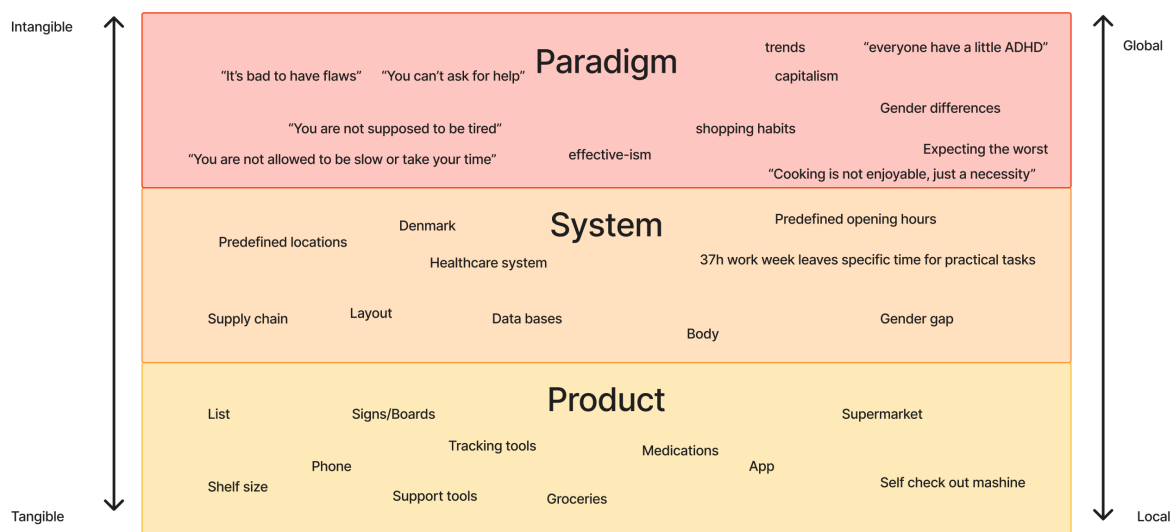


Figure 38 Meta design map in connection to cognitive challenged people and supermarket experiences

4.5. HMW

The ‘How Might We’ (HMW) method is a pre-ideation tool that transforms research insights into open-ended design challenges, framing problems in ways that stimulate creative exploration (Stickdorn et al. 2018). Insights gathered through interviews, surveys, and observations were first organised using affinity mapping (see chapter 4.5), shifted using the different perspectives (see chapter 4.6), and analysed using the service inclusion bridge (see chapter 3.7). It formed the foundation for generating HMW questions (Figure 39). These questions were clustered into opportunity areas and evaluated for strategic relevance (Stickdorn et al. 2018). The process led to the selection of the following HMW question:

How might we create a supermarket experience that is representative and supportive of cognitive needs?

This question was created by summarising the most lacking pillars from the four pillars of service inclusion (see chapter 3.7). The two core elements of the question reflect specific gaps identified applying the service inclusion bridge (see chapter 3.7.): ‘Representative’ draws from the pillar of ‘Fostering Happiness’ addressing the absence of visible signals that diversity and cognitive difference are acknowledged and valued within the store environment. ‘Supportive’ is based on the pillar of ‘Enabling Opportunities’, which addresses the challenges faced by customers with cognitive challenges in finding and receiving help from staff when needed (Figure 40). Although the question seems very open, the team decided to proceed with it due to its ability to generate ideas while keeping a clear user-centred focus. Additionally, it aligns with inclusive design principles, where multiple elements may face the problem, making open questions necessary.



Figure 39 picture taken during HMW generating process

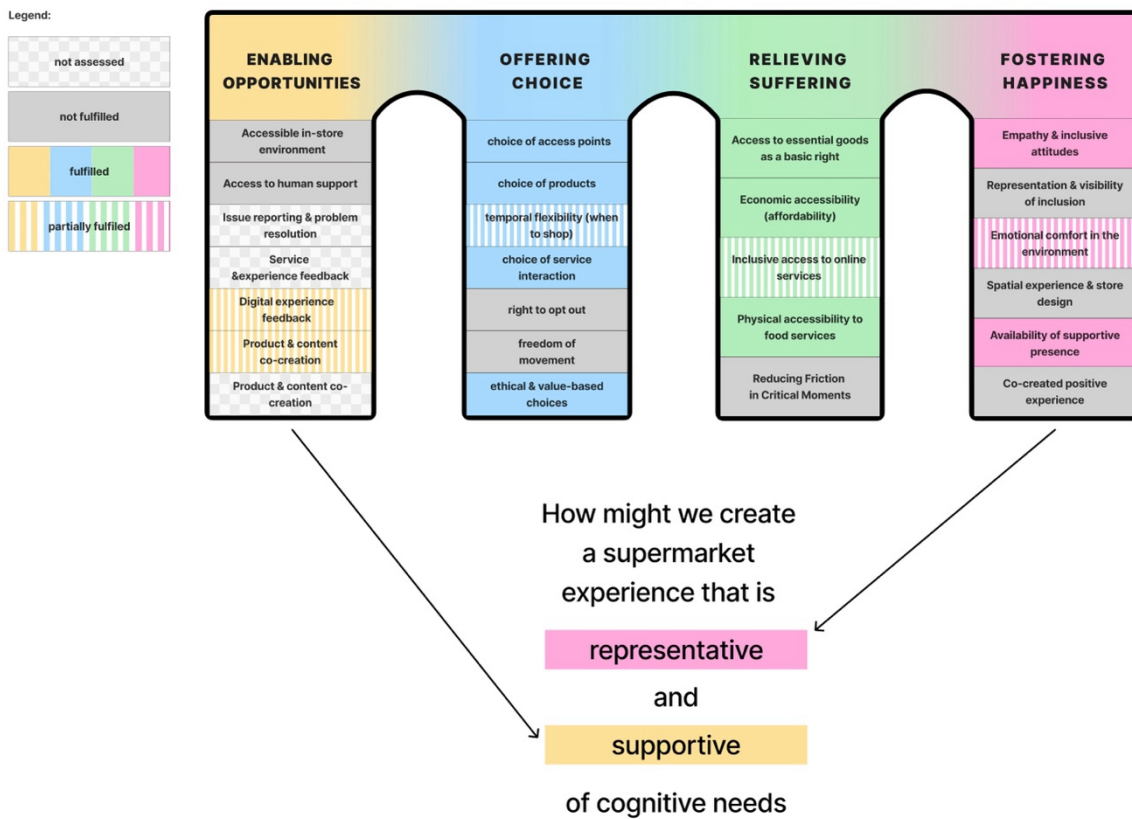


Figure 40 HMW created based on the four pillars of service inclusion

4.6. Key findings in the reframe phase

Through the reframe phase the findings from the previous phase were collected, organised and analysed using affinity mappings and meta design mappings. This happened while continually changing perspectives, both physically and mentally to create a springboard for new ideas, as proposed in the Systemic Design Framework (Design Council 2021a). Lastly, the final HMW question was phrased, leading us to a more focused issue to start the create phase from.

By validating our previous observations in other supermarkets within the Coop chain, we confirmed that the findings were not limited to the 365discount, where the main observations had taken place. Through affinity mapping, a shared understanding of the findings was created while exploring the intersections between categories to uncover trends. It was confirmed that most issues were related to other customers, navigation, checkout systems, and decision-making.

By applying the different perspectives method, the designers minds were broadened and valuable discussions about the root issues and complexity led to a round of meta design mapping, that helped visualise the systemic complexity, both activities shows that while





there are many perspectives to view the issue from, there are also multiple possible solutions and while the customers included in the design process are the one with lived experience of the issues, they might not even see the full complexity themselves and therefore their ideas for solutions might not cover the root causes. This finding reminds us of the important responsibility we hold as designers, having to guide the process in the best possible direction.

The findings from this phase were further analysed, together with the service inclusion bridge from the previous phase, to zoom in on the main issue and frame the HMW question, which will guide the process into the next phase: How might we create a supermarket experience that is representative and supportive of cognitive needs?

5. Create

This is the phase where the idea take shape. Through co-creation with users and focused sessions within the design team, ideas at all systemic levels are brought to the table and discussed. While the ideas vary in ambition and complexity, they are all given attention. Through careful assessment and selection, a series of interventions was chosen for further development. Since many of the reported issues are practical and most users' ideas are likewise practical, these ideas are prioritised alongside more technical interventions. All the chosen interventions work well together and create a safety net that ensures most needs are met. In the second half of the phase, mapping out aspects of the service systems within the interventions allows the details of the ideas to be considered.

Methods and activities used in the create phase:

-  Co-design workshop
-  Lotus Blossom
-  Decision Matrix
-  Costumer Value Constellation
-  User Journey
-  Service System Navigation
-  Service System Architecture
-  Blueprint

5.1. Co-design workshop

The workshop was designed as a participatory co-design session with the aim of generating initial solution ideas in collaboration with the target group. The intention was to design with participants as experts on their own lived experience. This approach is grounded in co-design principles, which position users as active contributors to the design process itself (Benz et al. 2024). Participants were recruited from those who had already taken part in the research phase ensuring continuity and familiarity with the project. The session aimed to gather specific data: new perspectives on the supermarket experience, recurring patterns in how challenges appear, and hidden difficulties that might not appear through observation, interviews, or survey results.

‘Connections and Relationships’ are important aspects of the Systemic Design Framework (See chapter 1.4). It is about creating empathy with the project by involving stakeholders. A big part of doing this is through ‘Storytelling’ (See chapter 1.4), when the designers share the motivation behind the project, the process and invite the surrounding community to share their thoughts and ideas.

The workshop was structured in 3 active phases, started by an introduction and closed with an informal chat. First, the introduction used storytelling to communicate the project to the users. Taking it out of the academic context and positioning it at eye level with the participant, acknowledging that they might have different backgrounds than ours. Next, a short ice breaker activity was used to ease participants into the collaborative setting and establish a comfortable group dynamic before moving into generative tasks.

The first exercise was intentionally abstract to spark creativity in participants and have a little warm up. Each team received two cards with fictional scenarios e.g. ‘The store layout changes every day like moving stairs’ and two blank cards and was asked to invent two more scenarios of the same kind. The cards were then swapped between teams, and each team generated as many ideas as possible based on what they received. The team with the most ideas won. This playful, competitive format was designed to encourage divergent thinking, the ability to produce many varied ideas and to build participants' confidence before moving into the real problem (Guilford 1967). Before moving into problem-focused ideation, the original design challenge was presented again. This transition served to reconnect the creative energy generated in the first exercise with the concrete context of the project.

The second exercise brought participants directly into the research topic through a structured method known as 10 plus 10 (Stickdorn et al. 2018). Working with the ‘How might we’ question as a prompt, first, each team was supposed to generate ten ideas through quick sketching, drawing, or doodling with no expectation of visual quality, only

quantity (Figure 41). Teams then selected one idea and developed it in depth, moving from broad exploration to focused elaboration. To support the generation of variants, teams were provided with visual aid cards introducing idea development techniques, including the SCAMPER method a structured prompt tool that encourages re-examining an idea by considering how it might be Substituted, Combined, Adapted, Modified, Put to other uses, Eliminated, or Reversed (Stickdorn et al. 2018). The visual prompt cards supported participants with different cognitive styles in to keep focused on the task. Ending the workshop session, each participant received a reflection card containing four questions: What did you learn? What would you change? What did you like in particular? And what was your favorite idea overall? These responses serve as both an evaluation tool and a source of qualitative data on participant experience. The workshop concluded with cake and informal conversation, providing a space for participants to reflect and connect. In general, the workshop proceeded mostly as planned. The space was well-prepared, with clear signage and a presentation introducing participants to the project. Several observations were made regarding what could be improved. Although the session was designed with attention spans in mind, in retrospect more time could have been allocated at the start to allow participants to settle in, rather than moving into activities quickly to stay on schedule. The gamification element, the competitive idea-counting format, did not function entirely as intended, as participants were not actively competing or keeping to their teams. On the other hand, a number of aspects worked well. The number of participants proved to be well suited to the format, and all seven remained engaged throughout the session. Time was managed effectively overall. Importantly, the activities generated meaningful data: recurring patterns emerged that aligned with findings from previous research, including suggestions around maps, simplified store layouts, improved navigation using e.g. colour code, recipes integrated into the shopping flow, and the idea of unstimulating supermarket. These findings provided a solid foundation for future, deeper ideation.



Figure 41 picture taken during co-creation workshops while running 10 plus 10 method exercise

5.2. Lotus Blossom and dot voting

After the workshop, all the ideas were gathered and discussed. Because many of the ideas were still very broad and ill-defined, new questions were developed for them. E.g., the idea of making maps of the store leads to the discussion of how such maps need to be automatically updated to be realistic to implement in a busy store, resulting in the question: How might we make a map that is easily updated when items change places? Etc. For each of these questions, a round of brainstorming was conducted, using the lotus blossom method. This method allows simple but effective brainstorming, where more ideas are generated (Higgins 1996). While it brings more potential ideas to the table, they are also more specific, making it easier to move to the next step of the process and decide which ideas to work with. Seven rounds were done, working around all the unspecific ideas before clustering the new ideas. While many of the ideas from the method were still too ill-defined to continue with, the method still created value as it generated a few valuable ones, being all what was needed to move to the next step. After this process, the designers dot-voted on which of the ideas they preferred to continue with, to make sure there was a shared motivation moving forward. In the end, nine ideas were left, the few ideas from this process and a couple of ideas from the previous research.

5.3. Decision matrix

To decide which of the nine ideas to move forward with, a decision matrix was used (Figure 42). The decision matrix enables an analytic process in which several factors are taken into account (Stickdorn et al. 2018). The ideas were placed on the horizontal axis, and the relevant factors on the vertical axis. The first six factors were based on the two pillars of the service inclusion bridge that were assessed to lack the most interventions for Coop supermarkets to achieve service inclusion (See chapter 3.6.): ‘enabling opportunities’ and ‘fostering happiness’. One factor was ‘Feedback’, as it is an important part of the ‘enabling opportunities’ pillar. The core of this pillar is empowerment, and the authors suggest that sufficient inclusion creates opportunities for vulnerable customers to become value creators (Fisk et al. 2018). To reach this potential, the customers need to be given a voice. In a supermarket setting, this can happen in several ways, but easy access to giving feedback is a key component. In addition to the six factors based on the two pillars, six other factors focused on creating a good solution were used, including ‘feasibility’, ‘Solving the root problem’ and ‘personal motivation’. Each factor was assessed and given points from 1 to 5, while ideas not having the potential to impact the factor were scored 0, shown in the matrix with a minus. After assessing each factor, two ideas were eliminated: the one with the lowest score and the one with the highest score.

ideas									
1-bad 5-good	Having a store computer you can chat with.	TGTG Option	Colour code	Library system	Analogue Map	Sign of System	Stand about app	Sensory Hours	Guide for practical changes
Accessible physical Store Environment	4	-	5	5	5	5	5	5	5
Reporting/ Feedback	5	-	-	-	-	-	5	-	-
Participatory platform	3,5	-	-	-	-	-	5	-	2
Emotional comfort in the environment	4	-	4	4	4	4	4	5	4
Cocreated positive experience	-	3.5	-	-	-	-	3,5	-	1
Spacial experience and Design	1	-	4	5	4	4	3	5	4
feasibility	3	3	5	4,5	5	5	3	3,5	3,5
Solving the root needs	3,5	2	4	5	5	5	2,5	5	3,5
Qualitative Impact	3,5	3	4,5	4,5	4	4,5	2,5	5	3
Quantitive Impact	2	1,5	4,5	4,5	3,5	4,5	3,5	4	3
Environmental Impact	3	5	-	3,5	5	5	4	5	4
Personal motivation	2	3,5	3,5	4	4,5	4	3	5	4
Total	34,5	21,5	34,5	40	40	41	44	42,5	37

Figure 42 Decision matrix

First, the one with the lowest score: ‘making bags with all ingredients for a single meal’, as it was too far from the key issue. After this, the remaining ideas and how they complemented each other were discussed. As most of the ideas had strong potential to interact with each other and none of them solved the main issue individually, it was decided to move forward with several of them. While ideas like ‘colour coding the section sign’ and ‘making a guide for practical changes’ seemed simple to continue developing, the combination of the remaining ideas made the overall solution too extensive, leading to the decision to leave the idea with the highest score behind. While this idea of setting up a physical info stand to help customers get started with the app scored highly on multiple factors, it also posed a risk of not being fully inclusive of the majority of customers who reported wanting to avoid personal interaction when grocery shopping. It would also require an extra employee present, which would risk being too expensive to implement. In the end six ideas were chosen, aligning with the idea of using multiple adaptations to reach the goal of inclusiveness, from inclusive design (Interaction Design Foundation 2026).

5.4. Presenting the solution

After the workshop, using the lotus blossom method and decision matrix, the design team has decided on a portfolio of interventions focused on navigation, feedback, and planning the grocery shop visit in advance. As described in the previous chapter, the design team chose smaller, distinct interventions that address more of the target group’s needs. In addition to meeting all needs, the multi-tackled design solution is stronger because it offers customers more opportunities to benefit more easily. In addition, a multi-tackled solution is more aligned with the inclusive design approach (Interaction Design Foundation 2026). The solution is a portfolio of interventions (Figure 43) for a crowd counter, a physical navigation sign at the store entrance, colour codes and numbers, a digital map in the app and on the website, and an information tablet that supports item search, recipe inspiration, and feedback, along with a guide of practical changes. It is a service system that covers most of the user’s journey, as shown in chapter 5.11. All interventions were analysed using scenario based planning (See Appendix M) During the portfolio creation process, two other solutions were developed. One of them is a basket with an attached map, which has either the sunflower symbol or the store’s normal colour. The other solution is a ‘bring a friend’ campaign to promote the Coop app. Those solutions were not further developed after user testing showed a mixed level of interest (See chapter 6.4.1.)

5.4.1. Crowd counter

The crowd counter is a digital feature in the Coop app or on the website that allows customers to see the current and 7-day expected crowd for a specific store location. This intervention helps reduce social anxiety and discomfort with large crowds in public spaces. Another advantage is that people can plan more tactical and incorporate grocery shopping into their daily routines, which may lead to better stress management and more time for self-regulation or social interactions. This is implemented with a crowd counter that integrates new technology to track how many people enter the store at the entrance and how many leave. The customer can choose a specific Coop store location, see the current number of people in the store, and how many are expected each hour of the day. In addition, the customer can see the forecast for the next 7 days. This helps and supports to plan their shopping according to their potential need to avoid crowds.

5.4.2. Navigation sign

The navigation sign is a physical board in the entrance hall of each supermarket that provides an overview of the store's layout, sections, and colour codes. It explains what to look for when navigating the store. This solution addresses basic navigation problems, guiding oneself through the store more easily and helping remember the sections more easily. The board also provides a QR code for the phone in case the customer wants to scan and take the map with them. This implementation takes up space in the entrance hall and requires resources to update if the supermarket changes its structure. A QR code for the digital map is also on the navigation sign and links to the digital map presented in subchapter 5.7.4.

5.4.3. Colour codes and numbers

The colour codes and numbers are a combinational intervention in connection with the navigation sign and digital map. Each section of the store has its own colour, a specific icon and a number. This supports multiple challenges and preferences in reading signs. This combination also allows space for several support systems. In practice, this means that people's needs are covered depending on their challenge or preference. If a customer is dyslexic, they can easily recognise the colours and icons; if another customer prefers the numbers or is visually impaired, they can follow those. For example, the section 'vegetables' has the colour green, number 1 and has a carrot as an icon. This section can be summarised with a green V1 sign. The intervention takes up an integration of a colour and code system, redesign and reorganisation of the sections with their colour codes, numbers and icons.

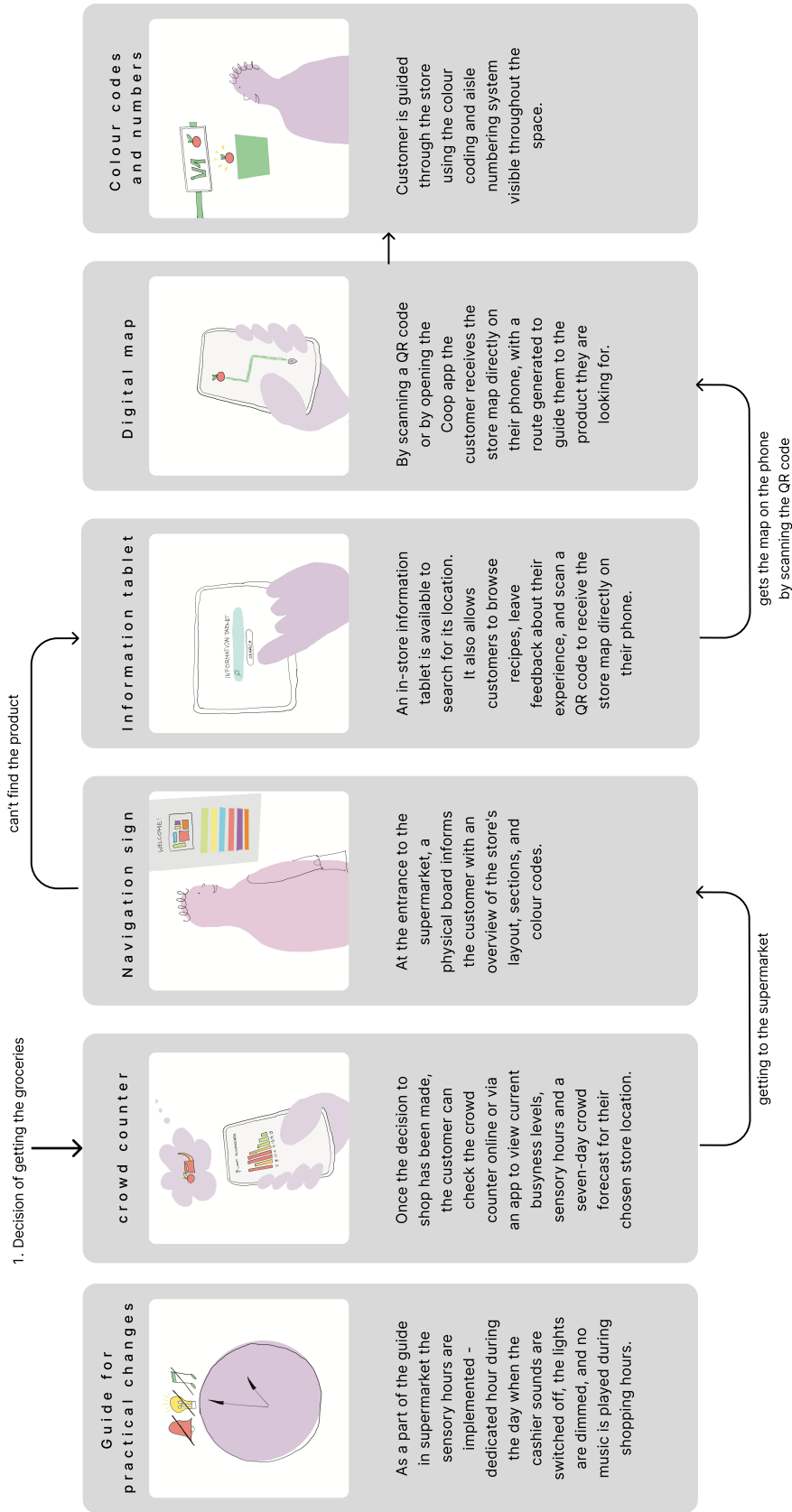


Figure 43 Presentation of the solution in the form of an illustrated journey

5.4.4. Digital map

Other aspects of the interventions include a digital map of the store layout, its sections, and areas. The digital map is an addition to the Coop app and website. The navigation sign has QR code linking to the map. This gives the customer the opportunity to scan and take the map with them. This implementation takes up space in the entrance hall and requires resources for updating in case the supermarket section changes location. The digital map is meant to be automatically updated if items or sections change in the store, but further research is needed for this implementation.

5.4.5. Information tablet

The information tablet is a digital component placed in the store that allows the customer to search for items, gives recipe suggestions and allows the customer to give feedback to the staff and store management. This part of the solution also allows access to the store map, as on the navigation sign. This intervention helps solve the problem of poor navigation, recipe needs and one-sided service creation. Through the map and the search function, the customer is guided to the specific aisle. For example, if the customer cannot find olive oil, they type the word olive oil in the search bar, and the price, the location, based on the aisle number and section letter, is displayed. Through the feedback option, the service experience is co-created because the customer can give feedback actively and opens for new suggestions. Those suggestions can be implemented by the store managers and staff.

5.4.6. Guide for practical changes

For a systemic integration of store design planning, another aspect of the solution is an interior guide for supermarket layouts. In this guide, changes to physical layout, noise, and lighting are explained, along with why they are so significant for supermarkets' physical experiences.

The guide includes an interior design section that offers straightforward guidance for planning a new store. It recommends wide aisles to accommodate multiple people, reduce the number of noisy devices for a quieter space, and provide spacious checkouts for easier exits and reduced stress. These considerations were chosen because space and noise reduction are essential for an inclusive supermarket environment.

For existing stores, general adjustments and considerations are suggested. Lower the music to improve sound quality and reduce overstimulation from loud noise. Switch off the sounds at the cashiers, as they can be very overwhelming when combined with other sounds in the store. Implementing sensory hours is highly recommended, as it allows people with cognitive challenges to shop without extra stimuli. Lastly, avoid placing any extra displays in the aisles. This combination of suggestions and considerations can lead

to a significantly less stressful experience for people with cognitive challenges. Customers' wishes and needs are taken into direct consideration.

5.5. Validating ideas with Coop

To uncover practical details important to the solution's development and to ensure the interventions were sufficiently feasible, two employees at Coop were involved: a store manager and the communication chief. The interventions were presented to the store manager, along with questions related to the back end of the service, such as whether it is possible to adjust the cashier's beeping sounds or what the rationale is for placing new products in the store. The store manager was also asked to contribute with ideas or comments for further development. When presenting the manager with the insights into how challenging it is for the target group when items are moved around in the store, they informed that customers often complain to him about it as well. The store manager's solution is to tell them they might find something they didn't know they were missing while looking for the specific item. While this might be meant to cast some positive light on the challenge, it also dismisses the feedback they receive from customers. Without knowing if this is a common response to this kind of feedback within Coop supermarkets, it is difficult to draw firm conclusions. However, if employees generally lack the knowledge to receive feedback constructively, this might undermine the criterion of enabling customers to provide feedback on the service and experience. This criterion is an important part of the 'enabling opportunities' pillar in the four pillars of service inclusion framework (see chapter 3.6). While the store manager saw many barriers to implementing the ideas, such as the cost of printing signs or the fact that their only current map of the store is not up to date, knowledge of the backend of supermarket services and practicalities added value to the further development of the solution. After the meeting, the design team discussed the store manager's perspective. As a store manager at a big chain, a big part of the job is ensuring orders from Coop Denmark are followed, keeping the store within budget, and managing store employees. These are not small tasks, and while they might have big experience with day-to-day management, they are not often involved in development or invited to think outside the box. It is also likely that a person in their position experiences some degree of status quo bias, meaning they unconsciously avoid change because it seems more efficient to stick to the way things are (Samuelson and Zeckhauser 1988).

While some of the practical questions were answered, the design team decided to reach out to Coop once more and get another set of eyes on the ideas. A brief phone interview was conducted with the chief of communications. As they had only a few minutes, the focus was on the more complex ideas, such as making a map that automatically updates. He said that if it had to be done with the current technologies available at Coop, it couldn't be automatic and would be too resource-intensive to be feasible. When asked

how he thought about using cameras and AI to automatically track and update the maps, he said they are open to using AI and that such a system would be feasible.

Both employees commented on the idea of dimming the lighting, based on the needs found in the explore phase. They said that lighting was always under development, and the chief of communication explained that they conducted extensive testing whenever they opened new supermarkets. Contrary to the findings in our target group, dimmed lighting seemed to be the adaptation with the most complaints when presented to the general customer base. The team decided to dismiss this idea of dimming the light permanently, focusing the guide of sensory hours, based on this insight and the testing of prototypes in chapter 6.1.2.

5.6. Customer Value Constellation

The Customer Value Constellation (CVC) was mapped as part of designing the service concept (Figure 44). The service concept includes the values offered in the service, the system surrounding the firm, including other related companies and how they are all connected. This is mapped in the CVC with a focus on the company offering the services and what brings value within the system. (Patrício, Fisk, Falcão E Cunha, et al. 2011).

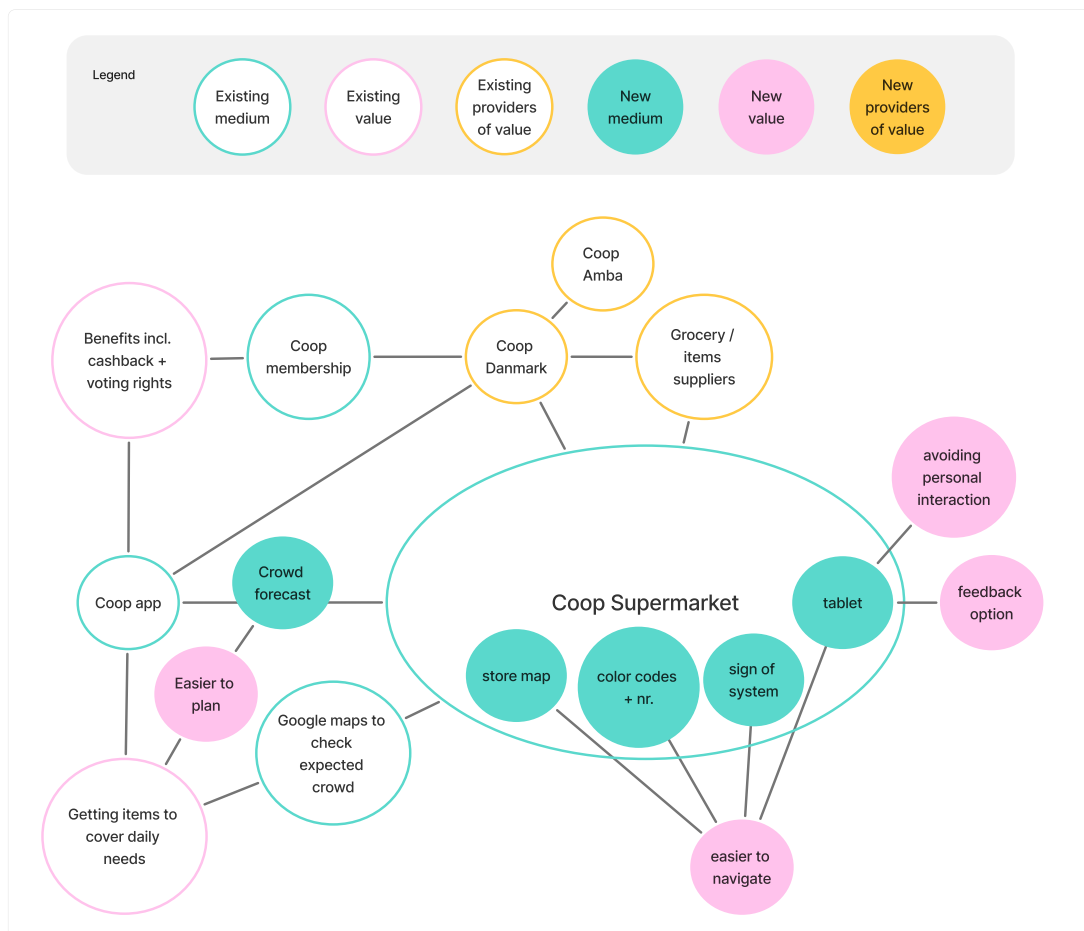


Figure 44 Customer Value Constellation Map

When taking a closer look at both the existing service and the proposed new one, the value comes from an interconnected system of values within the service. The CVC is connected with the value constellation, presented in chapter 3.9. Here, it was discovered that the main service organisations related to the existing experience were the supermarkets, producers of items and banks. In the CVC, there is a focus on the Coop organisation, as these service upgrades must be implemented through Coop Denmark across all Coop supermarkets. Parts of the Coop service, such as the app, are also managed by Coop Denmark, not by individual supermarkets. While most of the proposed solutions bring value within the supermarket experience, part of the map is zoomed in on the 'Coop supermarkets'. E.g. The value 'avoiding personal interaction' is connected to the addition of info tablets in supermarkets. While this might not be perceived as valuable by all customers, the explore phase showed it was valuable among many cognitively challenged customers. Proposing to implement tablets that allow customers to search for help doesn't change customers' option to go directly to an employee, but it offers an alternative, making the service more inclusive. While banks were mentioned as a relevant related company in the value constellation, given their impact on checkout options, they are not included in the CVC, as the proposed solutions do not focus on this aspect of the service.

5.7. Updated Journey Map

Following the creation of the final portfolio of interventions, the objective was to produce a visual representation of the redesigned user experience. The new user journey was developed to map interactions with the service, with particular emphasis on emotional responses and the touchpoints introduced through the proposed interventions (Kumar 2012). The journey served a dual purpose: to understand users' motivations and feelings at each stage and to evaluate whether the proposed solutions met the expectations established during earlier research phases (Stickdorn et al. 2018). Following the creation of the final portfolio of interventions, the objective was to produce a visual representation of the redesigned user experience. The new user journey was developed to map interactions with the service, with particular emphasis on emotional responses and the touchpoints introduced through the proposed interventions (Kumar 2012). The journey served a dual purpose: to understand users' motivations and feelings at each stage and to evaluate whether the proposed solutions met the expectations established during earlier research phases (Stickdorn et al. 2018).

To ensure consistency and comparability, one of the personas developed in an earlier stage of the project was selected as the user in the journey (see Chapter 3.9). The scenario follows the same narrative as the first user journey (see Chapter 3.4), allowing for a direct before-and-after reading of the experience. Some steps were adapted to

reflect the specific shopping habits of this persona, for example, the persona does not use a mobile phone for shopping or checking the printed advertisements, which resulted in a slightly different path through the service.

The visualisation presents each intervention in context, including particular screens encountered when using digital devices (Figure 45)(See full version in the Appendix L).

The result of the journey map illustrates a coherent and emotionally positive progression through the service. Each intervention is shown at the relevant touchpoint, making the impact of the design decisions legible. The new signage system, in particular, accompanies the user across the majority of the in-store experience. This continuity made it harder to show as a specific event on the map, but it was included on the map to show how it supports navigation throughout the visit.

The journey map confirms that the proposed interventions align with the needs and behaviors presented in the persona chapter 3.6. Each solution addresses a specific pain point surfaced in earlier research, and the journey as a whole demonstrates a more guided, less frustrating in-store experience. The exercise showed that ongoing interventions, like the signage system, need careful planning to show their value.

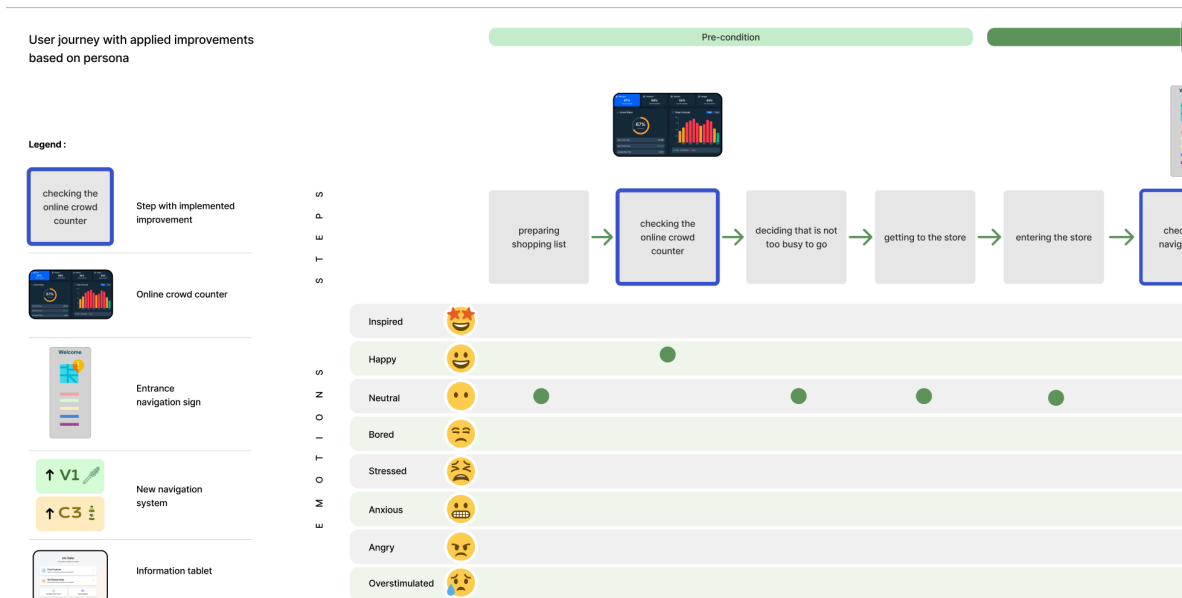


Figure 45 Updated journey map showing emotions and implemented improvements, detail on the first steps

5.8. Service System Architecture and Service System Navigation

The Service System Architecture (SSA) and Service System Navigation (SSN) are two models from the multilevel service design method developed by Patrício, Fisk, o Falca and Cunha, and Larry Constantine. It focuses on *“the design process at the system level”* (Patrício et al. 2011). Both models showcase the backstage and *“provide structure and navigation views of the service system that guide the design of each service encounter.”* (Patrício et al. 2011).

The SSA *“defines the structure of the service system, providing an integrated view of the multi-interface offering and support processes across the different tasks of the service experience”* (Patrício et al., 2011). The top row of the SSA describes the service activity, which is based on the service experience. The service experience was shortened not only by its length but also by the clearer overview it provides of the Architecture. In Figure 46 (Appendix H), the SSA is based on the new service experience with new service encounters and support tools. The left column shows the service interfaces and the backend systems of the supermarket experiences. The column shows detailed service interfaces, reflecting the complexity of the supermarket experience. In this example of a supermarket experience for cognitively challenged people, the backstage support includes back-end systems and staff who fill shelves. The addition to the backstage support is ‘staff filling the shelves’, which was included because it is a basic precondition for the supermarket to run smoothly. The service activity shown in the top horizontal row is divided into four phases of the experience: Precondition, at the supermarket, checkout and exit. In the SSA, there are two differently coloured circles. One is blue, and the other is purple. Those circles indicate direct and indirect interactions with the service interfaces. For example, the customer interacts directly with the navigation board when they look at it, but indirectly when they follow instructions from memory of the sign. Another service interface that the customer indirectly interacts with is the surveillance cameras. The cameras are an essential part of the store, as they automatically update the map and the crowd forecast. The customer never interacts with the video cameras directly because the interface runs in the background, but it is still part of the service interface. It is part of the service interface because it provides control, safety and updates on the situation in the physical store.

As shown in Figure 46, most of the different interfaces are encountered at checkout, at the end of service activities. On the horizontal line, the navigation sign and tablet serve as the primary interface for interaction, like how users engage with physical space. The surveillance cameras are the only service interface that the customers interact with indirectly. The navigation sign and tablet combine direct and indirect interactions:

orientation occurs when you look at the board, which then influences the navigation support based on the customer's memory.

The SSN (Figure 47) *“enables mapping possible customer journeys across service interfaces and explicitly designing necessary links between service interfaces to assure a smooth experience across service encounters”* (Patrício et al. 2011). It *“offers a dynamic view of the service system”* and employs different *“paths customers may take across different service encounters forming the service experience.”* (Patrício et al. 2011). The SSN *“enables better identification and design of service interface to another service experience”* (Patrício et al. 2011) and is based on the SSA, which has the same matrix parameters in the left column. In contrast to the SSA, the customer actions are divided in service steps and the customer actions. In Figure 47, the service activity and experience slightly changed because the user journey used in the SSA was too broad for the SSN. Some of the activities were possible as much as they could without losing the experience steps across several service paths. It also shows the backend systems and stages.

The SSN indicates that the surveillance cameras, check-out aisles and check-out displays are not part of the Navigation and are present only for the sign process. Most of the Navigation is based on the sign and tablet, because they are direct navigation tools and support the service. The SSN helped the design team understand the implications of design decisions, the complexity of the new service system, and the potential improvements to each interface and touchpoint across front-stage and backstage operations. For example, the app and website are mainly used at the beginning of the grocery shopping journey, when customers are expected to use the crowd counter to plan when to visit the store. But this service interface could also be more prominent depending on the customer's journey and their phone use. For example, if they use the self-scan option or digital shopping list in the app. As the SSN model showed that the crowd counter and tablet are *“an interface mix that enables customers to choose their preferred service interface”* (Patrício et al. 2011). In addition, it shows that the paths that illustrate the service journey are better supported than before. The different interventions can be identified as part of orientation, localisation, or service provider support and play important roles in helping the customer have a smooth, less stressful experience.

Overall, the SSA and SSN have guided the design team in better understanding their solutions and in making the service system as smooth and effective as possible for customers, given the different interventions introduced.

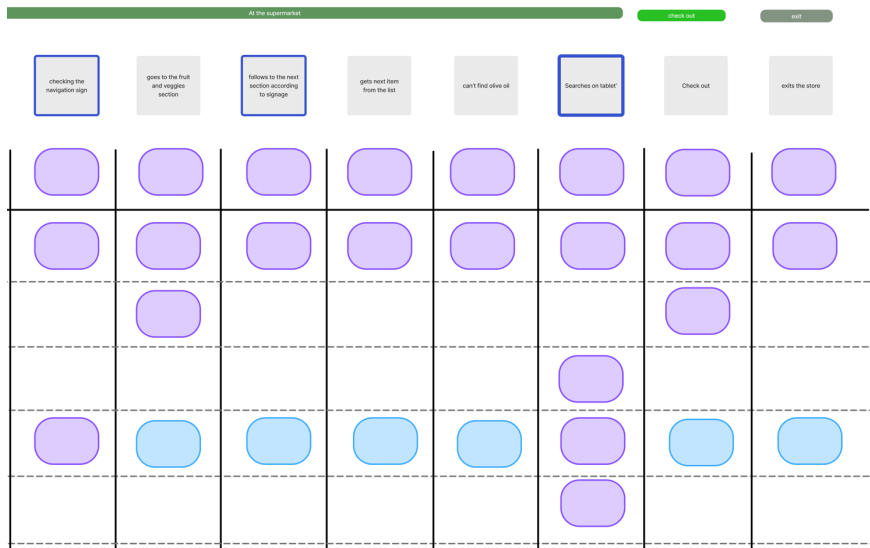


Figure 46 SSA detail: Visual representation of the indirect and direct interaction of the customer
Full version in Appendix H

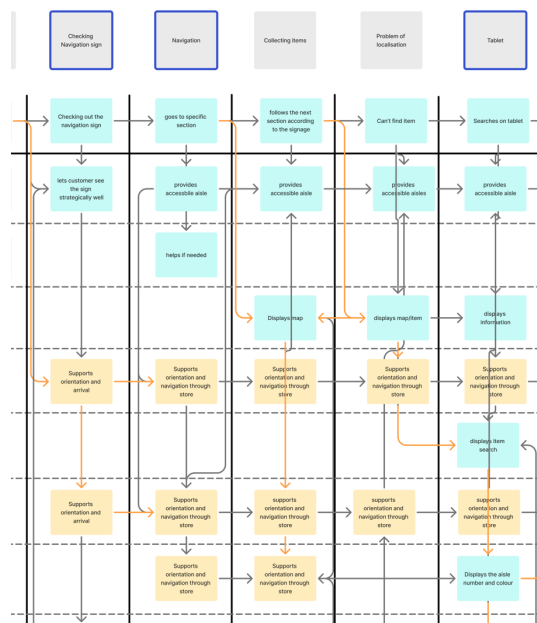


Figure SSN detail: visual representation of support structure through interventions
Full version in Appendix H

5.9. Blueprint

The Service Experience Blueprint (SEB) is *“a multidisciplinary method for designing multi-interface service experiences”* 47 and is essential for showcasing the service system. The SEB is used in the Multilevel Service Design (MSD), which *“is presented as a new interdisciplinary method for designing complex service systems.”* (Patrício et al. 2011).

In this project, the SEB is based on Figure 46; the SSA and Figure 47; the SSN; and the Blueprint shows the whole journey of the new service experience on the top row, Figure 48 (See full version in Appendix I). The vertical parameters are divided into the frontstage, with its different interfaces; the backstage, with technology support, Coop employees, and store staff; and the support systems, with their backend systems. A Coop employee is someone working, for example, in the IT department or other operational departments. The support system covers databases, cloud platforms, and servers.

The interfaces listed on the frontstage part are the physical store, the app/website interface, navigation sign, info tablet, colour codes and numbers, and digital map. Most of the parameters for the frontstage are the new interventions and touchpoints developed in this project. The different actions and activities are divided into two colours: the blue box represents an action or activity, and the yellow box represents a support system or action. This colour code was chosen to highlight how the different interventions support the customer journey and to emphasise that all interventions are introduced to enhance customer navigation.

