Open dataset of 20 interviews with senior service designers and managers for the Empathy Business research project

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Abstract

The aim of the Empathy Business research project (2023-2024) led by the University of Lapland focused on how to digitalize services and business prototyping through creativity. The research named challenges as well as design methods for developing digital tools for meeting the future needs of service design and business development.

In total, 20 interviews among senior service designers and managers located in Europe, Latin America and Asia were conducted during spring 2023. The interviews provide perspectives related to the future of service design as a practise, the skills required and further issues of relevance for professionals in the field. Based on affinity diagramming eight main clusters were named: Sustainability, Business compatibility, New tools, Designer's skills, Art-based methods, People in the centre, Online workshops, and Physical workshops.

This data set includes an anonymized list of the interviewees, affinity diagram post-it notes of the interviews, short descriptions of the main clusters and an internet link to the online affinity diagram on Miro board.

The materials provided initial insights for developing Proof-of-Concepts for digitized interfaces, such as suitable plugins, 3D-based photorealistic solutions, or an application with the potential to be used in service design and service prototyping contexts as well as in other development processes within and across organizations.

Keywords: dataset, interviews, post-its, Affinity Diagram, Miro board, service design, sustainability, digitalization, design skills, digital prototyping, collaboration

1. Introduction

The Empathy Business research project (2023-2024) led by the University of Lapland studied how to digitalize service and business prototyping through creativity. The research aimed at developing Proof-of-Concepts for digitized interfaces, such as suitable plugins, 3-D-based photorealistic solutions, or an app, which could be used for service design and service prototyping as well as development processes within organizations.

A multidisciplinary team of researchers and steering committee members did research to name the development challenges and design methods for meeting the challenges and carried out pilot studies both with creative companies (Content Union, Zone2 Pictures Oy, and Zone ii Oy) and industry collaborators (Wetteri & Volvo cars) to produce proof of concepts.

The ambition was to produce beyond the state-of-the-art PoCs as well as new research knowledge on digital solutions that are focusing on utilizing the competencies and strengths of creative industries especially service design, theatre, and audio-visual media.

Empathy Business research project realized 20 interviews with senior service designers and managers during the spring 2023. These interviews were focusing on developing digital tools for service designers, design and business development process. The strong focus in the interviews were in the future of service design as a practise, skills sets needed by the service designers and the topics that the service designers' are dealing with. These requirements outlined what kind of tools would be needed. The interviews had pre-set of questions that the interviews followed but the interviewer let a lot of room for the intuition and flow of talk of the research participant. This set the tone of the interviews.

The interviewees represented a global group of designers situated in Europe, Latin America and in Asia. They could be categorized in three groups: a) working as a senior in house designer in major corporation, b) working as a senior or partner in a medium-size design consultancy and c) working as a senior designer in a small design consultancy.

The interviews were recorded and handwritten notes were made. Recordings were transcribed. After this the interviewers made affinity diagram notes that were exported to a Miro board. The notes included the key outputs of the interviews. The interviews were analysed using affinity diagram method (Lucero 2015). The research group worked collectively to categorize and cluster the notes and created an affinity diagram out of it.

2. List of Interview questions

1. How to transfer functionalities of the service prototyping lab into digitalized service business development features that embrace creativity?"
2. How to utilize the identified potential of the creative industry experts in online and real-time creative prototyping with companies?
3. How to bring sustainability into creative digital product development?"
4. How to develop a digital solution for users to tell their stories and express their needs related to their service experiences and service journeys?
5. How to prototype & evaluate a service quicker to compete in the rapidly changing business environment?
6. How to recruit and motivate users and employees to participate in creative digital activities that enhance the business development of companies?
7. What are your preliminary reason and value creation need to search for service design options? What is your elementary resource needed in value creation for the services you receive/offer?
8. How significant is the role of using technological tools in service journeys?
9. What kind of service experience did you have and how would you define different forms of value creation? (example of using digital tool)
10. What will increase your participation in service processes? How can digital tools stimulate your participation?
11. How can service design be made more accessible and approachable within organizational teams and for users?
12. What are the bottlenecks for gaining access and trust with a client organization or another department? How have you sustained/built relationships that work well? Which tools work best?
13. Which level (employees, teams, departments, or management) would you contact for first trials? Experiences of this?
14. Is your success/failure dependent more on tools or your personality or other factors?
15. How are novel digital apps and tools received by the users? What have you tried out to make the use of digital probs as easy as possible for the users? Please specify are these the end-users or employees in the client organization or other organizations (context)
16. Social aspects: how to increase participation? What prevents employees or end-users from being part of the planning stage?
17. How to choose participants? Problems?
18. How well is design accepted in your opinion as an emancipatory tool for participation?
19. Does design use change the client organization´s strategic/tactic goals or follow them as given? Examples?
20. Do your client organizations understand design vocabularies and concepts? Are you explaining these by using business concepts (such as ….?) or inventing something else?
21. When you handle sustainability issues at your organization, what kind of methodologies do you use?