In addition, the icons ‘phone’, ‘laptop’, ‘house’, and ‘brain’ were added to indicate the level of interaction. The phone stands for ‘Display interaction with phone’, the laptop for ‘Display interaction with laptop’, the house for ‘Physical interaction’, and the brain for ‘Influence through memory’. These additions and icons are shown because they make it clear which actions take place in the physical space and which in the digital space. They also allow the viewer to see which interventions drive behaviour changes through memory, the device, or the physical space. For example, the navigation sign has an interaction in the physical space when the customer sees it, but with better preparation for entering the store through the sign, it creates a memory effect. A constant physical activity is the colour coding, and numbers are clearly visible throughout the store, on signs and in different sections and colours.

Many operations run behind the scenes of the service because they rely on digital and database systems. Especially, the back-end systems and technology are intertwined and closely connected behind the scenes of the service.

The SEB has been very insightful and useful for visually representing and organising the new service system for supermarket experiences. During blueprint creation, the complexity of the various touchpoints and interventions was highlighted. To create an

inclusive experience, several multilevel interventions need to be represented in the blueprint. It provided insight into backend systems and technologies that the design team has little knowledge of and that require further investigation in the next steps of the implementation. The support system for navigating the store is made visible by the different coloured boxes. This enhances the interventions' function and purpose and underscores the importance of supporting systems within supermarket experiences.

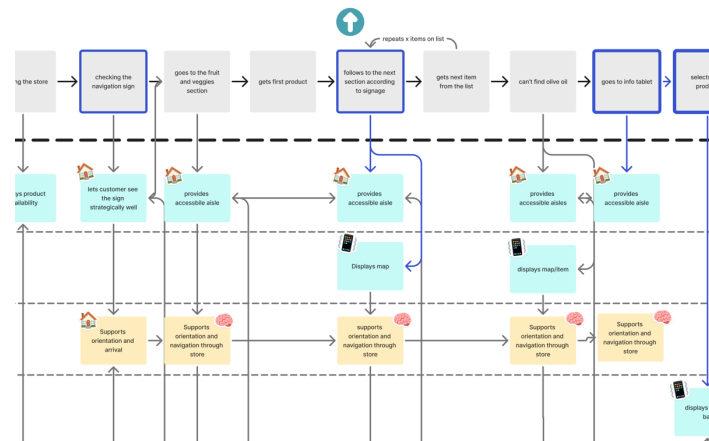


Figure 48 Blueprint: Visual representation of memory effect of the navigation sign

5.10. Summary of the create phase

During the create phase, all the data and insights were organised, ideated, analysed, and comprehended using several service design methods. The methods workshop, lotus blossom, decision matrix, and several mappings, such as customer value constellation, service system architecture, Service System Navigation, and Service Experience Blueprint, were used.

The idea for the portfolio of interventions was further developed and tested with potential users, Coop employees, and experts. The outcome of the solution and service system results from a combination of interventions targeting the customer and company levels. The six interventions create a support system that enhances the customer's shopping experience. Most of the interventions are based on the need for navigation support and avoiding sensory overload, such as navigation signs, info tablets, colour codes, numbers, and a digital map. The only intervention at the company's institutional level is the guide for practical changes. The complexity and interactions of each intervention, aside from the guide, are shown in the SSA, SSN, and the service experience Blueprint.

Working with and mapping the service experience across the new touchpoints was challenging but very insightful. The complexity of introducing a multilevel solution needs to be communicated clearly and carefully. Some interventions have disadvantages; others do not. For example, the crowd counter cannot predict whether a school class will enter the store because they have free time. Implementing this intervention requires

adjustments and additional design for the app and website. It also requires more detailed tracking technology at the entrance and exit. Another example is the digital map. One of its functions is automatic updates, which needs further research on how to implement this. Inspiration could be taken from 'Amazon Go', a cashier-less store without a checkout, where cameras, weight sensors and AI are used to register what items are on the shelves (Amazon 2026)

However, the design team chose this level of complexity because it allowed the store to implement the interventions gradually. The interventions can work on their own, but when multiple are implemented together, they strengthen and diversify inclusion. This solution's approach also shows, based on the principles of inclusive design and accessible design (Persson et al. 2015), that multiple solutions create diversity and lead to greater inclusion.

6. Catalyze

In the catalyze phase, the design team shifted focus from understanding and framing the problem toward validating and developing the proposed interventions. Building on the directions established in the reframe phase, the work centered on bringing ideas into tangible form and testing them with real users and experts. Prototyping served as an evaluation of the ideas, and as a tool for building shared understanding within the team and ensuring that the solution remained grounded in the needs of customers with cognitive challenges. The phase progressed from broad validation to more focused functionality testing, each round informing interventions that moved closer to a form suitable for real-world implementation.

Methods and activities used in the catalyze phase are:



Sketch prototyping and testing with users



Testing with experts



Functionality prototyping and testing with users



Recommendations for next steps

6.1. Prototype and testing

To validate and get input for further development of the ideas, three rounds of prototyping and testing were conducted. The first and second rounds aimed to communicate and evaluate the ideas with a broad segment of the target group and a few experts. The results helped to reduce the number of interventions. The third test aimed to evaluate and understand which details and functions of the crowd counter should be in focus, and test how the potential customer would react to the info tablet.

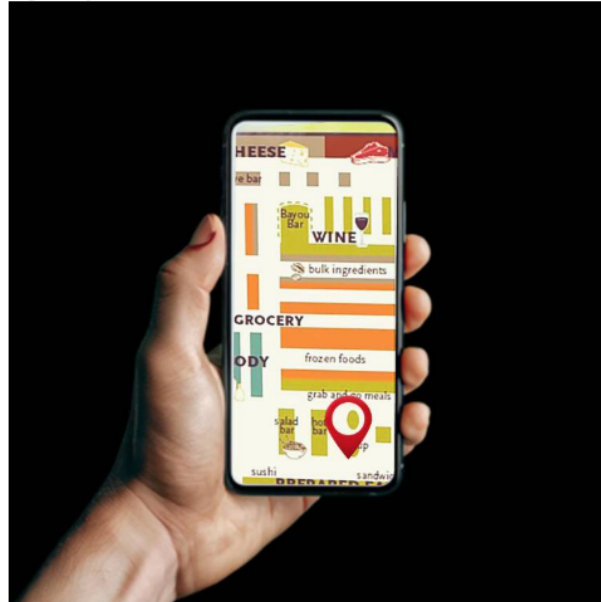
6.1.1. Sketch prototyping and testing with users

To evaluate with the users, the design team designed a low-fidelity prototype. It consisted of sketch-like images of each intervention, paired with a short description (Figure 49). This created an imagine-like prototype (Stickdorn et al. 2018), presenting all the interventions one by one. The images were made by editing photos. The images and descriptions were organised into a questionnaire to make it easy to review and answer questions for each part of the solution. The goal was to communicate the ideas for interventions to the target group and to evaluate how inclined they would be to use them if they existed. Moreover, participants were prompted to elaborate on their reasons for potentially using or avoiding each intervention, providing a more detailed understanding of their thought processes in response to several additional questions. The prototype was shared in 11 Facebook groups relevant to the target group, like groups for people with ADHD, autism, brain damage, stress, etc. It was also shared within the design team's network, and 233 responses were collected within 24 hours. When going through the results of the test and the comments on the respective Facebook posts distributing the prototype, it was clear that many of the respondents resonated with the project and values being involved in the process. Some wrote long comments explaining their needs when grocery shopping. While this could be due to a lack of clear communication of the test goal, it is also assessed as a testament to the cognitive challenges customers need to be heard. Like the person writing: *"I like shops where it is clearly marked what items are where."*

Of the 233 respondents, 215 reported experiencing cognitive challenges, 7 reported not being sure, and the last 10 answered that they do not experience cognitive challenges (See appendix J for a full report). Of those who reported not being sure or experiencing cognitive challenges, 188 reported having at least one diagnosis related to cognitive challenges, and 15 reported being in the process of getting a diagnosis. Out of the 188 having a diagnosis, 50% are neurodivergent (ADHD, autism, dyslexic or dyscalculic) (Figure 50). Of the other half, most are temporary conditions like stress, anxiety and migraine, while 7 % are permanently brain-damaged. 10 % choose 'other'. This group includes conditions like fibromyalgia, schizophrenia, OCD, etc. While the overall group of respondents has an overweight of neurodivergent respondents and a lack of representation of people with neurodegenerative

diseases like dementia, it overall represents the target group and matches the respondents from the explore phase.

Imagine there is a digital map of the store in the app.
The map shows both sections and subsections.
E.g. Dairy > Milk



Would you use the map?

Figure 49 screenshot from prototype

Among the ten participants who did not report experiencing cognitive challenges, six stated they would use the crowd counter if it existed. Four reported appreciating if the stores turned down sound and lighting, while three answered maybe appreciating it. This pattern can be recognised repeatedly throughout the interventions, suggesting that the interventions either have the potential to create value for those outside the target group or the respondents did not clearly understand the question of whether they experience cognitive challenges, even though the definition was presented with the question. We do know that most participants did not misunderstand it, as 215 reported experiencing cognitive challenges.

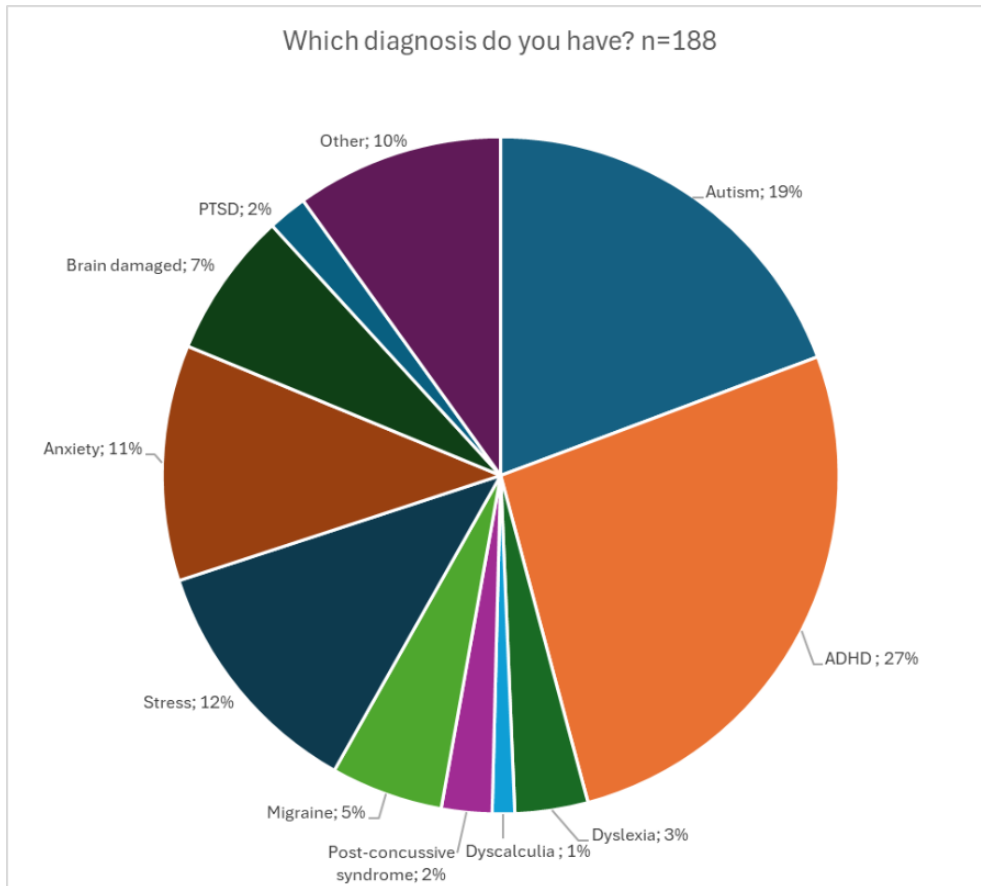


Figure 50 Survey results – distribution of the responses regarding diagnosis

Each intervention was presented with an illustration and explanation, and the respondent was asked whether they would use it if it was available. The results from all eight interventions were compared in a table (Figure 51). Four of the interventions got between 52-79% respondents reporting that they would use the intervention if it were available. The responses to the other four interventions were more evenly divided among respondents who wanted to use them, did not want to use them, or did not know whether they would use them. The question about having a basket with a paper map was framed differently, focusing on which basket they would use from the options provided. This meant the results were not comparable to those of the other interventions, so the row was left blank in the table. From the data gathered in the explore phase, several reported wanting a map of the store, leading to the idea of adding a map to the baskets, an analogue map on the navigation sign and a digital map in the app. After testing, the basket idea was removed from the catalogue of interventions to focus more on other interventions with greater potential.

Those who reported that they would use the digital app argued that it seemed easy and enabled them to prepare from home, noting that it was a discreet solution and would be especially useful when going to a store they were not familiar with. Those who didn't know whether they would use it said it would be useful in larger supermarkets, in stores they do not usually go to,

or when they were having trouble finding a specific item. Those reporting they do not use it say they do not need it, do not like apps, specifically because it is digital, or do not want to use their phone while shopping. While these are all valid reasons, the results still show potential for the digital map as a solution for those reporting that they need it.

Intervention	Yes	Maybe	No	N=
Crowd counter	52%	30%	18%	211
Guide for practical changes	79%	14%	7%	202
Navigation sign	60%	19%	21%	193
Color codes and numbers	60%	24%	16%	191
Digital map	34%	37%	29%	189
Info tablet	41%	26%	33%	184
Campaign - Show a friend the app	38%	24%	38%	97
Baskets with maps and sunflower print*				

Figure 51 table of users responses to whether they would appreciate each intervention

It might be possible that there is a difference between the respondent’s approach to answering a question like “Would you use it?” Some might choose ‘yes’ if they think they might use it one time, while others might choose ‘maybe’ or ‘no’, thinking that ‘one time’ does not count. This is a factor to consider.

As a result of the test, the campaign intervention was removed from the final solution. The idea came from the insight from the survey (see chapter 3.5) about a majority of cognitively challenged users not using the self-scan function in the app, but those who did reported very positive results with several of the issues also mentioned by the same respondents, like avoiding other customers, avoiding standing in line, etc. In the end, this direction still has potential, but needs substantial research, ideation and testing.

The idea that received the most positive response was the guide to help supermarkets adjust to a more sensory-friendly environment. As this testing was from the customer's point of view, they were presented with a description of the desired result of implementing the guide (Figure 52), as it would be irrelevant for them to comment on the guide itself. Out of 202 responses in total, 79% answered ‘yes’ to the question of whether they would appreciate the adjustments, 14% answered ‘no’ and 7% answered ‘maybe’ (Figure 51).

Imagine you enter a supermarket.
There are no music and the beeping sounds from the cashier are dimmed.
The lighting is a bit warmer, and less bright than usual.



Would you appreciate these adjustments?

- Yes
- No
- Maybe

Figure 52 screenshot of user testing of 'Guide for practical changes'

The overall responses to the interventions were very positive. The test ended with the question of whether the respondents had anything else to add, which mostly was positive feedback on the overall project, like the comment here:

These are really exciting thoughts you have made. Some of the initiatives will definitely help me in everyday life, as shopping requires a lot of energy and mental surplus.

While the aim was to evaluate with the users, designing the prototype also helped create a shared understanding and nurture the collaboration within the team (Stickdorn et al. 2018).

6.1.2. Testing with experts

Based on the user prototype, another version was created for a panel of four experts. This time, the questions were focused on assessing the potential value of the intervention. The experts are four people, recruited from the design team's network, all having knowledge about the target group, but representing different angles. The experts are:

- A. Ph.D. in landscape architecture using universal design. Experience with accessibility efforts at Folkemødet.
- B. Associate Professor in Media Technology. Ph.D. project about using VR for training social skills for autistic children
- C. Psychiatrist at a Copenhagen-based clinic, focused on young people and students. 6 years of experience.
- D. Autistic influencer and public speaker. Podcast host at Molis, a national psychiatric clinic focused on ADHD and autism.

The interventions were presented in the prototype and the experts rated on a scale from 1 to 5 on how helpful the intervention was perceived. 1 is not helpful at all and 5 is very helpful (See Appendix K). The results were collected in a table, to make scores easy to read and compare (Figure 53). The last three interventions, are marked with a minus, as Expert C did not rate them.

Intervention	Score Ex. A	Score Ex. B	Score Ex. C	Score Ex. D	Average score
Crowd counter	5	5	5	4	4,75
Guide for practical changes	4	4	3	5	4
Navigation sign	5	3	4	3	3,75
Color codes and numbers	5	2	-	3	3,33
Digital map	5	5	-	5	5
Info tablet	3	5	-	4	4

Figure 53 Table presenting expert evaluation scores by intervention

Along with the ratings, the experts were asked to comment on their assessments.

The **crowd counter** got a great average score of 4,75. One of the experts wrote:

I think it's good in relation to people who can be sensory sensitive. It can be a way to reduce stress and be beneficial in terms of completing daily chores and getting a success experience in this way.

The comments on the **guide for practical changes** verified a barrier uncovered when validating the ideas with Coop employees (see chapter 5.5) That while the dimmed lights and dimmed music might be inclusive towards customers with cognitive challenges, it can be exclusive towards others. One of the experts wrote:

It can potentially exclude visually impaired people who depend a lot on good lighting / good sound feedback in connection with self-check out.

In relation to the **navigation sign**, it was noted that it creates an option for help, not changing things for those who do not need it. One of the experts commented:

I don't know what information I need until I need that specific information, so if this was something that can be in several places or follow the user around the supermarket, it would be great.

The expert rating both the navigation sign and colour codes and numbers with a score of 3, wrote that if both are implemented, the value of the interventions increases. Another wrote in relation to the **colour codes and numbers**:

My experience is that it can be really good to have visible color codes. At first glance, I can only see advantages with such a solution for the specific target group.

Another commented only seeing potential with using colour codes for the dyslexic customers.

The **digital map** got top scores with an average score of 5 points. To this, one of the experts wrote:

It is extremely stressful to look for goods and that means that many autistic people in particular do not dare to shop in new places.

The **info tablet** got an average score of 4. The expert rating it with 3 points notes:

I can imagine that it can be a bit overwhelming to navigate and spend time on. (...)

The design team discussed this and noted that while the interface should be designed to be intuitive, there will always be the dilemma of more functions, presenting options for getting help on more parameters results in a more complex layout. This is something that should be tested further.

The main outcome of this testing is confirmation of the potential value of the interventions: crowd counter and the digital map. The navigation sign shows potential but needs further testing to zoom in on the specific content of the sign, as well as the info tablet.

While the colour codes and numbers got mixed feedback from the experts, 60% of the users reported thinking that it would help them navigate. It would require more testing to assess the full potential value of the intervention.

The guide for practical changes got an average score of 4, along with 79% of the users reporting to appreciate the potential adjustments. But with the Coop employees commenting on the issues with dimmed lighting in chapter 5.5., and the comments from the experts, this led to an insight into the complexity of lighting design. This finding was further confirmed when the design team had an informal chat with a lighting designer providing sources to support it. Dimming the light will possibly exclude other sensitive customers, like people who are visionary impaired. This led to the design team deciding to change the guide for practical changes from suggesting dimming the lighting to more focus on introducing sensory hours instead.

6.1.3. Functionality prototyping and testing with users

Because the solution consists of a set of interventions, there was no single prototype to test in the traditional sense. Instead, it was decided that the testing phase would focus on evaluating ideas that could be prototyped.

Three components were selected for testing: the crowd counter, info tablet, and navigation sign, due to their feasibility for prototyping. For the crowd counter, two interactive click models were prototyped, each presenting a different layout and feature set. The prototype of the information tablet also functioned as a working touchscreen, incorporating multiple features. For the in-store navigation signs, two design versions were created (Figure 54).

Prototypes of the digital screens were created using Figma Make, a prompting tool for building apps with AI. The screens were later adjusted based on the design team's understanding of user needs (Figure 55 and 56) The prototype of the navigation sign was prepared in Figma using existing examples as an inspiration. The goal was to confirm findings gathered during the first round of user research and to identify universal patterns in designing for people with cognitive challenges.

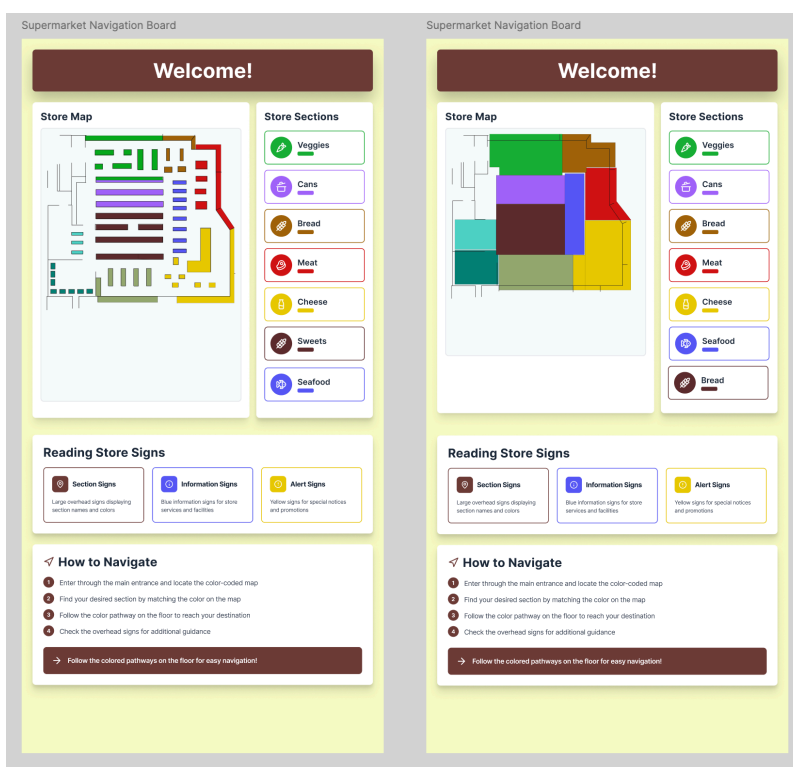


Figure 54 Two versions of the navigation sign prototypes

Testing involved five participants: three individuals with ADHD, one with both ADHD and dyslexia, and one with dyslexia. The testing consisted of the following steps:

1. Both variants of the crowd counter screen were presented to participants, who were first invited to examine and reflect on what they saw. A single task was then assigned: to plan a supermarket visit for the following day. A structured discussion followed, exploring whether participants would use such a tool and in what context. For

instance, planning ahead versus checking in real time. How the two screen designs compared to one another, were also discussed.

2. For the information tablet, one screen was tested, but with multiple distinct features available: a recipe creator, a product finder, a feedback function, and an option to send a map to a phone. Participants were asked to complete two tasks: finding information about a specific product and creating a recipe, while narrating their experience aloud as they interacted. A follow-up discussion addressed which features participants would use and how.
3. Two prototypes of the navigation sign were presented to participants, who were asked for their impressions and whether they would check the sign before entering the store.

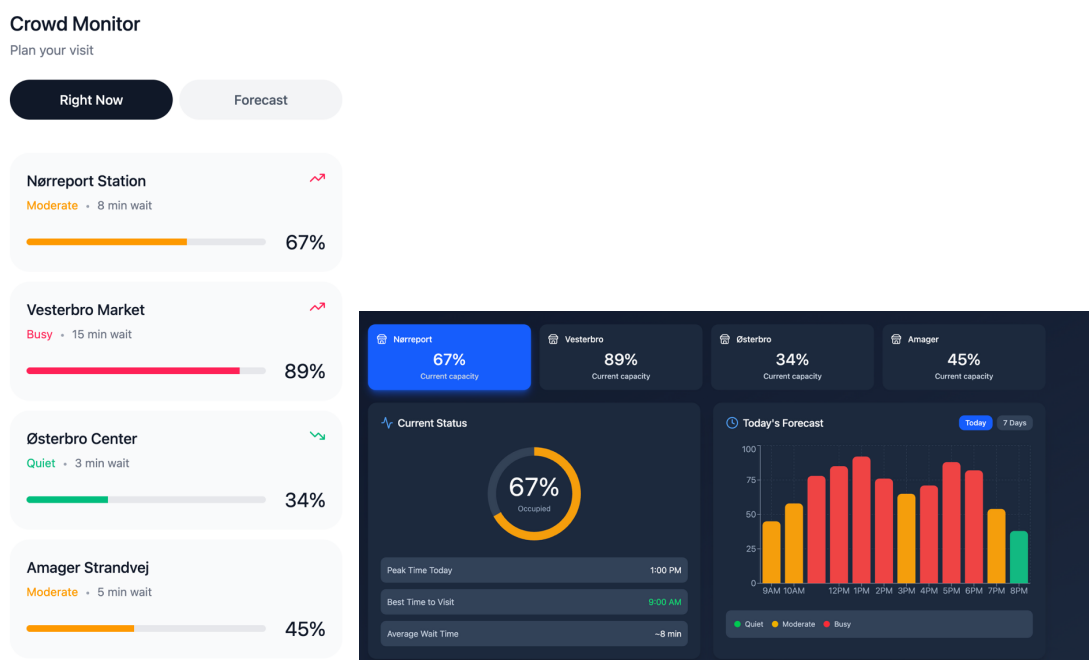


Figure 55 crowd counter prototypes

The overall response was positive. All interventions were perceived as needed and were considered likely to be used by participants in practice. Adjustments were identified primarily at the level of the user interface, but also functional aspects emerged:

- For the crowd counter, the forecast feature was of limited interest to most participants. This was linked to a tendency, common among people with ADHD, to not plan far into the future (Padín Concepción 2025). However, the participant with dyslexia indicated they would use the forecast feature for future shopping planning. Since it was not possible to test the feature with participants representing all cognitive profiles, no final decision was made to remove it.

- For the information tablet, the recipe creator attracted less interest than anticipated. This appeared to reflect existing habits: participants generally already knew what they intended to cook and a concern that long engagement with the screen would contribute to congestion in the store, this concern also appeared in the first testing. The feedback feature was met with notable distrust: participants doubted that any response they submitted would be genuinely taken into consideration. This connects to a gap identified in the Service inclusion bridge assessment (see chapter 3.7) , specifically within the ‘Enabling Opportunities’ pillar, which concerns empowering people through meaningful access to services and the ability to both receive and co-create them. The distrust participants expressed suggests that for many people with cognitive challenges, feedback mechanisms are not experienced as a genuine channel for co-creation.

Several recurring themes emerged across all tested interventions: Colour played a central role in faster information processing. Participants made spontaneous associations with traffic light systems in the context of the crowd counter, and several suggested colour-coding for the product finder in the tablet as a means of more quickly locating items. Participants consistently drew on analogies from familiar tools, most notably Google Maps for navigation. Google’s crowd indicators were also used as a point of reference for evaluating the prototypes. This reflects a broader finding: people with ADHD often develop deliberate personal strategies and established

behavioural schemas to manage their everyday lives (Meachon and Alpers 2023) This reflects a broader finding: people with ADHD often develop deliberate personal strategies and established

behavioural schemas to manage their everyday lives (Meachon and Alpers 2023). However, Meachon and Alper mention that coping mechanisms among adults with ADHD tend to differ from those used by individuals with other neurodevelopmental conditions, such as Developmental Coordination Disorder (DCD), also known as Dyspraxia. While environmental modifications are more common in DCD, behavioural adaptations are more prominent in ADHD, suggesting that individuals with ADHD actively engage in shaping their behaviour to manage their condition, which the testing activity confirmed. Design that aligns with existing schemas was perceived as significantly more accessible and trustworthy. Information overload was a key concern. Participants responded best to content that was visually concise and ideally anchored to something familiar or comparative allowing them to orient themselves quickly without having to process large volumes of new information at once.

One notable idea that emerged from testing was that the information tablet could serve as a way for people without the app to experience its features in store, making it easier to encourage customers to start using the app. This is a particularly meaningful outcome, as one of the challenges identified earlier in the project was that while the app addresses many of the

difficulties faced by people with cognitive challenges, it remained unclear how to encourage them to try it in the first place.

The testing confirmed the research directions from the earlier round. Participants responded well to interventions that reduced cognitive load, used familiar references, and applied colour as a visual cue. The distrust toward the feedback feature pointed to a broader systemic gap in how people with cognitive challenges are included in shaping the services they use. Testing with a wider range of cognitive profiles would have strengthened the conclusions.

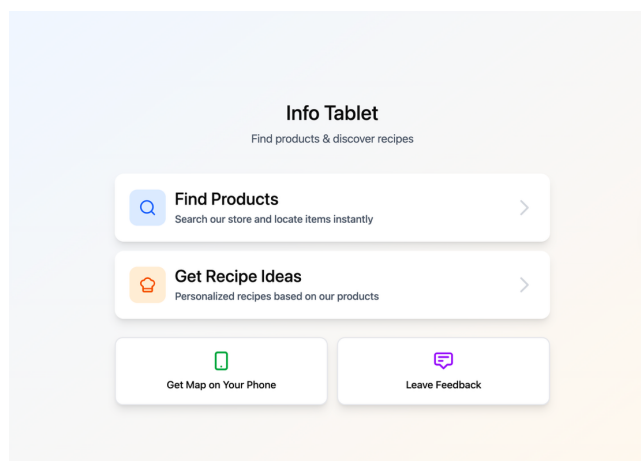


Figure 56 Main screen of the info tablet prototype

6.2. Recommendations for next steps

The interventions developed throughout this project demonstrate potential, but further work is needed before potential implementation. The most valuable next step would be testing the interventions directly within a supermarket environment, using physical navigation signs, a real store map, and a working version of the information tablet, ideally through a Wizard of Oz approach in which a facilitator operates the system from behind the scenes (Stickdorn et al. 2018). This would allow for a far more realistic evaluation of how the interventions perform under actual shopping conditions.

Testing should also be broadened to include a wider range of cognitive profiles, as well as store staff, whose engagement will be essential for the long-term success of any in-store implementation. Closer collaboration with the supermarket would further allow the guide for practical changes to be developed in detail, potentially in consultation with specialists such as sound and interior designers and translated into a concrete, step-by-step implementation plan. As digital prototypes develop, embedding them in the store for a pilot period would provide the most meaningful basis for evaluating impact.

The Service Inclusion Bridge requires further validation. Although a guide to applying the framework was developed as part of this project, neither the guide nor the framework has been tested beyond the project team. A valuable next step would be to evaluate whether the

framework is actionable for external stakeholders, for example, through a campaign approaching supermarket chains to participate in a pilot, testing the Bridge as a practical tool for assessing and improving inclusivity in their stores.

As the framework is validated, development of high-fidelity prototypes should follow. This would move the interventions: the navigation signs, store map, and information tablet beyond their current low-fidelity form into testable, realistic versions. Further research and development are also needed on the system that automatically updates the store map, reflecting real-time changes to product placement or store layout. This functionality is central to the reliability of the navigation intervention and should be developed and tested in a controlled setting before implementation.

Testing should include a wider range of cognitive profiles, as well as store staff, whose engagement will be essential for long-term implementation. Closer collaboration with a supermarket would allow the guide for practical changes to be developed in greater detail, potentially in consultation with specialists such as sound and interior designers, and translated into a concrete, step-by-step implementation plan. As digital prototypes develop, embedding them in a store for a pilot period would provide the most meaningful basis for evaluating impact. The exact implementation plan will naturally vary depending on the store, available staff, and existing technology infrastructure, yet every step taken moves a store closer to being more inclusive.

6.3. Summary of the catalyze phase

The catalyze phase focused on validating and developing the portfolio of interventions. Through three rounds of prototyping and testing, participants recognised the need for a more inclusive supermarket experience and responded positively to the suggested interventions. Key insights around colour, familiarity, cognitive load, and trust shaped the direction of the final design. Expert input was particularly valuable in refining scope feedback on lighting, which revealed that store-wide changes are not easily implemented, which led to the decision to limit light adjustments to designated sensory hours. Concerns raised around the information tablet including hygiene, the risk of generating crowding around the device, and mistrust in the feedback function, that prompted deeper reconsideration of this intervention and strengthened the need for continued prototyping and testing. Recommendations for next steps emphasise the importance of contextual testing, broader participant recruitment, and closer collaboration with supermarkets to move toward real-world implementation.

7. Discussion

In this thesis, the inclusivity of customers with cognitive challenges in Coop supermarkets has been assessed using the four pillars of the service inclusion framework. Furthermore, the framework has been further developed, and a portfolio of interventions to make the supermarket experience more inclusive has been designed and tested. In this chapter, the results will be interpreted. The implications and limitations of the research will be discussed, and recommendations for future research will be suggested.

7.1. The goals and results of the project

The research question for this project was: How can designing for service inclusion support customers with cognitive challenges in Coop supermarkets? To answer this question, several activities were required, including exploring how to design for service inclusion in practice, what the needs of customers with cognitive challenges are in the Coop supermarket context, and testing how these customers potentially felt supported by a proposed design, based on the 'service inclusion' theory.

The goals of the project were (1) to develop a tool to assess if a service is inclusive, (2) to assess the inclusivity of the current supermarket service, and (3) to design a more inclusive service.

1. Based on the Service Inclusion framework (Chapter 2.1.5), the 'Service Inclusion Bridge' was developed. It is a tool that aims to help designers apply the Service Inclusion theory. Where the original framework offered definitions and descriptions of the four pillars, representing four aspects of what makes a service truly inclusive, it did not offer a clear explanation of how to apply it. With the Service Inclusion Bridge, a step-by-step guide for applying the theory is proposed. A paper version of the bridge, including 'bricks', is included to make the tool tangible. With this tool, the project's first goal is met.
2. The Service Inclusion Bridge was used to assess how inclusive the current service at Coop supermarkets is for customers with cognitive challenges. The data collected during the explore phase was used to assess whether each criterion, illustrated as a brick, was met. The result was that there were criteria in all pillars that were not fulfilled, but the pillars 'Enabling Opportunities' and 'Fostering Happiness' were especially lacking in inclusive-fostering aspects. The conclusion was that while some functional aspects are in place, the service does not support participation and fails to create a positive, inclusive experience. This means that it is exclusive for customers with cognitive challenges. Through this process, the project's second goal was fulfilled.

3. As a solution, a portfolio of six interventions for a more inclusive service was developed. The interventions were based partly on ideas directly from the target group and partly on ideation methods used within the design team. All interventions were prototyped and tested at least once, both with potential users and experts. While some challenges were highlighted, the overall response was highly positive, and the project's third goal has been fulfilled.

The portfolio of interventions includes:

- Crowd counter
- Navigation sign
- Colour codes and numbers
- Digital map
- Info tablet
- Guide for practical changes

The ideation leading to this solution was based on research from the explore phase, revealing that customers with cognitive challenges face several issues when grocery shopping. Most evident were the issues with sensory overload and the need for better navigation. The navigation issue further worsened the sensory overload. Sensory overload occurs when customers are overwhelmed by sensory input during grocery shopping. Many users reported that other customers were contributing factors, making them increasingly stressed and anxious, further worsening the risk of sensory overload. The need for better navigation was also expressed several times. This includes a logical store layout and more and better signs. Visual aids, such as color codes, icons, and maps, were mentioned as ways to improve navigation.

Later in the process, the systemic complexity became apparent, highlighting the contrast with the customers' rather practical solutions. This focus was included in the ideation phase. While ideas for addressing the systemic root cause emerged, the solutions aimed at tackling the issues highlighted by users were prioritised in the end.

7.2. Interpretation and limitations of results

Returning to the research question: How can designing for service inclusion support customers with cognitive challenges in Coop supermarkets? Throughout the project and the process to reach the goals, many decisions were made to ensure the project's progress. These decisions shape the outcome and always have the potential to change the result.

7.2.1. Development and use of the Service Inclusion Bridge

When developing the Service Inclusion Bridge, a set of decisions was taken, based on the designer's experience with this type of tool and knowledge of user-friendly design. In a project focusing mainly on developing this tool, a focused research and potential case study on how designers use the 'service inclusion' theory, and how other tools for applying theory to real-world services could be beneficial. It would allow the designers to benefit from other researchers' and designers' experiences and best practices. Such research would surely have changed the outcome. However, it is not to say whether the result would have been better. Working with inclusion is not just about technical specifications; it calls for an interpretive social approach. Inclusion can be viewed as a socio-cultural phenomenon (Sudakova and Astafyeva 2019), shaped by user experiences and by interpretations of accessibility. Consequently, assessing whether a service is inclusive or developing a tool to do so will never be an absolute objective. It is affected by the researchers' methods, the theoretical lenses used, and the experiences of the users partaking in a co-design process. In this project, the process of interpreting the pillars, to unfold the aspects of social inclusion and place it in a supermarket context, was based on the researchers' knowledge of the area, affected by their choice of methods and theory. Likewise, the assessment of the pillars is based on interviews, surveys, and service safari data, which, in turn, is affected by the specific users participating and sharing their experiences and needs. One way to make the assessments of the criteria less dependent on interpretation would be to establish specific, defined standards, as used in the ISO system. Such a system will be based on measurable standards, which, when defined and selected, will always rule out other options. All decisions have consequences, and when one set precise requirements, they remove the opportunity for people to choose and adapt as needed. These requirements thus ensure a standardised bottom line that takes into account certain people, but even here, there is a risk of unseen conditions and needs from other target groups.

Additionally, the number of criteria not assessed in the service inclusion bridge leaves the full result of the assessment unknown. On the other hand, Fisk et al. used the bridge metaphor because if one pillar of the bridge is not fully stabilised, the bridge collapses (Fisk et al. 2018). This means that if one aspect of what defines inclusion is missing, the service is not inclusive. Thus, they do not see it as a scale of inclusiveness but rather as an either/or matter. In this case, it means that even if not all pillar criteria were assessed, it is safe to conclude that the service is not inclusive as soon as we uncover one unfulfilled criterion.

7.2.2. Developing the portfolio of interventions

When designing the solution, several discussions were important, especially when opposing needs arose, such as some users requesting more signs, maps, colour codes, numbers, etc.

While other users said it is overwhelming as it is, we should not add more. This last perspective called for interpretation, as an overwhelmed person might resist change, since it naturally requires mental capacity, even if the result is better for them in the long term (Samuelson and Zeckhauser 1988). This perspective made it clear to the designers that solutions to the navigation issue should tap into users' intuition rather than require mental processing. This also called for the addition of the 'Navigation sign' as it acknowledged that not everyone interprets their environments in the same way. While a designer might feel they have done something logical, it might not be logical for everyone. Hence, there is a need for an additional level of guidance for those who need it.

While the target group of this project is those sharing the same barriers, as customers experiencing cognitive challenges, the individuals represented in the primary data collected for this project do not represent all types of customers experiencing cognitive challenges. The respondents in the survey and prototype, the interviewees and observation subjects were mostly representing the neurodiverse individuals and those with the most common mental conditions, such as stress and anxiety. A few other conditions were represented, including a few with brain damage and migraine. While the design team succeeded in reaching out to and engaging these potential users in the project, no potential users with neurodegenerative diseases were represented. This group covers conditions such as Alzheimer's, Parkinson's, Huntington's disease, and Lewy body dementia. While the different sub-groups covered in the 'cognitive challenged' group were not included in a manner that represented the actual occurrence of the conditions, the data is assessed to be representative, as people having these conditions share the same barriers and therefore should benefit from the same type of solutions, according to the inclusive design theory.

The issue of the dimmed light was also a matter of balancing the needs of customers experiencing sensory overload, partly exacerbated by harsh lighting, with those of customers with visual impairments. Since testing the dimming of the light, as part of the 'Guide for practical changes', indicated that customers with cognitive challenges would greatly appreciate it, it was decided to change this recommendation to apply only during sensory hour, to avoid excluding customers with visual impairments.

Lastly, it is important to note that for the supermarket services to become more inclusive, the suggested interventions should be implemented. While the chief of communication and a store manager from Coop were presented with the interventions, no formal presentation of the project has been made, making it uncertain how inclined Coop would be to implement these solutions.

7.3. Comparison with existing literature

Testing the solution showed that most potential users appreciated the proposed interventions, regardless of whether their conditions were permanent, temporary, or whether they reported not experiencing cognitive challenges. This finding aligns with the Inclusive Design theory, suggesting that by addressing issues faced by those who permanently experience barriers, the design can be extended to benefit everyone who experiences those barriers.

Consistent with the studies identified in the literature review, the conclusion of the explore chapter showed that customers with cognitive challenges are being excluded from supermarket services. While this study focuses on Coop supermarkets, the barriers and needs expressed by the target group apply to all supermarkets. The main barriers, a lack of clear navigation, a lack of an overview of the store, and sensory overload, are relevant across all supermarket brands.

7.4. Unexpected finding about customers' app-avoidance

Research on users' habits, barriers, and needs showed a trend of customers avoiding technology solutions during grocery shopping. 42% of the survey respondents preferred the traditional cashier to the more technological options, and many preferred the self-checkout over the self-scan app. 70% Rarely or never uses the self-scan app. This finding was unexpected as the designers assumed a high level of interest in digital solutions in general. This assumption might be based on the increasing application of technology-based solutions across all areas of society, suggesting that this is what the users want. Reflecting on this, it is not surprising that what is being designed does not always match what is needed, as other aspects, such as economy or convenience, are sometimes prioritised over user needs. Reminding us of the importance of research and the potential of involving users in the design process, even when working with a service that also caters to minorities or other vulnerable users. When sharing this result with Expert B, who has a background in technology applications for autistic users, he was equally surprised.

7.5. Implications of the project

This thesis answers the call by Fisk et al. to design for service inclusion (Fisk et al. 2018). As the literature review revealed a limited number of practical applications of the service inclusion framework, this thesis further contributes by giving an example of using the theory in practice. Furthermore, the development of the Service Inclusion Bridge helps future designers assess whether a service is inclusive, regardless of which target group the tool's user is working with. This thesis also proposes a portfolio of interventions to make the supermarket experience more inclusive. The interventions are designed based on the needs of cognitively challenged customers, and with realistic implementation in mind. As suggested by Dodds and Palakshappa (2022), more research is necessary to create fairer services and better include

disabled customers. Especially for customers with mental disabilities. With this thesis, a contribution has been made to this area, and while the research focuses on supermarkets, many findings are valuable across services.

The first dialogue with Coop revealed that they have a whole department focused on workforce inclusion, while the designers were unable to find even one employee focused on customer inclusion, despite several attempts across several channels. Throughout this project, the designers have shared their enthusiasm for the topic and interesting findings with relevant stakeholders, engaging in 'leadership and storytelling' as suggested by the Systemic Design Framework. When calling Coop Denmark to enquire about an interview on practical solutions, the designers were met with empathy and surprise, suggesting an understanding of the relevance, but also that the inclusion of customers is not something usually discussed. Throughout the process, the designers have raised the topic across several layers of the organisation, hoping it will sow seeds of thought that could potentially grow into more.

7.6. Continuing the journey

In respect of the hundreds of people with cognitive challenges who have shared their experiences, needs and ideas throughout this project, it is important to reflect on how to 'Continue the Journey' once this project has ended. This reflection is also an important part of the Systemic Design Framework. With the development of the Service Inclusion Bridge and the work on this project, the designers hope to inspire others to design for more service inclusion in the future. The designers are motivated to share their experiences from this project when relevant and support each other and potential other designers or researchers, should they enquire about the project.

Based on the findings and limitations of this project, the following areas are recommended for future research:

- How to motivate customers with cognitive challenges to use the self-scan app option
- What are the barriers for supermarkets/stores to work with inclusion?
- Research and further development of the service inclusion bridge
- Testing the interventions in a supermarket after implementation
- Testing the prototypes of the interventions with users with neurodegenerative diseases or brain damage

7.7. Summary of the discussion

This thesis assessed the inclusivity of customers with cognitive challenges in Coop supermarkets using the four pillars of the service inclusion framework, successfully developing the 'Service Inclusion Bridge' tool to translate theory into practice. The assessment revealed that while functional aspects exist, the current service fails to support participation, particularly lacking in 'Enabling Opportunities' and 'Fostering Happiness,' thereby remaining exclusive. To address this, a portfolio of six interventions, including navigation signs and crowd counters, was designed and tested, receiving highly positive responses. The research highlights that sensory overload and poor navigation are common barriers, yet current solutions are often not inclusive to the cognitively challenged user's needs. Although limitations exist regarding the representation of neurodegenerative diseases and the uncertainty of implementation by Coop, the study significantly advances inclusive design by proving that addressing permanent barriers benefits everyone. This thesis exposes a critical gap in organisational focus on customer inclusion and provides a tangible method for designers to assess and improve service inclusion. Ultimately, this work moves beyond abstract definitions to offer a portfolio of interventions aiming at transforming supermarket experiences, ensuring that service design actively supports dignity and participation rather than exclusion. By grounding solutions on user needs and systemic analysis, the research establishes a new standard for how retail environments can accommodate cognitive diversity. This project not only fulfills its immediate goals but also sows essential seeds for future inquiry into overcoming institutional barriers to inclusion. The significance of this research lies in its ability to convert theoretical frameworks into actionable strategies that prioritise diverse human needs. In essence, this thesis proves that true service inclusion requires a deliberate shift from assuming user needs to actively designing for them, ensuring that supermarkets become spaces where every customer can navigate without suffering.

8. Conclusion

The inclusion of people with cognitive challenges is failing in supermarket experiences due to a lack of consideration for this user group's perspective. In this thesis, inclusivity within the service inclusion framework has been analysed, assessed, and further adapted. The research question: How can designing for service inclusion support customers with cognitive challenges in Coop supermarkets? has been addressed through an application to supermarket experiences, specifically connected to Coop Denmark. The thesis works with the category of service design for inclusion and Inclusive design for service design, as it integrates people with cognitive challenges into the design process, tackling the social issue of challenges in supermarket experiences. In addition, it also contributes to developing a service with inclusive features and values to improve the usability and satisfaction of people with cognitive challenges. The framework provided a solid foundation for applying inclusivity practices through the service inclusion bridge, but it has its own limitations. Through the Service Inclusion Bridge, the supermarket experience was identified as exclusive towards people with cognitive challenges. It was also implemented and evaluated, leading to an improved version. The design conducted its own research using surveys and interviews. They identified numerous negative feelings about navigation and sensory overload as the primary challenges, highlighting their interconnected nature within the target group.

Using several service design methods, such as affinity mapping, clustering, and workshopping, testing sessions with users and experts have been conducted, resulting in a portfolio of interventions to be implemented in the physical supermarket. The portfolio of interventions is a collection of smaller solutions that support people with cognitive challenges in their grocery shopping experience. The interventions are Crowd counter, Navigation sign, Colour codes and numbers, Digital map, Info tablet, and a Guide for practical changes. The complexity of the design interventions aligns with the principle of inclusive design, connecting multiple solutions for several people with cognitive challenges. For future work on this project, implementing these interventions is key to linking its results to the landscape of Coop. Further testing in the physical space is a vital step in the implementation, as it involves identifying physical barriers and challenges. Another aspect is to investigate why cognitively challenged people do not use the digital solutions Coop already offers and to promote them further. Further research is needed on inclusion in public spaces. Another aspect: since the designers have been met with openness, empathy, and excitement about this research, it is also important to create a more inclusive grocery shopping experience for people with cognitive challenges that can benefit not only this group but all people in society. This inclusive design research not only contributes to an aspect of society that everyone interacts with, but also to the fact that this realm has not been innovative in terms of inclusivity and accessibility. Furthermore, it is everyone's right to access a grocery shopping experience that does not harm them further but may support them in their circumstances and conditions.

9. References

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10. Appendix

10.1. Table of appendix

10.2. Declaration of AI use.

- All the text was written first, and then Grammarly was used to edit grammar and phrasing
- The info tablet prototype was made with Figma Make
- Prototype images were made with AI help in Photoshop
- AI was used for editing images used for prototyping with users and experts.
- AI was used for input on structure in a few chapters

10.3. Official learning goals

The official learning objectives for the Service Systems Design thesis at AAU is:

Knowledge

Students who complete the module will obtain:

- knowledge about the appropriate methodological approaches to specific study areas
- knowledge about design theories and methods that focus on the design of advanced and complex product-service systems
- knowledge about the relevant literature in the Service Design field

With respect to Problem-Based Learning students will be able to:

- account for the scientific foundation, and scientific problem areas
- describe the state of the art of relevant research

Skills

Students who complete the module will be able to:

- work independently, to identify major problem areas and adequately address problems and opportunities
- analyse, design and represent innovative solutions
- evaluate and address major organisational and business issues emerging in the design of a product-service system

With respect to Problem-Based Learning students will be able to:

- master the scientific methods and general skills associated with the problem area
- produce a project report according to norms of the area, apply correct terminology, document extensive command over relevant literature, communicate and discuss the research-based foundation, problem and results of the project orally, graphically and in writing in a coherent manner
- critically evaluate the results of the project in relation to relevant literature and established scientific methods and models, evaluate and discuss the project's problem area in a relevant scientific context
- evaluate and discuss the project's potential for further development

Competences

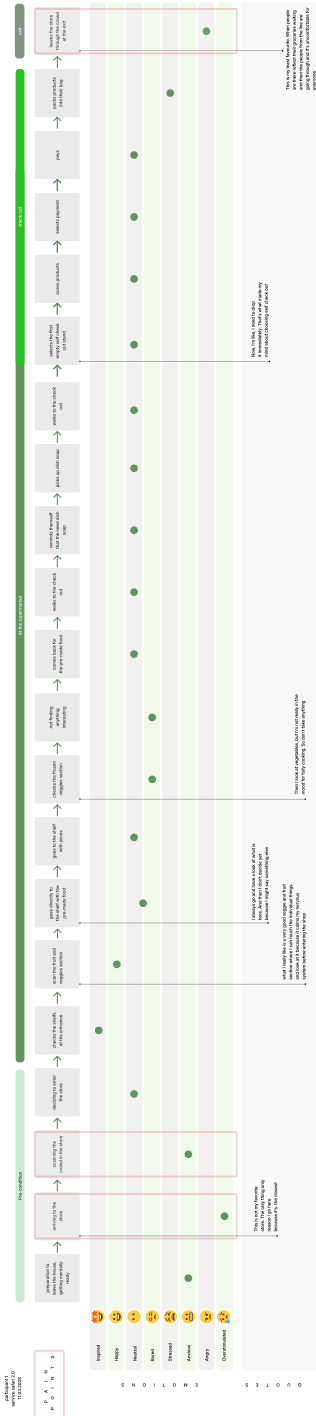
Students who complete the module will be able to:

- master design and development work in situations that are complex, unpredictable and require new solutions
- independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility

With respect to Problem-Based Learning students will be able to:

- participate in, and independently carry out, technological development and research, and apply scientific methods in solving complex problems
- plan, execute and manage complex research and/or development tasks, and assume a professional responsibility for independently carrying out, potentially cross-disciplinary, collaborations
- independently assume responsibility for own scientific development

Appendix B – Journey Map – based on service safari

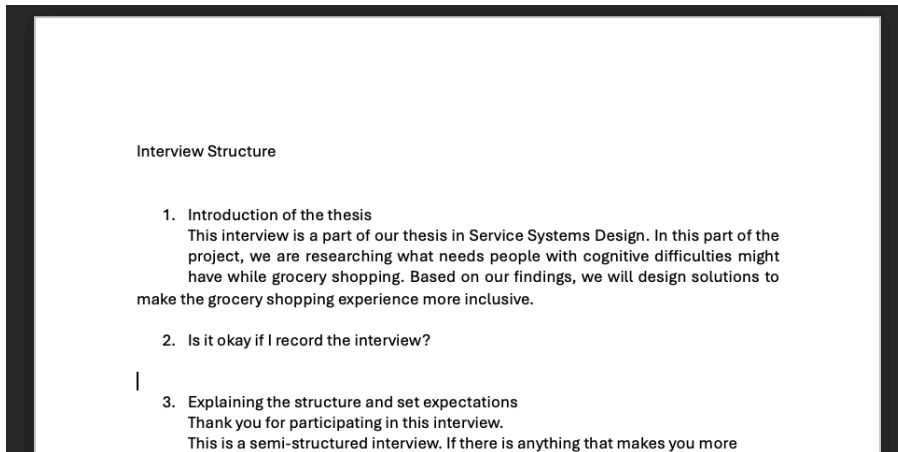


[link to the digital version](#)

Appendix C – Interviews

Link to whole file: [Digital Exam Attachments](#)

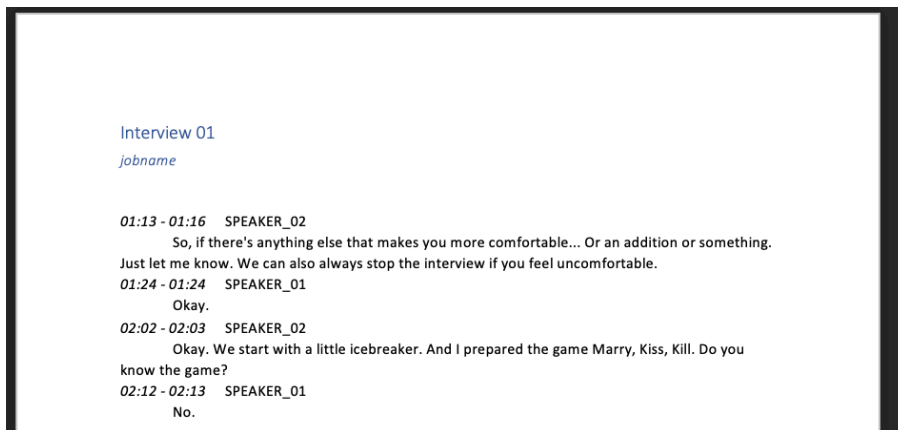
Interview structure + Questions



Link is here:

<https://aadk.sharepoint.com/:w:/s/ThesisGroupofExcellence/IQCksYZUZW1RR4IToMeU-deUAXT7E4Um-gavASBkNanujk?e=enSbx>

Transcripts



The transcripts are linked in Digital Exam and under this link here:

<https://aadk.sharepoint.com/:w:/s/ThesisGroupofExcellence/IQBq3abfbTFUSpbhC1WsQcfVAX94a9nTwfHz5V0bjgCpfLs?e=A2g4u2>

NVivo Analytics

Coding overview on entire transcript collection. 10 Interview transcripts with codes.

Type	Name	Memo Link	Codes	References	Created on	Created by	Modified on	Modified by
Document	Interview 01		51	112	16. Mar 2026 at 19:57:46	SK	16. Mar 2026 at 19:57:46	SK
Document	Interview 02		50	101	16. Mar 2026 at 19:57:46	SK	16. Mar 2026 at 19:57:46	SK
Document	Interview 03		60	125	16. Mar 2026 at 19:57:46	SK	16. Mar 2026 at 19:57:46	SK

Link here: <https://aadk.sharepoint.com/:w:/s/ThesisGroupofExcellence/IQD1XgJbXD-TazP9Wqv1d75AdDj5ddvBmJvJlf8sfH8jA?e=bbZ7NE>

Codebook overview

Interview Analytics

Codes\Version 2

Name	Sources	References
App	0	0
barcodes connected to an app	1	1
digital app google keep notes	1	1
has used apps, but does not remember the name	1	1
Using grocery shopping apps because of discounts	1	1
very good experience with Nemly .	1	1
taste preference for substitute in the Nemly app	1	1

Link here:

<https://aadk.sharepoint.com/:w:/s/ThesisGroupofExcellence/IQCZzwxY3hcSYB09j7UNac9AZGWDkRzYzEFR9A0izKP0HM?e=4EraDj>

Specific Code overview shown in the report

App

Codes	Number of coding references	Aggregate number of coding references	Number of items coded	Aggregate number of items coded
Nodes\\Version 2\\App	0	12	0	9
Nodes\\Version 2\\App\\barcodes connected to an app	1	1	1	1
Nodes\\Version 2\\App\\digital app google keep notes	1	5	1	3
Nodes\\Version 2\\App\\digital app google keep notes\\has used apps, but does not remember the name	1	1	1	1
Nodes\\Version 2\\App\\digital app google keep notes\\Using grocery shopping apps because of discounts	1	1	1	1
Nodes\\Version 2\\App\\digital app google keep notes\\very good experience with <u>Nemly</u>	1	2	1	1
Nodes\\Version 2\\App\\digital app google keep notes\\very good experience with <u>Nemly</u> \\taste preference for substitute in the <u>nemly</u> app	1	1	1	1
Nodes\\Version 2\\App\\not using any apps	1	6	1	6
Nodes\\Version 2\\App\\not using any apps\\Bad experience with the coop app	1	1	1	1
Nodes\\Version 2\\App\\not using any apps\\Have not tired Apps	1	1	1	1
Nodes\\Version 2\\App\\not using any apps\\No ap use due to <u>overdigitalisation</u>	1	1	1	1
Nodes\\Version 2\\App\\not using any apps\\no deleting option in the app for lists	1	1	1	1
Nodes\\Version 2\\App\\not using any apps\\not using apps besides the <u>self check</u> out for a while but it does not support	1	1	1	1

Feelings

Codes	Number of coding references	Aggregate number of coding references	Number of items coded	Aggregate number of items coded
Nodes\\Version 2\\Feelings\\Feelings going to the store	0	16	0	10
Nodes\\Version 2\\Feelings\\Feelings going to the store\\Does not like to go to the store	6	6	4	4
Nodes\\Version 2\\Feelings\\Feelings going to the store\\Enjoys going to the store	8	8	4	4
Nodes\\Version 2\\Feelings\\Feelings going to the store\\Neutral feelings with grocery shopping	2	2	2	2

Needs and Adjustments

Link to the whole document:

<https://aadk.sharepoint.com/:w:/s/ThesisGroupofExcellence/IQDUm0a4EtyR5mrl5o4HLVMARY9z-tTu0q9Rh0quBJ2mHM?e=4Dm92U>

Pain points and Challenges

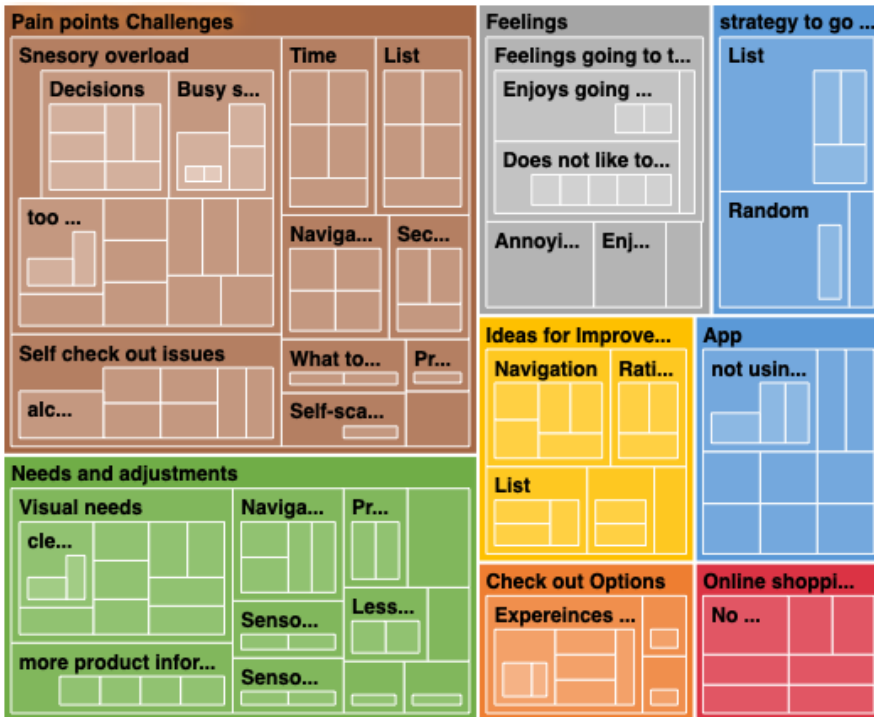
Codes	Number of coding references	Aggregate number of coding references	Number of items coded	Aggregate number of items coded
Nodes\Version 2\Pain points Challenges	0	61	0	10
Nodes\Version 2\Pain points Challenges>List	0	5	0	5
Nodes\Version 2\Pain points Challenges>ListA list does not help to remember the items	1	1	1	1
Nodes\Version 2\Pain points Challenges>ListA lot if planning involved otherwise you spent too much money	1	1	1	1
Nodes\Version 2\Pain points Challenges>ListBuying more without a list	1	1	1	1
Nodes\Version 2\Pain points Challenges>Listforgetting one thing even though it is on the list	1	1	1	1

Link to the whole document:

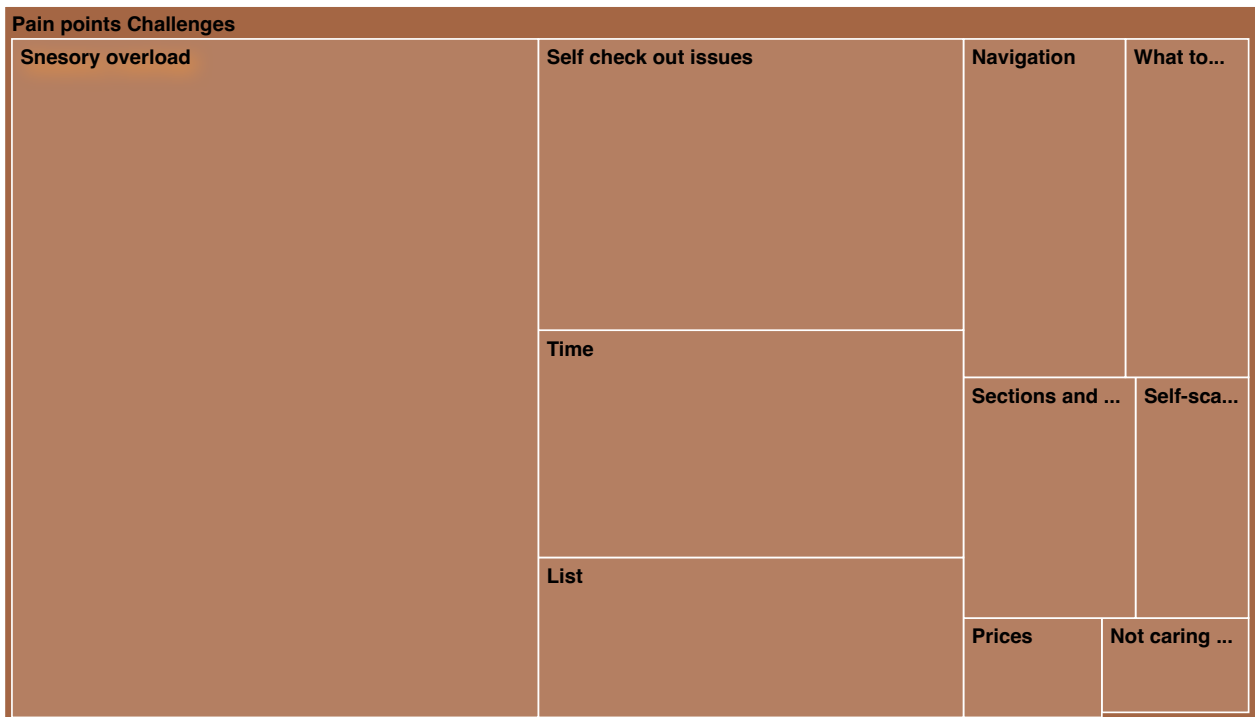
https://aadk.sharepoint.com/:w:/s/ThesisGroupofExcellence/IQBkO1cbloQfR4YBOU5NzSNrAUpxeuvq5qpJ_Gkxa6FzMsU?e=z1xbjC

Codes	Number of coding references	Aggregate number of coding references	Number of items coded	Aggregate number of items coded
Nodes\Version 2\Needs and adjustments	0	38	0	11
Nodes\Version 2\Needs and adjustments\Less Variety	0	2	0	1
Nodes\Version 2\Needs and adjustments\Less VarietyA lot of options is fun because of more variety	1	1	1	1
Nodes\Version 2\Needs and adjustments\Less Variety\less variety lesser labels to read less time spent in the store	1	1	1	1

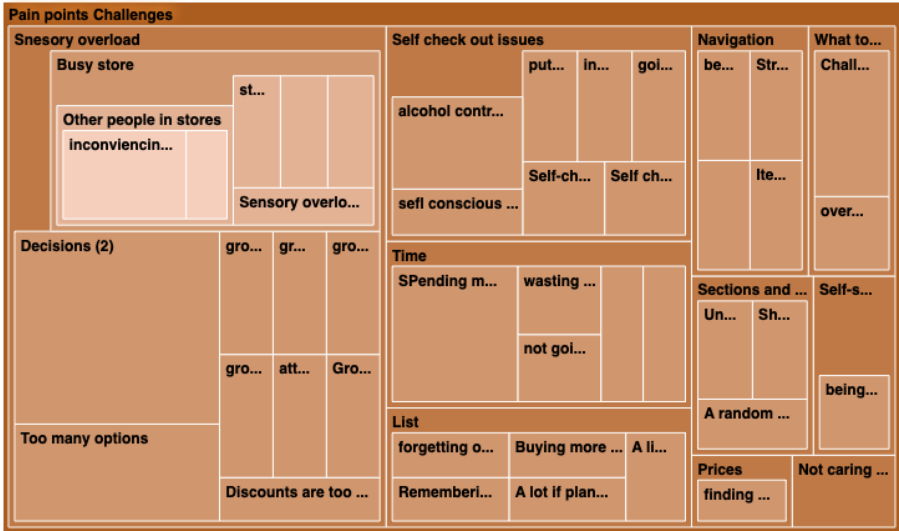
Graphs:



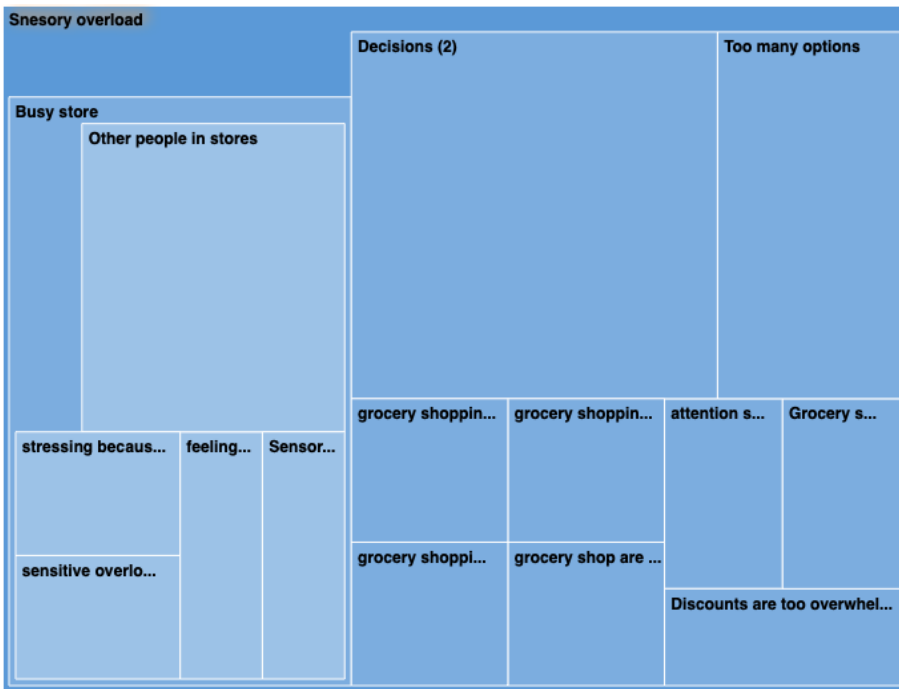
Hierarchical Overview on all code



Hierarchical Overview on the Code Pain points and Challenges with its subcategories: Sensory Overload; Self check out issues; Time; List; Navigation; What to eat,cook; Sections and Shelves; Self-scanning and surveillance; Prices; Not caring about quality of products.



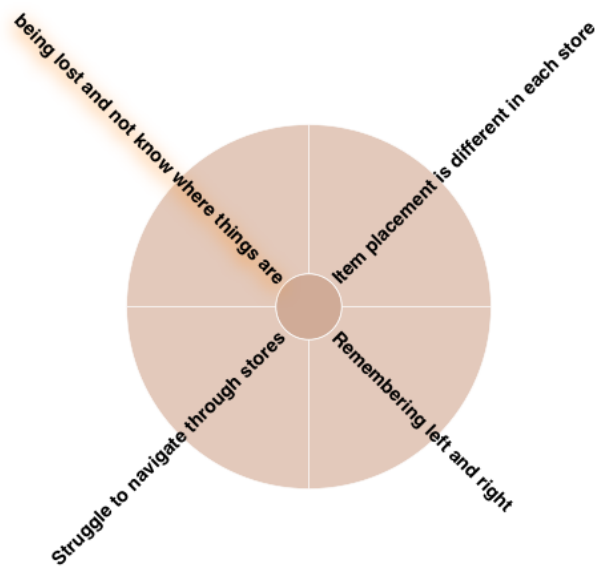
Hierarchal Overview on pain points and challenges with detailed sections, detailed list of subcodes is in doc. Code overview Pain points and challenges



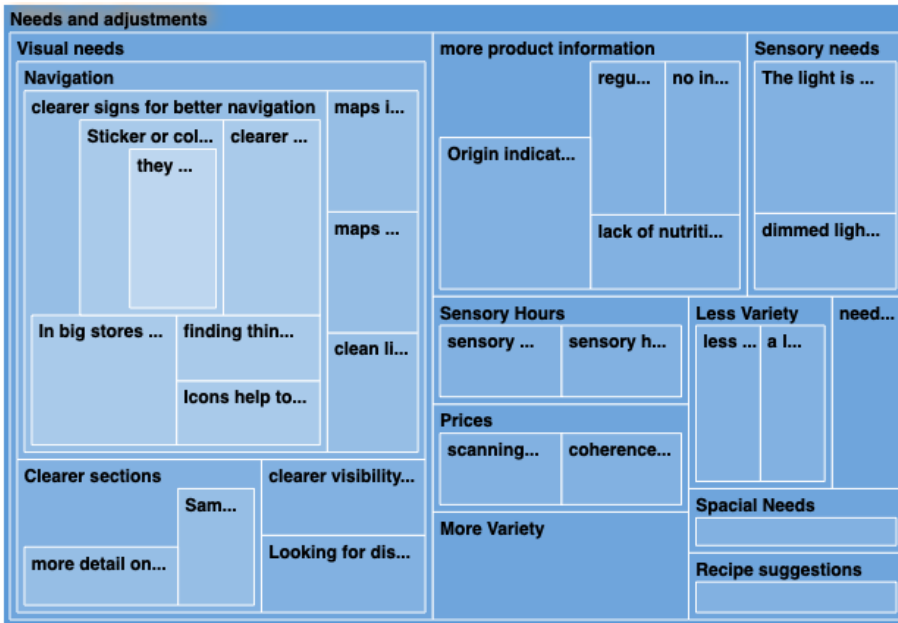
Hierarchal Overview Sensory overload with subcodes, detailed subcode list is in Doc: Code overview, Pain points and challenges

Self check out issues	sefl conscious and anxious because ...	going with the fl...	Self-checkout d...
alcohol control at self check out	putting more thought into how to pack...		
	inconvenience with weight at the self-...	Self checkout is frustrating because th...	

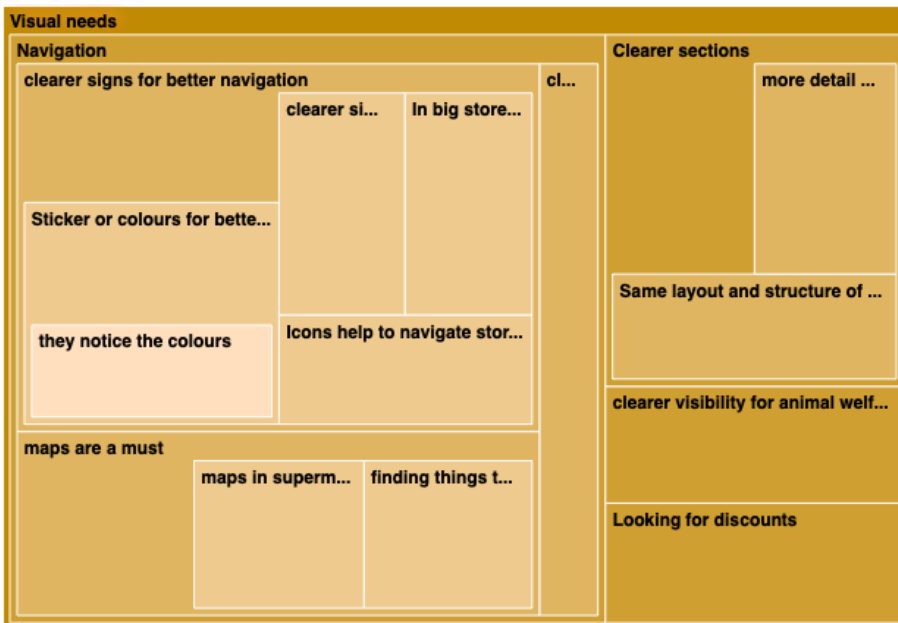
Hierarchal Overview on Self-Checkout issues



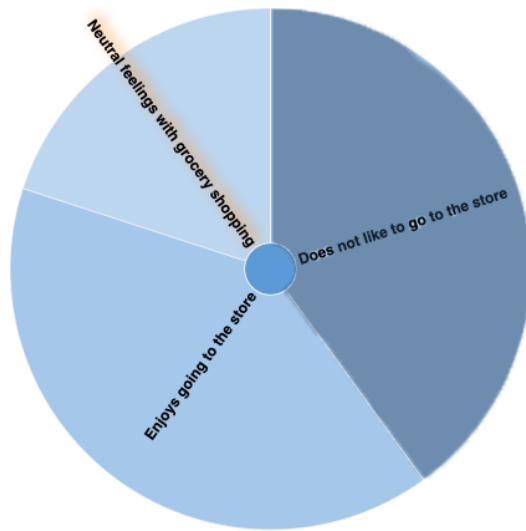
Pie chart of navigation pain points and struggles in supermarkets



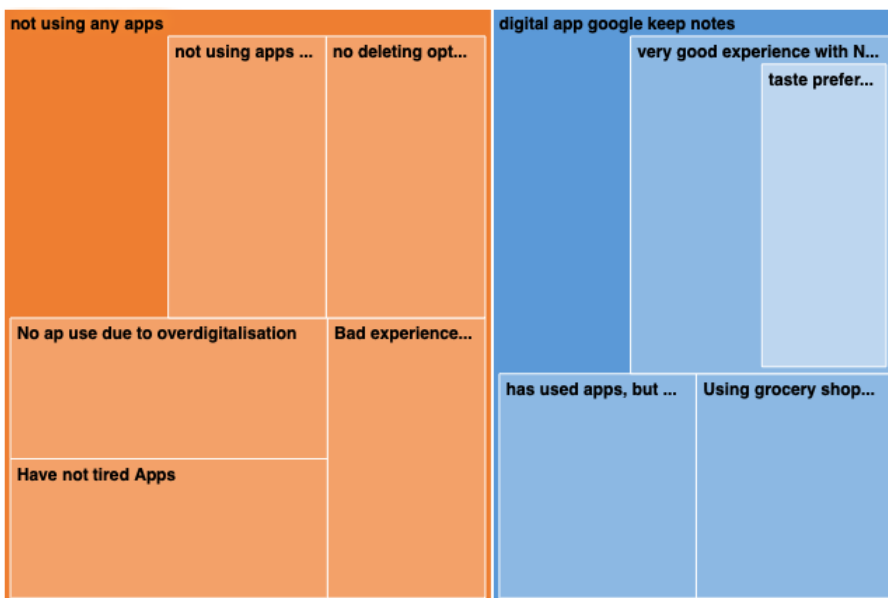
Hierarchal Overview of the Code Needs and Adjustment, detailed sub code list is in doc: Code overview needs and adjustments



Hierarchal Overview on the code Visual Needs, detailed display of subcodes is in Doc Code Overview Pain points

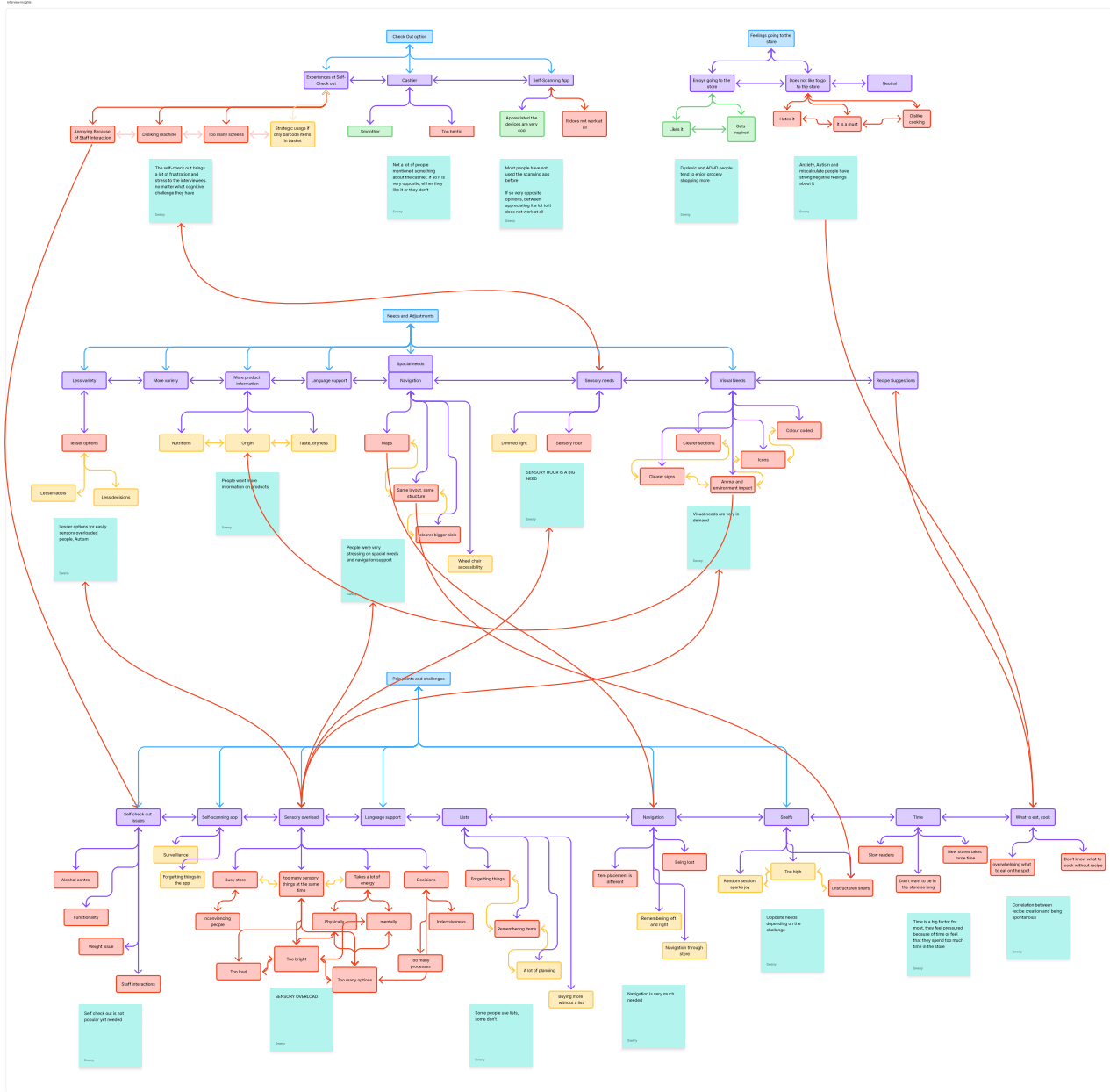


Pie chart of the code Feelings with its subcodes,



Hierarchal Overview on code App and its usage details displays in doc Code overview App

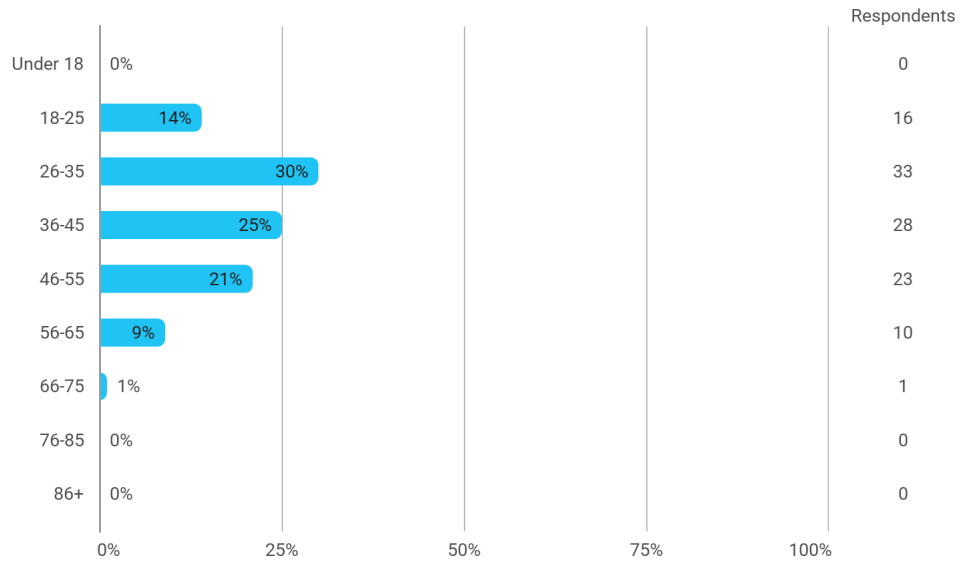
Appendix D – Mind map (interviews)



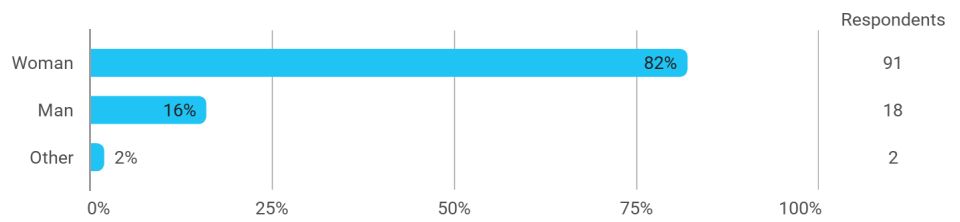
[Link to the full version](#)

Appendix E – Survey

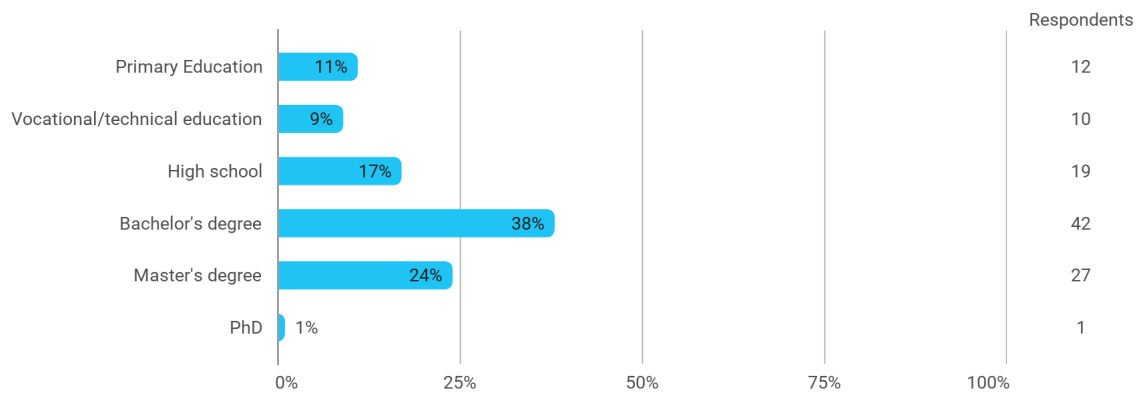
How old are you?



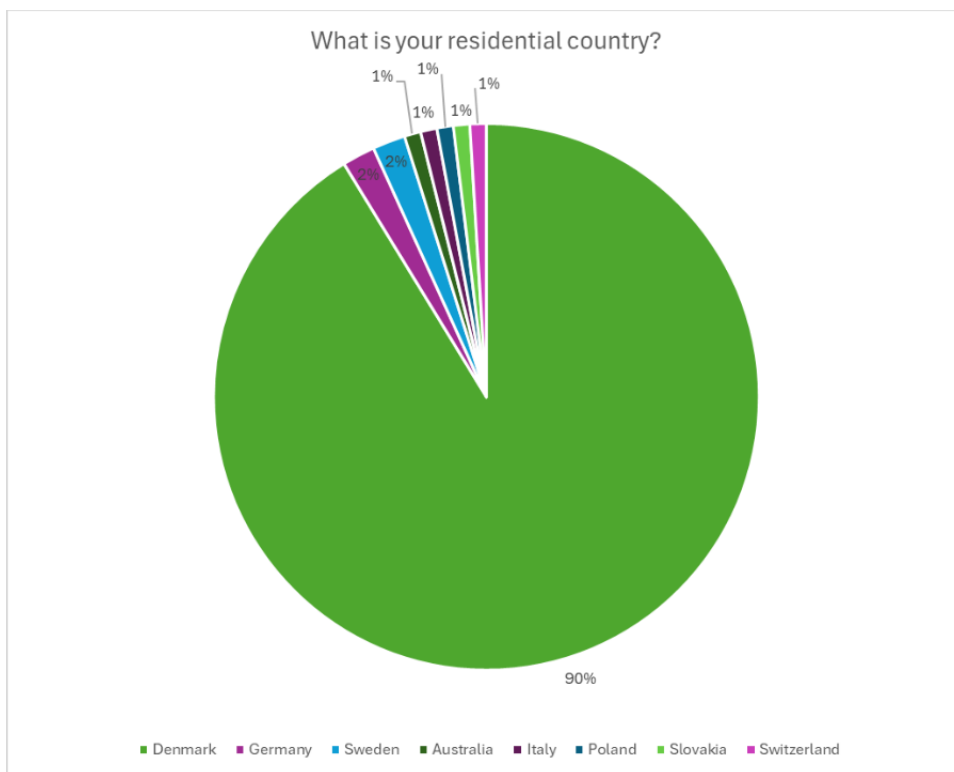
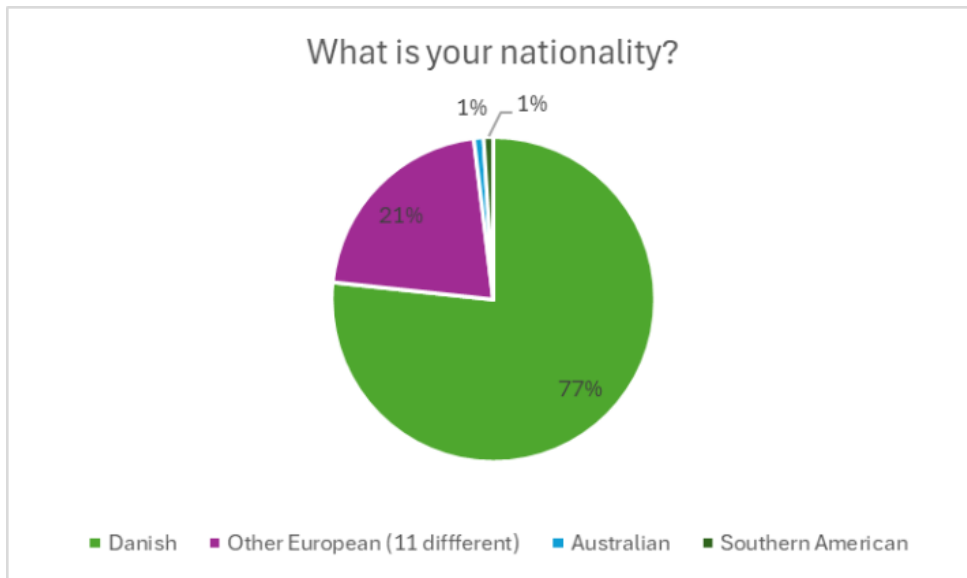
What is your gender?



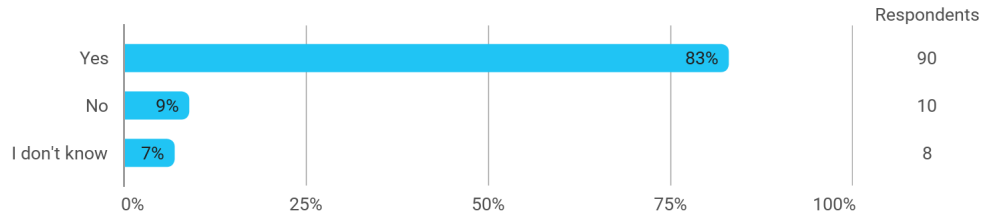
What is your highest level of education?



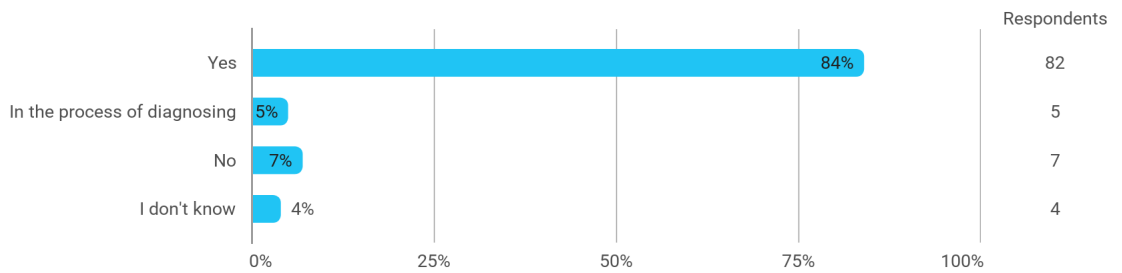
What is your nationality?