3. Anonymized list of Interviewees

The 1st interview, Head of Design in a national logistics corporation

The 2nd interview, Principal Designer, Design lead, Partner in a service design consultancy

The 3rd interview, Service Design Director a design and management consultancy

The 4th interview, Design Researcher at a global technology company

The 5th interview, Freelance Service Designer

The 6th interview, Principal Service Designer in a global digital product company

The 7th interview, Project Manager in an AI solution company

The 8th interview, Principal Designer & UX Strategist in a multinational major appliance and consumer electronics corporation

The 9th interview, Cinematographer, Associate producer, Partner in an audio-visual production company

The 10th interview, Speaker, Author and a Story designer in a consultancy

The 11th interview, Specialist in service design in a service design consultancy

The 12th interview, Customer Experience Lead in a national financial corporation

The 13th interview, CEO and Owner in a service design consultancy

The 14th interview, Mentor in Service Design in a business consultancy

The 15th interview, Service Designer in a metropole city

The 16th interview, CEO, service design, producer in a service design consultancy

The 17th interview, Lead Product Designer in a global IT software and service company

The 18th interview, Service Designer in a business consultancy

The 19th interview, Service Designer in a hospital

The 20th interview, Customer Experience Lead a national financial corporation

4. Interview post-it notes

Twenty expert interviews were video/audio recorded or note-taken to capture the current practical challenges in service practices. Interviewers transcribed the recorded interviews in text. Then, the researchers summarised key insights for analysing the interview data with the Affinity diagram. Each interview's key insight is summarised in the text as follows.

4.1 The first interview

- Prober quality online connection is needed.
- Technology can make the workshop situation more equal to participants.
- Mural, Miro, Figma (digital whiteboard) have different functionalities and it's hard to learn multiple apps/tools.
- The workshop flow for an online workshop needs careful planning. Workshop preparations take lot of work.
- The online workshops serve well when developing digital services. It is based on showing how the digital interfaces work.
- Designers needs very good technological skills in an online workshop to make the tools' functionalities easier (easy way to make post its, zoom) vs. physical workshops are more embodied, easier to improvise.
- When we approach different things that we are designing, we need to make sure that we understand each other's in a multi-disciplinary team.
- There is still need to argument for the meaningfulness and benefits of design.
- Trust comes naturally in a workshop or in a design process.
- Online workshops has less privacy when working with Miro etc.
- It would be great to be able to tool with a digital pen at the same time when workshopping.
- There can be hybrid part in an online workshop, for example, Wolt voucher for ordering lunch.
- Participants don't necessary share as much their ideas than previously in an online workshop.
- Also, facilitators skills are important. Online facilitators need to be inspirational but neutral.
- Teams and integrated apps need to be available in an online workshop.
- Bad online tools can hinder the workshop participation.
- The attention span of participants is hard to maintain in an online workshop and prevent multi-tasking of the participants.
- There are still difficulties to include the customer early on of the development process. There is a afraid that customers think the draft as a final product.
- Human-cantered thinking and empathy are in the core of service design. This may not be understood if you have superficial knowledge of service design.
- We need to learn from different vocabularies (tech, business etc).

4.2 The second interview

- Basic online and digitals tools such as Miro & teams integration are available.
- Division between online workshops and physical workshop is 30-70%.
- There could be need to more imaginative online (Miro, Mural, Figma) templates that support creativity.
- Introduction to digital tooling and the use of tools is needed. Some users may hesitate using the tools.
- Company is having their own machine learning tool.
- There is lot of experiential knowledge used in the service design workshops.
- Different skills sets are needed in online and physical workshops.
- The skills needed are learned through experience.
- There is need to learn strategic business language.
- Design knowledge transfer takes place through shared examples.
- Participants to the workshops are usually easy to find through collaborating companies.
- Mapping tool for discovering new business opportunities for SMEs would be helpful.
- There is lot of challenge in helping to discover new ways to support the customer.
- It is hard to achieve playfulness and increased empathy in an online workshops.
- It's good to check out VR online collaboration tool Glue.
- When developing more long term relationship also social interaction is needed: lunch & dinner together.
- There might be tiredness to learn again another digital tool from the participants.
- Customers may want to pay customer insights or service journeys, vocabulary describing service design varies.
- Designers need excellent presentation and argumentation skills.
- There are a couple of persons who have specific training in sustainability. There are some tools how to consider ethics, sustainability and diversity in the workshops.