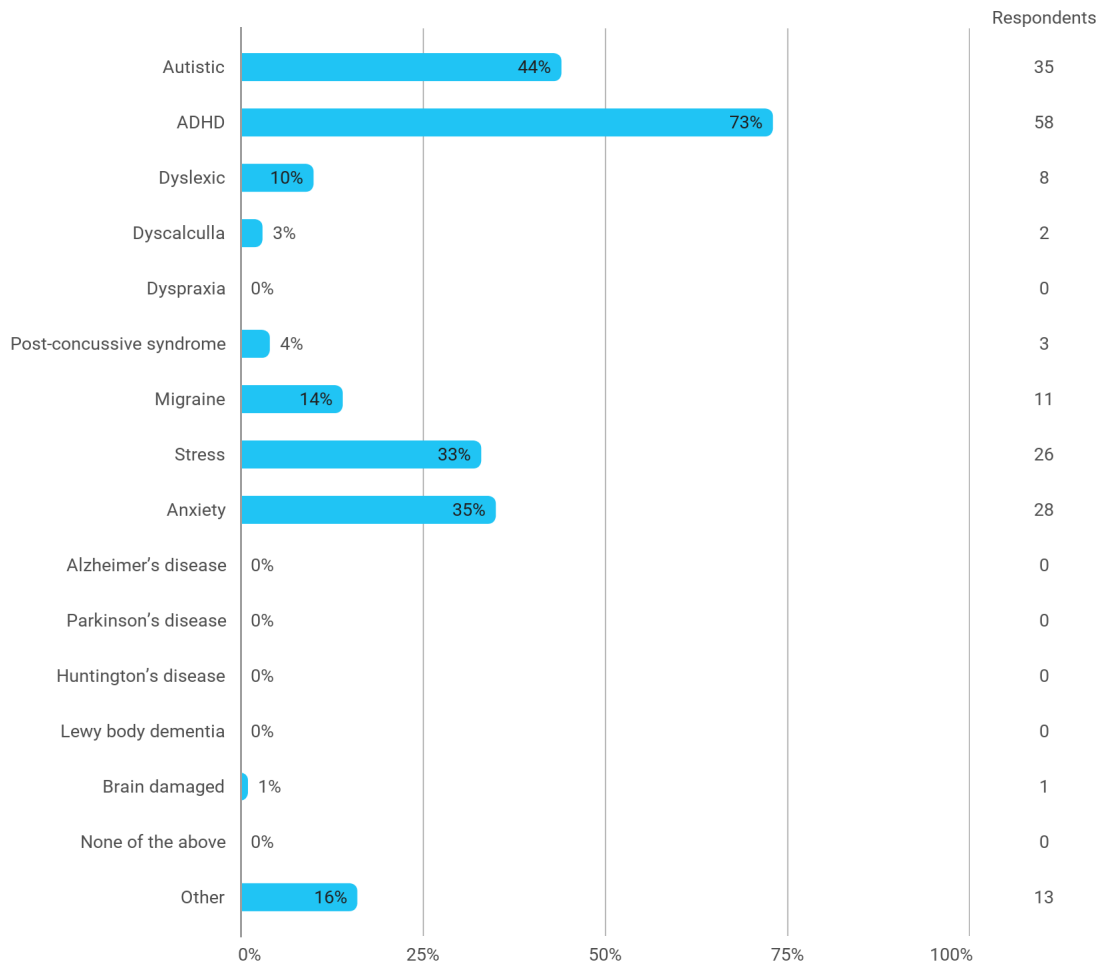
Cognitive challenges are difficulties with mental processes such as remembering, focusing, understanding information, or solving problems. Do you experience cognitive challenges?



Do you have a diagnosis that affects your cognitive abilities?



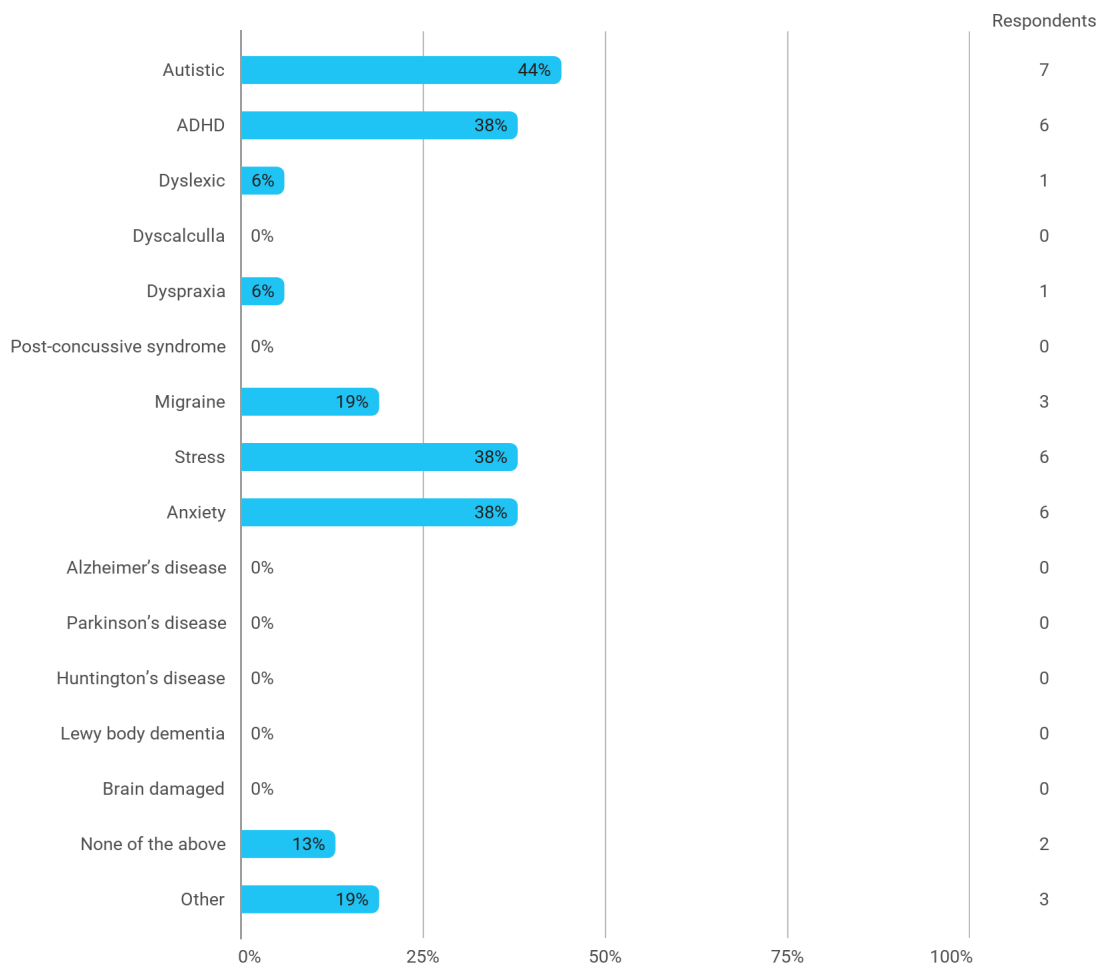
Which diagnosis do you have?



Which diagnosis do you have? - Other

- *Fibromyalgi, Fatigue, belastningsreaktion*
- *Belastnings reaktion igennem mange år*
- *neurofibromatose (NF1)*
- *Den stille adhd*
- *Belastningsreaktioner*
- *Kronisk belastningssyndrom/kronisk udbrændthed*
- *Paranoid skitzofreni*
- *CPTSD*
- *Minor brain damage / very severe post concussion*
- *Borderline, high IQ*
- *Fibromyalgi og overbelastning*
- *Udbrændthed og fibromyalgi*
- *Kronisk piskesmæld*

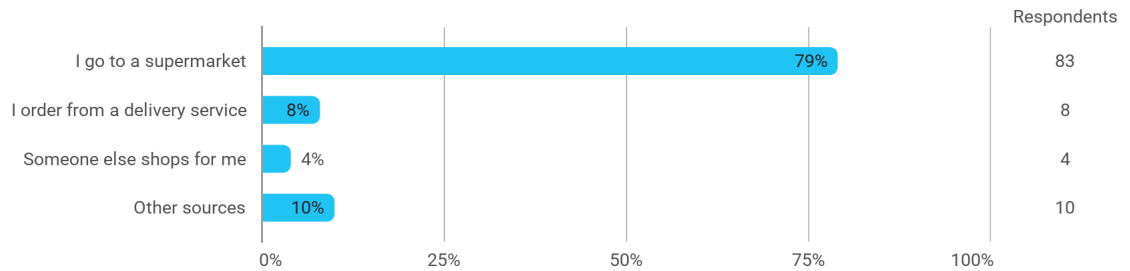
Which diagnosis do you think you might have?



Which diagnosis do you think you might have? - Other

- *chronic fatigue syndrome*
- *OCD og Depression*
- *Ved ikke*
- *Under udredning*

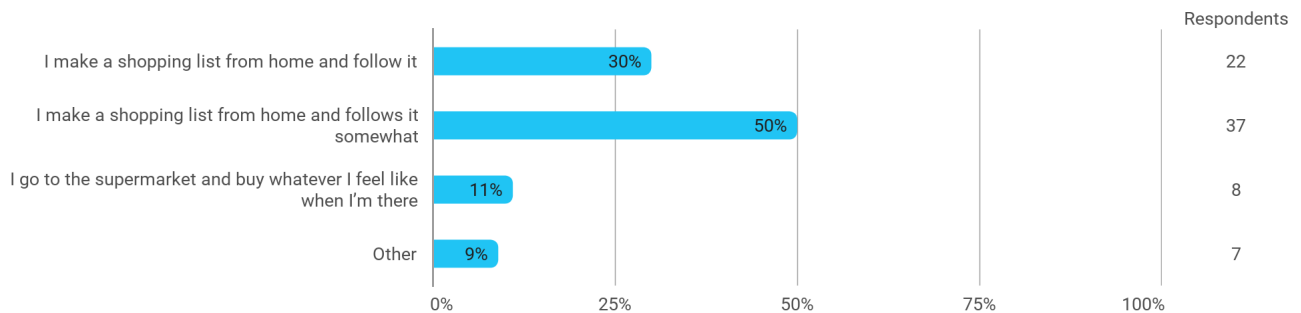
How do you typically do your grocery shopping?



How do you typically do your grocery shopping? - Other sources

- *Handler når jeg har overskud, ellers handler min mand*
- *I go to the supermarket but also get a weekly box with fresh vegetables from a local organization*
- *Min mand handler typisk*
- *Half online, half supermarket*
- *My partner does all the shopping because I struggle*
- *Usually someone else shops but I do go as well*
- *Men jeg har næsten altid en med mig*
- *Blanding - jeg handler lige meget online og i supermarked*
- *primært lokal spar købmand og andre der handler når jeg ikke kan*
- *En blanding*

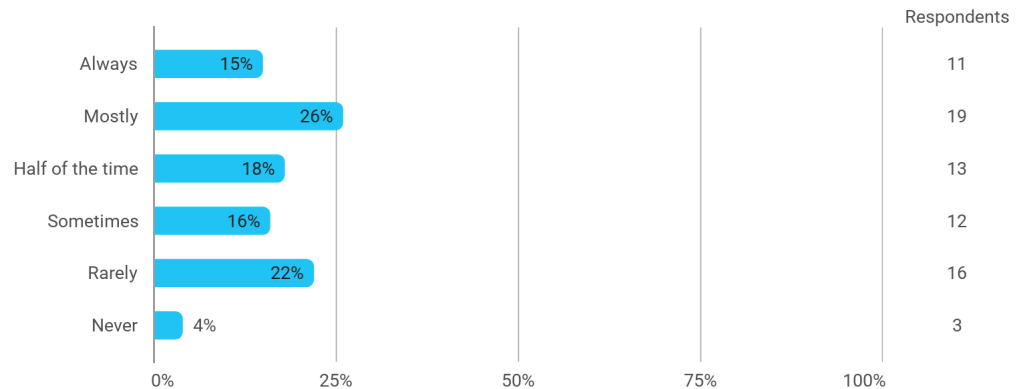
What is your typical strategy for shopping?



What is your typical strategy for shopping? - Other

- *Hvis jeg husker at lave indkøbsliste, handler jeg for det meste efter den*
- *Jeg laver indkøbsliste og planlægger ruten igennem butikken, så jeg kommer hurtigst muligt ud igen*
- *Har mental indkøbsliste.*
- *I try to eat before I go to the supermarket so I wont overbuy. I buy what I feel like when I am there. Food plans dont work for me*
- *I first follow the list I did on my phone, then add extra things; whatever I feel like*
- *Jeg siger til mig selv jeg kun skal handle det mest nødvendige, men når jeg er der ryger der alligevel flere med. Handler også gerne lige efter jeg har afleveret min søn i skole kl 8 da der er få mennesker*
- *Laver en indkøbsliste og prøver at følge den og kommer i tanke om andet der lige kan komme med*

How often do you use the traditional cashier?



Why do/don't you use the traditional cashier?

- Det er energibesparende
- I supermarkeder hvor der ofte er fejl i priserne er det lettest at benytte kasse
- Jeg foretrækker at pakke mine varer ned i mit tempo.
Jeg kan ikke følge med i personalets tempo ved kassen...
- Så skal jeg ikke selv stå for at registrer mine indkøb.
- Jeg bruger netto fordi den ligger 2 min gang fra mit hjem
- Hvis jeg har glemt at scanne varerne så tager jeg en normal kasse da jeg ikke magter at skulle stå og scanne alle vare igen
- Fordi jeg ikke orker at skulle bruge tid på at tilkalde hjælp, hvis selvbetjening ikke virker
- Hvorfor/hvorfor bruger du den?
Jeg svarede sjældent
- Vente tid/kø ofte
Langsomt personale
- Hvis jeg har for mange varer. Er ikke så god til at scanne alle varerne på vejen!
Hvis der er få, scanner jeg dem ved udgangen!
- Fordi jeg lettere kan få penge tilbage ved fejl og derudover handler mest i min lokale Meny, hvor jeg kender de ansatte og der ingen selvbetjeningskasse er.
- For ellers bruger jeg for meget energi, hvis jeg selv skal.
- Når jeg har en god dag, og har tålmodighed til at stå i kø, og studere andre mennesker, så bruger jeg kassen med personale
- Orker ik at de andre aldrig virker og man efterfølgende alligevel skal vente på hjælp
- Kan ikke svare på på hvorfor?
- Fordi jeg letter processen for de ansatte...

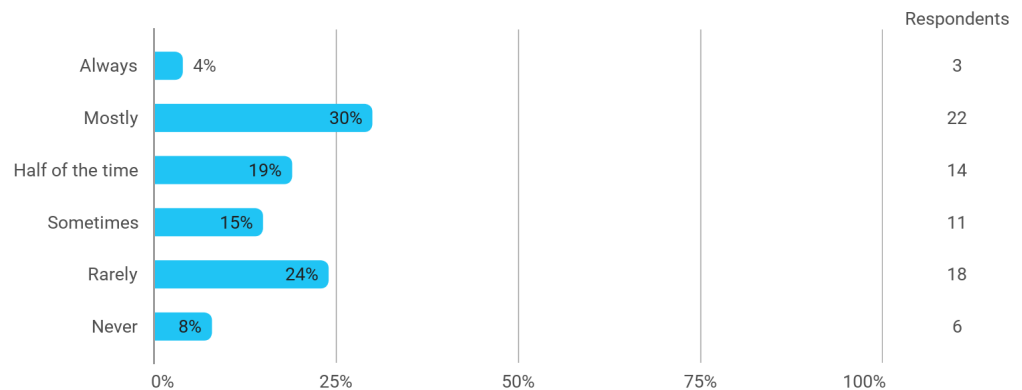
- Vane, tænker jeg...
- it's easier and quicker with a supermarket employee
- Fordi der sjældent er kø i min lokale Netto og det er nemmere end at scanne selv
- I am lazy so I prefer them scan it if I have lots, but I hate if it has a long line
- Slow & unnecessary human interaction
- I am faster no using it.
- Hvis jeg kun har få ting og ingen kø
- Bruger den som regel kun Rema, hvor der ikke er en egentlig scan-selv terminal
- I use it for convenience although more people's shopping coming on the conveyor belt while I'm packing my bags makes me self conscious that it takes me longer to pack my bags than other people.
- The automatic is often slower
- Efficiency
- Hurtigere med scan selv
- I use people because then I dont have to deal with the fear of doing it wrong
- Its slower
- Anxiety, not knowing the language, fear of being judged
- Oftest hvis jeg skal købe øl eller vin fordi der alligevel skal en menneske hen og godkende jeg er gammel nok til at købe alkohol. Så det er et fedt, da jeg er tvunget til at interagere med et fremmed menneske i sådan en situation.
- Bruger den kun ved bager/kiosk, fordi der ikke er scan-selv på samme måde.
- I user the traditional cashier most of the time, mainly because I have a lot of items and I know it'll take longer for me to do it on the self checkout. I also go to the traditional cashier if I have a lot of veggies/fruits that have a code because it would take me longer to find them in the system than if just a cashier does it for me.

- *Vænnede mig til scan i app eller scan selv kasse under corona, og jeg slipper for at stå i kø*
- *Jeg vil gerne undgå køer, så jeg kommer hurtigere ud igen*
- *If the option is there, i prefer self-checkout to not wait in a queue or to not have to engage with a person. But if it's not there, then i have to use traditional cashier of course.*
- *Orker ikke kø og kontakten*
- *It's more convenient/quicker to use the self checkout.*
- *Jeg bruger det sjældent da jeg så ikke behøver at stå i kø med andre, og jeg behøver ikke at vente eller tale med nogen.*
- *Fordi at jeg ikke får rabat for at lave supermarkedets arbejde.*
- *Det er sjældent en scan selv og jeg bruger ikke appen*
- *Nogle gange nemmest eller mindst kø*
- *Hvis der ikke er mulighed for selvbetjening*
- *Jeg foretrækker kassen uden personale, men den har de ikke i Lidl eller Rema. Skal jeg købe mange ting, skal jeg i kassen med personale.*
- *Fordi så skal jeg forholde mig til andre mennesker og stå i kø*
- *Self checkout is usually quicker*
- *For at sikre arbejdspladser, bruger jeg kassen, men flere steder er det ikke muligt eller lang kø, derfor ca halvdelen.*
- *Jeg hader at stå i kø*
- *I like the human interaction if i have the time to do so*
- *In my home country/home village i appreciated the cashier to do some small talk as the assistants are always the same and it's a nice way to connect. In denmark the shop assistant change so frequently that there's no point in that and it feels awkward not interacting at all with a person.*
- *Sometimes there is a line and the self check out is faster. Sometimes I don't feel like talking to anyone. If I have a lot of things and there isn't a long line I go to the traditional cashier. And sometimes I just*

go there because I don't want to do the scanning myself.

- *Fordi det er jeg tryk ved*
- *Hvis jeg har vare der kræver godkendelse. Eller hvis der ikke er anden mulighed*
- *Det giver mig ro, at kunne lægge mine varer op, og kun skulle tænke på at betale og pakke. Jeg bliver enormt stresset hvis scan selv ikke virker. Der er ikke ret meget plads ved scan selv kasserne og det gør det kaotisk at få pakket varer ordentligt*
- *Så er alting som det plejer*
- *Synes det er rarest ift fejl*
- *Jeg har svært ved at stå i kø, derfor tager jeg den kasse jeg tror er hurtigst at komme igennem*
- *det er nok fordi jeg plejer at tage den*
- *Hvis jeg har rigtig mange vare, synes jeg det er nemmere*
- *Det kan være rart bare at følge strømmen, og det er ikke mig, der har kontrol over eller ansvar for, hvor hurtigt det går (det er ikke mig, der er skyld i andres utilfredshed). Derudover er man også meget overladt til sig selv ved selvbetjening og man er lidt i samme båd som alle andre, hvor medarbejderen ved kassen er en naturlig 'opdeler'.*
- *Bliver forvirret ved scan selv*
- *I don't like waiting in line! I rather do self checkout even if there is a queue for it. Also I feel like im in my own thoughts when im there, either thinking about something or listening to music so im in my own bubble and i don't wanna necessarily interrupt that to talk interact with the cashier. Going to the supermarket something feels like being on a mission and going in there getting my things and doing self checkout is the most effacent way to get my groceries. Without being distracted.*
- *Synes det er rare og at der ofte sker stop og fejl ved selvbetjeningskasser..*
- *Ja jeg godt kan lide den personlige kontakt. Samtidig opstår der udfordringer er de ofte hurtigt løst (Ihvertfald i mit primære supermarked)*
- *I like to pack my groceries in my own pace*

How often do you use the self-checkout?



Why do/don't you use the self-checkout?

- Det er energi krævende
- Kommer an på hvor køen er kortest
- Hvis selvbetjening er lukket, hvis butikken lukker om under 1 time...
- Jeg bruger kun selvbetjeningskasserne hvis jeg har få varer. Samt hvis der er lang kø til kassen.
- Jeg bruger selvbetjening fordi så slipper jeg for at skulle se en kassemedarbejder i øjne
Fordi den netto hvor jeg bor ikke har sådan en
- Det er nemmere og man skal ikke stress pakke bagefter
- Se ovenstående
- Hurtigere. Skal ikke forholde mig til personale/kunder
- Nemt
- For ikke at være til besvær eller fordi der er lang kø og jeg ikke gider at være tæt på folk i køen!!
- Der er ikke en i min lokale Meny (som ligger tættest på mig). Men i Netto er jeg begyndt at bruge den. Men nervøs for at lave fejl eller at tager for lang tid, hvis varerne bliver slået ind til en forkert pris. Og før brugte jeg den ikke, da jeg synes det var uoverskueligt at oprette en bruger.
- Det tager for meget af min energi.
- Når jeg er overstimuleret og bare skal hurtigt ud igen, så bliver det selvbetjening.
- Synes altid det er bøvl og vi har kun en butik her i byen med det system
- Jeg vil ikke stå i kø
- Hvis jeg handler STORT, er selvbetjening for svært
- Der er ikke en selvbetjeningskasse hvor jeg handler - kun en app-kasse, og den spør I om lidt længere nede kan jeg se
- it's always more difficult than I expect – I either don't have the code for the

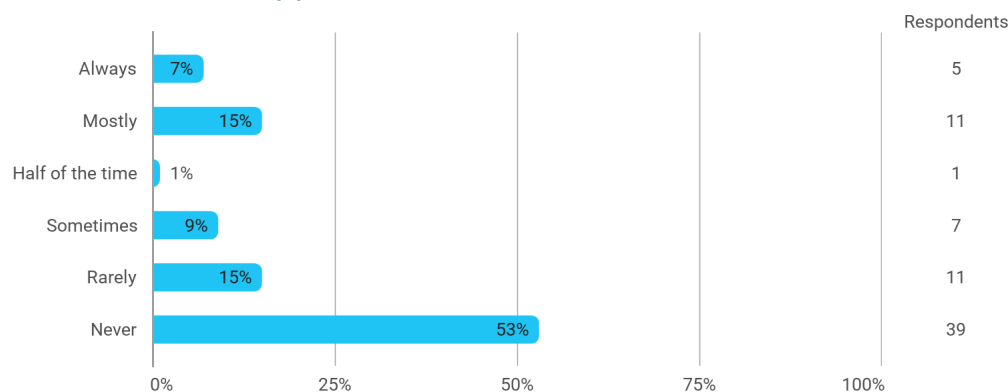
fruits/vegetables, or have a beer with me so I'll need an employee's help anyways.

- Hvis der er lang kø ved betjeningskassen
- If its fast or i only have a couple things
- When app checkout is not available
- I am faster.
- Virke ofte ikke
- For at undgå kø og også lidt, fordi det er blevet en vane eller for at personalet ikke skal afbryde det, de er ved, hvis de ikke sidder ved kassen
- It often goes wrong and makes me very frustrated and it ends up taking longer than the cashier because of waiting for help to come.
- Depends on the queue and number of items I have
- Once I get use to it it is quite automatic. It is still struggle if an error occurs or I am asked something. I feel the pressure of taking too long just to read the message..
- Hurtigere med scan selv
- Because scared of doing mistakes
- Its fadder
- Efficient, no need to speak to anyone
- Jeg bruger helst denne, fordi jeg gerne vil slippe for at få andres følelser/adfærd, lugt og lyd 'i ansigtet', hvadend andre kunder og/eller kassemedarbejder - at interagere med andre mennesker som jeg ikke kender er meget drænende, da det kræver ekstra mange ressourcer for mig at lukke førnævnte generende faktorer ude. Når jeg handler ind er det og tit efter arbejde og hvor jeg er meget på som formidler, underviser og/eller konsulent, så mit sociale batteri er helt drænet.
- Spild af tid, når der er scan-selv
- I only use the self checkout if I have a few items with a bar code in them. The more veggies/fruits I have, the less likely I am to use the self checkout.
- Jeg foretrækker scan i app, men afhænger af supermarked

- *Jeg behøver ikke forholde mig til andre og undgår ofte kø*
- *I feel more comfortable using it at my own pace.*
- *Kun hvis scan selv ikke virker*
- *Quicker, usually a shorter line.*
- *Jeg behøver ikke at stå i kø med andre, og jeg behøver ikke at vente eller tale med nogen.*
- *Jeg bryder mig ikke om det.*
- *Fordi fødselsdagskort vejer for lidt til at vægten i Føtex kan registrere dem, fordi personalet skal tjekke en, hvis man har købt en flaske hvidvin, eller man bliver taget ud til kontrol, så man alligevel skal vente på en personale.*
- *Så kan jeg passe mig selv*
- *Ikke lang kø og kan tage det i mit eget tempo, der ud over kan jeg ikke li så lidt plads der er ved de fleste normale kasser*
- *Det er hurtigere, og nogle dage har jeg ikke lyst til kontakt med andre.*
- *Så skal jeg sjældent stå i kø og forholde mig til andre der står der.*
- *It is usually the quicker option*
- *For at sikre arbejdspladser*
- *Jeg hader at stå i kø*
- *Sometimes it is just faster to use, but also annoying with the errors*
- *The self-checkout is faster, I can pack my own groceries as I go and review the prices of products (some times the offers on the shelf don't match the scanned price). I like to be independent and scanning the groceries is relaxing and i can realise more easily if i forgot anything from the list.*

- *Same reasons as above*
- *Bryder mig ikke om det, plus jeg skal ikke lave andres arbejde gratis*
- *Fordi jeg kan tage det i mit eget tempo, sikre at prisen er rigtig og ungå at skulle snakke og smille høfligt*
- *Se ovenstående svar*
- *Man skal ofte have hjælp alligevel, og så ønsker jeg ikke at stå og vente*
- *Det er angstprovokerende, bruger det kun hvis min mand er med*
- *Jeg har svært ved at stå i kø, derfor tager jeg den kasse jeg tror er hurtigst at komme igennem*
- *Fordi jeg synes at nogle gange brokker den sig*
- *Mindre kø, ingen sociale forventninger, går hurtigt og mindre stress med at pakke*
- *Hvis jeg ikke kan overskue at tage stilling til andre mennesker - dog er der risiko for at lave 'fejl' ved selvbetjening, og så kommer der alligevel en medarbejder...*
- *Bliver forvirret*
- *Sometimes if I have many items its required to use the regular cashier, or if im with someone else who rather be at the cahier I just join too. But its happnes rarely*
- *Usikkerhed og en forventning om fejl og stop*
- *Da jeg synes det er upersonligt og bøvlet hvis der skulle være fejl*
- *I prefer packing my groceries in my own pace*

How often do you use the self-scan app?



Why do/don't you use the self-scan app?

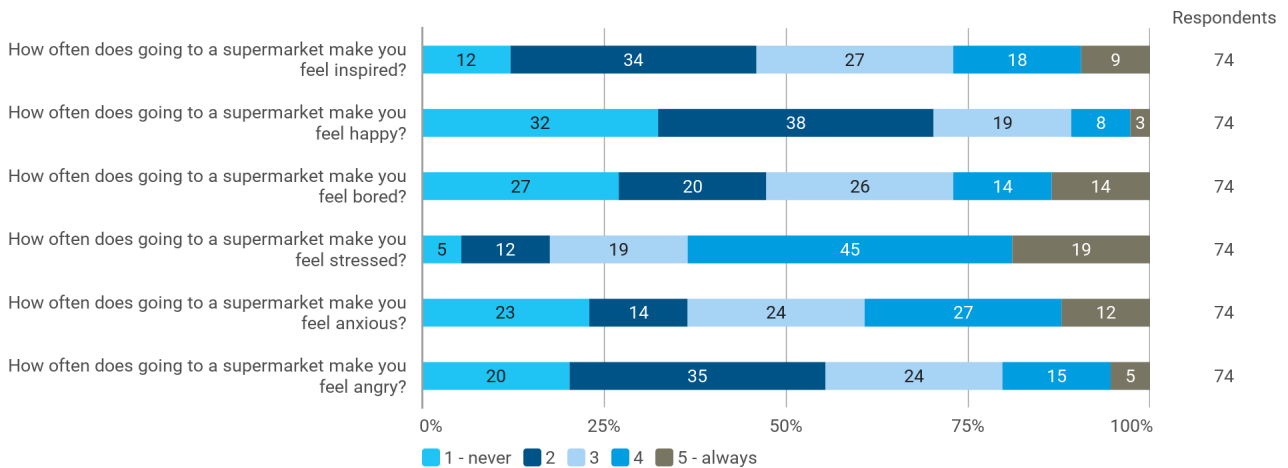
- *Det er ikke trygt*
- *Jeg har ikke haft energi til at sætte mig ind i det*
- *Jeg kender den ikke.*

- *Kan ikke overskue at sætte mig ind i det det, samt huske det.*
- *Jeg bruger selvbetjening fordi der er nemt*
- *Det er nemt og kan nøjes med at pakke varerne 1 gang*
- *Se ovenstående*
- *Netto altid. Hurtigt overstået*
- *Nemt*

- Hvis jeg har få varer, scanner jeg dem ved udgangen. Jeg glemmer at gøre det mens jeg finder varer.
Når jeg har få varer, vil jeg ikke være til besvær ved kassen, så er det nemmere at jeg gør det selv.
- Kan ikke lige overskue at sætte mig ind i hvordan det bruges.
- Det tager min energi, det skal installeres og det kan jeg ikke rumme
- Hvis jeg ikke skal have så meget, og der er mange mennesker. Så er jeg hurtigt videre.
- Kan ik overskue at sætte mig ind i det og er bange for at komme til at lave fejl og "stjæle"
Ved et uheld
- Jeg vil ikke stå i kø
- Aldrig kommet i gang
- Vane, tænker jeg. Og så gider jeg ikke have en masse apps der har mine kreditkortoplysninger - jeg holder i hvert fald lidt igen med det...
- no idea that it exists here
- Bruger den, når der er for lang kø ved betjeningskassen
- Can't be bothered
- No human interaction, no waiting times
- Not familiar with it.
- Det er lettere, ingen stress ved kassen, og pakker varerne ned efterhånden
- Så har jeg ikke rigtig noget sted at stå og håndtere varerne,
- Haven't learned to yet.
- what app?
- To confused to use this..
- Noget bøvl, og tit ikke opdateret
- I can check the price and wont have to go around and do math
- I don't like apps
- I don't know how it works
- Hvad er forskellen på en scan-selv og en selvbetjeningsløsningsskabe? Og hvordan kan jeg vælge 'oftest' ved flere kategorier - så er dataene jo ikke entydige?
- Nemt, tidsoptimerende, effektivt
- I don't use it because I don't find it efficient, I'm already with my list on my phone I don't want to be switching apps back and forth to scan my item. I also don't like lingering at random aisles in the store or spots where there is a lot of people around (such as the veggie section or milk).
Honestly, apps and self checkout give me more mental work where I'm already finding it hard to focus and there is literally a person who's job is to do that better than I could.
- Det virker mest effektivt at scanne og pakke undervejs og jeg slipper for at stå i kø
- Jeg kommer hurtigere ud af butikken igen
- Didn't really see it was an option in some markets...or atleast i don't know of it.
- Det er hurtigere, ingen kø og ingen social kontakt
- I find it easier to just scan everything in one go at the end when I bag it, so my bags end up with the heavier stuff at the bottom, rather than packed in the order I picked things up.
- Jeg behøver ikke at stå i kø med andre, og jeg behøver ikke at vente eller tale med nogen.
- Det interesserer mig ikke.
- Jeg ønsker ikke at knytte mine data til mine indkøb
- Glemmer at jeg har den
- Jeg er ikke god til nye ting, så derfor er jeg ikke kommet igang
- Jeg har ikke smartphone
- Det er nemt og skal ikke stå i kø
- I never tried it
- Hvis lang kø til kassen.
- Det går meget hurtigere når jeg kan gøre det løbende.
- never had a need or was met with the self scan app in a store
- If I have a couple of items I use the self scan app, just to avoid long queues etc, if Im doing a big shopping then i prefer the self-checkout of cashier so i know i wont be forgetting to scan any item or losign track of what i should buy from my grocery list.
- I don't want to set it up and set up another account. I also think because my shopping habits often are that I go into the supermarket buying "one thing" but I end up with my hands full so I don't want to use my phone to scan, I need to put the things down before I take them home
- samme som overfor
- Det med at scanne kræver mere opmærksomhed og tager fokus fra Indkøbsliste osv. Det kræver for meget energi
- Jeg er bange for, at jeg kommer til at glemme at scanne noget eller gør det forkert og at jeg så vil blive beskyldt for at snyde
- Jeg glemmer det
- Det er angstprovokerende, bruger det kun hvis min mand er med
- Er aldrig kommet i gang med det. Men kunne sikkert være en hjælp
- fordi jeg ikke har den
- Føler ikke der er behov for det når der er selvbetjening

- *Jeg kan kun finde ud af det i coop, og jeg bor ikke tæt på en coop*
- *Kan ikke*
- *Its feels like an extra step, so i just never tried it*

- ?
- *Har en ældre mobil og ville evt. Glemme at scanne i farten*
- *Dont have one*



Is there any part of grocery shopping at supermarket that makes you feel particually good? Please explain what and why.

- *Når jeg har fået slæbt alle vare hjem og pakket dem ud og sat på plads - opgave overstået*
- *Nej ingen dele af det*
- *Ja når der er gode og billige tilbud. Færre mennesker i butikken. Når mine varer ikke er udsolgt!*
- *Jeg kan selv udvælge mine varer. Så ved jeg at jeg får det bedste af de råvarer der er.*
- *Nej ikke rigtig*
- *Spot, eller det er tit der hvor man køber alt det der er Nice to have*
- *Når der er orden og tingene er logiske at finde. Når der ikke er mange mennesker*
- *Netto... spotvarer...hvis der er keramik, eller blomster*
- *Når der ikke er nogle andre mennesker..jeg kan ikke lide mennesker... personalet er ok, da jeg ikke kan undgå dem..men så må de gerne være søde og smile.*
- *Når folk kender ens navn og bruger det, smiler, er servicemindede, når priserne er korrekte.*
- *Det ved jeg ikke*
- *Når mærkning og varer passer sammen. Hvis der står pærer ved kiwi, så kan jeg slet ikke have det.*

- *Hvis de har det jeg skal bruge og det går glidningsfrit. Og hvis jeg formår at holde overblikket og huske det hele*
- *Ingen mennesker, at varene er til at finde. Ingen dufte eller uventet lyde.*
- *Når jeg falder over gode tilbud. Det gør mig glad 😊*
- *Hm, jeg fungerer ikke så godt til daglig og arbejder på nedsat tid. Når jeg køber ind, føler jeg at jeg bidrager til husholdningen. At jeg gør nytte.*
- *Finding new products to try*
- *Hvis der er tilbud på nogle af de varer, jeg ofte handler*
- *No I hate it.*
- *Finding amazing tomatoes by smell. With online ordering, they are random, but by smell, one can get much tastier tomatoes.*
- *Jeg kan godt lide at finde særligt gode tilbud på mad, som jeg ikke havde set hjemmefra, og jeg bliver glad, hvis jeg finder et godt produkt af den rigtige kvalitet og jeg bliver glad i grønt og frugt, hvis der er meget indbydende.*
- *No*
- *discounts feel like little wins.*
- *When I score a good deal. Or get a snack that I can look forward to for when I get home*
- *No*
- *Looking at new products, beautiful fruits and vegetables, trying to create new recipes*
- *Når alt er struktureret godt og varer følger en god logik efter overordnet type, kategorier og underkategorier. Når der er*

få kunder og de kunder der er, er opmærksomme på deres omgivelser og tale lavt. Når jeg ikke skal stå kø ved selvbetjeningskassen.

- Kun hvis jeg har god tid, og det er om formiddagen. Så kan det være hyggeligt.
- *I like finding tasty things that I will be able to eat later.*
- Nej. Det er bare et nødvendigt onde.
- *If i have money, i love getting a snack for myself so i always feel excited afterwards when i get home.*
- Scan selv systemet.
- *Finding tasty things on special, which is usually when I can justify buying them as a treat.*
- *At jeg kan handle med høretelefoner med ANC og scanne vare og betale med tlf*
- Nej ikke rigtig
- Blomster og grønt. Der er mest plads og ro, og knap så mange indtryk
- *Jeg prøver at tilpasse min tid så der ikke er mange i butikken, det gør jeg bedre kan få et overblik og føler mig ikke presset*
- *Looking at the different options and what i can use for cooking*
- Nej, indkøb skal overstås
- Dimse reolerne i Netto
- *seeing all the great ingredients that evoke imagination for what to cook*
- *i like to check the promotions and i am simply happy about going home and cooking my meal.*
- *The produce section (veggies and fruit) but only if it's a good one. I don't think any Danish supermarket has a good one. It requires you to be able to handle the produce without it all being in a big plastic bag and or a net. Swedish supermarkets do this really well. There is the little tomato market at Spar in teglholmen that gives a little bit of this. And sometimes the random stuff aisle at netto.*
- *Brede gange med god plads. Steder hvor der bliver fyldt op og fjernet pap så det er nemmere at overskue. Steder hvor der ikke hele tiden bliver flyttet rundt så jeg kan finde tingene.*
- *Når andre kunder hold god afstand i køen. Når kassemedarbejder ikke kører mine varer ned af båndet oven i en andens varer. Når butikken er overskuelig ..gerne med skilte i loftet ift at finde rundt og finde de rigtige varer*
- *Når varerne står som de plejer. Når jeg har min mand med*
- *Når jeg hurtigt kan finde de ting jeg har brug for, samt at når der er spændende ting at kigge efter.*
- pas

- *Hvis der ikke er nogen mennesker, så er det rart at have god tid og være omhyggelig med at vælge frugt og grønt*
- *GULVVASK, jeg ved ikke, hvad det er for en gulvvask, men den bliver brugt mange steder (også institutioner osv.) den lugter så kvalmt. Non-food afdelinger (især Lidl), de er ofte meget rodede, jeg kan ikke nå at danne mig et overblik over, hvad der er på hylterne medmindre, jeg stopper op og kigger, og det er også lidt fjollet, når jeg ikke skal have noget af det, så det er ikke så rart at gå forbi, det virker lidt som en blackbox, jeg ikke har fået afdækket. Hvis jeg er alene, og jeg står i køen til kassen, men har glemt noget, så er det ikke altid jeg tør at gå ud af køen. Bip-lyden fra selvbetjeningen kan være utrolig høj og skinger (især i Lidl)*
- *Mmm I like just browsing through all the stuff that are there, sometimes I would pickup a new things to try that makes me feel good.*
- Nej
- *Når kassedamen kan huske en og man får et smil og en rar samtale*
- *Getting healthy food instead of eating sth random*

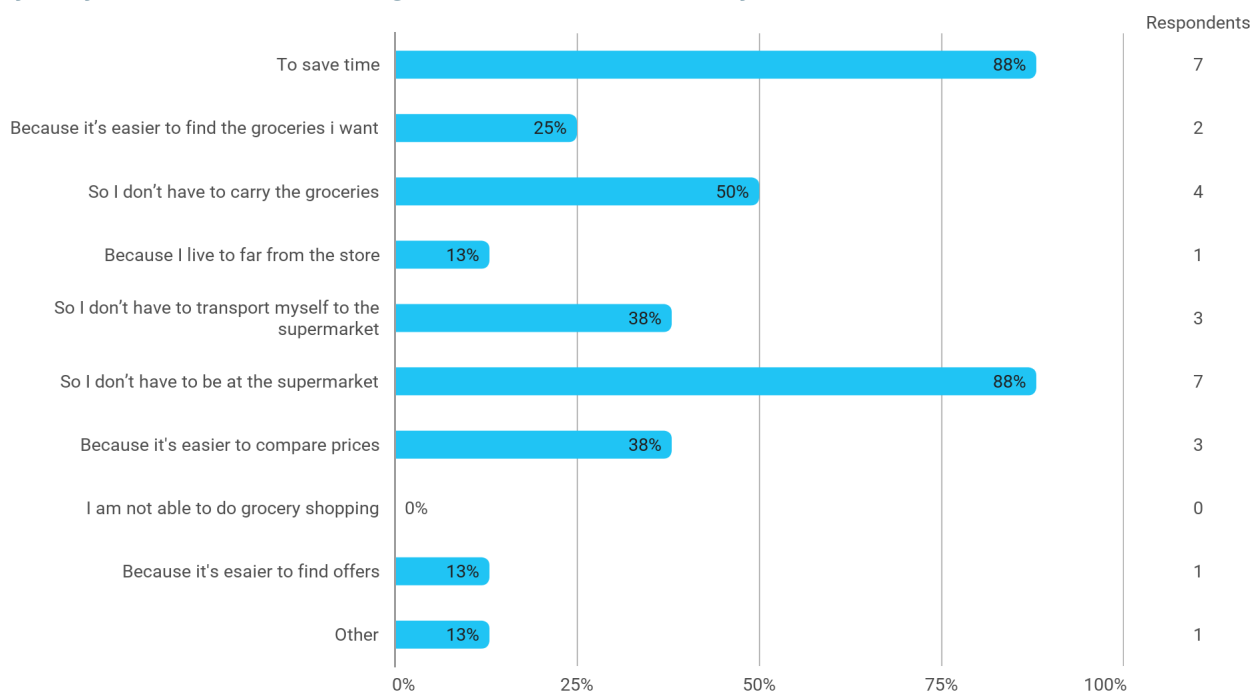
Is there any part of grocery shopping at a supermarket that makes you feel particually bad? Please explain what and why.

- *Udmattelse, smerter, stimuli, kø, glemsomhed/ klappen går ned*
- *Lys støj forvirring ugennemskuelig placering af varer, mange mennesker*
- *For mange mennesker, for lidt plads, folk der står i vejen, folk der ikke flytter sig osv. Når mine varer er udsolgt og der ikke er et lige så godt alternativ eller slet intet!*
- *Hvis der er fyldt med mennesker og skrigende børn og unge mennesker.*
- *Ja steder med mange lugte eller hvis der er mange mennesker*
- *Når folk kigger på en*
- *Når frugt og grønt-afdelingen ikke er ordnet, så det lugter. Generelt dårlig eller kraftig lugt. Voldsomme temperaturforskelle, nogle supermarkeder har fx blæsere i loftet som blæser meget varm luft ned i butikken og det føles ubehageligt at være i nærheden af. Og sidst men ikke mindst, når mennesker står for tæt på mig i køen*
- *Råt kød. Og glimmeting i plast..*

- For mange mennesker og for lys og for høje lyde
- Når der er fyldt med kunder... prøver som regel at undgå mylder.. jeg bryder mig ikke om mange mennesker, det giver mig angst!
- Hvis der er mange mennesker, hvis der ingen kontakt er med medarbejderen i kassen, hvis kunder opfører sig upassende.
- At det er blevet for dyrt, især når man er alenemor.
- Mange mennesker. Rodet opstilling. For mange valgmuligheder (flere forskellige slag skummetmælk fx) Akustik (det runger i de fleste supermarkeder)
- Mylder og tomme hylder, for så skal jeg lave planen om
- Lyde, mange mennesker, kø, lugte. At jeg ikke kan finde det jeg skal bruge b
- De andre mennesker. Det lyder hårdt, men de stresser mig σ
- the lights are usually horrible, the overall sensory experience is bad, too many things to choose from, too many people, etc
- Hvis jeg ikke umiddelbart kan finde det, jeg skal bruge, hvis der er udsolgt, hvis der er for mange valgmuligheder for samme vare og jeg skal til at sammenligne pris vs. kvalitet
- People in my way, never know what to have for dinner, can't find what I want, find it stressful.
- Shopping with a kid that would really like to buy it all.
- Hvis noget, jeg skal bruge til en opskrift er udsolgt, især hvis det ligesom er den ene ting på en hel reol, der mangler. Jeg hader, når et produkt, jeg godt kan lide, bliver taget ud af sortiment, for pasta er ikke bare pasta osv.
Min hjerne har ændret sig over årene pga stress inden min adhd blev opdaget, så der er dage, hvor det modsat normalt ikke er rart at være i supermarkedet. Så kan jeg ikke tænke, ikke få øje på tingene på hylderne, og de mange ting omkring mig føles overvældende, så jeg er lettet, når jeg kommer ud.
- choosing between too many options makes me get stuck and waste time
- self checkout bugging and having to wait for staff to help you. sometimes it happens multiple times in a row
- Highly processed foods
- I always impulse buy. Then I feel guilty. Its also very overwhelming trying to find what im looking for and I always feel like I have to look at everything so I dont miss anything
- People
- Crowds, no alternatives for missing products
- Rod og/eller uorden/dårlig struktur i butikken, så det er svært og finde det man skal bruge og man er tvunget til at spørge personalet - jeg vil bare gerne hurtigt ind og ud.
Har det særligt svært, når der er for mange mennesker, da de ofte bliver mindre opmærksomme på deres omgivelser, når de er i flertal. Som om den kollektive EQ og IQ falder drastisk. Lange køer og alt for udadvendte og overvenligt personale.
- For mange mennesker, folk der hoster i hænderne og slikker op fingrene, for tæt på, høje og pludselige lyde osv osv
- I try to make it through as fast as possible because the grocery store can be a bit overwhelming if there is a lot of people around.
I mostly find it boring and very much a chore rather than something fun. I don't enjoy cooking but of course I need to eat so I see it as a necessary task.
- Jeg bliver meget nemt overstimuleret af både lys, lyde, og mange mennesker. Ekstra svært hvis der er flyttet rundt så tingene ikke står hvor de plejer
- Hvis der er for mange mennesker
- If i don't find what i want for some specific recipe, i do get frustrated because i prefer not having to stay too long shopping.
- Musik, rod, andre mennesker, manglende varer.
Det er stressende og på en dårlig dag, må jeg gå ud igen
- When they're out of something I need, especially if that's a key ingredient that means I have to re-think what I'm cooking on the spot. That is a very stressful experience for me.
- Når jeg skal stå i kø, og vente. At nogen måske taler til mig, når jeg ikke er i humør til det.
- Enhver form for konflikt eller fejl, samt når det jeg kom for er udsolgt
- Når jeg ikke kan finde de rigtige hylder eller afdelinger og der er rodet
- Hvis der er mange mennesker og mange lyde
- Når supermarkedets procedurer er dumme. I Lidl skal medarbejderen bruge en chip, hvis en vare er registreret forkert eller lignende, men det er en anden person der har den. Så går der 3 minutter før den person kommer til kassen, og hele køen har stået og ventet mens kassearbejderen har siddet og kigget nervøst ned i kassebåndet.
- Næh.

- messy inventory or moldy vegetables
- I don't like it when i go to the supermarket and more than half of the items on my list are not available and i need to run around different supermarkets to find all the things i need.
- Just in general if it's too big. But also if it's aisles are very tight so you can't stand and look at the product without being in everyone's way and in general if moving around it is always making you feel like you are in someone's way, that's horrible
- Rod og uorden. Propet hylder så det er svært at få varen. Butikker som aldrig har tilbud på lager, eller i hvert fald ikke engang gider kigge efter. Medarbejdere det udstråler at man forstyrre når mand beder om hjælp.
- Andre står meget tæt på mig ved kassen. Kassemedarbejder blander mine varer med andres eller ekspederer så hurtigt at jeg ikke kan nå at pakke. Når tilbud jeg er kommet for allerede er udsolgt første dag
- Kø, folk der står tæt på mig, hvis jeg ikke kender butikken og ikke ved hvor jeg skal gå hen, mange valg
- Hader at handle i ulvetimen (mine egne børn er voksne) det er meget stressende
- Jeg bliver frustreret når jeg ikke kan finde ting, eller ting ikke er der hvor jeg logisk synes de burde være. Dette bliver bedre når jeg er fortrolig med placeringer i et givent supermarked
- pas
- Mange mennesker, lidt plads, blive skubbet og puffer til
- Mm sometimes when the cashier are rude of some of them get annoyed if u take longer when it comes to the payment process, or if something goes wrong there, that's also why I rather skip intracrning with people to avoid exposing my self as incompetent or when I make a mistake or so on.
- Musik og for meget larm
- Når der er mange i butikken, så handler som oftest tidligt på dagen, da det folk er utålmodig og larmer på lidt plads, stresser mit hoved
- If theres a lot of people

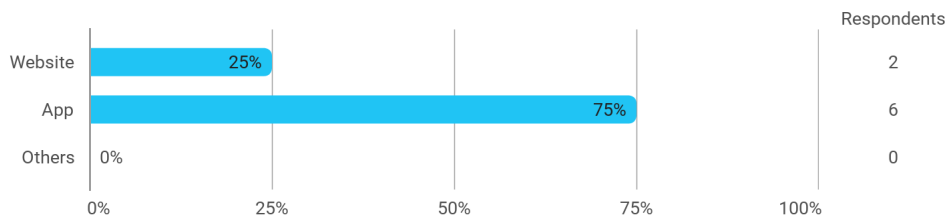
Why do you choose to order groceries from a delivery service?



Why do you choose to order groceries from a delivery service? - Other

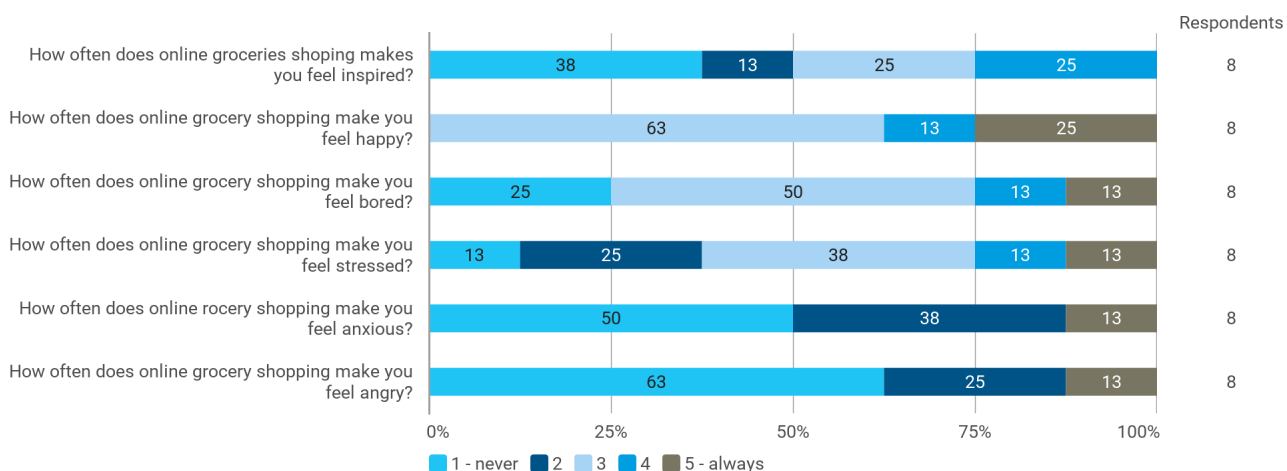
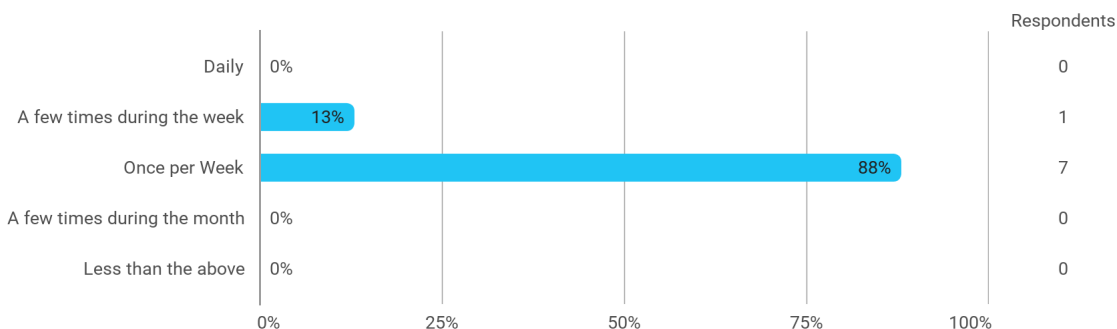
- For at spare på min energi, da det koster meget på energi kontoen at lave indkøbs liste, madplan, kører til og fra og handle og huske poser osv.

Which platform do you usually use for the delivery service?



Which platform do you usually use for the delivery service? - Others

How often do you use this platform?



Is there any part of online grocery shopping that makes you feel particually good? Please explain what and why.

- I like being able to choose an alternative if an item is out of stock.
- Hvis der ikke er mange mennesker, hvis det er tidligt så jeg har mere energi, hvis jeg skal have få ting og hvis jeg ikke har mine børn med. Hvis jeg har min kæreste med.

- I like being able to organize the meals for my whole week and order exactly the number of groceries I need to not waste anything, and use good ecological and local product. I think making it efficient and as I want it to be makes me feel pretty good.
- Nej
- Det er spændende at se hvad de har, særligt spotvarer.

Is there any part of online grocery shopping that makes you feel particularly bad? Please explain what and why.

- It makes me feel lazy
- (lidt) visuelt støjende sted, hvor man samtidig skal finde rundt og huske, hvad man skal have
- Mange mennesker, hvis tingene ikke virker f.eks. scanselv kasserne, hvis jeg er presset i forvejen, hvis der er udsolgt og jeg skal et andet sted hen, hvis jeg skal have rigtig meget og der er mange beslutninger. Hvis der er dårlige parkeringsmuligheder.
- Sansel-overload; for mange mennesker, larm, hvis varer er udsolgt og jeg skal bestemme mig for alternativ, der, i supermarkedet
- If I'm already overwhelmed with other duties, doing anything, including my groceries, is going to take a big toll on my energy.
- Det hele. Farver, lugte, larm, musik, mennesker, kassedame smalltalk
- Der er for mange mennesker, valg der skal tages når jeg ikke er i fred og ro til at tage dem, lyde osv, som udmatter mig

Why does someone else shop for you?

- Angst
- Små indkøb kan jeg men holder mig generelt fra det. Alle stimuli som lys, lyd, mennesker, irriterende ekspedienter (der fx råber i stedet for at tale) kan på de dage uden energi tappe mig fuldstændigt fysisk som psykisk.
- Mine eksekutive funktioner gør at jeg bliver for belastet i et supermarked./overstimuleret

Do you have any ideas on what could make grocery shopping easier or a better experience for you?

- Small, quite, no fluorescent lights and no fragrance
- Nej
- Jeg handler så vidt muligt i det samme supermarked. Det koster mindre energi, efter at jeg er begyndt at bruge scanselv. Det vil hjælpe hvis butikken ikke flytter rundt på varernes placering. Det hjælper når der ikke er så mange andre kunder. Der hjælper når det er nemt at finde personale man kan spørge, uden at man føler at man forstyrrer dem. Godt når der ikke er mange biler på parkeringspladsen

- Jeg vælger de mindre supermarkeder ude på landet med et mindre sortiment
- Lad være med at luk scan selv ned, før de alm. betjente kasser. Sørg for der er nok varer og ikke tomme hylder!
- Altid have de rigtig prisskilte på, mere behageligt lys, ingen musik.
- Desværre ikke
- Ledsager
- Less flickering light and less noise maybe. Primary the light
- Pas, måske kære butikkerne mere overskuelige så man ikke skal gå en helt butik rundt for at finde det man skal bruge
- At man indfører corona-køkultur igen. Resten planlægger jeg efter og handler de steder og på tidspunkter, som er mindst energikrævende
- Dæmpe lyset en smule. Ikke alt for højt musik. Afstandslinjer ved kassen... hader når jeg vitterlig kan mærke kunden bag mig mod mine skuldre eller lignende
- Jeg tror ikke at jeg kommer nogen vejen ved at ønske ingen andre kunder end mig der er jo andre muligheder, som at få det bragt til døren..jeg kan bare bedst lidt at stå med tingene i hånden, før jeg køber.
- Når priserne passer, når personale er imødekommende, hvis ting ligger på sin plads.
- Nej, jeg kigger tilbuds aviser inden og laver indkøbsliste. Så håber jeg at der ikke kommer nogle jeg kender. Bor i et mindre samfund.
- Hold det pænt, enkelt og overskueligt
- Mindre rod. Bredde gange. Synlighed på ting - bedrer lys.
- Måske jeg skulle installere en app...
- dim lights, less products (not sure if that's a good solution but somehow making the experience less overwhelming and helping choice fatigue?)
- Klar struktur og skiltning. Tilgængeligt personale at spørge om hjælp.
- Supermarkets with layouts that make sense. Why is bacon in 3 places in Netto?
- One way alleys
- Fewer people (less noise and stress)
- Bedre belysning, lyset er ofte koldt og skarpt.
- Næh, men hvor jeg normalt kan finde på at google en opskrift spontant og finde varer til den, dropper jeg det på de svære dage, så det er mere mig selv, der skal justere. Jeg vil selv finde mine ting og vurdere grøntsager osv. og netop også kigge uforpligtende på noget
- fewer choices
- Regulation on clear pricing - for example if you can always see a price per kilo (f.ex. fruit and vegetables).

- *Less bright lights, more isle space, quieter. Less people*
- *Supermarkets that are selling and growing, operating within the local socio-economic structures. Would feel some much better knowing I am contributing with my purchase to local economies that sustain livelihoods and health of the community human as well as other-than-human.*
- *Ved det ikke lige. Mindre dårlig belysning og dårlig lyd/musik. Bedre parkerings muligheder.*
- *A minimalistic store*
- *Make logical placements of things in the shops*
- *Having lower lights and more space between the shelves*
- *More foreign products/ foreign weeks? (We have it in Poland - nice to have something new to explore each week and learn about cultures through cuisine)*
- *En app med et kort over, hvor varer er, så jeg kan planlægge min rute og komme hurtigt ud. Hvis man kan betale i det app også, så jeg har minimal menneskekontakt og spildtid ville det være perfekt.*
- *Jeg ville aldrig forvente disse ting. Men her er nogle svar: Færre høje, pludselige lyde. Scan-selv i alle butikker. Mere fokus på anti-madspild (butikker bør ikke smide så meget bagværk ud kl. 20/21/22 f.eks. Sæt kommende datovarer ned i pris lidt før, for det bliver aldrig solgt med mikro-reduktioner. Mere afstand i køerne. Mere venlighed blandt kunder.*
- *Scan selv kan faktisk afhjælpe lidt*
- *I really like the idea of the "sensory" hours i've heard some grocery stores do - not sure that happens in denmark but if they do then the marketing for it is pretty bad cause I've never heard of it. I know that when I moved here it was super overwhelming to find items in Danish, so having a list or an app that helps you find items in different langauges would be amazing.*
- *Nej.*
- *If the supermarkets really categorize their things well. Markets like Netto where everything feels very disorganised and placed randomly makes me confused and just waste a lot of time walking around to find what i need.*
- *Hvis jeg havde råd, ville jeg bestille alt online. Lige nu bestiller jeg måltidskasser til 3 aftener*
- *Something I already do: I have an app (Bring) which lets me add things to my shopping list, but also sorts them into categories (e.g. fresh produce) and then lets me customize the order so that it*

matches the layout of my local store. It means I can just work my way down a list, rather than jumping around, missing things, and having to double-back in the shop when I miss something. Also, I can share the list with my partner, so we can split up in the shop and buy things simultaneously, and instantly know if the other person has picked something up because they can tick it off the list in real time.

- *Ikke noget der kan ændres på. Men at jeg ikke var så skide opmærksom og sensitiv på andre og hvad der sker omkring mig.*
- *For at være ærlig, så nej. Det er bare overvældende*
- *Ja, hvis der ikke var andre mennesker.*
- *Når kassemedarbejderen har styr på båndet, så tomater, chips mv. ikke bliver mast og varenne kører frem, når der er plads*
- *Tydelig skiltning*
- *I mit tilfælde handler det om at det gør mig tilpas når der er ro og et godt overblik i varene*
- *Hvis varenes priser var opdaterede, så de gik ind til samme pris som på skiltet.*
- *Nej*
- *In a perfect world I would want us to not even have access to products that are terrible for the planet and/or our bodies. But I think doing my groceries online is a pretty good alternative for handling my obstacles as a neurodivergent.*
- *Hvis det på nogen måde kunne blive nemmere at spotte hvad der er hvor - særligt i supermarkeder jeg ikke har været i før - ville det være fedt. Det er frustrerende ikke at kunne finde det man skal bruge.*
- *I would like more vegetable variety and in general more options. but i also feel like it's very much missing the human connection when doing groceries.*
- *Better produce section that welcomes you and is visually soothing and allows you to touch and choose individual pieces. At the beginning of the shop. It helps with reducing over stimulation. Wide enough aisles. I think REMA 1000 does a good job with their design, most of the stores don't feel cluttered or crowded. I think it's also in the colouring design and perhaps because they mostly have the aisles all in the same direction, just long, it's not broken up by "horizontal" aisles.*
- *Selv-scan*
- *100% selvbetjening*
- *når tingene står logisk. og velkendt. korte køer. god plads. få mennesker. tydelig*

nøddugange. nem parkering. fast personale

- Ingen musik og afmærkning af afstand ved kassen. Hvis scan selv, så god plads til at pakke varent
- Nej
- At man kunne blive varslet, hvis de ændrer indretning
- Nej
- Gør den logisk og ens i alle butikker og roligt lys, og ingen musik
- Mere plads i gangene så man ikke står i vejen hele tiden
- Biplydene behøver vel ikke være så høje, jeg ved godt nogle mennesker har eller får nedsat hørelse, men der kan man jo heldigvis se at varen er scannet
- hvis der ikke var musik i højttalerne, og hvis der, ligesom i andre lande (fx UK) var "stille timer" med færre mennesker, dæmpet lys og ingen musik
- Nej

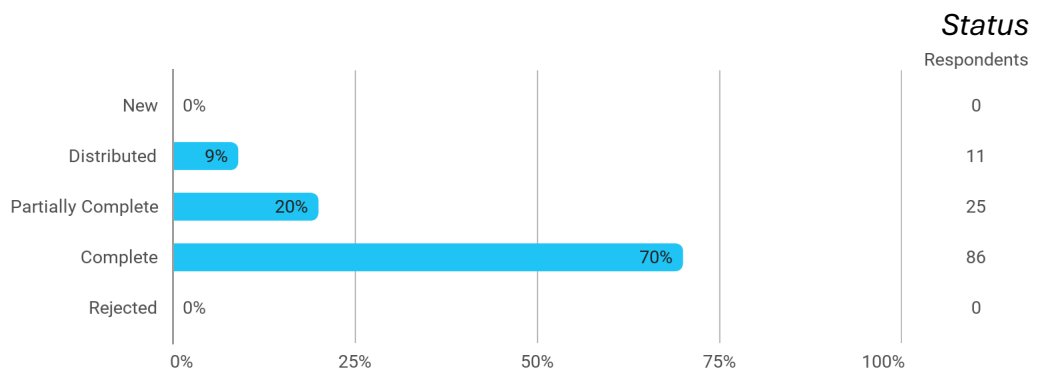
- I think if there is a map that shows you what are the sections of the store are, like where would u find certain items that would be nice, I know it now by heart in the usual store I go to but sometimes its confusing if you go to a new store, or if they change order of things.
- Ingen støj og ikke så mange mennesker
- Nej
- Ikke umiddelbart, da det fungerer for mig bare at gøre det på "atypiske" tidspunkter
- No

Do you wanna add anything else in relation to your thoughts on grocery shopping?

- Kan ikke handle grundet kronisk stress og angst
- Nej
- Store supermarkeder er værre end små

Thank you very much for your time. Your answers are a great help to our project.

Overall



Appendix F – Service inclusion bridge

[Link to the digital version](#)

Service Inclusion Bridge - An inclusion assessment tool for supermarkets

The Service Inclusion Bridge is an assessment tool designed to evaluate how inclusive a supermarket service is across four key pillars: enabling opportunities, offering choice, relieving suffering, and fostering happiness. Together, these pillars form a bridge — a structure that holds up only when each pillar is strong.

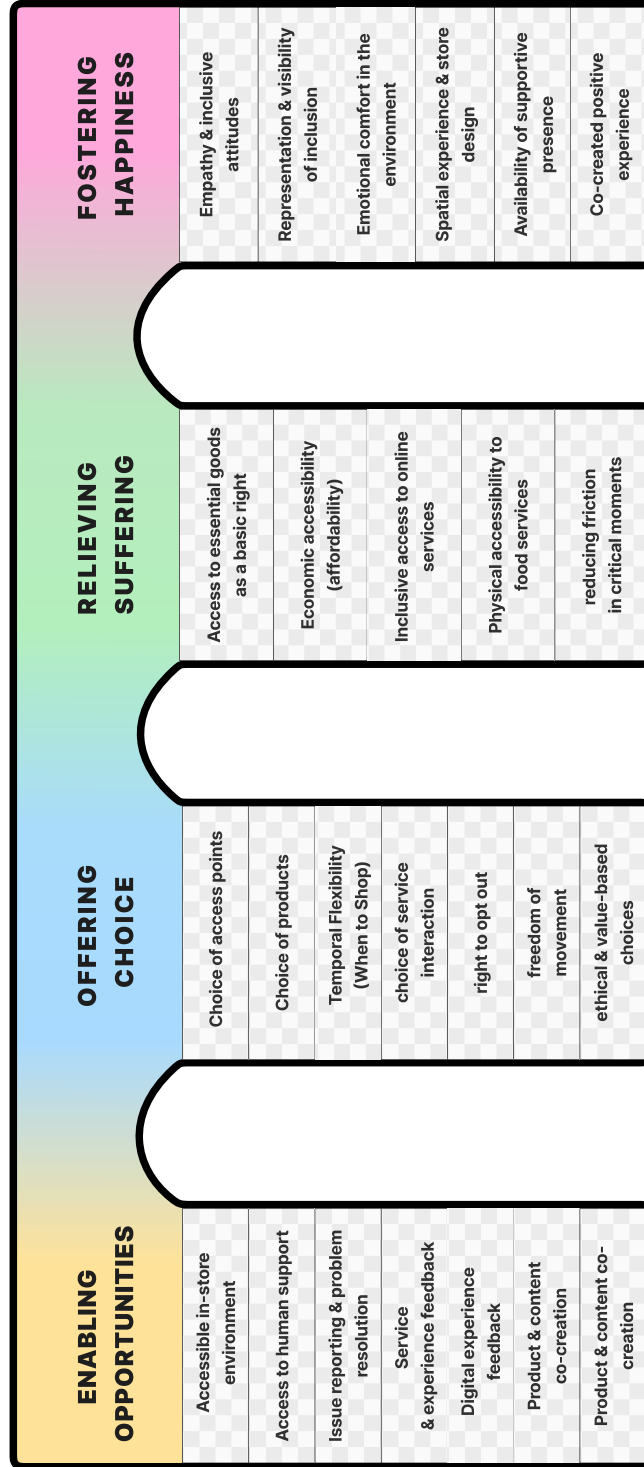
How to use

Each pillar is made up of a set of bricks. Every brick represents one criterion relevant to the supermarket experience, and each criterion has a corresponding card.

To assess the service, work through the cards one pillar at a time. Each card poses a specific question about the service. Based on your findings from observation, interviews, or service testing select the brick that best reflects the outcome:

- Coloured brick — the criterion is fulfilled
- Striped brick — the criterion is partially fulfilled
- Grey brick — the criterion is not fulfilled
- Checkered brick — the criterion cannot be assessed based on available information

Once all cards in a pillar have been answered, build the pillar from the corresponding bricks. When all four pillars are complete, the bridge reveals the overall inclusivity of the service at a glance — showing which pillars are strong, which are incomplete, and where attention is needed most.



ENABLING OPPORTUNITIES

Empowering people by providing access to services and the ability to receive and co-create valued services

<p>Accessible in-store environment Are there accessible conditions (e.g., quiet hours, reduced noise/light) that support different sensory needs?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>	<p>Participatory platforms & voice Are there accessible ways for customers to share ideas, suggestions, or opinions—and are these taken into account?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>
<p>Access to human support Can customers easily find and receive help from staff when they need it?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>	<p>Product & content co-creation Can customers contribute by rating, reviewing, or sharing their experiences with products or recipes?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>
<p>Issue reporting & problem resolution Is it easy for customers to report problems and receive a clear response or solution?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>	<p>Participatory platforms & voice Are there accessible ways for customers to share ideas, suggestions, or opinions—and are these taken into account?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>
<p>Service & experience feedback Can customers easily share general feedback about their shopping experience?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>		

OFFERING CHOICE Providing people with viable choices between different service offerings, along with giving people the choice to opt out of services should they desire”.

<p>Choice of access points Can customers choose between different store formats or ways of accessing the supermarket (e.g., physical store, online)?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>	<p>Right to opt out Can customers leave the store without buying anything without feeling pressured or restricted?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>
<p>Choice of products Is there a diverse range of products that meets different needs, preferences, and budgets?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>	<p>Freedom of movement (navigational autonomy) Can customers move freely through the store and exit without obstacles or confusion?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>
<p>Temporal flexibility (when to shop) Can customers choose when to shop based on their schedule and preferred pace?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>	<p>Ethical & value-based choices Do customers have enough information and options to choose products based on values (e.g., local, seasonal, ethical)?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>
<p>Choice of service interaction (checkout) Can customers choose how they want to shop and pay (e.g., staff checkout, self-checkout, app)?</p>	<p>not assessed</p> <p>not fulfilled</p> <p>fulfilled</p> <p>partially fulfilled</p>		

RELIEVING SUFFERING

“Providing fair access to essential services that fulfill basic human needs (e.g. the need for water, food, and shelter) in diverse service contexts

Access to essential goods as a basic right
Are essential food products consistently available and easy for customers to access?

not assessed

not fulfilled

fulfilled

partially fulfilled

Physical accessibility to food services
Is the supermarket physically accessible and easy to reach and navigate for different users?

not assessed

not fulfilled

fulfilled

partially fulfilled

Economic accessibility (affordability)
Are affordable options available across different product categories and budgets?

not assessed

not fulfilled

fulfilled

partially fulfilled

Reducing friction in critical moments
Are stressful situations, such as payment issues or finding products, handled in a way that reduces frustration?

not assessed

not fulfilled

fulfilled

partially fulfilled

Inclusive access to online services
Can people with different digital skills, resources, or access still use (or opt out of) online services?

not assessed

not fulfilled

fulfilled

partially fulfilled

FOSTERING HAPPINESS

Encouraging people to experience the pleasure that services can provide (hedonic well-being).

Empathy & inclusive attitudes
Do staff show empathy, openness, and understanding toward people with different needs or disabilities?

not assessed

not fulfilled

fulfilled

partially fulfilled

Spatial experience & store design
Is the store layout intuitive, pleasant, and easy to navigate?

not assessed

not fulfilled

fulfilled

partially fulfilled

Representation & visibility of inclusion
Are there visible signs that diversity and inclusion are valued within the service?

not assessed

not fulfilled

fulfilled

partially fulfilled

Availability of supportive presence
Are staff available when needed without being intrusive or overwhelming?

not assessed

not fulfilled

fulfilled

partially fulfilled

Emotional comfort in the environment
Does the store environment feel calm, comfortable, and non-overwhelming?

not assessed

not fulfilled

fulfilled

partially fulfilled

Co-created positive experience
Can customers shape their experience in a way that feels comfortable, enjoyable, or supportive for them?

not assessed

not fulfilled

fulfilled

partially fulfilled

Appendix G – Personas



Casper Bak
26 years old, employed, lives alone, Copenhagen

Migraine

Anxiety

preferred method of groceries: in-store shopping

„I come prepared with a list and plan my meals and grocery shops, I just don't like to intervene with people in the store“

GOALS

- getting ingredients for planned meals
- ticking off bullets at grocery list
- getting some steps in
- not being in the way of other people

PAIN POINTS

- inconveniencing other people
- spending too much time in the store
- sensory overload

BEHAVIOURS

- tries to avoid rush hours
- does not look at other products
- has pre-made list according to shop layout

NEEDS (design opportunities)

- less stimulation
- knowing when people are in the store
- navigation support



Anna Nowak
31 years old, student, lives with 2 roommates, Copenhagen

ADHD

Dyslexia

preferred method of groceries: in-store shopping

„I didn't even think about what I'm going to do here, but I want to get something for dinner.“

GOALS

- getting ingredients/ pre-made food when getting hungry
- feel safe and not rushed at the checkout
- navigate without asking for help
- getting all the products at one visit

PAIN POINTS

- getting ingredients/ pre-made food when getting hungry
- feel safe and not rushed at the checkout
- navigate without asking for help
- getting all the products at one visit

BEHAVIOURS

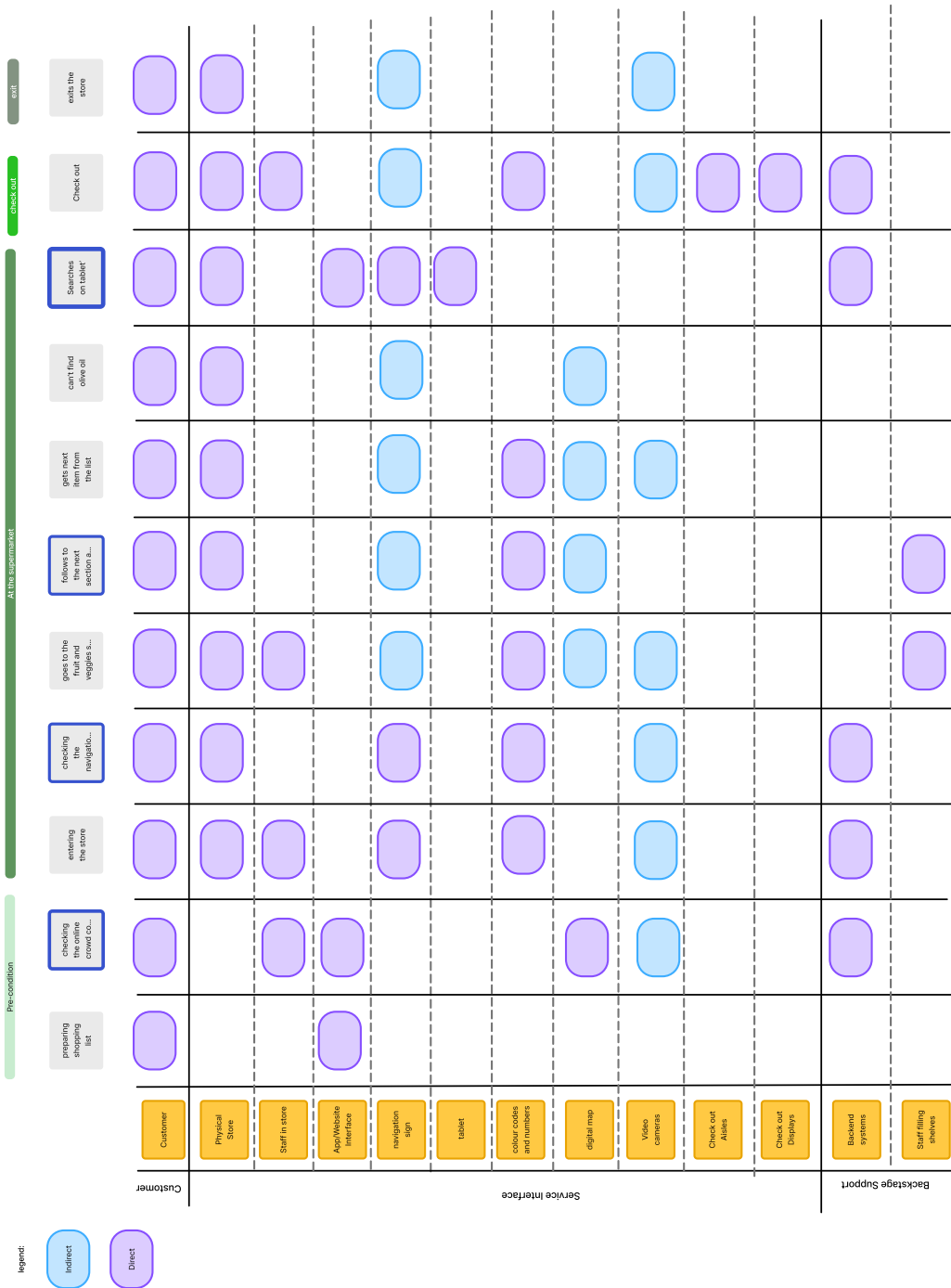
- tries to avoid rush hours
- checks what she has at home and remember what she needs to buy or decides at the store
- remembers the store layout, follows her old route thought the store
- carries all products in her hands

NEEDS (design opportunities)

- improved layout
- more space at the check out, to pass and to stress free purchase her shoppings

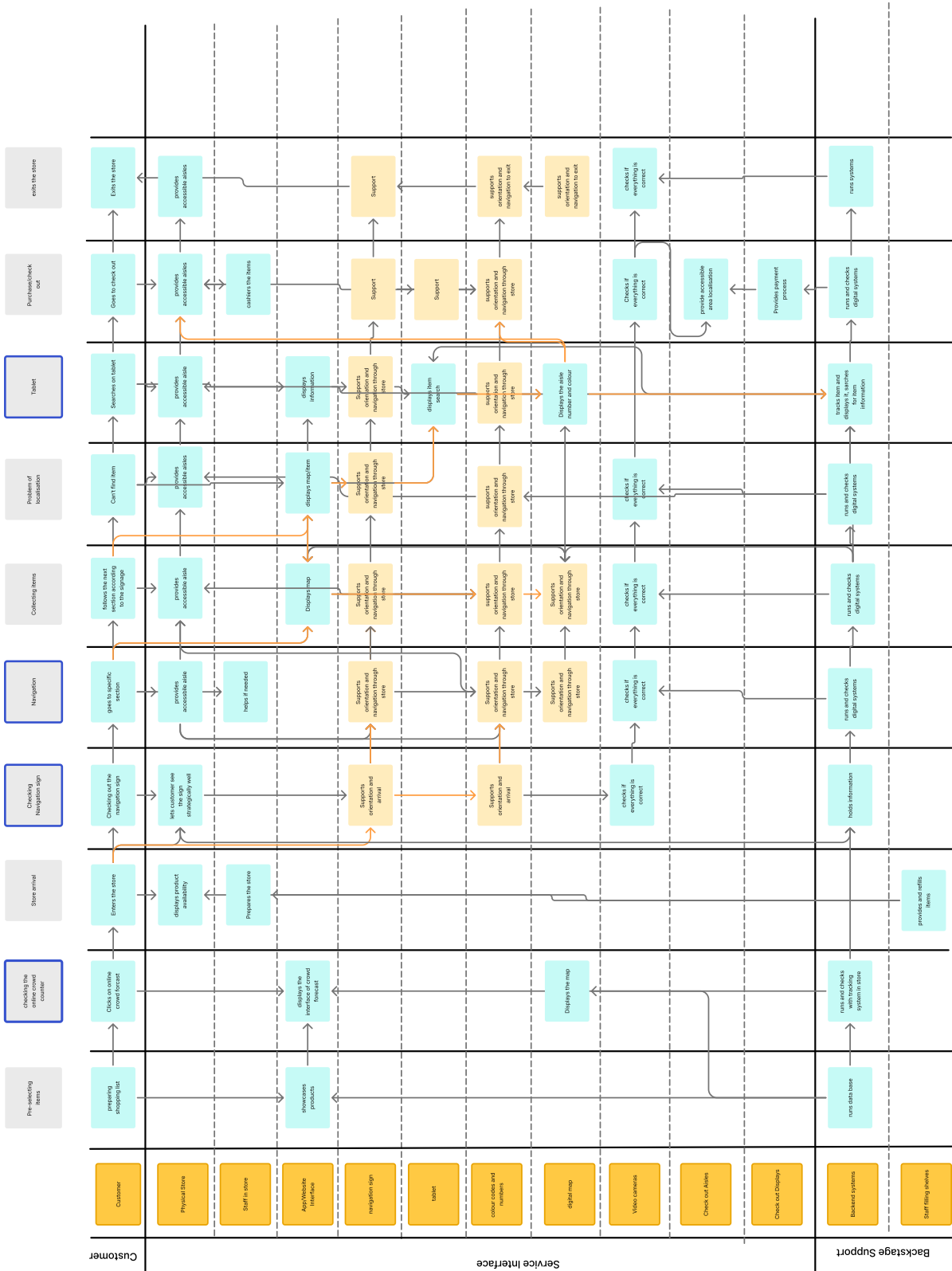
[Link to the digital version](#)

Appendix H – Service System Architecture and Navigation



Map 1 Service System Architecture

[Link to the digital version](#)

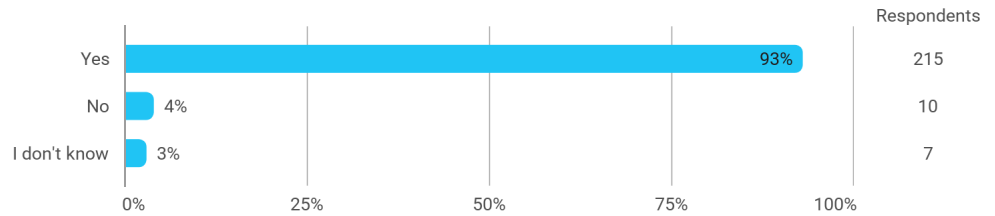


Map 2 Service System Navigation

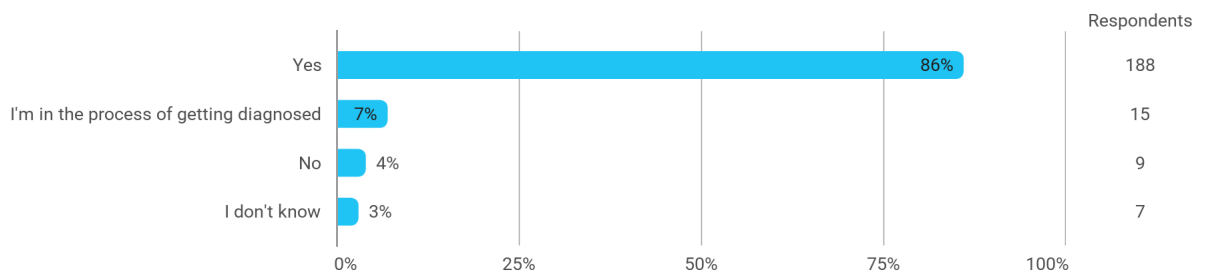
[Link to the digital version](#)

Appendix J – Sketch prototype testing with users

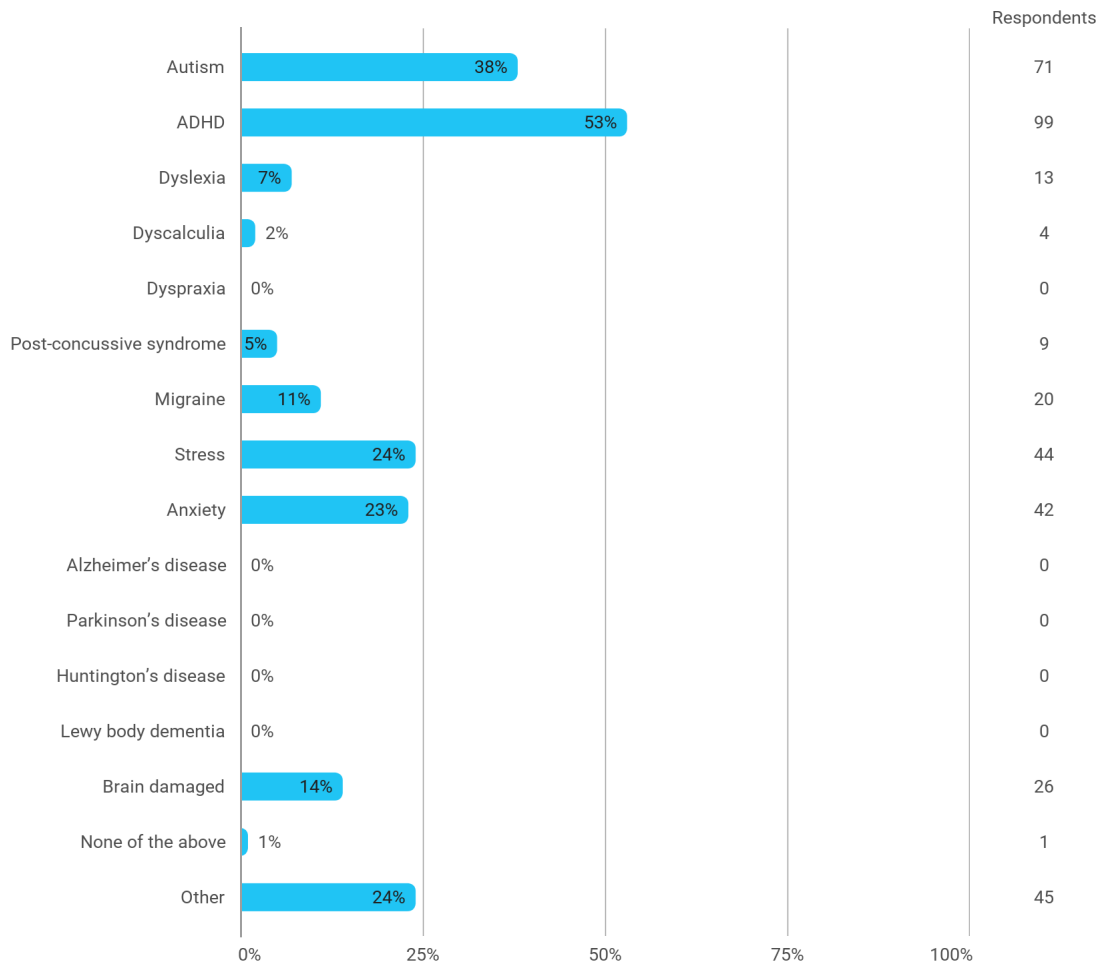
Do you experience cognitive challenges?

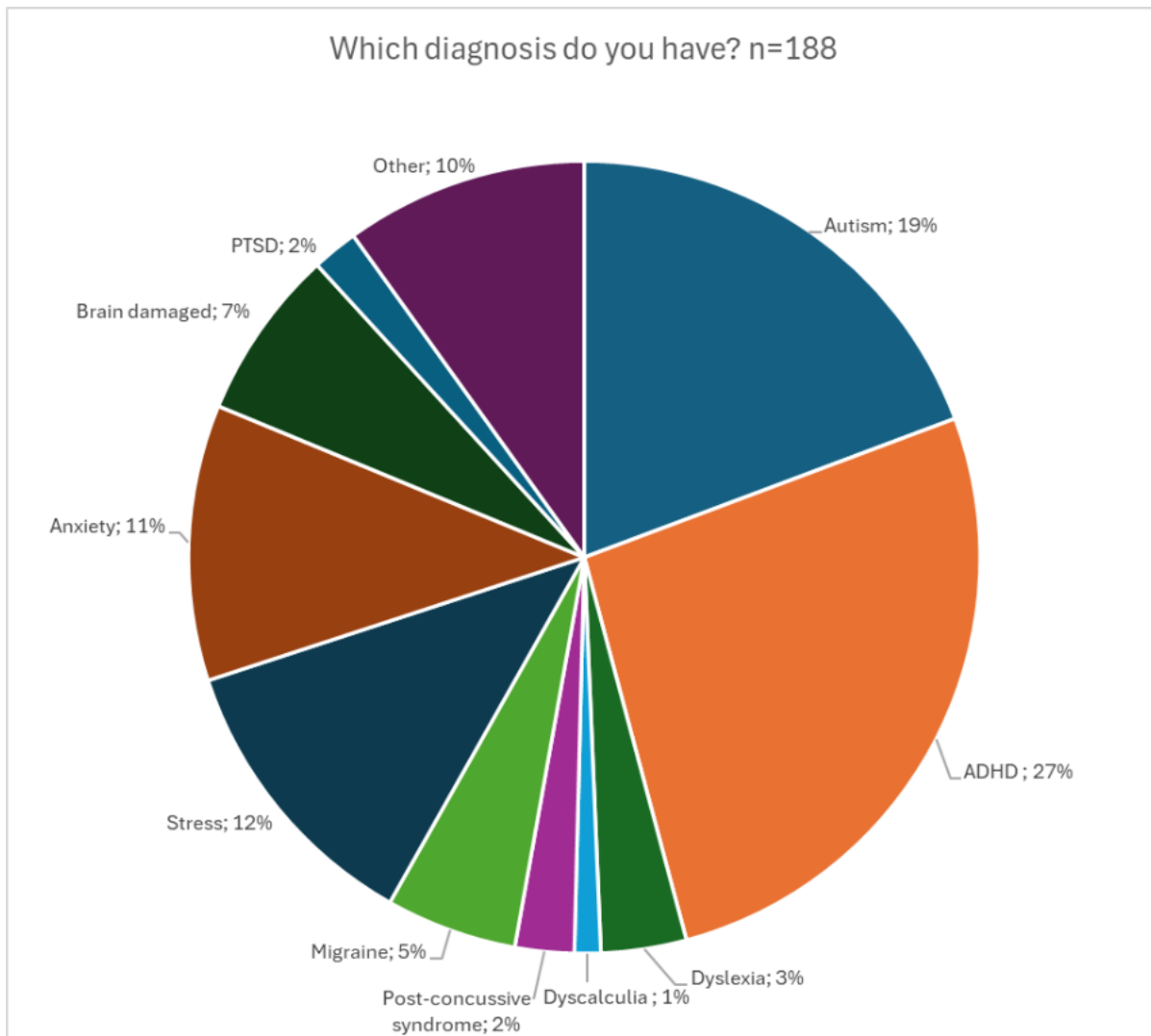


Do you have a diagnosis that affects your cognitive abilities?