4.3 The third interview

- Online workshop needs more preparation work.
- Not all users can do this, especially if you are not used to working with online tools.
- People who are used to online and digital tools are a good user groups for online workshops.
- Designers needs to be able to work with several customer groups from users to strategic management.
- Designers need business skills and ability to understand to which of the customer needs one starts responding or makes to choice to start designing solutions.
- Designers to be able to develop skills to discuss with strategic management.
- It's important to have customer orientation (inside company) as well as customer experience strategy (competition outside view).
- This is to make distinction between the customer experience value and business value. What makes a better service and also brings in money or increase customer experience value.
- Startegic management process is not the same as the service design process.

- Being an expert and knowing what one is doing and showing competence creates trust.
- Customer Experience Space as a physical working space has benefits and you can work several days with the same process and show it physically.
- Roadmaps and strategies are needed as tools for organising existing information so that it available.
- If one is collaborating with users who are not used to online and digital work it's better to have physical workshop.
- When you have strong facilitator's skills you can trust on your skills, experience and toolset to lead the workshop.
- Double diamond as traditional process model needs more focus in an implementation phase.
- Designers need more business understanding.
- What is the service product itself and what it offers? This was the first phase of service design.
- What kind of transformations/transformation design are/is needed in management? This was the second phase of service design.
- How to promote customer-centeredness in the all levels of organisation. This was the third phase of service design.
- How to manage customer experience in an organisation. This was the fourth phase of service design.

4.4 The fourth interview

- First one needs to change the way of thinking from physical to virtual in the context of workshops. Designers are used to embodied action.
- Physical workshops are embodied, in VR one can use avatars for more embodied experience.
- Online workshops are totally normal and have many benefits. Designer need to be able use all the tools and features in an online apps for example background voice when voting etc. to make the online experience more friendly to users.
- Designers need high level of tech skills.
- Designers need to have abilities to familiarize oneself with different trades.
- For designers, It's important to have strong foundation skills: mathematics, engineering, history, vertical skills.
- Designers need to understand business models and language to understand the company's strategy and goals.
- Designers also needs to understand users language. Technically this works but users don't want it.
- There are visual creators online tools/platform available. A digital studio with tools that creators can use. With these tools one can for example create an avatar.
- For example GPD4 (AI) can create an image that one can use.
- Avatar can be an embodied experience, for example demonstrating and learning how to fix a car in a virtual context.

- Online workshops still have the challenge of using physical object as a metaphor, for example as Lego serious play. VR environment could have these characteristics for example building something but this needs more skills.
- Using AI is saving time in finding information for designers.
- Having a shared folder/hub/table for sharing information between teams during projects is needed.
- One can familiarize the business for example looking at company websites etc but nothing beats hands on experience.
- AI can save work when creating images.
- There are always subject matter experts that you need for some piece of information. It would be important to identify/locate these quickly.
- There are language barriers how to share information that others can use this.
- During projects synchronized and updated information for sharing is needed.

4.5 The fifth interview

- Online workshops may be too agenda oriented, this doesn't allow freedom or space for development.
- There is a threat that actual goals many are not achieved during online workshops.
- There are quite many digital/online tools available but one's needs time to learn these.
- It would be good to have more sharing among designers on different tools for different purpose.
- With physical workshops it's easier to support and facilitate participants goals and achievement.
- It's important to support the participants process and goals.
- Designers' role is to interpret between different expertise areas. One need to make sure that main concepts are understood and there is consensus about their meaning.
- Trust enables working within project and process.
- It's important to notice that there are internal (and external) projects.
- There needs to be purpose for different methods.
- Arts-based methods have a strong role with communities and sharing personal stories.
- Soundscapes could work as arts-based method, for example using sounds to describe ones inner feelings.
- There can be also role for arts-based methods within business project when the purpose in the process is clear.
- Business mapping could work.
- Frog has internal training about sustainability, which is very purposeful, they have example from the chemical industry.
- Embodied methods could be used to describe future combination of digital contents (AI) and physical environment.
- One needs to motivate participants for joining the workshops also for using different methods and understanding their purpose.

- In large corporation it is harder to change into creative mode in a workshop. It needs warm-up and learning new thinking pattern.
- There is a challenge to facilitate multiple groups in Teams. It is still easier in physical space.
- It is still tough to do embodied prototyping or creative work in digital environment. Usually it more about producing text, visuals or links.
- Sustainable development should be in the core of service designers' tool pack.