Which diagnosis do you have?





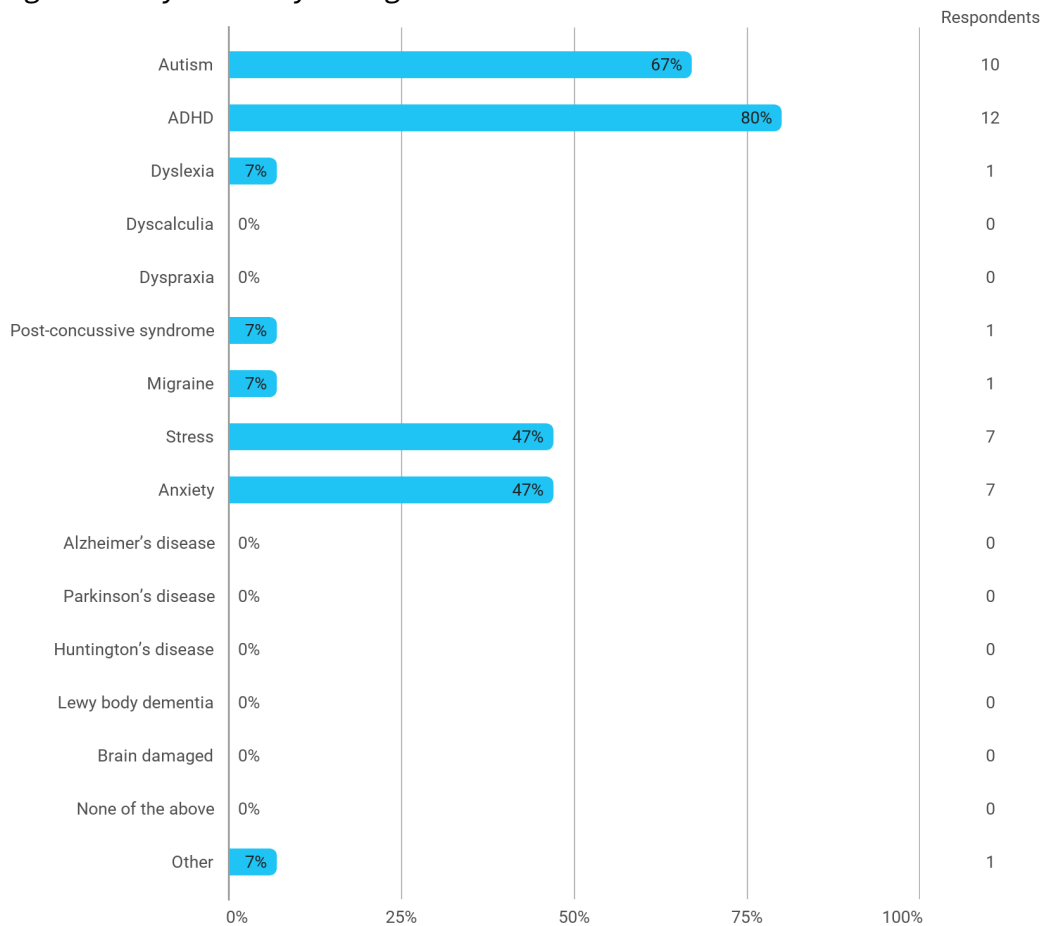
Which diagnosis do you have? - Other

- CPTSD
- udbændthed
- Multiple Sclerose
- Belastningsreaktion/udbrændt
- FND
- Graves (stofskifte) og anoreksi
- Ptsd
- ME
- Bipolar
- hjerneblødning
- Fibromyalgi
- Long covid +pots
- Ptsd
- Fibromyalgi
- Belastningsreaktioner
- Post traumatisk stress.
- Tilpasningsreaktion
- Belastningsreaktion i svær grad
- Pots
- Hjerneskade aneurisme
- Høretab, Tinnitus, skelnetab
- Sclerose
- Depression
- Fibromyalgi
- Senfølger efter corona
- Ptsd
- Paranoid skizofreni
- Symptoms of autism and cptds without any confirmed diagnosis
- Kronisk trætheds syndrom og udbændthed

- *Overgangsalder og belastningsreaktion*
- *Cptsd*
- *PTSD misofoni OCD*
- *Kronisk belastningsreaktion*
- *OCD*
- *Ptsd*
- *Kronisk stress/burnout*
- *I also have symptoms that match autism and Cptsd and background that supports it without any diagnosis but I can very much relate to some struggles that I've learned from anecdotal evidence from people with these diagnosis. I'm not seeking*
- *Which diagnosis do you think you might have?*

diagnosis for this, but I utilize accommodations and modifications that work well for these diagnosis in my daily life

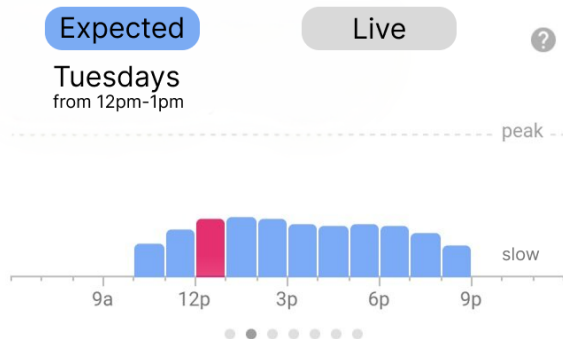
- *Cptsd +fibromyalgi*
- *CPTSD*
- *Kronisk depression*
- *PTSD*
- *PTSD*
- *PTSD*
- *Neurasteni*
- *Multiple sclerose*
- *Asberger*



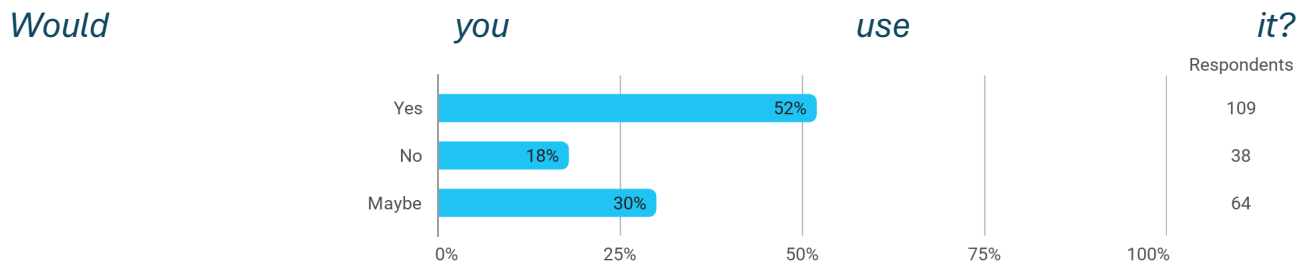
Which diagnosis do you think you might have? - Other

- *Og PTSD*

Imagine a graph where you could see the expected amount of customers during the day, of all days of the week.



People typically spend 25 min to 1.5 hr here



Why/Why not?

- I work full time, so I don't have the flexibility to go during the day
- Så det ville være hurtigere at handle
- For at undgå for meget larm og indtryk en fyldt butik giver.
- Save time.
- Because shopping at a less busy hr means less waiting time and sensory input
- I don't mind the peoples
- I dont know hwat would be more important chose a time where I can be with less people in the shop or that it fits my personal shedual
- Effort of looking it up and planning around it
- I could avoid big crowds
- It's really overwhelming to shop when there's too too many people but I

haven't experienced it as much in Denmark!

- I normally go when I need to and would go no matter the amount of people
- handler ikke ved mange mennesker i butikken
- Fordi antallet af kunder gør en stor forskel på støjniveauer og andre stimuli. Samt hvor nemt og overskueligt det er at komme rundt i butikken.
- Det er ikke alle dage at jeg har problemer med mange mennesker i supermarkeder. Men de dage jeg har, vil det være rart at kunne se hvor mange mennesker der er.
- Så kan jeg planlægge mit indkøb og undgå de lange køer og støj.
- For at undgå køer
- Somme tider er jeg fleksibel. Andre gange skal jeg på indkøb lige nu!

- Giver mig ro
- Vil allerhelst handle hvor der ikke er andre handlende og uro
- Hjælp med færre kunder i butikken
- Jeg vil benytte mig SÅ jeg ikke tager der hen når der er mange
- Måske
- Så man kan undgå store folkemængder
- Ikke nødvendigt da man som neurodivergent som regel kun handler i de samme butikker, da dette er det mest overskuelige og er mindst belastende for nervesystemet. Så man kender i forvejen til hvornår der er travlt det pågældende sted.
- Jeg bruger Loop og er god til at lukke af
- Jo færre kunder, jo hurtigere er jeg igennem og får færre input
- Fordi jeg skal købe ind
- Fordi jeg så bedre kan forberede mig på, hvad der venter forude
- Jeg handler når jeg er på vej hjem.
- Så kan man forsøge at komme hvor der er færre mennesker
- Ja, i det omfang at det passer til hvornår jeg kan
- Jeg bliver stresset bare af at komme ind i butikken pga lyd og lys mm
- Det findes på google og bruger det allerede
- For at undgå overvældelse, overstimuli
- For og undgå larm og mange mennesker
- Jeg handler oftest når jeg kan have en anden med
- Kan ikke rumme masen og parfume
- Prøver at undgå for mange indtryk
- Kan godt nogenlunde selv regne ud hvornår der er mange. Plus mine indkøbsvaner er mest tilrettelagt efter hvornår jeg har mest energi frem for

- hvornår der er færrest mennesker i butikken.
- jeg bliver forvirret og føler mig stresset ved mange mennesker især ved kassebåndet
- Fordi jeg gør det når jeg mærker jeg har mest overskud til det.
- Forudsiglighed
- Foretrækker få folk, men har begrænsninger i hvornår på dagen jeg kan tage ud, så vil sjældent kunne tage det hensyn
- Fordi mennesker larmer
- Sjældent pålidelig, tager fleksibilitet fra mig
- For at undgå mennesker
- Fordi jeg bliver mindre forvirret med færre mennekser
- Jeg bliver stresset når der er for mange og glemmer ofte hvad jeg skal have hvis jeg ikke kan få ro og plads til stille og roligt at gå igennem butikken og kigge på min liste flere gange.
- Det handler om hvornår jeg lige tænker jeg har overskud til at handle
- Fordi det er svært at få købt ind
- De dumme dage vil der være godt at kunne planlægge efter hvor mange mennesker/sansestimuli der vil være. Specielt i butikker jeg ikke kender
- Jeg har Social angst, som gør det bliver meget svært for mig at kunne koncentrere mig til at handle hvis der er for mange, derfor vil det være rart hvis jeg inden kunne se hvor mange mennesker der befandt sig i butikken.
- dfbdgbngf
- Det kommer an på dagen om der er nødvendigt at handle
- kommer an på humøret på dagen
- Giver ro
- har også arbejde det skal passe sammen med
- Så ved jeg om jeg ikke skal gå ind.

- Fordi det vil give en ro
- Så man kan se hvormange kunder der er i butikken.
- Så gå mennesker som muligt er at fortrække for mih
- Jeg har som regel en god idé til hvornår der er mange mennesker, men god idé alligevel.
- Fordi jeg vil undgå "primetime" og ulvetime med stress. Jeg vil bare gerne handle i fred, uden at møde for mange mennesker eller stå tæt på mange
- Jeg ville nok glemme at bruge det. Ellers så er mit liv indrette således, at det er bestemte tidspunkter, hvor jeg har tid til at handle. Så jeg ville nok ikke kunne handle, når der er mindst travlt - f.eks. midt på dagen.
- Jeg vil helst købe ind, når der er færrest kunder.
- Så ville jeg tage ud og handle på det tidspunkt der er færrest kunder
- Har ikke mulighed for at planlægge/tilpasse, hvornår jeg handler.
- Måske vil jeg glemme det
- Fordi små børn og mange mennesker gør indkøb hektisk.
- Handler helst når der er færrest.
- Det er ikke altid muligt at undgå at handle på bestemte tidspunkter
- Kun hvis det er live og ikke estimeret. Forventet kan ses på f.eks. google maps.
- NEJ vil alligevel ikke kunne få gang af det fordi butikken indretning er problemet
- Måske
- Det vil høre det muligt at planlægge besøg
- Stressende og udfordrende med mange mennesker, så det vil jeg gerne have mulighed for at undgå - dette er nemt
- Jeg har kun en bestemt tidsperiode hvor jeg har mulighed for at handle, så det er ikke sikkert at det vil hjælpe mig at vide hvor mange kunder der er i butikken
- Jeg bliver stresset af at handle ind, når der er mange mennesker og mister lettere overblikket.
- Hvis jeg skal handle, kan jeg ikke vente. Handler på vej hjem fra job. Bor uden for byen, så det vil give ekstra kørsel. Plus det vil gå ud over min hvile/stille periode
- Nemt bruger det allerede andre steder
- Et godt tidspunkt
- Det ville dejligt at undgå for mange mennesker, men jeg handler som regel når jeg alligevel er ude
- hvorfor ikke?
- Færre mennesker. Bruger det i ikea
- Det ville kræve for meget planlægning
- Jeg er endnu ikke blevet god til p
- Fordi jeg ved, hvornår der er mange i butikkerne
- Det er ikke sikkert jeg husker, at tjekke informationen
- Så jeg finde et tidspunkt der passer mig
- Færre mennesker=mindre stress
- Det er på engelsk
- Mindre stimuli når det er færre kunder
- Kan på en dag med begrænset overskud og energi, hjælpe en med at vælge et sted, hvor der ikke er ligeså mange stimuli
- Mere ro
- Jeg har apps, så jeg selv tjekker ud - og ved, hvornår jeg skal undgå at komme.
- Mere ro, når der er få
- Det kommer an på humøret på dagen
- Det kan ændre sig på de 5 minutter, det tager at tage til supermarkedet.

- *Foretrækker at handle eller være ude når der er mindst mennesker, trafik og mennesker og snak stresser mig.*
- *Det afhænger nok af dagen*
- *Vælge tidspunkt med færre kunder*
- *Jeg ville ikke kunne overskue at planlægge efter det*
- *Ro!*
- *Foretrækker at handle, når der er færrest mulige folk i butikken.*
- *Det er stressende nok at skulle finde varer, de mange mennesker gør det endnu mere vanskeligt at fokusere*
- *Fordi der ofte er rigtig mange mennesker og meget kø hvilket er stressende*
- *For at undgå at mange står for tæt på og at mine varer køres sammen med andres på båndet*
- *Jeg handler når det passer ind i mit overskud*
- *Foretrækker at handle når der er få mennesker*
- *Foa at kunne komme når der er færre mennesker*
- *Det er ikke sikkert at jeg har mulighed for at handle når der er færrest mennesker*
- *Jeg bruger det allerede, nogle supermarkeder har det på deres hjemmeside*
- *For at slippe for, for mange mennesker og larm*
- *I usually go to the same grocery stores so I know what to expect at each time.*
- *But probably only once because I tend to go to the same supermarket(s) so I'd also assess myself and detect the pattern by arriving at different times and then going out of the perceived "busy" times. Busy can btw mean a lot of people - but also less people, but general groups that make the space*

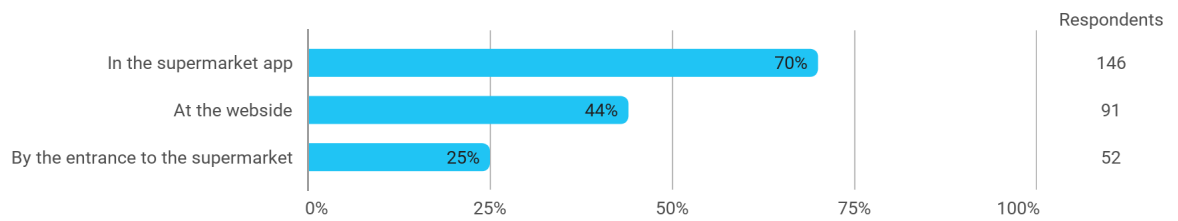
very stimulating for me (loud group of teenagers)

- *Jeg har et arbejde og en hverdag der skal hænge sammen*
- *Vil ikke handle når der er mange*
- *Undgå overfyldt butik og for lange køer ved kassen*
- *Sp bliver jeg låst i mit bevægelsesmønster*
- *Handler i forvejen på tidspunkter hvor jeg ved der er få mennesker i butikken*
- *Har flere steder plus vi ved allerede, hvornår de fleste mennesker handler.*
- *It doesnt really matter to me*
- *Den eksisterer allerede, og jeg benytter den aldrig. Jeg handler når jeg har mulighed for det, men forsøger at gøre det enten meget tidligt eller meget sent*
- *Kunne måske hjælpe*
- *Findes allerede plus de fleste ved, hvornår de bedste tidspunkter i deres butik er og hvornår, der er mange mennesker.*
- *Antal kunder kan ændre sig fra jeg ser hjemme fra til jeg kommer til butikken*
- *Bryder mig ikke om mange mennesker samme sted*
- *Jeg planlægger i forvejen at handle på tidspunkter hvor der er færre mennesker, men sommetider er der alligevel flere end jeg havde forudset*
- *Foretrækker få mennesker*
- *Mister overblikket*
- *Vil ikke benytte*
- *Når der er mange mennesker kan det værre svært at overskue med et usynligt handicap*
- *Jeg prøver i forvejen selv at regne det ud*
- *Vil helst når der er færre mennesker*
- *For at forberede mig selv, hvis jeg skal handle et ukendt eller stort sted.*

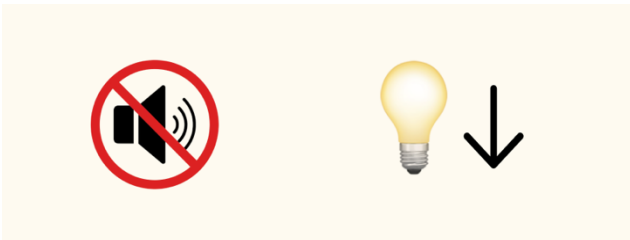
- *Fordi som regel kender jeg "rush" hour i mine lokale butikker*
- *Mindre mennesker mere ro*
- *Vi handler, når vi er ude at køre*
- *Hader at stå i kø, det værste i verden*
- *Alt uro er slemt*
- *Ved allerede hvornår der er færrest*
- *Yes but probably only once - I tend to detect these patterns myself because I use the same supermarkets and I'd gather information by experience to determine when it feels most busiest and avoid those times. Busy for me doesn't always mean only lots of people, it can also mean less people but groups that do very easily overstimulate me (perhaps groups of teenagers that are very loud)*
- *Socialangst. Jeg har selv en forventning om hvornår der er mange i supermarkedet men hvis jeg kunne se det reelle tal live ville det hjælpe mig.*
- *Jeg kan ikke være sammen med mange fremmede mennesker*
- *Fordi det ville være endnu en god grund til ikke at handle. Er nødt til at få når energien er der*
- *Jeg ved ikke*
- *Live?! Er du gal, ja! Fordi det er forfærdeligt at være i supermarkedet når der er mange mennesker. For mig er det ekstremt stressende. Larm, man har svært ved at komme frem, indkøb tager længere tid.*
- *Det findes allerede i en del butikker*
- *For at finde det tidspunkt, hvor der er færrest mulige mennesker i butikken. Mange andre handlende er ensbetydende med megen stimuli i form af lyde, lugte og eventuel fysisk kontakt med fremmede, hvis man kommer til at ramme ind i hinanden. Dette er noget, som trætter mig mentalt.*
- *I already use this feature for many cafes/restaurants, but it doesn't show up consistently. I would love this for the grocery store or "recommended times" for when the place is usually less busy.*
- *Mere overskueligt at handle ind.*
- *Jeg benytter altid når virksomheder har den slags. Jo flere mennesker jo mere ubehag*
- *Jeg handler aldrig i rush hour, en nogle butikker har overraskende mange kunder på uventede tidspunkter.*
- *Kunne handle når der ikke var så mange mennesker*
- *For at vælge det tidspunkt med færreste andre kunder*
- *Jeg kender og benytter det allerede, fordi jeg gerne vil undgå travle tidspunkter*
- *så kan man handle når der ikke er mange*
- *Jeg har svært med at koncentrere mig, hvis der er mange mennesker og uro omkring mig..det gør det svært at koncentrere mig om indkøbsseddelen og finde det jeg skal bruge...mange gange ender jeg med at gå igen uden at handle, hvis der er fyldt af mennesker i butikken, når jeg kommer ind*
- *Gær det allerede igennem Google når det er muligt.*
- *Det ved jeg ikke*
- *Det er mere overskueligt når der ikke er så meget larm og mennesket*
- *Få kunder giver mere ro og færre indtryk*
- *Bryder mig ikke om alt for mange personer*
- *Fordi det ikke ville blive for overvældende at handle*

- *Jeg kan bedre koncentrere mig om at få købt det hele når der ikke er for mange mennesker (indtryk)*
- *Fordi jeg bliver stresset, i dårligt humør og skal vente*
- *Handler, når det passer mig*
- *Mindre mennesker, mindre at forholde sig til og mindre kø*
- *Få folk giver ro, så er der ikke så mange indtryk*
- *Fordi det ikke betyder noget for mig*
- *Sådan at man kan planlægge hvornår man ønsker at handle*
- *Mindre larm*
- *Fordi jeg bliver overstimuleret af for mange mennesker*
- *Så ville jeg vide, hvornår der er færrest kunder i butikken.*
- *Det lyder som en fin idé, men jeg planlægger ikke mine indkøb, men derimod handler spontant, når jeg har en dag med overskud til det. Dog foretrækker jeg aftener lige inden lukketid, da der ofte er få mennesker.*
- *Det gør indkøbsturen lettere, når der er få mennesker*
- *God ide, men svært når man arbejder i det tidsrum*
- *Undgå myldertid*
- *Jeg går på indkøb når jeg har overskud*
- *Uu*
- *Rart at vide*
- *For nuværende handler jeg yderst sjældent, bla fordi man aldrig ved hvor mange andre kunder der er i butikken.*
- *Det ved jeg godt i forvejen. Undgår for alt i verden lørdag mellem 11 og 15*
- *Less is more. Færre mennesker mere overskuelighed*
- *Ro og nedsættelse af stress*
- *Så jeg måske kan indrette min dag efter hvornår det er bedst at handle ind*
- *Det kan være med til at jeg kan træffe den rigtige beslutning om det er på dette tidspunkt det er optimalt for mig at handle.*
- *Så jeg kunne undgå at handle, når der var mange mennesker*
- *Kan ikke klare hvis der er for mange mennesker omkring mig*
- *vil føles som et krav*
- *Jeg kan ikke altid planlægge mig ud af hvornår jeg slavehandelen. Jeg har 4 børn der skal passes ind.*
- *Jeg har brug for transport til indkøb*
- *Planlægger gerne at komme når der er færrest*
- *Så ved jeg hvornår der ikke er så mange mennesker*
- *For at undgå mange mennesker og kø.*
- *Findes allerede og jeg glemmer at tjekke det*
- *Det er ikke mængden af kunder, som er mit typiske problem, men i ekstremer kan det være det*
- *Fordi jeg bliver stresset og overstimuleret hvis der er mange mennesker*
- *I perioder, hvor jeg ikke er på job mv og måske er mentalt presset kunne jeg godt finde på at bruge det*
- *Den funktion findes allerede på Google, men den er ret upræcis*
- *Er derfor mange, bliver jeg hjemme*
- *Foretrækker så få mennesker som muligt.*
- *Vil gøre det mere overskueligt at handle. Mindre stress/angst fyldt*
- *Det kræver for meget energi*
- *Kommer an på, hvor nødvendigt det er, at komme afsted*

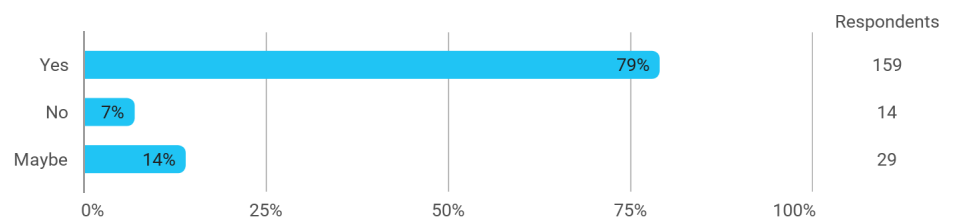
How would you prefer to access this information?
(choose 1-3 options)



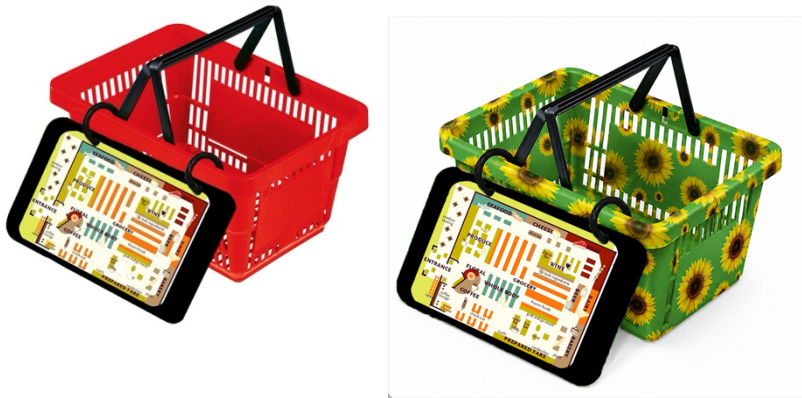
Imagine you enter a supermarket. There are no music and the beeping sounds from the cashier are dimmed. The lighting is a bit warmer, and less bright than usual.



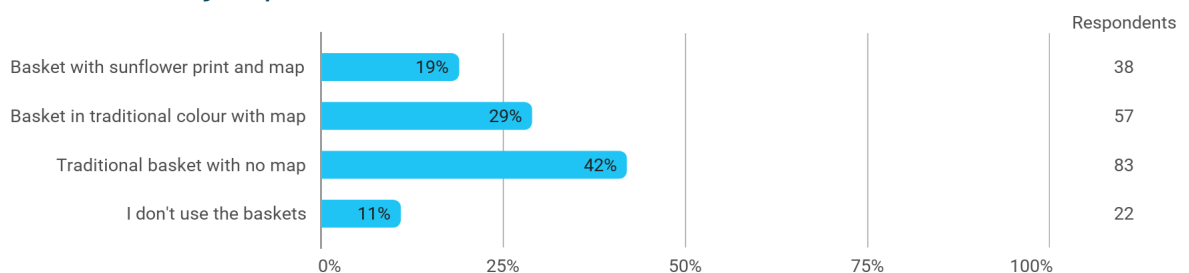
Would you appreciate these adjustments?



Imagine the shopping baskets have a paper map attached on the side. The map shows where each section of the store is and how to get around. There are an additional few baskets with both a map and sunflower print. The sunflower symbol on a green background is the official symbol for hidden disabilities.



Which basket would you prefer to use?



Why would you choose as you just did?

- We are ostracized enough, I wouldn't want people to make assumptions about me by seeing the sunflower print
- Har ikke brug for et kort
- Jeg handler mest steder jeg kender. Og jeg foretrækker ikke at tiltrække opmærksomhed om mig.
- Map is useful. Whole basket in sunflower a little too bold, could just be a little tag.
- It's necessary for strangers to know of my challenges. The map would decrease confusion and distractions

from wandering into the wrong aisle, thus be less draining.

- Useful
- I don't want to show my disability but really appreciate the map
- Don't need gimmick basket but finding things better would be helpful
- I don't usually use baskets, if I had to I would use the regular for my local supermarket which I already know but I might use the regular with the map for new supermarkets
- A map would cut down my shopping time by half I feel like. Danish supermarkets are organized very strangely

- *A map is useful but I dont have any hidden disabilities*
- *det er noget man kender*
- *Fordi ellers skal jeg også sætte mig ind i det. Jeg handler kun steder jeg kender i forvejen.*
- *Jeg er ikke så hårdt ramt som andre, der bruger solsikkesnoren. Derfor synes jeg at jeg vil lade dem om at bruge solsikkekurven, da jeg ikke har behov for at man tager særlige hensyn til mig. Men et kort over butikken ville være rigtig rart. Jeg HADER at handle nye steder fordi jeg ikke ved hvor deres ting er.*
- *Jeg ville have tendens til at glemme noget hvis jeg får mulighed for at se et kort.*
- *Den signalerer det jeg ønsker andre tager hensyn til*
- *Kortet er i vejen. Jeg kan tage en solsikkesnor om halsen hvis jeg skal bruge den. Kortet bliver sikkert ulækkert. Kort skal hænge i loftet eller på væggen.*
- *Føler mig mere tryk*
- *Ville vælge kurv med kort hvis det var en for mig ukendt butik/supermarked.*
- *Brug for vogn eller kurv med hjul for at undgå tunge løft*
- *Den var den første*
- *Vil helst bare have en almindelig kurv.*
- *Grundet blindhed (helst et kort jeg kan bruge; føle rundt på)*
- *Min solsikkesnor er nok når jeg handler. Det er svært både at fokusere på et kort samt omgivelser på en gang*
- *Hvis jeg er i Bilka meget gerne et kort. handler altid i Rema, hvor der ikke er rod, spotvarer og en app - Netto derimod er jo en decideret møgbutik og kommer der aldrig, ville være ødelagt i dage efter (Heldigvis at remas varer generelt er en bedre kvalitet!)*
- *Jeg bruger altid solsikkesnoren*
- *Fordi jeg som udgangspunkt ikke har lyst til at skille mig ud*
- *Det virker voldsomt at gå med solsikke. Og alm fungerer fint. Men kort er god ide, så man ikke skal bruge energi på at lede*
- *Jeg har som regel ikke behov for at skilte med mine udfordringer , men jeg vil gerne have overblik over butikken*
- *Jeg benytter mig af de samme supermarkeder og ved hvor 90% af tingene er. Men hvis jeg kommer til et nyt supermarked vil jeg tage en kurv med kort*
- *Har ikke lyst til at fortælle folk om mine udfordringer*
- *Gider ikke flage med mine problemer*
- *Jeg har ikke brug for flere opgaver til hjernen mhp. at tyde et kort. Jeg kommer oftest i supermarkeder i mit nærmiljø.*
- *Almindelig kurv men evt med solsikke logo på siden*
- *Jeg ville ikke kunne finde rundt alligevel. Solsikke kurven ville jeg bruge hvis den var der*
- *Vil mindst muligt skille mig ud*
- *Bryder mig ikke om at blive hængt ud og synliggjorte*
- *I butikker jeg ikke har været i før vil det være smart med kortet. Og solsikkefarverne tror jeg vil være en god hjælp så man giver andre mulighed for at vise hensyn og forståelse for at man er lidt usikker.*
- *jeg har ikke brug for printet men bærer i forvejen min solsikkesnor synligt så det let ses at jeg ikke bare er almindelig langsom*
- *Fordi jeg har poser med så jeg pakker med det samme*

- Kortet syntes jeg er praktisk, men solsikkekurven syntes er lidt for tydelig (men solsikkesnoeren er fin)
- Jeg bruger min egen indkøbsvogn tilpasset mine fysiske begrænsninger
- Synes den er lidt voldsom den med solsikker
- Jeg kender indretningen af butikker, kun hjælpsomt hvis de var super specifikke og så ville kortene være uoverskuelige. Mere brugbart at ting ikke bliver flyttet rundt og alle butikker i samme kæde har (cirka) samme layout.
- ?
- Ønsker ikke at udstille mig selv med solsikkebånd
- Jeg har ikke brug for alle der går forbi mig ser anderledes på mig, jeg vil gerne være så usynlig som mulig når jeg handler
- Jeg benytter mig af samme butikker hver gang, så jeg ved hvor alt er
- Fordi det er svært
- Jeg ville gerne have en solsikke kurv uden kort
- Kortet ville hjælpe både angsten med at gå direkte hen, samt min adhd
- gfdsgdf
- Jeg har mine egne rutiner i forbindelse med indkøb
- For hjælp men alm, for ikke at stikke ud og være anonym
- Ro
- jeg tror det er nok
- Så folk kan se jeg har et usynligt handicap
- Jeg har selv pose med og scanner på app
- Jeg er egentlig ok til at navigere i butikker. Og jeg har ikke så store udfordringer, så jeg har behov for solsikkesnor, men stadig en god idé

med solsikkekurv, da den er mere tydelig

- Jeg har ikke brugtsolsikkesnoeren endnu, men jeg har en.
- For det meste handler jeg i de samme butikker. Der kender jeg deres layout. Jeg føler heller ikke, at jeg har brug for solsikkerne.
- Hvis det er en butik, jeg kender, har jeg ikke brug for et kort. Men i en ukendt butik ville det nok være en fordel.
- Fordi jeg ikke vil føle mig anderledes end andre.
- Har brug for at kunne finde rundt effektivt
- Jeg vil ikke bruge dem med solsikke - jeg vil ikke skille mig ud. Men god idé med kortet!
- Fordi så er det åbenlyst at jeg er på overarbejde.
- Det vil afhænge af mit behov på dagen. Nogle dage vil jeg have behov for en solsikke kurv, andre dage ikke.
- Handler primært i butikker hvor jeg kender indretningen, men hvis det ikke er muligt, vil det være rart med et kort
- Jeg ved godt hvor tingene er.
- Fordi kort er stressende I laver sgu flere problemer end I gør gavn med nogle af jeres spørgsmål
- Vil ikke udstille mig selv
- For hensynet
- Jeg har ikke et behov for ekstra støtte eller andet under min handletur, derfor ikke solsikkekurven. Kortet ville måske være forvirrende, hvis det ikke allerede kunne ses hjemmefra, da ens koncentration m.m. ikke er ligeså meget til stede i butikken. Så tilføj endelig også det på appen eller hjemmesiden, evt ude foran også.
- Det VÆRSTE er når der bliver flyttet rundt på varerne og man skal bruge tid, ressourcer og energi man ikke har,

på at finde rundt. Så vil jeg hellere stille kurven på plads og forlade butikken.

- Jeg er ikke så god til at læse kort og har heller ikke behov for at skilte med, at jeg har et usynligt handicap.
- Kortet kan hjælpe mig med at finde varerne
- Efter mit behov
- Ikke brug for
- jeg bruger de samme butikker, så jeg ved hvor alting er
- Jeg kender normalt butikken godt. Men var det en ny butik, så måske med kort.
- Behøver det ikke
- For mange ekstra beslutninger ved at skulle vælge noget andet end jeg plejer
- Fordi jeg handler i de samme 2 butikker hver gang, jeg kender butikken og de kender mig
- Signalere "skjult handicap" Men kortet ville jeg ikke bruge - Er rum og retnings"blind"
- Jeg behøver ikke stå mere frem end jeg gør
- Jeg ved allerede hvor ting er.
- Kort er forvirrende, og passer nok ikke alligevel, når de flytter rundt på hylder
- Det ville afhænge af mit humor om kurven ville være solsikke eller alm farve. Altid et kort.
- Det fungerer fint for mig
- Fordi jeg stadig kan
- Jeg skilte ikke med mine udfordringer
- Jeg har ikke lyst til at skilte med mit handicap, men bruge mange kræfter på at finde rundt
- Jeg har ikke brug for at skilte med Solsikken.
- Jeg har en solsikkensnor i tasken til nødstilfælde.

- Den er diskret nok til ikke at fange opmærksomhed, men hjælper mig stadig med at komme derhen hvor jeg skal.
- Hvis det ikke er mit almindelige supermarked
- Jeg bruger vogn til at støtte mig til
- Jeg handler oftest i de samme butikker
- Bruger egne poser altid, og scanner køb undervejs i butikken. Spare SÅ meget kræfter og overskud.
- Vil hellere have en vogn
- Det er kaotisk nok at skulle navigere i supermarkedet, det skal være et meget detaljeret kort for mit brug, et kort vil være for uoverskueligt at skulle bruge tid på, det vil forstyrre balancen af kurven,
- Jeg handler kun i butikker jeg kender så jeg har ikke behov for kort. Jeg ville vælge alm kurv for ikke at tiltrække opmærksomhed
- Bruger vogn, da min venstre arm er med nedsat funktion
- Jeg er i stand til at tage vare på mig selv - men dejligt, hvis ting ikke flyttede rundt i butikken.
- Kortet ville være fin. Jeg bruger ikke soldikkensnor når jeg handler
- Kortet er en fin ide, men jeg er ikke så glad for solsikkemønsteret, da folk har oplevet at blive antastet når de brugte symbolet
- Jeg vil ikke skille mig ud
- Kortet er fint nok, men jeg ville foretrække det var i supermarkedets appen, da det ellers bliver svært at bruge lige så snart der er bare lidt varer i kurven. Desuden er det "clunky" ud.
- For ikke at skille mig for meget ud
- The sunflowers on the green background looks pretty and if there's an annoying amount of people I might

feel more noticed. Otherwise a basket with a map would be a good solution in bigger less organised stores

- *I don't like the map, I would rather like the signage and design of the physical space to act as a map. The map itself would be very bothersome to me. I'd take a sunflower patterned basket if it was in a design I could work with. I don't often take a basket and I never take a basket that's the shitty dragging one. I'd actually prefer a bag like ikea - and would be nice with the sunflowers to indicate that my disability doesn't show*
- *Har ikke brug for at udstille mig selv*
- *Ville ikke kunne læse kort midt i indkøb.*
- *Forsi jeg ikke kan vælge solsikkekurv uden kort*
- *Kort på vognene ville osse være en go ide*
- *Solsikke snor er allerede mulighed. Folk vil tage kurv først for uden hensyn til farve. De skifter sektioner for ofte til at holde kort opdateret.*
- *the map could be usefull, but i dont think my dissability requires special attention in a supermarket*
- *Fordi jeg synes det er en genial ide, men jeg bryder mig ikke om at udstille mit handicap*
- *Det er mere enkelt og som det plejer.*
- *Solsikke snor findes allerede. Folk tager kurv først for uden hensyn til farve. Fysisk kort er for vanskeligt at holde opdateret.*
- *Jeg viser ikke jeg har skade*
- *Fordi jeg kun handler i butikker jeg kender*
- *Jeg bruger altid vogn da jeg handler stort ind så jeg ikke skal afsted så tit*
- *X*
- *Så andre kan se, at man har en udfordring/syg*

- *Min udfordring er ikke her*
- *Så kan de øvrige kunder se man skal bruge lidt mere tid til tingene.*
- *Fordi*
- *Det giver tryghed også at vise andre kan tage hensyn*
- *Man skulle kunne tage et kort og tage med sig. Jeg bruger indkøbsnet eller vogn*
- *De dage jeg har det mest svært, vil jeg tage en solsikke kurv*
- *Jeg kan godt finde rundt*
- *Den grønne stresser mig.*
- *Jeg kan godt lide og gå rundt og søge, og de fleste supermarkeder har varerne samme steder*
- *Så er det nemt og hurtigt at komme ud*
- *Hader at butikkerne flytter rundt på tingene, når man ved hvor alt plejede at stå*
- *I personally don't like the map idea because it's an additional thing that I would perceive getting in my way and taking up space. I'd rather the map be in the form of obvious signage and the design of the store so it feels "natural" in the terms of flow and I can use visual signage in the space as my map. I would appreciate the sunflower marked basket but never without the map. But I would also never chose the "traditional basket" that's currently the one I can find in coop, the one you have to drag on the floor. I might grab the "traditional basket" if it's the design pictured. But I wouldn't always. I think I would always however chose a bag (the ikea model) to put my groceries in - and I would like that I could chose the sunflower pattern but I don't think it would neccesarily be a make or break for me because having the bag (or a better designed basket) would already make me feel less disabled so I wouldn't really feel like I*

needed the accommodations that would follow having the sunflowers

- *Solsikkeprintet synes jeg ikke jeg hører under og ville ikke bryde mig om at blive "udpeget" ved den kurv jeg gik med. Jeg føler heller ikke kortet er nødvendigt for mig.*
- *Jeg har altid solsikkensnor på tasken*
- *Jeg har min egen kurv*
- *Hellere være lidt mere diskret*
- *For mig er der stadig meget stigma omkring solsikkensnoren. Jeg er ikke klar til at være "åbenlyst handicappet", udover mine høretelefoner eller ørepropper som jeg er nødt til at have på/i. De er trods alt lidt diskrete stadig.*
- *Ønsker ikke at udstille mig selv*
- *Så andre handlende og personale ved hvorfor jeg muligvis reagerer anderledes end forventet, hvis jeg er presset .*
- *I think it would be hard to find the sunflower basket and many people don't know what it means so it will lose it's meaning. If people know about the sunflower program they often already have their lanyard/card.*
- *Jeg ville føle mig udsat med en kurv med solsikker på, føle at alle kigger på mig, som om jeg er et problem.*
- *Jeg tror ikke jeg sådan ser mig selv som handicappet nok til at fremmede behøver tage hensyn til mig.*
- *Jeg vil bare gerne vælge solsikkekurven, uden kort.*
- *Vil gerne være diskret og solsikke gør nogle henvender sig unødigt*
- *Kort er ikke relevant men solsikke er super*
- *Jeg vil egentlig gerne bruge solsikke men er nervøs for at møde klienter eller samarbejdspartnere fra arbejdet der måske vil betvivle min*

arbejdsevne. Kortet ville være en god hjælp

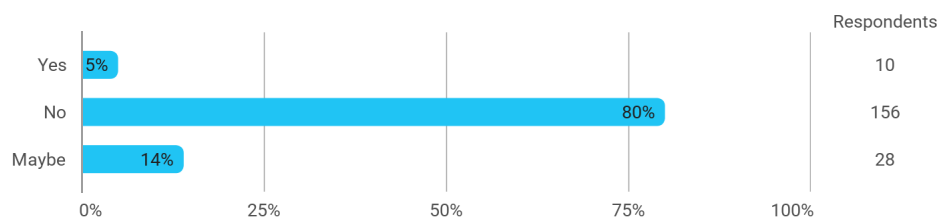
- *fordi jeg vil have hjælp hvis brug for det.*
- *Fordi jeg har fundet ud af, at når jeg har min snor på, er de andre handlende og medarbejdere mere hensynsfulde, og opmærksom på mine signaler*
- *Jeg er ikke intrasseret i folk skal tage hensyn til mig, ved at bruge solsikkensnore eller kvuve*
- *Fordi jeg behøver ikke at hele verden skal vide at jeg har en diagnose*
- *Jeg føler mig mere almindelig end handicappet men rart med et kort*
- *Jeg vil ikke reklamere med mine udfordringer*
- *Så ved folk at jeg har det svært*
- *Måske folk vil tage mere hensyn*
- *Jeg kan ikke koncentrere mig både om kort og hvad jeg skal huske, samtidigt med at jeg får i impulser om impuls køb og en tanke om noget 5.*
- *Smart med kort*
- *Har ikke brug for disse typer kurve*
- *Det ville signalere til andre at vi er en familie med særlige behov*
- *Et kort ville være mere forvirrende*
- *Fordi det ikke er et problem*
- *Jeg bryder mig ikke om at "kategorisere" mig med et usynligt handicap når jeg er ude og handle*
- *Jeg vil vælge et supermarked jeg kender og der kan jeg godt finde rundt. Kortet ville kræve endnu mere overblik.*
- *Fordi den vil passe bedst til mit behov*
- *Kurven gør ingen forskel for mig*
- *Jeg synes sjældent, at der er system i varernes placering, og jeg hader at handle i en butik, som jeg ikke kender. Men jeg skal ikke være til udstilling med mine vanskeligheder, blot bare*

have ro og struktur i indkøbet. Det ville være fedt med et kort, der viste hvor tingene var placeret.

- Jeg ved som regel hvor tingene er, eller har nemt ved at finde dem, men synes alligevel kurvene er en god idé. Jeg kender andre der ville være glade for kortet og solsikkekurven
- Står ofte skilte i loftet
- Bedre overblik. Hurtigere ude igen
- Scanner selv gennem forretninger og pakker med det samme.
- Har ikke brug for at skilte med mine problemer
- Solsikkekurven er grim. Men hvis kun håndtaget var solsikke og kurven rød, så
- Fordi Solsikken gør mig mere tryk, da den signalerer at jeg er utryk i disse omgivelser
- Det ekstra hensyn jeg ville få af at gå med en speciel kurv ville ironisk nok give mig ekstra angst. For mig handler indkøb mest om at komme hurtigt og ubemærket igennem supermarkedet, uden for mange interaktioner.
- Der er for mange farver på solsikke kurven og jeg lover jer at kortet kommer til at ramme ind i alt når man bevæger sig rundt hvilket er unødvendigt stress.
- Jeg scanner mine varer gennem butikken og pakker dem i medbragte poser
- Ved ikke om jeg ville bruge kortet
- Fordi jeg ikke ønsker opmærksomheden fra andre handlende i forhold til mine udfordringer.
- Kurven pga det flotte design - det gør det til en rarere oplevelse. Og så med kort, så Dexter lettere at finde varerne

- Har svært ved at røre noget andre har rørt ved
- Jeg har ikke brug for et kort for at finde rundt. Og jeg ville stadig ikke kunne finde alt med et kort. Så logisk er butikker ikke opbygget
- Man kan ikke se kognitive udfordringer, så skal jeg ikke forklar
- Jeg er meget struktureret og ved præcis hvor alt i mit foretrukne supermarked er.
- Jeg bruger ofte ALT for meget tid og energi på at tage tilløb til at spørge efter en vare... gik jeg med denne kurv og jeg leder efter noget så vil jeg forvente at medarbejderne er ons på min person og træder ind og spørger mig om de kan hjælpe
- Jeg har ikke lyst til at reklamere med, at jeg er anderledes.
- Kurven er for lille og hvis der sidder noget på siden bliver jeg irriteret
- Jeg har ikke brug for at vise mit handicap til hele verden
- Fordi jeg primært handler de samme steder, så jeg ved hvor varerne er
- Jeg har ikke bruge for skiltet, men at kunne vide, hvor de enkelte varer står helt konkret
- Jeg tror et kort ville skabe ubalance i kurven og være bøvlet at se på undervejs på grund af placering ville hellere kunne se kortet på hjemmesiden
- Vil ikke skilte med mit problem
- Bruger indkøbsvogn pga halvsidig lammelse
- Solsikken er blomsten for hensyn
- Ved ikke
- For at vise, at jeg nogle gange trænger til plads, eller ikke tænker så langt. Jeg farer let vild

Are there any other signalling or sign that makes you feel more included besides the sunflower?



What signals or signs would make you feel more included or safe?

- Stillezoner og generelt HELE corona situationen, hvor vi IKKE måtte kramme ens læge (kramme kulturen var stukket helt af før 2020) - generelt alt hvor der naturligt er gjort "mere plads" eller skilte med Max. 2 personer osv.
- Et der ikke er så markant, demenssymbolet er rigtig fint og diskret og kan sættes på ens tøj
- Mange forskellige
- hvis der er et symbol for hjerneskader
- Nedsat hørelse
- Aner det ikke
- Pentagram, puslespilsbrik?
- Possibly signs at the allies about what you can find there.
- Farvet infinity tegn
- To i butikken og ingen løb
- I think perhaps I'm not convinced everyone knows what the sunflowers mean. So I like generally when the design of space or whatever has just included modifications for disability anyways. If not, perhaps a signage that somehow indicates "supermarkets can be hard for all, let's show patience or consideration" or a more general way of encouraging people to accommodate other people
- Jeg kan godt lide autisme-evighedstegnet. Men i bund og grund føler jeg mig mest inkluderet når miljøet er inkluderende, så jeg kan være som alle andre.
- Jeg har en snor på min taske, hvor der står autist på...så folk bag mig, der ikke kan se solsikkesnoren, har mulighed for at se snoren på min rygsæk
- Der er ikke nogen. Jeg svarede måske på Tidligere spørgsmål
- Det ved jeg ikke
- Et symbol der viser at man ikke har lyst til kontakt inde i supermarkedet
- Et som symboliserer angst
- Solsikkesnoren
- Fotos af varerne
- Jeg har ikke behov for at reklamere med, at jeg er anderledes.
- Ikke nogen. Solsikken bliver misbrugt og bliver ikke respekteret mere

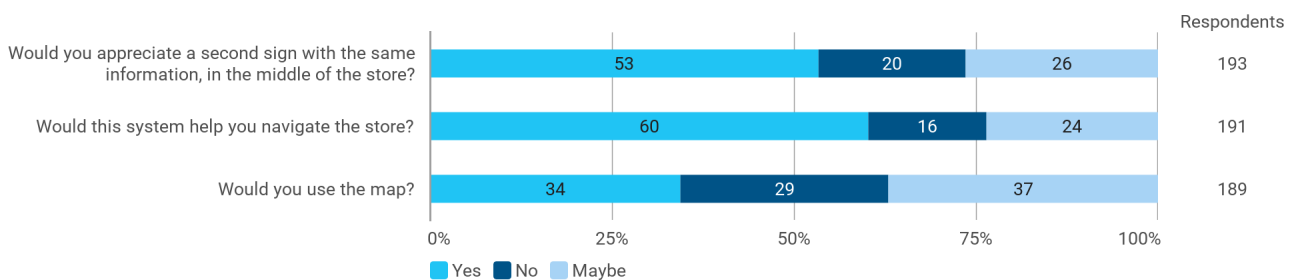
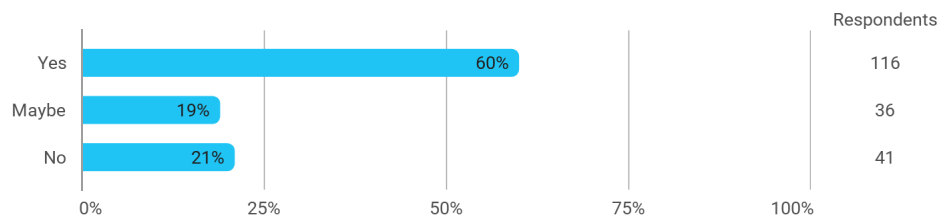
Imagine a sign by the entrance, explaining the structure and system of the store.

Like:

- What signs to navigate after in the store
- Where to find price-scanners
- What check-out options are available
- A map of the store
- etc.



Would you take a little time at the entrance to check out how to navigate the store, by reading the sign?



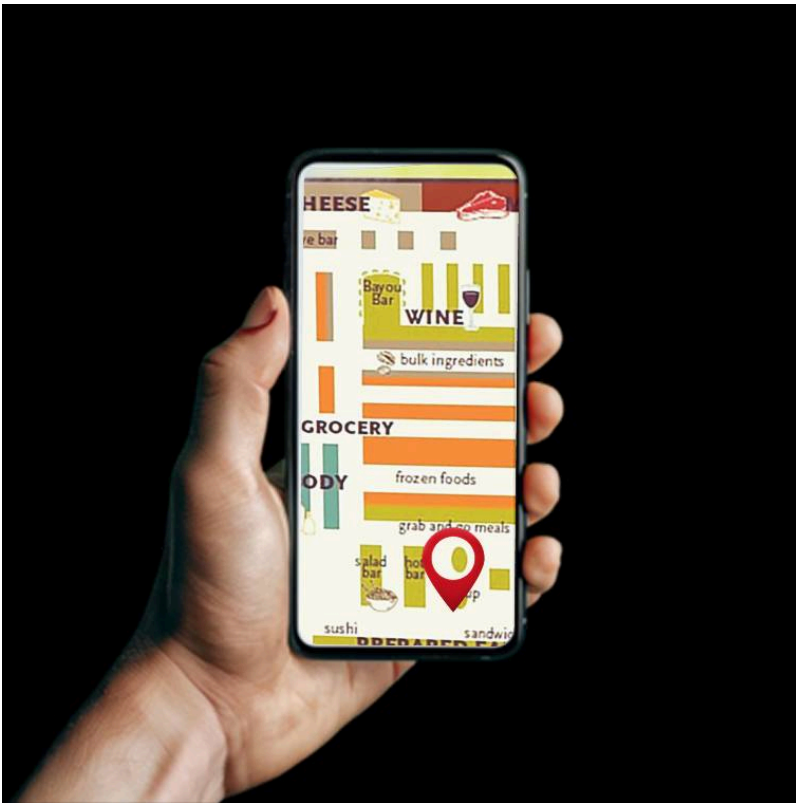
Imagine there is a digital map of the store in the app. The map shows both sections and subsections.

E.g.

Dairy

>

Milk



Would you use the map?

Why/why not?

- I don't like using too many apps
 - Så svært er det ikke finde rundt i en butik
 - Jeg kan se situationer hvor det vil være behjælpeligt. Men personligt tror jeg det ville være sjældent.
 - Finding things and looking at my list is already a lot without another thing to look at.
 - Depends on size of store. If big, then definite yes. If smaller, perhaps, but would depend on how confusing the layout is and how often I've been there.
 - I think if I know the store I will not need it anymore and many store layouts are similar, but I might use it for items that are not on my daily list and would appreciate a search bar.
- I'd use it if I could look up a product and it tell me what aisle, instead of having a map. Some supermarkets have this
 - I think I would rather walk around and find out/use a physical map at the store than downloading an app
 - Not a fan on following a map on phone, take space in hand, if holding the basket I have to put my phone somewhere everytime I want to grab a product + if everyone does the same people walk more slow, don't look out for other people etc... I think a physical map on basket is less disconnecting
 - If I need something specific or if I'm at a new supermarket that I haven't been before
 - er ikke til mange apps på mobil

- *Jeg ville bruge det fordi jeg forbereder mine indkøb hjemmefra, jeg vil ikke have overskud til at bruge det når jeg først er der*
- *Jeg sætter pris på at jeg kan finde de ting jeg præcist leder efter i butikkerne. Det kunne også være smart med en søgefunktion, så hvis jeg søgte "mel", viste den hvilken sektion jeg skulle gå til.*
- *Der skulle være en specifik søgefunktion, så jeg kan søge et enkelt produkt frem.*
- *Hvis jeg kan finde specifikke varer, eller hvis jeg kan få anvisninger ud fra min indkøbsliste.*
- *Overblik*
- *Jeg bruger oftes ikke mobilen når jeg handler*
- *Brug for få indtryk. Kan ikke holde overblik*
- *Pas*
- *Måske ville det bare stresser mig yderligere.*
- *Det vigtigste er at jeg som blind kan bruge kortet uden syn (husk derfor lyd eller føle evnen)*
- *Det er svært at fokusere på tlf og omgivelserne samtidig*
- *Jeg ville bruge det, for så var der en medarbejder mindre jeg skulle kontakte og spørge (handler dog heldigvis et godt sted, så dialog er altid rart)*
- *Der bliver for meget at forholde mig til*
- *Jeg ville måske bruge kortet, hvis jeg i forvejen skulle bruge mobilen til andre funktioner i butikken - eks. skan selv*
- *Det er smart og jeg kan bliver hurtigere færdig og komme ud*
- *Så jeg ikke behøver lede*
- *Der er mange ting og holde styr på når man først er inde! Inkøvseddler, tilbud i app mm så hvis kortet skal være i*

- *endnu en app tror jeg det bliver for meget at holde overblik over*
- *Kommer an på om det er for uoverskueligt*
- *.*
- *Fordi skærm fokus koster energi*
- *Overskuelig*
- *Jeg ville vide hvor jeg kan finde de ting jeg skal bruge hvis det er en butik jeg kender*
- *Kende ruterne. Bruger meget meget sjældent andet end 2 faste supermarkeder*
- *Kan godt læse et almindeligt skilt*
- *Jeg har som regel ikke min smartphone med når jeg er nede og handle. Måske det også vil kunne gøre det svære at navigere helt generelt og få det til at tage længere tid, hvis man i stedet for at kigge sig omkring bliver for van til at finde vej via telefonen. Men jeg ved det ikke helt.*
- *når det ikke er min daglige butik så ville jeg have brug for det, nu færdes jeg kun i andre butikker når jeg har en hjælper med*
- *Jeg skal bruge alt for meget krudt på at finde rundt i kortet og måske ikke kan overføres det til praksis alligevel*
- *Kortet er digitalt - jeg foretrækker kort fysisk.*
- *Det er bøvlet at have både telefon fremme og finde vare. Mængden af gange jeg har lagt den fra mig på en vare hylde og ikke kunnet finde den igen, fordi jeg lige skulle se noget med begge hænder*
- *Det er da mega smart... ligesom at de der numre øverst ligesom gir en et anker så man ikke bare går rundt på må og få*
- *Jeg ville bruge det i en ukendt butik, men ville jeg så have nået at downloade appen hjemmefra? Sikkert ikke.*

- Hvis ikke jeg kan se dét fysiske
- Det ville være fantastisk at have med rundt i en app. Fremfor på en kurv hvor jeg ikke føler mig inkluderet
- Jeg ville bruge det i skjul, som skrevet tidligere har jeg ikke lyst til at sætte mig selv i fokus, jeg vil gerne bare gå alene i min egen verden og ved at den er på telefonen ville jeg kunne det
- Jeg handler i samme forretninger hver gang og ved hvor tingene er
- Fordi app er bedre
- I store butikker vil der være rart
- jeg er ung, derfor er det nemmere når det er på telefonen, og man har mulighed for at være forberedt forinden man går ind i butikken
- gsfdsgd
- Jo mere der skal tages stilling til, jo mere forvirret bliver jeg
- Kommer an på humøret på dagen
- Uro
- gider ikke gå med min telefon fremme
- Er ikke klar over om jeg kan overskue det pga. hjerneskade og kognitive udfordringer
- Det tager tid men hvis jeg ikke kender butikken vil det være rart at kunne orientere før jeg kommer
- Jeg gider ikke følge et kort på min tlf. men bedre skiltning i selve butikken er en god idé
- Det er da genial tænkt. Kommer jeg i en "fremmed" Bilka eller Netto er jeg lost! Det her ville hjælpe meget
- Jeg ville ikke bruge det til f.eks. mælk. Det er som regel nemt at finde. Men hvis man kunne bruge det til at søge i butikkens sortiment og det kunne lede en direkte hen til f.eks. en special vare, som man har svært ved at finde, ville det være meget brugbart.
- Måske i en stor og ukendt butik
- Det er klart lettere at overskue. Minder lidt om biltema/thansen hvor varerne har en plads med nr. som man også kan se på deres hjemmeside
- Ved ikke
- Så jeg kommer hurtigere igennem uden at skulle gå tilbage.
- Kortet gør det overskueligt og jeg mister ikke orienteringen.
- Især i ukendt butik eller når de flytter rundt.
- Tror det vil kræve for meget af mig, når jeg også skal holde styr på indkøbskurv, mig selv og indkøbsseddel
- Måske
- Jeg skal skilles sådan jeg ikke har behov for min telefon til andet end min hjælpemidler som ordblind
- Bedre overblik
- Det virker uoverskueligt
- Ville bruge det, hvis der var noget jeg ikke kunne finde. Men det ville kræve live lokation for at jeg ville kunne bruge det, da jeg ellers ville blive mere forvirret, tror jeg.
- Alt afhængig af hvor meget jeg skal handle, om jeg kender butikken og hvordan mit energiniveau er, så vil jeg bruge app'en. Der er MANGE kriterier der spiller ind.
- Måske ville det kunne hjælpe mig med at orientere mig bedre i butikken.
- Hvis jeg ikke kan finde ting
- Ikke nødvendigt
- Jeg ville ikke have apps fra butikker
- Hader appzsh
- Kan selv
- Det ville forvirre mere end gavne, da det er et ekstra element at forholde sig til, i en i forvejen lidt overvældende oplevelse.
- Fordi jeg kun handler i butikker, jeg kender

- *Jeg bruger butiksapp til scan selv. Og vil ikke zappe mellem forskellige apps når jeg er på indkøb*
- *Det kunne være godt i store butikker men der handler jeg ikke ofte*
- *Jeg ved hvor ting er, men måske nyttigt i en ny butik*
- *Jeg kan ikke både bruge orientering kort og handle*
- *Det kommer an på om kortet ville hjælpe eller være en ekstra kognitiv udfordring*
- *Jeg lærer hurtigt, hvor de fleste sektioner er*
- *Jeg vil ikke være afhængig af at have mobil med*
- *Jeg ville kun bruge en app, der præcist viste, hvor varen er*
- *Prøver at minimere skærmtid*
- *Nemmere navigation*
- *At bruge en telefon under en handletur ville øge min stress*
- *Ville foretrække det fysiske kort.*
- *Hvis jeg ikke kender butikken*
- *Kun i ukendte butikker. Jeg har mere brug for at vide, når noget er flyttet*
- *Kun hvis jeg havde brug for det*
- *Afkorte tiden i butikken.*
- *Hader at rende rundt som en hovedløs kylling*
- *Indkøb skal mest bare overstås. Det ville være bedre med mere logiske placeringer og mere kundevenlige placeringer*
- *Har rigeligt i at holde styr på kurv, vare og alt andet der forgår*
- *Periodevis neglect*
- *Jeg ville kun bruge det, hvis jeg kunne slå den specifikke vare op, og derefter være sikker på, at den lå PRÆCIST der hvor den er sat til på kortet, eller hjælper det ikke.*
- *Jeg har brug for ikke at bruge lang tid på at finde varen*
- *Jeg ville kunne stå et roligt sted og finde ud af hvad jeg skulle finde*
- *Jeg har ikke mobilen fremme når jeg handler*
- *Det vil være en kæmpe hjælp, især i de store supermarkeder*
- *For at få den korteste rute gennem butikken*
- *Depends if it's visually pleasing and if there are any sales popping up and distracting me while shopping. It would be also useful to be able to type an item in and see where in the store it is, like Tofu, which is often placed in random sections or in two sections at once.*
- *Det tager for lang tid*
- *Se tidligere svar*
- *De dage hvor min hjerne går helt i stå, så kan jeg sidde hjemme og planlægge en rute*
- *because it would save me time and would be easier to go straight to what I need and I wouldnt get distracted in other isles.*
- *Det virker alt for uoverskueligt*
- *Ved ikke*
- *Nemtest at holde opdateret og bedre til at trække sig til side og læse, hvis behovet opstår. Skal ikke først finde en tavle.*
- *Vil ikke gå og se ned på en App mens jeg handler*
- *I butikker jeg ikke kender, ville jeg nok*
- *Handler stort set kun i butikker jeg kender i forvejen. Ville måske bruge det hvis jeg var tvunget til at handle i en ukendt/ny butik*
- *X*
- *Kun i en ny butik.*
- *Det er forvirrende*
- *Ville ikke kunne overskue det ville blive forviret.*
- *Fordi*

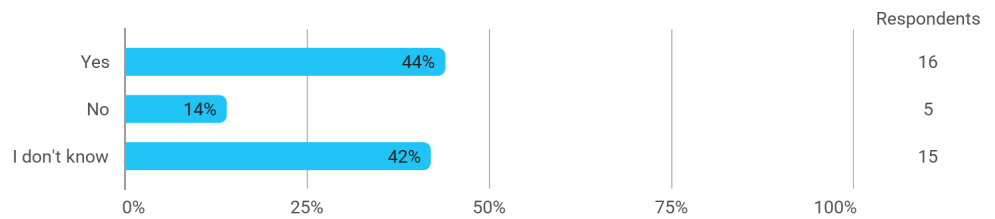
- *Ville bruge det, så jeg kan finde rundt hurtigt, specielt når man har vænnet sig til hvor ting står, og butikker så pludselig vælger at bytte rundt på alt*
- *Jeg har ingen stedssans, så i fremmede butikker, ja tak*
- *De fleste butikker er opbygget ens, så det er nemt at finde rundt*
- *X*
- *Hvis jeg skal have noget jeg ikke plejer eller er i en ukendt butik*
- *Næsten alle supermarkeder er delt op ens*
- *Overblik*
- *Kun når de flytter tingene*
- *My brain is already being bombarded with information that needs to be processed, both internally and outwardly. This feels like another task that I need to use brain power on. I might appreciate the map of the supermarket in the beginning but only if it is very simple and very visual and doesn't feel as one more sensory overload. The signage and the design of it for different sections is a much better idea I think - especially if the design doesn't feel cluttered - simply, clear, imagery rather than lots of text, perhaps different colours (not necessarily)*
- *Jeg synes generelt jeg har nemt nok ved at finde rundt som det er nu.*
- *I nye butikker*
- *Hvis det er en ukendt butik for mig, så klart ja!*
- *Har ikke brug*
- *Ja, i butikker jeg ikke kender. Det der ville alle jo være glad for, også neurotypiske. Så kan man let finde de varer man skal bruge og komme hurtigt ud derfra.*
- *Handler kun i butikker som jeg kender*
- *I butikker som jeg ikke kender, eller som jeg sjældent handler i.*
- *It looks hard to navigate on such a small screen*
- *Det gør ikke min shoppetur mere overskuelig.*
- *Jeg ville hverken bruge kort på app eller i indgangen for jeg kan ikke huske vejen alligevel med mindre jeg kigger på det hele tiden. på kurven ville det måske give mening, så kunne man lige tage et kig på det ind imellem. Men for meget med kort og dybden vej og jeg glemmer hvad jeg skal købe. farvekoder og markerede gange ville være ok*
- *I en større butik jeg ikke kender, så ville jeg. Men det vil kræve at kortet er opdateret, for ellers vil det for mig få den modsatte effekt. Jeg ville blive mega frustreret med potentielt nedbrud.*
- *På mobilen kan jeg zoome ind da jeg har dårligt syn. Derfor en god ide med farvekoder i butikken*
- *Måske i ukendte butikker*
- *Jeg vil ikke have apps*
- *Så kan man forberede sig*
- *Det vil gøre jeg kan komme hurtigere igennem butikken, og kan komme hurtigere ud af butikken igen*
- *Ved ikke om jeg har butikkens app. Ville ikke gide at downloade den for at finde et kort.*
- *Fordi jeg ikke gider og skal kigge på min telefon for at kunne finde rundt*
- *Så skal man huske det, det bliver for uoverskueligt*
- *Jeg bruger det også i j'en og fix fx til at finde varer og hyldenumre på forhånd eller i butikken*
- *Nemt at finde varer og kan se på det igen*

- *Jeg kan ikke koncentrere mig om så mange ting på en gang og jeg så det jo da jeg gik ind*
- *Det viser kun nogen nøjagtighed*
- *Ved ikke*
- *Det ville gøre det nemmer at finde hvad jeg have behov for*
- *Har rigeligt med at skulle igennem forretningen uden for mange indtryk*
- *Måske*
- *Fordi det er smart at have det ved hånden*
- *Tror det vil forvirre mig endnu mere.*
- *Fordi der ville være for mange ting jeg skulle forholde mig til*
- *Jeg ville bruge det som en tryghed ved at vide præcis, hvor jeg finder de varer, jeg skal bruge*
- *Jeg ville bruge det, da det ville gøre mine indkøb væsentligt kortere, når jeg er i butikker, som jeg ikke kender. Jeg bliver enormt drænet for energi, når jeg handler grundet larm og alt for mange indtryk. Og når jeg samtidig ikke kan finde de ting, som jeg skal købe, er jeg helt færdig, når jeg kommer hjem og helt bombet i hovedet. Det er ofte, at jeg kan mærke stressen i min brystkasse og ikke har mere energi tilbage.*
- *I butikker jeg ikke kender, er det rart at kunne se hvor tingene er henne*
- *Fedt hvis man kunne søge efter placering. Lidt ligesom tag selv lageret i ikea hvor der står hvilken hylde*
- *Man undgår at lede efter varerne*
- *Jj*
- *Kortet ser alt for indviklet ud . Men en app hvor jeg skriver varen og den derved viser mig vejen derhen , - som Google Maps*
- *Mest i de store varehuse, Bilka osv, hvor overblikket, i mit tilfælde, er forsvundet nærmest allerede ved kundeservice*
- *Som en hjælp til at planlægge mit indkøb.*
- *Fordi det er brugbart*
- *Har ikke det behov*
- *Kun hvis jeg når at tjekke det*
- *Fordi det vil hjælpe mig med det visuelle overblik over hvor varerne jeg skal købe er. Og så vil jeg engergiforvalte bedre.*
- *Ved ikke*
- *Er mere analog*
- *Ved ikke hvordan detaljeret det kan laves*
- *Turen i butikken er mindre forvirrende hvis jeg går mere målrettet efter varerne*
- *Det er for omstændigt at bruge. Jeg vil gerne hurtigt muligt ud af butikken*
- *Især butikker jeg ikke besøger så har de ofte flyttet rundt på vare siden sidsttit såns*
- *Der er diskret, og jeg har alligevel gang i telefonen for at se min indkøbsliste.*
- *Det er rigelig belastning at forholde sig til indkøbsseddel og scan & goi*
- *Det ville være nemmere for mig at tilgå og så kan jeg finde de varer undervejs, som jeg har behov for*
- *Jeg ville bruge det i de butikker jeg ikke plejer at komme i.*
- *I tilfælde af tvivl fx i en ny butik*
- *...*
- *Kunne orientere mig hjemmefra*
- *Så behøver jeg ikke bede om hjælp til at finde mine varer*
- *Foretrækker ikke at gå rundt med min telefon fremme*

Imagine the signs of the store is updated, so each section has a color and a code.
 E.g. Beverages & coffee = Yellow = Section 3

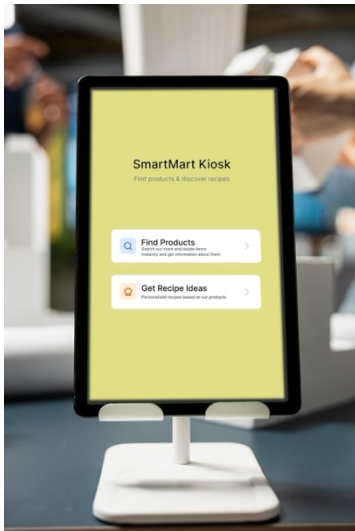


Would you use these signals or signs in the supermarket?

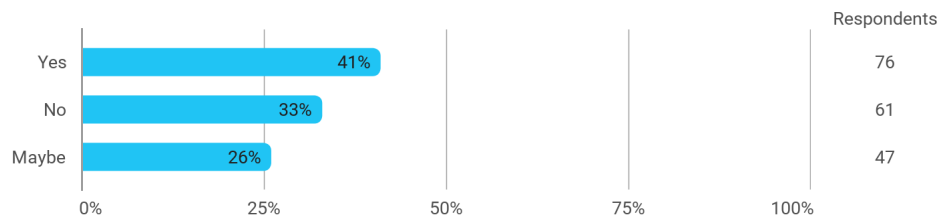


Imagine that tablets are installed inside the store, with the following features:

- A digital map
- Search engine to find placement of item
- Search engine to find all products in a category (e.g. gluten free)
- recipe suggestions
- option for giving feedback



Would you use the tablets?



Why? / why not?

- Helps with the decision making
- .
- Lidt som med appen, der vil være gavnligt at gange hvor det vil være gavnligt at kunne finde ud af om der er en specifik vare og hvor. Men tvivler på jeg ville bruge den ofte.
- I might use it if it was my first time in that store or it was very large.
- Running around looking for a specific product is draining, this would be very helpful as I would not have to first locate someone who works there
- To find stuff
- I use these in malls etc commonly
- i'd use this for products that im not 100% sure are available at the store to save time to look for them
- Yes, especially for small purchases like when going in store for 1 or 2 specific products that I am not used to buy
- Sounds very useful
- er ikke til mange apps
- Det er nemmere for mig at bruge en skærm end at spørge et menneske.
- Jeg tror det ville være bedre med en søgemaskine på telefonen i

supermarkedets app. Jeg er ikke meget for at bruge offentligt tilgængelige ting som tablets, der er mange der rører ved dem, og jeg bryder mig ikke om at folk har rørt med beskidte hænder.

- Jeg vil ikke bruge en offentlig tilgængelig skærm af hensyn til renlighed.
- Kun hvis det passer (opdateret), diskret (ikke viser min søgning til næste kunde og er nemt
- Som en hjælp
- Specielt hvis det er for mig en ukendt butik
- Ville spørge om personlig hjælp
- Pas
- Det ville stresser mig yderligere.
- Hvis jeg har det på min telefon behøves, en skærm ekstra ikke.
- For uoverskueligt
- Er ikke gået I Ikea
- Igen det bliver for meget
- Måske kort og søgemaskine for enkelte varer - men opskrifter har jeg fundet hjemmefra
- Ved ikke jeg både ville have behov for app og tablet i butikken
- Angst
- Fantastisk. Det fungerer SÅ godt i THansen el i et storcenter hvor man søger en butik. Vildt god ide
- Det er jeg for stresset til at koncentrere mig om
- Vil hellere benytte mig af fysiske visuelle skilte og anvisninger. Derudover er der mere både trygt effektivt for mig at spørge en ansat.
- Gider ikke bruge tid på det midt i en butik det vil være for stresset
- Jeg ville vide hvor jeg finder det jeg skal bruge i en butik jeg kender
- Vil ikke bruge tid og energi der

- Hvorfor komplicere noget simpelt, der skal bare være ryddet op i gangene og ikke så skarpt lys
- Hvis der er noget jeg ikke kan finde kunne det være rart.
- det fungerer ligesom når man leder efter en vare i Jem&Fix og lignende butikker og er brugbart for mig
- Jeg er der for at handle de ting jeg har på listen
- Det ville er dejligt alternativ til finde en varer istedet for at spørge personalet.
- Søgemaskine, særligt brug i forhold til vare på tilbud og især for at vide om der er flere på lager. Også selvom det ikke er på hylden. Så jeg kan spare at spørge en medarbejder efter en vare der ikke er på lager. Også gerne hvornår en udsolgt vare kommer på lager igen, hvis den gør. Spiser meget det samme(safefoods) og det er rart at vide hvornår det bliver leveret
- Det er smart
- Ja, specifikt til at søge hvor en bestemt vare er. Klart mest hjælpsomme ide!
- Pga bakterier
- Syntes allerede det er genialt med dem der er i store indkøbscentre så syntes det er en god ide
- Jeg ville bruge den til hvis jeg var meget i tvivl om hvor tingene var og hvis jeg ikke selv kunne finde det ved at lede. Men jeg ville starte med selv at prøve at finde det
- Hvis man leder efter noget specifikt så ja
- Ok
- Mindske tiden/belastning ved at handle
- det kan triggere min angst hvis folk går forbi mig, fuktionen ville være smart på telefon
- Til at finde en bestemt vare
- Jeg skal ikke have for meget jeg skal

- til hjælp for mig selv
- Uro
- for at finde det jeg mangler
- Men så jeg ikke skal gå rundt og lede
- Hvis jeg her brug for en opskrift i butikken, så søger jeg min tlf. hvis jeg har brug for at finde vej, så skal det gå så lynhurtigt, og det tager for lang tid med en skærm. Der vil det være lettere at have store skilte i loftet/væggen, som eks. Thansen og vist også Harald Nyborg har. Jem og fix kan man dog se sektionen for hver enkelt vare på deres hjemmeside. Det bruger jeg faktisk meget.
- Det er sateme smart! Det ville jeg klart hvis jeg ikke kunne finde en medarbejder at spørge
- Til at finde specifikke varer.
- De tre første punkter er mest relevante
- Ville klart give mening i en stor butik som Bilka
- Bruger det f.eks. på IKEAs lager.
- Jeg vil bare igennem og ikke stå stille for længe. Som app på min egen telefon, ja.
- Overskueligt og hjælpsomt.
- Bryder mig ikke om at stå til offentlig skue. Vil gerne kunne stille mig op af en væg eller hjørne og se på et kort.
- Hvis det er en stor butik, som fx Bilka, ville jeg nok bruge det
- Jeg vil gerne hurtigt ud. Foretrækker at forberede hjemmefra.
- Åndssvagt at man skal svare på lige præcis det her når mange spørgsmål faktisk ikke inkluderer hvad det egentlig er der har brug for ikke alt det skiltning men
- Smart
- Jeg ville formentlig forlade butikken
- Ville ikke bruge forslag til opskrifter, da jeg allerede har planlagt det inden.

- Og så skal der være nok tablets tilgængelige, så der ikke er kø.
- ALT for mange valgmuligheder. Det er mere stressende end hjælpsomt. Kan slet ikke overskue at blive til ude opskrifter og lignende, når jeg bare har brug for at finde rundt.
 - Det tror jeg kunne hjælpe mig, hvis det ikke er for kompliceret at bruge.
 - Kan hjælpe mig med at finde varer
 - Ved jeg ikke
 - ikke almindelige produkter (vegetarisk, vegansk, glutenfri mm) er ofte spredt i hele butikken
 - hvis jeg ikke kan finde det jeg leder efter
 - Nej
 - Ved ikke.
 - Fordi jeg ikke har ro til at læse noget som helst i en butik. Desuden kan jeg jo bare spørge personalet
 - For at navigere rundt
 - Jeg vil ikke bruge mere tid end aller højest nødvendig
 - Tablets er generelt en dårlig ide som vejviser. Jeg ville hellere have samme information i en app
 - Man kan ikke finde alt. Men et system som jemogfix og harald nyborg er genialt, da man kan orientere sig hjemme fra
 - Nogle gange under indkøb brænder min hjerne HELT sammen. Jeg kan ikke tage info ind, eller tænke. Der ville denne ikke hjælpe. Og når den er der, ville det måske være endnu sværere at bede om hjælp
 - Det kommer an på situationen
 - Spare tid, inspiration
 - Jeg slipper for at lede eller spørge en medarbejder
 - Bedre end app, da jeg ikke skal fumle med telefonen
 - Nemmere navigation

- *Jeg ser ingen grund til det, hvis jeg benytter et velkendt supermarked.*
- *Fordi jeg helst gerne vil ud med det samme, og en skærm i supermarkedet føler jeg er lidt beskidt måske.*
- *Ville foretrække at kunne bruge min telefon*
- *Det kan være rigtig svært, at finde på middagsretter. Men jeg bruger min smartphone til det. Men den har ikke kortet over butikken.*
- *Fordi det er mega smart. Jeg hader at spørge om hjælp*
- *Savner det allerede!*
- *Vil hellere kunne forberede mig hjemmefra, f.eks. i en app*
- *Jeg køber varer der altid er svære at finde, så en søgefunktion kunne hjælpe*
- *Handler kun i butikker jeg kender*
- *Mange kunder uden udfordringer bruger disse, fordi det er sjovt og ikke fordi de har udfordringer*
- *Som tidligere skrevet.*
- *Jem og fix har det. Det bruger jeg*
- *Kommer an på om jeg er presset og om jeg kan finde ud af maskinen, da jeg tit kommer op og skændes med teknologi*
- *Så skal jeg bruge ekstra tid i forretningen*
- *Der vil være vildt mange bakterier på dem*
- *Igen for at få den korteste rute og for ikke at skulle lede for længe efter noget*
- *Not the recipe part since it would take long and that's not why I go to the grocery store. But having tablets might be handy but there also could be a queue to them.*
- *Det tager for lang tid*
- *Kunne evt opsøge det*
- *Til at døge det jeg ikke kan finde*

- *because it would help me to know where is what I need or if the stores has it*
- *Jeg vil foretrække min egen mobil, end at stå der midt i butikken og rode rundt*
- *Mere overskueligt*
- *Jeg vil bruge*
- *Det ville tage for lang tid, jeg har lavet den forberedelse hjemmefra*
- *Vil gerne slippe for at røre skærme en masse andre har rørt ved. Hvis funktionen var i butikkens app på min egen tlf. ville jeg måske bruge den*
- *Fordi det giver mig stress og gør mig utrygt*
- *Ikke brugbart*
- *Blive forviret*
- *Åhhh det ville da være så meget bedre end det er på telefonen*
- *God erfaring fx. fra Ikea.*
- *På svære dage er det bare ind og ud*
- *Det gør opholdet længere*
- *Ville foretrække det på telefonen*
- *Hvis jeg ikke kan finde en vare. Dild sovs til laks syårnaltid et mærkeligt sted fx....*
- *Skal helst bare hurtig ud igen*
- *Nemmere end at finde en sjælden medarbejder i butikken*
- *Absolutely not, it would also create friction points for flow of people which would be a nightmare for me. I might use a feature similar to this beforehand at home on a website to prepare myself (or as a part of a digital shopping experience where I don't have to look through categories but I can "flow through the supermarket" but online. I would maybe use the recipe idea feature but always with my own phone and only if I had enough space to not feel in the way of anyone else in the shop while using it and only I think linked to certain*

products/ingredients that would strike an idea and then I needed to find other things to go with while in the store.

- *Den tid man bruger på at søge på tabletten kan jeg lige så godt bruge på at lede inde i butikken. Jeg synes heller ikke det er så relevant at søge opskrifter der. Det kan jeg gøre selv på min telefon.*
- *Ved ikke*
- *Så slipper jeg for at lede efter en medarbejder*
- *Har ikke brug, men god ide*
- *Kun hvis det er et gigantisk supermarked som Bilka. Ellers bliver det for teknisk for mig at stå der. Plus, hvis der er andre som også skal kigge, så skal man stå i kø og vente. Et papskilt er der flere der kan stå og læse på én gang.*
- *Det er ikke kun "os" med diagnoser der kan have gavn af denne mulighed*
- *Nok mest til opskrifter. Især hvis de er baseret på de aktuelle tilbud.*
- *It would be great for when you don't want to talk to people or can't find a grocery store worker!*
- *-*
- *Jeg har seriøst nok at gøre med at koncentrere mig om hvad jeg skal købe*
- *Jeg vil ikke røre ved en skærm alle andre benytter. En QR kode som får mig ind på det rigtige sted i dem rigtige app (eller web).*
- *Fordi jeg har dårligt syn og på tablet kan jeg zoome ind*
- *Skal bare hurtig ind, hurtig ud*
- *Det ville være en stor hjælp, på samme måde som lignende kort over butikker i stormagasiner er*
- *ved ikke*
- *Hvis jeg i forvejen har en app med et kort over butikken og hvor jeg kan*

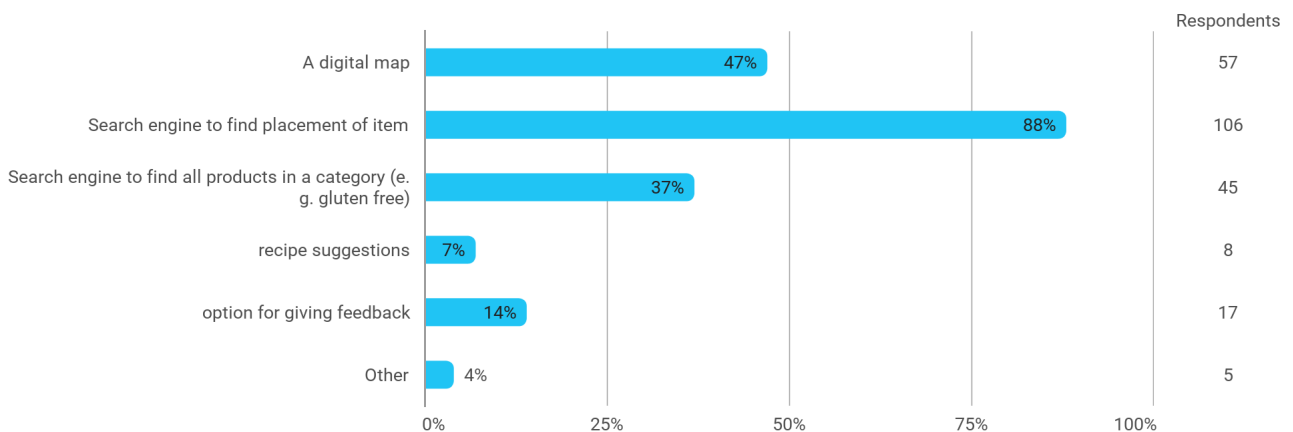
finde de ting jeg skal bruge..kommer jeg ikke til at bruge den

- *Jeg tager ikke ud og handler uden jeg allerede ved hvad jeg skal have, og ved hvad jeg vil bruge det til.*
- *Det kommer nok an på dagen*
- *Jeg vil bruge den del hvor man kan finde varer*
- *Det vil give ro at kunne finde ting selv*
- *Måske til at søge en specifik vare så jeg var fri for at spørge personale*
- *Hurtige ideer*
- *Til at finde varer, jeg ikke selv kan finde*
- *For besværligt*
- *Vil hellere spørge en ansat*
- *Egentlig en fin ide*
- *Hvis der er varer jeg ikke kan finde*
- *Så hellere handle i kendt butik.*
- *Jeg ville aldrig bruge den, den ville forstyrre*
- *Måske*
- *Jeg ville bruge den til at finde specifikke varer. Det er ikke altid man kan finde en ansat at spørge*
- *For at spare tid og dermed også overskud*
- *Finde varer, især det jeg sjældent køber, eller for at se lager status*
- *Hurtigere kunne finde varerne*
- *Jj*
- *Den er mere overskuelig og let at anvende*
- *Det er for opsigtsvækkende*
- *Nogle gange kunne det være rart, når man ikke kan finde en vare og man ikke føler lyst til at kontakte en medarbejder*
- *Meh*
- *Har ikke det behov*
- *Der går tid med det*
- *Det vil hjælpe mig i hverdagen især de dage hvor energien ikke er i top.*
- *Jeg vil hellere spørge en medarbejder*

- Rør helst ikke noget andre har rørt ved
- Fordi det er hamrende uhygiejnisk
- Jeg skal ikke bruge energi på at finde varen
- Tager for lang tid. Vil gerne hurtigt ud
- Især butikker jeg ikke besøger ret tit
- Der kunne spare tid og frustration, og jeg kunne være heldig at finde den vare, jeg ellers ville opgive.
- Det bliver for meget
- Jeg ville helt sikkert søge varer frem. Det gør jeg allerede i byggemarkeder.

- Ville bruge dem i de butikker jeg ikke plejer at komme i.
- For ikke at rende forvirret rundt og lede efter en vare
- God idé
- Bliver for stresset over at skulle sætte mig en i den.
- Bare måske
- Jeg spørger gerne om hjælp af en medarbejder. Andet søger jeg hjemmefra, så alt er planlagt hjemmefra

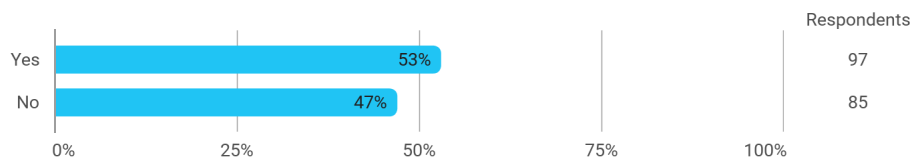
Which features would you use the most? (choose 1-3)



Which features would you use the most? (choose 1-3) - Other

- Søgemaskine kun hvis det vil være muligt og tjekke hjemmefra
- Skilte over reoler og kasser
- Skrive fx stil den vare her eller der
- Kunne være dejligt, hvis man kunne se om en varer man ikke kan finde..kunne slås op om det er udsolgt, eller der er flere, bare ude på lager
- Hvis jeg SKULLE bruge den, og der ingen medarbejder var, ville jeg søge efter en varer. Ellers ville jeg ikke bruge den

Do you have the Coop app?



What do you think about a campaign where you get a special discount or other benefit in exchange of showing a friend/family member how the Coop app works?

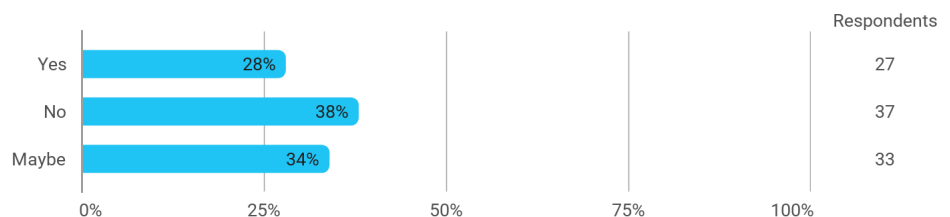
- Nej tak
- Det kunne da være en sjov måde at gøre opmærksom på at ikke alle har nemt ved at lære at bruge sådanne hjælpemidler. Og kan måske bruges som samtale starter. Da det ellers ikke er nemt at spørge om.
- Sounds good.
- Nej tak. Jeg har ikke brug for at skulle undervise andre.
- Det lyder fint
- At det bliver ren og skær marketing fra coop. Så drejer det sig ikke om god kundeservice, men om ren gevinst.
- Ellers tak
- Jeg har appen men bruger den ikke så får svært ved at vise andre brugen af den
- Vil blive misbrugt (ikke nødvendigt) dog burde appen laves om, så vi med handicap kan bruge den.
- Nej tak - for hader at ALT skal virke over apps - er mere analog type og elsker mine håndskrevne indkøbssedler.. samt hele mentaliteten om at "inviter én ven og få 50 energy" i mobilspil er da til at blive skør af
- Det vil være for omstændigt for mig
- Det orker jeg ikke.
- Ikke relevant for mig
- Alle jeg kender har den allerede eller har ikke smartphone
- Godt
- Nej. Det er noget pjat og endnu mere spild af folks opmærksomhed og rabat mig her og der. Kortsigtet og træls... Styrk og genopdag koncernens

oprindelige menneskesyn. Hold det simpelt, etisk og transparant når en kunde kommer ind i en coop butik ell app. Self vil man gerne spare hvor man kan. Men det er forældet og ikke venligt mod den menneskelige hjerne konstant at fylde flere opgaver på, med gulerod om fortjenester i form af rabatter... Keep it simple og fokuser på kvalitet af service/betjening samt varerudbud.