4.6 The sixth interview

- In an online workshop the real challenge is to get people focusing and not doing 100 other things.
- Miro/Figma are easy tools when you need to ideate, put down ideas but when you need to analyse and work with complex issues it's challenge.
- Designers need very broad spectrum of skills: ability to understand connections, mapping skills to make visual summary, ability to evaluate services access and review service and ability to understand how they bring value to customer and the company.
- There is need for designers to have skills to imagine possible futures, understanding goals (of the company, customers, service) and road mapping ways how to get there.
- Designers need to prepare oneself and learn about industry of the project context beforehand.
- Trust developed with having just normal, open behaviour.
- Would be great but is very hard in the business content to have easiness for using arts-based methods.
- Sometimes we are overcoming Miro limits as it is not meant for service design. For example it is not so easy to move and select items without making a mess.
- Number of people are involved in sustainability, but it is much used for marketing purpose.
- Being in a physical workshop gives you so many other layers of interaction as you see body language, more of facial expressions etc.
- Being able to connect with people around the world digitally and acquiring data/doing interviews in sustainable way is a great advantage.
- Designers important skill is to prompt a new tool to create conversation.
- Designers' skill is to simulate and evaluate service interaction.
- Designer needs to understand business strategies, strategic thinking, design management and business modelling.
- Designers need to understand sustainable development goals, product life cycle and the idea of circularity.
- There needs to be ability for a designer to do project management, implement agile methodology and do qualitative research.
- Usually you have 3-4 weeks immersion time to get to know the industry you are working with. Clients don't expect us to be experts of an industry in one day.
- I try to keep thing impersonal and friendly to create trust.

- We have given customers products from the future and they have created stories for them.
- People are not prepared to put extra effort in sustainability.

4.7 The seventh interview

- We are using tools such as Figma, PPT, Catbell Meet, Normal whiteboard at the office
- Figma enables developers to see every client's needs such as spacing, size, position without any further communication
- Figma also allows the team to prototype a service. Photoshop and traditional design tools take too much time for client communication
- Quick, Aesthetic, and User-friendly are the most important skills for designers.
- The designer must communicate well in the platform to deliver the right services.
- Organising (or managing) clients' request history data is also critical because sometimes clients prefer the previous version.
- Online tools also include human interaction. One platform is just one of the many tools. Despite using the best tools such as Figma, video conferences, the communication is always difficult.
- The good online platform is just adding small value to the physical (human) interaction
- I always tell them (team members), speak everything in their mind. And don't say NO in the meeting
- When the ideation is completed, the team filters each idea one by one after considering what we need and feasibility of the item.
- The tool should be attractive for designers and managerial levels.
- The most confusing function for Figma was the hotkey. The new tool should consider the hotkey from the most widely used software (not to confuse first time users).
- The tool must be compatible in any existing platforms
- The tool must have the competitive pricing
- I have never thought about environmental issues with online tools
- I think both (online meetings and face-to-face meetings) cost natural resources

4.8 The eighth interview

- We need to report to the managerial levels. Reports to team leaders and directors are normally conducted by face-to-face.
- 1/3 of meetings are online - especially when the other team leaders stay in the other countries
- people prefer to meet in person after all covid-19 restriction disappeared.
- If we organise service prototyping sessions with visual graphic designers, 4 – 5 members are most difficult size to manage effectively.
- Email communication is too time-consuming
- We also use the Miro when we collaborate with academics last year.

- Generally, we are using our own program for the digital collaboration. The functions have developed but also consider the security issues.
- So, speaking out during the presentation looks a bit unnatural, or "make-up" feelings.
- Chat was useful for receiving feedbacks in real-time and reflecting later after answering other questions.
- My team members checked the chat and let me know the questions. (real-time interaction with participants and presenters)
- we encourage team member to express their emotions (using emoticons) at meetings.
- If we are in the same room, eye-contact makes it easier to understand whether the person is focusing or not. (How can we transfer natural human interactions to a digital world for building personal trust?)
- when we have really urgent meetings, it's really chaos in face-to-face meetings. Everyone talks in their own languages and it's really difficult to get the result on time.
- New tools must be useful / flexible for different size of audiences. Current tools such as Teams are effective in certain sizes (one-on-one or one to many)
- Unfortunately we haven't thought about sustainability for the digital platform.
- But we use the saved budget for personal development purposes (e.g. attending international exhibitions)
- We can also save money for face-to-face employee training.