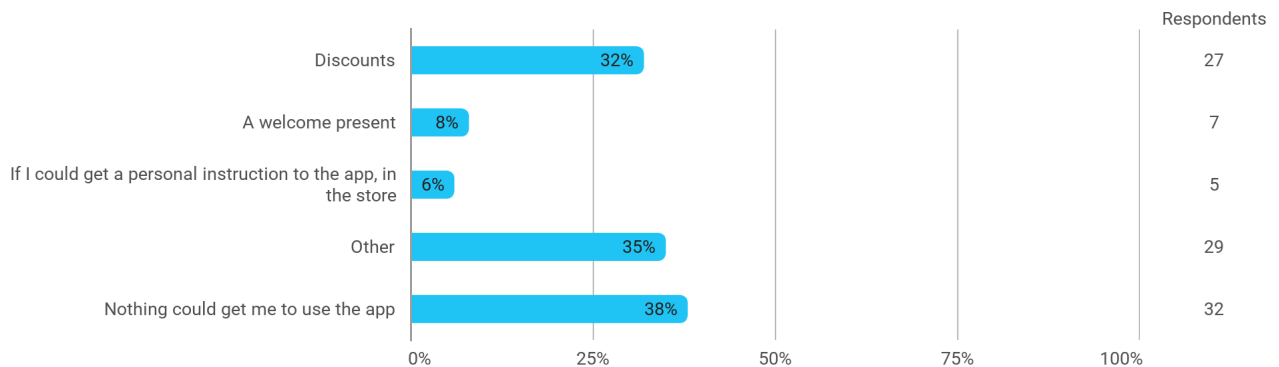
- Har jeg ingen holdning til
- Det er font
- Lige gyldigt
- svært da der er et segment som min mor der nægter at bruge alle apps
- Bøvlet
- Ikke interessant
- Ja
- Lige glad. Jeg ville ikke få det gjort
- ok
- Vil nok ikke benytte det
- Coops app er noget bøvl! Jeg kan ikke engang selv finde ud af den. Kig på REMAS. Den er simpel og let.
- Ikke interesseret
- Ikke interesseret
- Jeg får det ikke gjort.
- Okay
- Bruger den ikke.
- Tja
- Det kunne måske være en god ide
- Ikke noget
- Nej tak
- Ok
- Tja!
- Det ville være på niveau med selvmord, mine forældre er teknisk udfordret
- Det har de ikke brug for
- Det er underordnet. Jeg har ikke brug for incitamenter til at vise app'en til min omgangskreds.

- Virker måske lidt påpressende, medmindre den ven/familie har bedt om det selv.
- Ikke interessant
- Fint
- Nej tak.
- Har ikke overvejet det
- Ligegyldig
- Nej tak
- Det er mit mentale overskud ikke til - der henvender i jer nok til den forkerte gruppe : kognitivt udfordrede....
- Ok
- Det vil ikke være relevant for mig, da jeg har en meget lille omgangskreds. Så ville heller man fik nogle fordele for at bruge appen
- Ok
- ligegyldigt, jeg ville ikke gøre det.
- Det ville være okay
- Okay
- Nej tak
- I havent use it. I cant use the app for more than scanning becasue its in danish
- Tror jeg ikke
- Ikke noget
- Ok
- Ved ikke hvem jeg skulle vise den til
- Nej
- Nej tak, jeg anvender den ikke selv, så jeg har ikke styr på den.
- Fint
- God ide
- Jeg kan ikke se pointen
- Det har jeg gjort med min mor
- Ved ikke
- Pjat
- Udmærket ide
- Nej ser dårligt
- Nej tak
- Det lyder godt
- Jeg bruger den ikke
- For det nok ikke gjort
- Ved ikke
- Ville jeg ikke bruge
- Helt ok
- God
- Pjattet
- God ide
- Nej tak
- Helt fint med mig
- Det er ikke noget for mig
- Fin ide, men det ville jo kræve at vedkommende kom med ud at handle.
- Nej
- Behøver ikke rabat eller fordele for at vise folk noget som fungerer super godt. Fortæller det glædeligt uden gevinst
- Elsker rabatter
- Det vil jeg aldrig komme til at bruge. Vil tænke det er for besværligt.
- Godt
- Fint
- Det er lige meget
- Tja tror ikke det ville være noget jeg ville benytte mig af
- Det ville jeg nok ikke gøre.
- Lige gyldigt, den er intuitiv så det handler mere om holdning
- Det vil jeg ikke gide deltage i
- Nej tak

Would you invite a friend to use the app, if you got a special discount?



What would motivate you to use the app?



What would motivate you to use the app? - Other

- If it would explain the benefits
- If it was in english
- Hvis appen gav de muligheder I overvejer her i undersøgelsen.
- Overskuelig og ligner eks Lidl der er meget nem
- Tænker jeg vil bruge den, hvis det giver mening for mig, ikke ved at blive motiveret af ekstra ting/fordele.
- At en coop lå tæt nok på, til at jeg handlede der. Handler kun i de samme to butikker, nær min bopæl
- Jeg vidste ikke at Coop appen ku de ting så vil da tjekke den ud nu
- At den er overskuelig
- Jeg bruger kun app når jeg handler. Jeg vil ikke stå i kø ved en kasse da jeg ikke kan tåle det
- At jeg havde en Coop butik i nærheden. Det har jeg ikke, så det er ikke relevant for mig.
- De funktioner, I har foreslået.
- Intet
- Mulighed for at ha en god og visuel indkøbsliste inde i appen, hvor man kan indsætte deres specifikke varer og se deres tilbud - præcis ligesom rema 1000 app! Og ellers evt kort og andre institutioner.
- Helt uafhængigt af USA, fuldt offentligt sikkerhedsaudit og at den er open source
- Det burde kobles til sin coopkonto, et kundenummer, så lidt administrativt og larm fra app'en
- If it was not sales focused/had a "sunflower" mode and if it didn't require 20 steps to use it e.g. having to log in every 5th time or close popping sales and such.
- Hurtigt igennem butikken
- Jeg bruger ikke apps der er mig uoverskueligt
- If it actually made the shopping experience easier for me based on my actual issues. So far no grocery store app I've tried does that - it's technology for the sake of technology - not to make things inclusive. I get how the scanning feature can be actually helpful and make the experience better but just not for me personally. I do not struggle with learning how to use technology, I just have no tolerance for technology that makes my life harder than it is. Money is no motivator for me. And also, I do think overall that getting an app for things that can be very easily be a website is silly. Apps make sense in some instances, not all - and the benefit of the app has to be so much greater than what general grocery

store apps provide for me to want to go "through the hassle" of setting it up

- *Hvis der var en scan selv mulighed som i Netto.*
- *Inkluderende tiltag som dem I nævner i undersøgelsen her.*
- *Det ved jeg ikke*
- *Jeg bruger ikke apps i butikker. Hvis det er en app man kan bruge til noget uden for butikken så måske*
- *Jeg handler aldrig i Coop.*
- *Generelt give overblik, så man ikke løber rundt.*
- *Jeg bor langt væk fra jeres butikker. Benytter altid Bilka og Netto, med deres Scan & go*
- *Vi har kun et kundekort, og derfor kan kun en af os bruge appen. Det gør min mand, da han handler mest.*
- *Det ville søgefunktionen men ellers vil jeg helst undgå at have apps til alt*
- *Jeg handler, af logistik mæssige årsager, ikke i coops butikker*

Do you have any last comments about the ideas?

- *No*
- *.*
- *I forhold til appen. Tror jeg det vil være gavnligt at tænke ind hvordan man kan få os med kognitiv udfordringer til at spørge om hjælp, da vores omverden sjældent ved at vi kunne bruge hjælp og derfor ikke ved hvilke venner de skulle sende sådan en forespørgsel til.*
- *Colour coded signs are of limited help to people with colour blindness, would need symbols or patterns as well.*
- *Great ideas! Another idea could also be to make the layout of where each item is more intuitive/organic-feeling (easier to remember what to buy as not running around confused) and making sure cold groceries are near*

the cashier, so that you don't have to either stress about things melting/getting warm or end up going back to the freezers right before you leave to take it as the last item(s).

- *no*
- *Less is more. More signs is more stimulation and dilutes all the messaging to meaninglessness. I want to just be able to find what I want and leave with the least possible roadblocks or having to think about it.*
- *Good ideas:)*
- *N/A*
- *No*
- *nej*
- *mange særligt autister bruger tid på forberedelse og bliver sanssemæssigt overstimuleret i situationen, derfor vil det være en stor hjælp hvis der ikke flyttes om på varerne eller at man kan forberede sig hjemmefra.*
- *Nej*
- *Gevinster ved at vise eller invitere en anden til en app er en glidebane!*
- *Dediker stille perioder til at afprøve og indkøre tiltagene.*
- *Nej*
- *For mig betyder mange kunder, musik, uro og larm en helt masse når jeg skal handle ind, så oftest er det bare noget der skal "overståes"*
- *Klistermærke på gulv for at vise prisscanner. Plads i butikken så man kan passere andre kunder. Pæn butik med ro på hylderne. Kan ikke bruge scan selv kasser. Så rart hvis de i kassen kan se en med solsikkesnor og få åbnet flere kasser hvis køen er meeegt lang*
- *Nej*
- *Jeg kunne godt bruge en dims, der kan spore min kurv, når jeg glemmer hvor jeg har sat den.*

- *Håber i kan implementer jeres ideer rundt i hele DK*
- *Nej*
- *Det skal bare være, nemt og enkelt - men at alle forretning fik skilte i loftet hvor ting er, vil være en god idé... Rema app'en er fantastisk og generelt deres butikker, uanset hvilken en man handler i - selvfølgelig står ting forskelligt, men der ville et kort være en god ide. Evt. et der både hang ved indgang og i butikken samt en ting man kunne finde lokalt via app... Det eneste der "stresser" mit hoved med scan selv apps er: hvornår bliver man udtaget til kontrol.. er helt med på det er en god sikkerhed for dem og mig som forbruger - men en varsel ville være fantastisk, urealistisk med en 'heads up' men fedt.. Rema har heller ikke musik i radioen, endnu en ro og lokalerne er naturligt mindre fremfor Bilka og Føtex...*
- *Pga min hjerneskade og deraf problemer med at forholde mig til for meget, er det nok det med hvor mange kunder der er i butikken der er mest brugbar for mig.*
- *Spændende projekt - god arbejdslyst. ;)*
- *Nej*
- *Nej*
- *Noget om larm i supermarkeder! Børn der lager fanger rundt på gangene imens mor handler i 'fred' samt familier der handler sammen og et barn skriger hele tiden. Regler om at den ene forældre forlader stedet.*
- *Nej*
- *Nej*
- *Nej*
- *Næh*
- *Drop musik fuldstændigt*
- *Kunne godt bruge er tidsrum hvor der er dæmpet lys ingen musik og der er rydder op*
- *Nej*
- *ikke til idéerne men til jeres tekstfelter især i begyndelsen, det er meget lange sætninger, prøv at opbryde så der oftere er næste linje det gør det lettere for mig at læse*
- *Jeg vælger ofte steder hvor jeg løbende scanner mine vare og skal så ikke forholde mig til alle mulige forstyrrende andre elementer*
- *Idéerne er gode, men måden de bliver formidlet på til neurodivergente personer kan være mangelfuld - da jeg syntes sproget i undersøgelses ikke er konkret nok.*
- *Et sæde/bænk midt i butikken. En sjælden gang imellem kan jeg blive svimmel og have brug for at sidde. Pt sætter jeg mig på gulvet. Ville gerne at butikkerne ikke nægtede adgang til toilet. Dels fordi det kan give en kort pause hvor man lige kan tænke. Dels fordi jeg har problemer med hyppig vandladningstrang og trang inkontinens.*
- *Nej... tak for I sætter fokus på det.*
- *Mange ideer kræver stadig overblik (kort) eller forudplanlægning (app).*
- *Nej*
- *Nej*
- *Nej*
- *Nej. Tror generelt som en med ADHD at det kan være uoverskueligt at skulle sætte sig ind i nye ting, at man så ovenikøbet skal se på kort over hvor ting er i forretninger gør at det er meget synligt for offentligheden*
- *Nej*
- *Ikke umiddelbart. Det er menneskemængden/lyden der er mit største issue de dumme dage.*
- *nej*

- *Det værste er, at de ting man har brug for oftest er længst væk. F.eks. mælk og brød er længst væk fra udgangen, mens maling og legetøj er ved udgangen. Jeg ved godt, det er for at få folk rundt i hele butikken, men for folk som mig, der ikke impulsfører er det irriterende.*
- Nej
- nej
- Nej
- nej
- Nej
- Nej
- *I har mange rigtig gode idéer. Særligt med at skrue ned for bipperiet i kassen og slukke den forbandede baggrundsmusik. Spil dog almindelig radio eller noget i stedet Nu kender jeg mine lokale supermarkeder, så jeg forsøger at købe ind uden for primetime. Jeg hader at handle!*
- *Jeg kan godt lide idéen om en søgefunktion, så det er nemmere at finde varer. Noget i stil med Harald Nyborg, måske. Hvor man kan se lagerstatus og hvor varen er henne.*
- *Det ville være rart med en kasse, hvor man ikke føler, man skal skynde sig at pakke sine varer.*
- Nej
- *Måske en person i butikken, hvor man kan spørge om hjælp.*
- *Måske man kunne kombinere kortet med indkøbslisten, så man fik den nemmeste rute gennem butikken? Så kunne man planlægge hjemmefra.*
- *Endelig nogen der ser at indkøb er så udfordrende for os med forskellige ting at slå med.*
- *Kunne være rart hvis butikkerne laver et fælles system. Så skiltet til drikkevarer er gult uanset om man er i Bilka, netto eller Rema.*
- *Det ville være fantastisk hvis alle butikker indførte "stille time", hvor musikken blev slukket og der kun blev talt med dæmpet stemme*
- Nej
- *Det er fandme indretning og ikke alt det der appfis der er problemet gider ikke en app når jeg er ude at handle ind andet end en skal selv kan app resten fuck da nej*
- Nej
- Nl
- Nej
- Nej
- *Jeg synes tit, at lyset i supermarkeder er for skarpt, så en mere dæmpet/blød belysning kunne gøre en stor forskel for mig.*
- Nej
- Nej
- *Spændende projekt*
- *Suk, hvorfor SKAL man taste i SAMTLIGE felter!?*
- Nej
- Nej
- Nej
- *Ang. Coop appen. Så kan den forbedres med funktion. Så jeg husker mine indkøb. Der skal være direkte sammenhæng mellem "indkøbsliste" "tilbud" "Personlige tilbud" og "scan selv" Så jeg bliver mindet om at få købt alle varer på listen.*
- Nej
- *Især det med lys og lyd er vigtigt. Bare en dag om ugen med afdæmpet belysning og lyd ville gøre underværker.*
- .
- *Hvis butikker kunne have tidspunkter hvor der ikke var musik og nedsat lys. Åh. Det ville være værdsat. Lydstøj /lydstimuli føles som pollution. Det er forfærdelig - det er alle vegne. Ganske*

forfærdelig og gør det næsten umuligt at være ude og komme ud.

- X
- Nej.
- Nej - oplever at man gøres "handicappet" med solsikke og skilte
- Det vigtigste er, at der bliver slukket for musikken. Meget stressende
- Nej
- Nej tak til flere apps.
- Vildt gode og kreative ideer, jeg struggler selv meget med at handle alene pga. menneskemængden, lysene og larmen.
- Nej
- Nej
- Na
- Det virker bedst hvis alle(flest muligt) butikker bruger samme/lign. System.
- Måske lidt opmærksomhed på dufte/lugte.
- Fokus på overskuelig og brugervenlig indretning. Afdelinger for veganere, vegetarer, allergikere etc, så man ikke skal hele butikken igennem for at finde sin mad. Tydelig skiltning og mærkning.
- Nej
- Ikke nu
- Flyt aldrig rundt på varernes placering. Men det er ofte en del af supermarketers strategi. Dernæst, så bliver jeg overstimuleret, hvis der står monitorer og kører med lyd og billed.
- Nej
- Ingen yderligere
- Nej
- Nej
- Næh
- I liked the basket idea with a map and searching for a specific item.
- Nej
- Nej

- Tag en tur i biltema, deres nummersystem og skilte i loftet er helt genialt
- It looks very usefull
- Nej
- Prisscanner i alle varehuse
- Nej
- Nej
- Synes det er underligt, at I ikke spørger til scan&betal funktioner - det er en af de bedste opfindelser og har hjulpet mig meget, da jeg kan undgå at stå i kø og undgå at skulle tale med nogen ved kassen, så den funktion ville jeg ønske at alle butikker havde
- Nej
- At gå i supermarked er udfodrende i forhold til at der byttes om på vare, så lige så snart man har lært hvor varene står, så flyttes de
- Nej
- At butikkerne bliver mere opmærksomme på forkerte priser, så hvis rigtig pris var i appen
- Nej
- De bedste ideer/tiltag, vil være dæmpet lys og lyde
- X
- Scan selv ❤️
- Lyder som en god ide, for alle at bruge.
- Alt hvad. Kan dæmpe larm og skarpt lys
- x
- Some are good, some have good parts but perhaps the suggested accomodations didn't fully understand the problem they wanted to try and accommodate. Also, don't group accommodations, modifications and solutions together in one when you want feedback - perhaps especially not for neurodivergent people that cannot

answer generally by design
eeeehehehe! Also, technology is only good if it's design is rooted in an actual problem and it's actually solving the problem.

- Nej.
- Nej
- Nej
- Godt initiativ
- Det er meget rørende med tiltag som tilpasser en verden som overhovedet ikke passer til os neurodivergente. Nyere estimater viser at op mod 30% af befolkningen har en form for neurodiversitet. Så det er altså ikke nogen lille målgruppe.
- Nej
- Nej
- The signs should have good color contrast to be legible. I also like the icons used in the large sign, this could be cool for all the signage in the store. I'm thinking this helps people who also don't speak danish that well.
- Nej.
- Jeg kan godt lide butikker hvor det er tydeligt markeret hvad der står hvor
- En opdateret status for varelager. Det er meget frustrerende at stå i en butik, og så har de udsolgt af den vare som er planlagt at købe. Især hvis jeg handler for andre (og for husstanden), så ved jeg op ikke hvad de evt vil have i stedet for.
- Håber det bliver brugt så jeg kan handle uden ledsager hver gang
- Musik ud af alle butikker, mindre farve spil, på kort, sektioner, der er masser af indtryk over alt i forvejen. Hvad med en god kø kultur, så det er tydeligt man ikke kommer for tæt på hinanden?
- Nej
- hverdagen kunne være nemmere
- Hvis man kunne planlægge sin rute i butikken via appen inden man kom til butikken, eventuelt kunne lave en indkøbsliste i appen, som så kan ligge den nemmeste rute for indkøbet...det ville være perfekt og vil gøre det nemmere for mig at købe ind
- Kan godt lide ideen om et kort på kvuven, men hvis det stikker ud til siden ville det nok ramme ind i ting. Måske et kort i bunden istedet?
- Nej
- Nej
- Nej
- Nej
- Gode forslag! Og held og lykke med specialet
- Nej
- Nej
- Kunne være fedt at få linier ved kassen som under Coronaen, hvor der skulle være afstand til de andre. Værste er tit køen, hvor folk holder tæt på en
- Nej
- Nej
- Gode ideer, men uoverskueligt at sætte sig ind i når hjernen er træt. Så hellere handle i kendt butik, når der er få mennesker.
- Nej
- Nej
- Jeg vil blot nævne en ting. Musikken som efterhånden spiller i alle butikker er så unødvendig og gør det til en rigtig dårlig oplevelse at handle. Det er feedback i kan bruge
- Nej
- Kan godt lide den med at sænke lys lidt. Syntes ofte det er mere trygt at have solbriller på når jeg handler. Men jeg ligner en der er meget fjern
- Spændende ideer
- Nej

- Skilte direkte ved indgangen er måske ikke optimalt. Hvis man stillede dem lidt væk fra indgangen, hvor andre kunder ikke "forstyrrer" ved at gå tæt forbi. Så man kan stå lidt i "fred" og læse skiltet, uden at skulle føle at man står i vejen.
- De lyder gode.
- Nej
- Hvor skriver i det sidste spørgsmål det har man jo svaret på i næstsidste spørgsmål. Og hvorfor skriver I i sidste spørgsmål maybe og ikke måske
- Hader når butikker flytter om; det stresser mig helt vildt i flere uger efter når varer har byttet pladser... kunne være rart med et oversigtskort både under og efter omflytning
- Det er virkelige spændende tanker i har gjort jer. Nogle af tiltagene vil helt klart hjælpe mig i hverdagen, da det at handle kræver meget energi og overskud.
- Nej
- Nej
- Nej
- Farver på varekategorier og skilte er en god ide
- Nej
- Nej... men held og lykke med jeres projekt... det er skønt st nogen sætter fokus på det jer
- Nej.
- Ideer er vel ok, men ikke brugbar for mig, undtagen når jeg bruger en ny

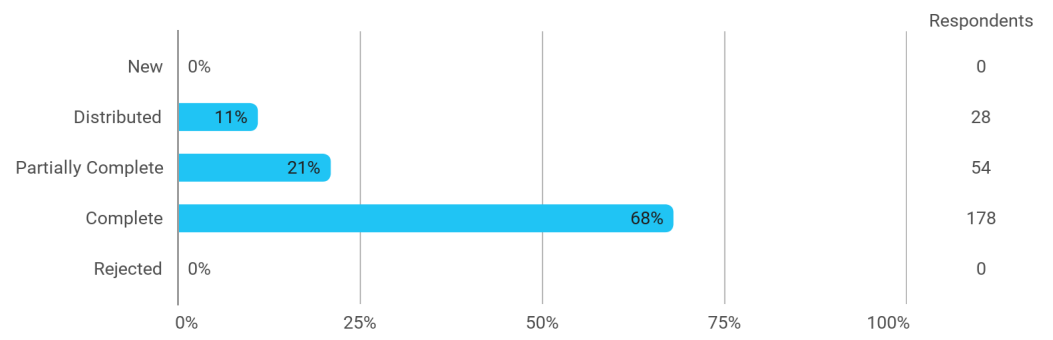
butik. Tilgængæld så vil jeg sætte pris på information før, under og efter at et supermarked, som jeg kommer jævnligt i, flytter rundt. Det er super arghh følelse at der er flyttet rundt og man skal starte forfra og føle sig som et barn med udmattelse og nedsmeltning. Hvis man kunne blive forberedt ville det være nice. Min ide ville være mere en funktion på butikkens app der viser "vi har flyttet rundt, undskyld. Her står tingene" eller "det er lang tid siden, du var her sidst, her står tingene" (eller "første gang i butikken -vejviser")

- Det er gode ideer men det kan også være vigtigt at kunne orientere sig hjemmefra. Jeg laver ofte indkøbsseddel efter produkternes placering i butikken. Måske det også ville hjælpe mig, hvis jeg kunne tilføje varer til indkøbsliste og at listen med varer så automatisk sætter sig efter naturlig rækkefølge i opstillingen i butikken. Og fedt hvis man så kan vinge varen af, når den er lagt i kurven.
- Nej, men det er gode ideer i har
- Det vigtigste for mig er at vide, hvor jeg finder den enkelte vare helt konkret - og gerne om varen er på hyldeerne
- Tydelig marketing i loftet over prisscanneren.
- Gode ideer, sæt i gang
- Nej

Please write your e-mail address if we can contact you about participating in a physical testing of the prototype. The testing will take place in the Copenhagen area.

(emails are deleted)

Overall Status



Appendix K – Prototype testing with experts

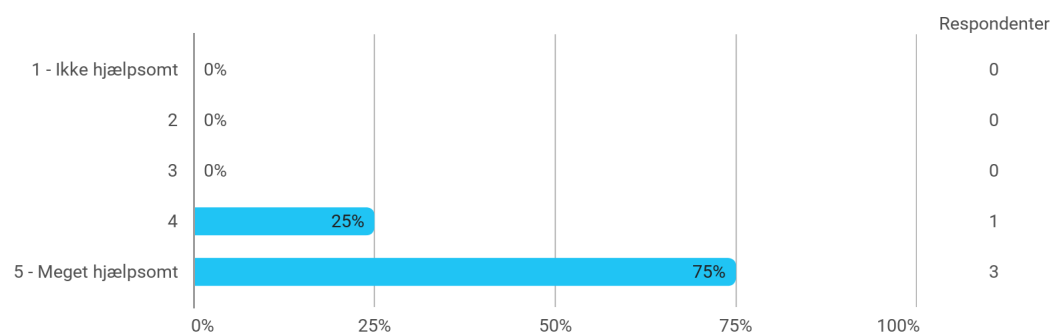
Appendix - sketch prototyping and testing with experts

Hvad hedder du?

- (Anonymised)

Tiltag 1 – crowd counter

Hvor hjælpsomt vurderer du at tiltag 1 vil være for målgruppen, på en skala fra 1-5?

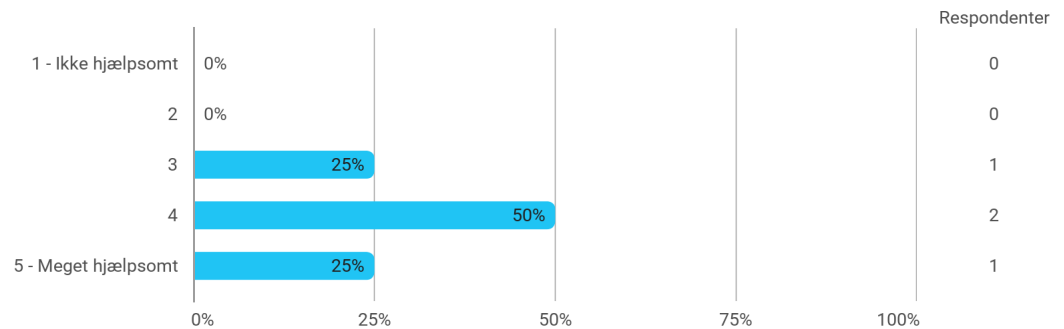


Hvad synes du om tiltag 1?

- *Superfint tiltag. Jeg ved, at det fungerer godt i fitnesscentre og forlystelsesparker og vi har også haft god respons på et lignende tiltag på Folkemødet.*
- *God ide*
- *Det synes jeg er godt ift. mennesker der kan være sansesensitive. Det kan være en måde at mindske stress og være gavnligt ift gennemførelse af dagligt gøremål og få en succesoplevelse på denne måde.*
- *Genial mulighed hvis man nemt bliver sansligt overstimuleret, social angst osv*

Tiltag 2 – Guide for practical changes

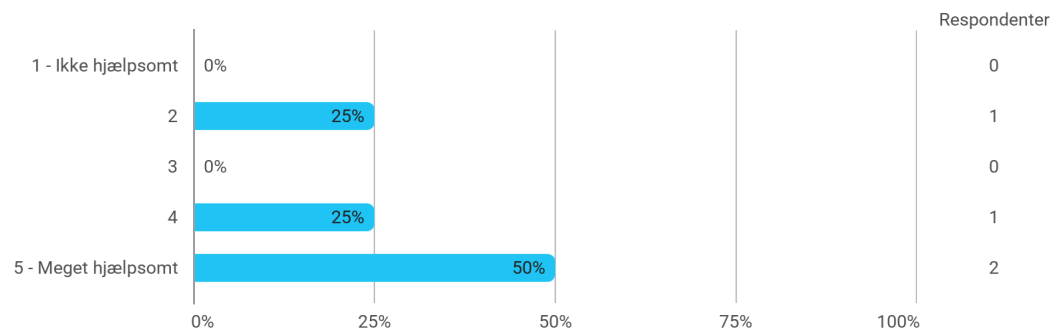
Hvor hjælpsomt vurderer du at tiltag 2 vil være for målgruppen, på en skala fra 1-5?



Hvad synes du om tiltag 2?

- På mange måder et fint tiltag for den specifikke målgruppe, men kan til gengæld være ekskluderende ift. andre målgrupper og især ekspedienterne (her tænker jeg på bip-lyde og ikke musik)
- Virkelig godt til sanseudfordrede
- Igen en mindskning af sensoriske input, der kan mindske overvældelse. Mit indtryk er at mennesker kan være mere overvældende hvor jeg ikke har ratet den ligeså højt
- Det kan potential ekskluder visually impaired personer som afhænger meget af godt belysning / god lyd feedback i forbindelse med self check out

Hvor hjælpsomt vurderer du at tiltag 3 vil være for målgruppen, på en skala fra 1-5?



Tiltag 3 – baskets

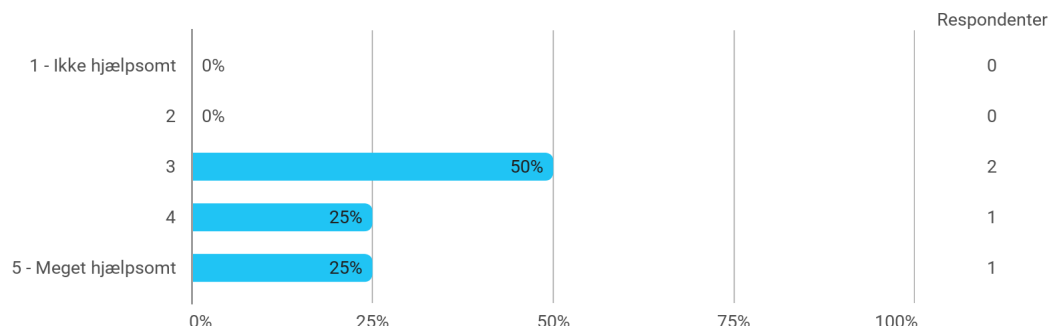
Hvad synes du om tiltag 3?

- Det virker som en supersympatisk idé. Især den med kortet. Jeg er tvivl om solsikkekurven er nødvendig. Personer der bærer en solsikkebærer den jo allerede og det er bevidst lavet som en nøglesnor, som er synlig, men samtidig diskret. Jeg synes måske kurven med solsikke "larmer" lidt for meget.
- Det er enormt stressende at lede efter varer og gør at særligt mange autister ikke tør handle nye steder.
- Jeg har det blandet her. Fint at kortet kan gøre det muligt. Samtidig tænker jeg også, at det kan skabe øget opmærksomhed at gå rundt med en solsikkekurv. Jeg tænker at dem der ønsker deres udfordringer synliggjort allerede vil bære snoren. Jeg kunne være bekymret for at det kunne trigge noget eller føles stigmatiserende også at blive konfronteret med det i et supermarked. Omvendt kan det selvfølgelig skabe en følelse af at blive set og inkluderet. Så for mig at se kan det pege i begge retninger.

- *Det vil hjælpe ALLE!*

Tiltag 4 – Navigation sign

Hvor hjælpsomt vurderer du at tiltag 4 vil være for målgruppen, på en skala fra 1-5?

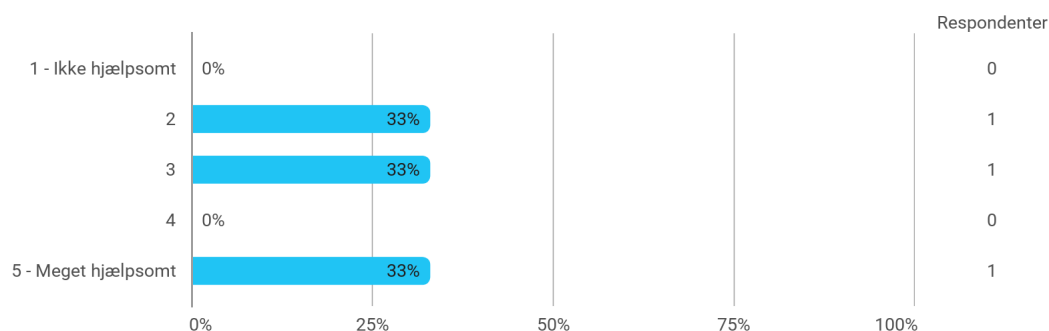


Hvad synes du om tiltag 4?

- *Det tror jeg, kan være en rigtig god løsning, og også et godt supplement eller alternativ til kortet på kurven.*
- *Lidt i tvivl om det stresser mere end det hjælper*
- *Rigtig fint. Så har man selv mulighed for at orientere sig hvis man ønsker det.*
- *Jeg ved ikke hvilket information jeg har brug for før jeg mangler det specifikke information så hvis det her var noget der være flere steder eller følge brugeren rundt i supermarkedet ville det være fantastisk*

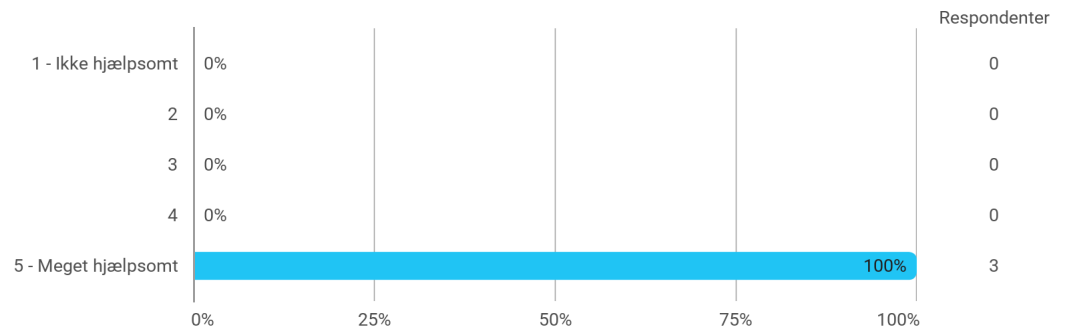
Tiltag 5 – colour codes and numbers

Hvor hjælpsomt vurderer du at tiltag 5 vil være for målgruppen, på en skala fra 1-5?



Hvad synes du om tiltag 5?

- *Min erfaring er, at det kan være rigtig godt med synlige farvekoder. Jeg kan umiddelbart kun se fordele med en sådan løsning for den specifikke målgruppe.*
 - *Det skal implementeres sammen med 4, så måske hjælpsomt*
 - *Farve koder kræver lidt træning men kan eventuel hjælpe de ordblinde*
- Hvor hjælpsomt vurderer du at tiltag 6 vil være for målgruppen, på en skala fra 1-5?

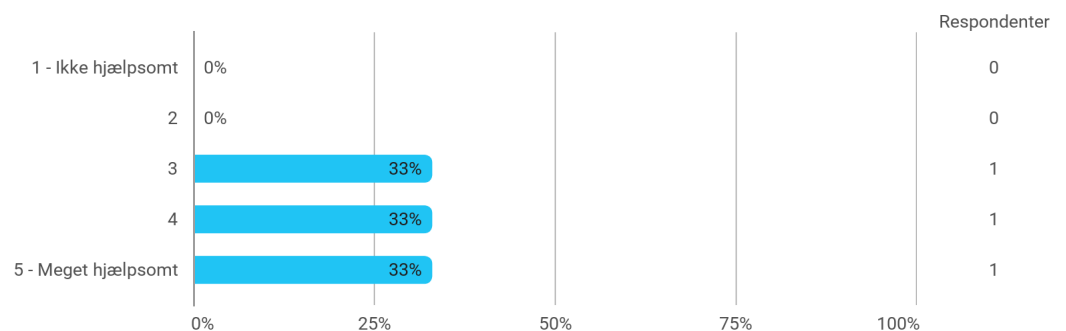


Tiltag 6 – Digital map

Hvad synes du om tiltag 6?

- *Også et rigtig godt bud på en god løsning. Det vil også være hjælpsomt for svagtseende.*
- *Godt til den yngre målgruppe*
- *Godt for alle*

Hvor hjælpsomt vurderer du at tiltag 7 vil være for målgruppen, på en skala fra 1-5?



Tiltag 7 – Info tablet

Hvad synes du om tiltag 7?

- *Det kan jeg forestille mig, kan være en smule overvældende at navigere i og bruge tid på. Her forestiller jeg mig, at man i stedet vil ty til onlinesupermarkeder ala nemlig.com.*
- *Smart med søgefunktion*
- *Ala fiskertorvet etc. Godt for alle*

Tiltag 8 – introduce a friend to the app campaign

Tiltag

8:

Hvad tænker du om en kampagne, hvor man får en særlig rabat eller anden fordel i bytte for at vise en ven/familie medlem hvordan Coop-appen virker?

- *Jeg kan godt se idéen, men jeg benytter aldrig selv lignende "inviter en ven"-kampagner, da jeg ikke har lyst til presse noget ned over hovedet på folk. Det er nok*

en personlig præference. Ift. målgruppen kan jeg ikke se noget i vejen for sådan en kampagne,

- Jeg tror barrieren for autister er at det er "ny ting" så ved ikke om det hjælper.
- Genial

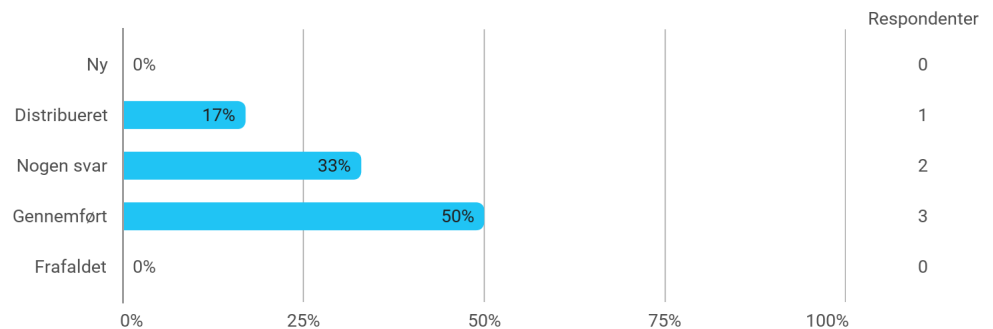
Har du andre ideer til hvordan man kan få kunder med kognitive udfordringer til at prøve app'en?

- Lave en "solsikke"-version, som er helt forsimplet. Min erfaring med Coop-appen er, at der også er en masse andre funktioner end scan-selv funktionen, som måske kan virke overvældende.
- Nej
- En simulation af at handle ind i en virtuel supermarked via scan-selv appen.

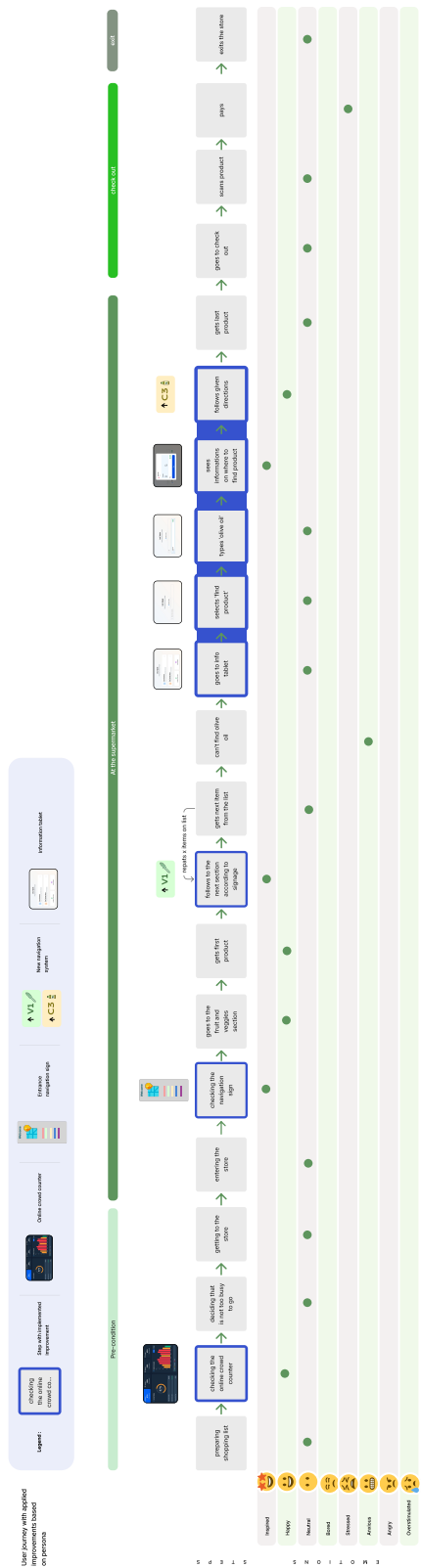
Har du nogle sidste kommentarer til idéerne?

- Ikke andet end, at jeg umiddelbart synes, at det er nogle virkelig gode tiltag, og at jeg håber I har en god dialog med Coop om det. Held og lykke med projektet.
- Nej
- I er god! :)

Samlet status



Appendix L – Updated Journey Map



[Link to the digital version](#)

Appendix M - Intervention Matrix - Senario Based Planning

Solution	1 - crowd counter	2 - navigation sign	3 colour codes and numbers	4 digital map	5 - info tablet	6 - guide creating and implementing
Which problem does it solve?	easier to plan avoid others	navigation	navigation	navigation	navigation + feedback	avoiding sensory overload
Quantitive Impact across all customers 1-5 scale 1- lowest 5- highest	4 many report wanting to ue it	2 many reports mostly wanna use it if they are new to the store	3 very beneficial to dyslexic and unconsciously others	4	3 you don't always need this level of help	3 less noise is good for everyone, sensory hours are for the fewer that needs it.
Qualitative impact 1-5 scale 1- lowest 5- highest	3 is limited by personal flexibility	4 the help is big if they are new to the store	3	4 helps navigation	4 when needed, it is very valuable	4 sensory hours are limited by personal flexibility
What resources does it require?	Adding to app, store space	<ul style="list-style-type: none"> make map (see intervention 4) finish design of sign printing sign installing space 	<ul style="list-style-type: none"> make maps finish design of sign printing installing space 	app redesign development of the map system: <ul style="list-style-type: none"> potentially new cameras AI 	<ul style="list-style-type: none"> installing the tablet developing the product (designing, coding and creating data base) 	depending on scale of implementation: <ul style="list-style-type: none"> either low resources to just lower sound or more to add acoustic panels + sensory hours
Will that require more staff to work?	No	No	Checking it up to date - reporting if its not	no	receiving and analysing the feedback	depends on the size of the store
Who should be involved to implement and run it?	IT-Department	<ul style="list-style-type: none"> Graphic designer to make sign person to print and install 	<ul style="list-style-type: none"> Visual designers/ interior designers IT-Department 	IT-Department	IT-Department staff to check it is working	<ul style="list-style-type: none"> Communication department to communicate about sensory hours. Staff to check it is being followed
will that require ongoing adaptations after implementations?	Only possible repair	new maps whenever store is updated	<ul style="list-style-type: none"> yes, updates and testing for the interanal system 	updating app whenever store is updated, fixing bugs	updating with new layout, new products	Checking and updating practise
Budget scale Cheap- moderate - expensive	expected = cheap live = moderate	moderate	moderate- expensive	moderate	expensive	cheap to moderate
Further development needed	needs more testing	needs more prototyping and testing	yes further research of store system and level down system	needs more prototyping and testing	needs more prototyping and testing	More research and designing of step-by-step guide etc.
limitations	<ul style="list-style-type: none"> Will never ensure people the expected nr. There can be surprises. personal schedule 	<ul style="list-style-type: none"> Doesn't ensure people see/use it Smaller stores might struggle with space for it balance of right amount of information, enough but not overwhelming. 	<ul style="list-style-type: none"> difficult to communicate and change behaviour of customers store layout and space in internal useage 	depends on version... doesn't show is an item is out of stock	require new space and might possibly create the crowd if badly placed	Sensory hours is not always, but ensures the physical environment is inclusive to the target group, without excluding other group, that can still choose to shop at other times.
Extra opportunity/ benefits	Works better for employees, lower rush hours, flattens out the amount of customers	<ul style="list-style-type: none"> If customers are better at navigating, they disturb the employee less Less stressed environment 	<ul style="list-style-type: none"> easier checking for inventory lists are easier updated and documented 	<ul style="list-style-type: none"> If customers are better at navigating, they disturb the employee less Less stressed environment 	<ul style="list-style-type: none"> If customers are better at navigating, they disturb the employee less Less stressed environment gathering data on search/needs 	<ul style="list-style-type: none"> Advocate for inclusivity Representation As part of CSR strategy, it can increase brand value
Ethics/sustainability	<ul style="list-style-type: none"> increased electricity usage 	<ul style="list-style-type: none"> extra resources for printed maps increased usage of data space 	extra resources for printing new signs	increased usage of data space <i>(AI related ethic issues - if used)</i>	increased usage of data space	increases social sustainability

[Link to the digital version](#)