4.9 The nineth interview

- tradition, reluctancy to change in the film industry
- potential benefits: saving money, flights, petrol, diesel, environment.
- even if not all PoCs work, even a negative outcome is useful information
- discussion of filming locations is unlikely to ever be the same on location as virtually
- first round of selection, pre-scouting or creative stage production phase could work virtually, tec recce will stay, my guess, as is on location
- a virtual studio option would allow remote preparation work online
- a smaller crew traveling on site to shoot larger landscapes vs. (virtual)studio dialogues
- a large studio model expensive and laborious
- a virtual studio option may be ok for large international companies, Scandinavian and Finnish companies qualitatively more efficient to work on location
- Example: 30 days in studio and 10 onsite abroad
- studio a more controlled option, lights, sound etc.
- will people dare to make decisions based on just a virtual model?
- scouting: should be as easy as possible, on the go
- demos so far have been too heavy to use, ad hoc use situations everyday reality
- another user group: heads of departments might be interested
- important: to whom is the tool for?
- heads of departments could work partly independently, save time, have better budgets for actual production
- distributed decision making, budgets changing even during shooting

- the (virtual) process is not fluent: service design might aid in this?
- how would saved time show in the quality?
- "dinosaurs" live like they used to, the younger generation is more sustainable
- solar power, batteries, led lights, green energy
- up to emissions 70% due to travel and energy in the industry
- pre-production selection phase: easy, simple device, no downloading, anywhere
- Avatars bring no added value
- a sandbox for creative responsible persons, leaving marks, saved
- funding is gathered for productions piece by piece.
- few Finnish operators dare to take risks, big internationals more so
- changing costs in the future, more expensive data, lack of storage...
- licenses: not interesting
- who would build, provide the tool?
- a free tool for creatives would be optimal
- having one space (studio) would save time, effort and money in big productions
- filming industry has its own vocabulary, some reference vocabulary might be good
- current online spaces are expensive
- production designer and costume designer often visit the location before shoot
- time spent on a sound stage / Led volume is limited and expensive, online might help actors
- the production company could provide the tool for those involved
- the service path should guide for more time for individual planning
- the platform could have different profiles for set design, artistic work, etc…
- often micro-enterprises or freelancers in the film industry.

4.10   The tenth interview

- in this online meeting, I like to use the chat quite a lot.
- I think it's the online is quite good you can use to that (in the big group)
- when we are online, that we are more focused on what we are doing
- when you are using pen and paper, your mind starts to work better.
- ... you are moving your hand, your brains are working better.
- (As a story designer) So it is very interesting how we can make these platforms and virtual worlds so that they would be more, more human,
- Empathy on this physical. Pen and paper are still able and also kind of approach
- being online is that it might be a bit easier to get everybody involved.
- as a digital environment, but also like little like stories people tell to each other.
- And there is so much, so much that we can we can do what comes to storytelling (with a new digital tool)
- story based design, what I'm doing, I think that is something that we should do more (with the digital tool)
- to be in the same place together with other people, that that it's more healthy for us
- It's (mentally & physically) healthier for us to connect online,
- But even more to share the space with other people. Because there is always we are more connected to each other.

4.11 The eleventh interview

- When you know that for people using digital tools is easy, the challenge is to make sure that all see the same thing and are able to access using different systems google vs. Microsoft, zoom functionalities.
- One needs to have strong Miro skills.
- Designer also needs to be also IT support to the workshop participants.
- Designers skill is to get people participating and talking, to feel that it is important to be part of the group and create the feeling of participation but still enough distance to have new perspective and challenge.
- It important to bring the participants over the change resistance.
- Service designer is as an interpreter between the customers and management. They are brining message from workshop participants to management in different words.
- During the service design process it's much easier to build trust, how much of yourself (designer) it's good to invest?
- Letting people to ask questions from you one can also be a learning process.
- Feeling of togetherness needs to be created for trusting.
- One can use art-based methods in a creative way. There is a good example of a visualisation task given to the workshop participants. "Please draw a pictorial manuscript, a guideline how to toast a bread?" for example crazy eight- drawing ideas (a fast sketching exercise that challenges people to sketch eight distinct ideas in eight minutes). or describe how you are feeling and draw this feeling as a river.
- One could use touchpoint cards/icons as Miro infographics.
- Tools for workshop recruiting are needed.
- Sustainability call for responsibility in strategic service design, considering the need to travel etc
- In a physical workshop one needs to use more time in motivating for participating. The advantage is to see at glance how the groups are progressing in their work.
- In an online workshop one needs to prepare much more for tutoring the tools etc. One needs to confirm how the tools work.
- In physical workshop there is more space for facilitation and improvisation.
- Designers need to take care that they don't become too involved but are able to keep the distance to be able to maintain transformation when it's needed.
- To encourage people to tell their opinions and true feelings is hard and designers main task.
- In workshop it is needed to really think about methods that enable everyone to be heard and everyone voice to be included.
- Sometimes work memory is needed, not all needs to be processed right away, for example ideating and using work memory to process and prioritize ideas and choosing only later.
- Tools that help you to take the information in the development processes, separate short term and long term information.
- Drawing with technical tools is too challenging for participants, rather to designers, using ready elements it's more for the participants.

4.12   The twelfth interview

- Mainly online workshops in this organisation but still we get more of the experience when workshopping face to face.
- Mural is in use, designers are more used to using digital tools.
- Designers ability is to quickly learn new tools and technologies.
- Yes, the different languages for different business and work areas exit, designer is communicating the user needs and voice for these discussions.
- All digital takes more time to build trust, easier in longer process.
- One co-designer has mentioned arts-based methods, company culture may be a challenge.
- When the documentation protocol for the company is powering, one need to double document when using mural as a tool.
- There is sustainability work done. What about the digital trash, opening and registering sites that become deserted, creating profiles not used etc.
- Physical workshops are more energising.
- I'm as a designer learning still IT language data containers etc.
- As designer one need to communicate different layers and levels in customer experience. Managing customer experience is understandable.
- My work with stakeholders in very digital but if you never meet physically something will be missing. If you meet physically this helps creating trust and with smaller group.
- In an online meeting is all are cameras closed and silent it's impossible to know what they are thinking and if they benefitted at all? This is typical thought in a larger corporation.
- How much will arts-based methods/acting/video will benefit? What is the added value? Will this ask for extra work.
- Will the acting or performative method be credible for the management?

4.13   The thirteenth interview

- There are Fifty fifty physical and digital workshops.
- One can use digital tools in physical workshops for generating information and documenting.
- Learning new tools takes time, there are even too many available.
- Designer needs basic set of skills according to design process phases, this will carry you long way and when you have more skills you can expand the tools selection you use.
- Designer is trusting the design process that enables different languages (of the stakeholders, participants) and uses in different business areas.
- Creating trust is essential for doing development work, this will need also social input, design sprint can be also tool for creating trust
- Using arts-based methods such as narratives, storytelling, using voice narration and movie making to communicate. These have an impact creating memories and atmosphere.
- There is a need to have a tool to manage a design process.

- There would be need to have quickly data available to analyse trends vs opportunities vs. Company competence.
- Tools are needed to help to designer to evaluate what is sustainable?
- One can use something physical as a workbook and utilize it's results in a two-day design sprint.
- We are not actively looking for new tools. Simple is beautiful. Managing tools is difficult.
- Tools for process management are needed and multiple processes.
- Working with users vs. working with management with same or different tools.
- We are constructing a joint tool pack that can be shared and a process that is aligned and shared. Younger designers can develop and bring in more tools.
- It important to talk with customers and listen to customers, propose the right things and ask if things are relevant.
- One needs also social encounters and this creates trust.
- Performative and theatrical methods are used for creating trust or icebreakers in the early part of the process.
- Performative and theatrical methods need to be executed in professional way.
- How to use real data and background information, legislation etc in company development processes.

4.14 The fourteenth interview

- Figma: A collaborative design tool that allows for real-time collaboration and prototyping of service interfaces.
- InVision: A prototyping tool that enables designers to create interactive mock-ups and gather feedback from stakeholders.
- Miro: An online whiteboarding platform that facilitates brainstorming, collaborative prototyping, and visual communication.
- Axure RP: A prototyping and wireframing tool that allows designers to create highly interactive and dynamic service prototypes.
- Figma: Pros: Real-time collaboration, extensive design library, easy file sharing, robust prototyping capabilities.
- Figma: Cons: Steep learning curve for beginners, limited offline functionality.
- InVision: Pros: User-friendly interface, extensive prototyping features, ability to gather feedback, integration with other design tools.
- InVision: Cons: Limited design capabilities, requires an internet connection for collaborative work.
- Miro: Pros: Versatile for collaborative brainstorming and visual communication, integration with other tools, infinite canvas.
- Miro: Cons: Limited design-specific features, less suitable for detailed prototyping.
- Axure RP: Pros: Powerful prototyping capabilities, advanced interactions, dynamic content, extensive widget library.
- Axure RP: Cons: Higher learning curve, limited collaborative features.
- Proficiency in using design tools and software mentioned above.
- Knowledge of design thinking and service design methodologies.

- Strong visual and interaction design skills.
- Understanding of user research and usability testing.
- Ability to collaborate effectively with team members and stakeholders.
- Proficiency in using design tools and software mentioned above.
- Knowledge of design thinking and service design methodologies.
- Strong visual and interaction design skills.
- Understanding of user research and usability testing.
- Ability to collaborate effectively with team members and stakeholders.
- Clearly define roles and responsibilities within the team.
- Use visual documentation and annotations to convey design decisions.
- Maintain regular communication through meetings, video conferences, and project management tools.
- Foster a collaborative and inclusive environment to encourage diverse perspectives.
- Actively listen to feedback and address concerns.
- Real-time collaboration features to enable simultaneous work and feedback sharing.
- Prototyping capabilities to create interactive and realistic representations of the service.
- Annotation and commenting features for providing contextual feedback.
- Version control and history tracking to ensure the integrity of design iterations.
- Integration with other tools, such as project management and communication platforms, for streamlined workflows.
- depends on stakeholder, big company will use new tech, but like farmer, they are afraid of new tech
- Digital tools can contribute to sustainability efforts by reducing the need for physical materials and travel.
- Online meetings and digital collaboration tools can help connect diverse communities across geographical boundaries.
- However, it's important to consider the environmental impact of data centers and energy consumption associated with digital services.
- Striving for a balance between digital and in-person interactions can help create inclusive experiences and foster a sense of local community.

4.15 The fifteenth interview

- We have mostly experience of UX-prototyping tools (such as Figma and Sketch).
- There was the tension among teams, because every team wanted to publish their contents.
- Service designer had to negotiate and tell the order of website structure and which one could be published first.
- When the service design determined the priority, the key argument is the customer. (e.g., this service is critical for customers)
- 80% work has been done in online
- Miro is the main tool for workshop
- Miro is good for structuring the workshop (by using the "frame" tool)
- All information in the other platforms can be copy & pasted to the Miro board

- Some participants had difficulties at first, but quickly learned Miro
- Miro has too many functions (users get distracted or lost if they are familiar with Miro)
- If you don't have the license, organising workshops can be difficult (e.g., number of participants in one board, number of boards, etc.)
- The service designer created the common instruction for Miro (onboarding process)
- Some people got nervous or frustrated when they moved/changed the board elements. The facilitator needs to make people relaxed and stay positive with diverse people on board.
- The service designer needs to encourage and help participants to use relevant functions in Miro
- Including end-users for the Miro workshop is very difficult (and needs to be avoided) because there is the huge gap in technical environment.
- Sketch focuses on Mac OS, which is difficult for us to collaborate with. So, we moved from Sketch to Figma which is less stressful in multiple OS.
- The compatibility issue is critical for the service designer to brief the model/concept with various stakeholders.
- Figma is better regarding the feedback & real-time collaboration purposes
- Prototyping straight to the online platform is useful
- The service designer thinks empathy is NOT always necessary for digital/online platforms.
- "I need teammates' intelligence, not their emotional interaction when we have very clear objectives in a project."
- The number of participants can impact on whether we need a certain level of emotional interaction or not (e.g., 1-1 meeting can be better in face-to-face meeting because human interaction is more critical in person-to-person meetings)
- Offline meetings are richer and natural.
- The atmosphere is created by people (facilitator). Thus, the facilitator needs to know relevant functions which can relax participants. (e.g., music functions in Miro)
- The team has the rule for online meeting to encourage human interactions (e.g., everyone must turn on the camera, everyone must comment or react when someone finishes her/his presentation).

4.16   The sixteenth interview

- taking what comes instead of claiming results
- help client organization change, do service planning
- meaning for all, human to human
- We see things as we see them, not as they are
- a different way of working is seen as a risk
- an extremely simple method, round table discussion, taking turns, drawing method, rich picture
- ideas about gamification, audio, (Miro used for online mapping)
- opportunities there to help people and organisations
- cultural conversations, people differ

- make the group think of itself
- getting rid of roles and expectations
- meeting face to face first or at some point is a must if virtual collaboration is done
- emotions will emerge
- data security important
- for a constructive conversation one needs to feel safe
- distributed, international organizations
- different legislation
- sustainability: an important aspect is wellbeing of employees, people in teams
- the sustainability trait is outstanding, more developed and clear than in other fields/industries (without exact knowledge)
- could not work with a client that is acting in a non-sustainable manner
- green ideas no longer marginalized, one can be proud of them
- nature, environmental values often emerge in workshops
- direct funding from the top to develop sustainability
- we are not well-informed enough to enter sustainability conversations (with companies)
- sustainability discussed and practiced at home
- For over 20 years companies have difficulty to change their way of acting, operation, when a planning task is ahead
- instead of 3 months, a half/whole day creatively would solve the issues
- heard how organizational actors cannot take actions, beyond their department
- not reaching the top level (close e.g. client service managers/developers etc.)
- big bosses may not know what client service means in practice
- there is a lot where creatives could help organizations
- companies have no clue how to integrate services into their planning/development processes
- the problem is in the hierarchy, organizing
- goal and financial management prevails
- a virtual design department
- accessible when needed, storing and documenting
- the knowledge of one unit is not enough
- case: top level wanted to find a way to avoid answering questions of users
- why is design thinking/creative methods not a natural part of everyday design work?

4.17   The seventeenth interview

- we start to use customer journey mapping with Smartly
- online tool, if you have a large amount of documents finding those might be a bit tricky and difficult
- service designer, usually can relate or any kind of insights, they can merge them with business objectives of the company.
- they can talk to the business and apply their insight to dispatch business and keep off on key performance indicators and all these objectives of the company
- designer does not losing the aspect of the customer

- In person and show data is better than show your opinion , because in company it will become politics
- We're going to influence who if you don't have data to back your arguments. So yeah, data driven discusses
- I know people come and go in the company. So you have everything digitized, there's like less risk for loosing knowledge.
- downside of digitalize is losing any kind of tangibility, tactile experience in the actual creativity process, like everything's digitized so people don't draw anymore
- Miro – working collaboratively, customer journey mapping, /know how to name document, because Miro is difficult to search
- Visual explain point of view is the most important of service prototyping
- Actual designer use digital tool , not for customer, they don't use digital tool

4.18   The eighteenth interview

- Depends on size, final user: Figma, Miro
- People like to be heard, they like to see their idea been implement
- VR : can provide people to understand complexity, helped people to imagine the real scene
- no for Remote communities can't access digital stuff
- train people who knows digital technology, they also have tools , help them to understand
- (WordPress+ Elementor: webflow)
- website for experiment - learning, can see on phone and computer
- AI con: communicate bias into machine, not a good things , people get /rely on answer from Ai
- Type form
- Even it is small, they want to provide solution
- AI pro: tool can help role, big data, arrange for you, provide insight if it programme
- Internet connectivity is problem : ex: Miro, lagging
- How much do you like to talk to people
- Great listener
- people want to feel recognize !
- Countries situation: not everyone can access internet
- Loom (explained well)
- Stakeholders is not users, make people understand what you are doing, make people comfortable
- Able to explained well the situation, how to read room, response, how to response to each other, does people understand what you says, actually understand!
- People don't want to be feel left out, feel empower , feel important
- Learning curve to use it (some people don't have time / able to learn):can paste comment from chat, need to help them
- Mood board

4.19   The nineteenth interview

- During covid- team, Miro , dalux , cave
  After covid- Loosing empathy by digital service - interaction between people
  Interaction in team is in intuitive Cave system
- In workshop , didn't get feedback immediately, not fluently
  Hard to know each other, Interaction face to face is better
- How to use team Miro, practice , skill level need to higher than user
- Need to be more focus than real workshop
- Design workshop better
- Technical issue still appear
- Able to solve problem , don't make people frustrated
- Good thing about Miro, documentation is digital , you don't need to document
- Easy to show/ visualize layout
- Team, inside team, better than mail
- You can create whiteboard
- Face to face- big room methods
- Ask from everyone/ each role
- Visualize layout
- AR (not for service designer)
- Hybrid workshop, all Finland, don't have to travel, help sustainability
- Mainly user is onsite, 5500 users / 400 workshops stakeholder not include patience
  , customer workshop

4.20   The twentieth interview

- Jira, Confluence(=wiki) Team, for communication
- Kanban board
- Digital service- interactive by smart phone/ computer/ something with screen.
  Design service at the end is the output, tool for design interface is important (at
  final stage), customer problem
- Difficult to organize , to maintain, (unimportant details)
- Depends on the state of the process, ex: early stage, how is the user, organize
  information is important or not how do you communicate with stakeholders, make
  it sharable and understand and Mural - good for create insight , step and process ,
  secure data, don't put personal data Mural, privacy
- Figma, new to Figma (sketch) use pen and paper also fine, like PowerPoint, Licence
  problem, not everyone can use
- PowerPoint: structure is good/bad for strategy work
- Cause friction, difficult to invite people to join
- Prefer face to face (zoom), It is more fun to face to face! output/ feeling up
- But efficient to have zoom/team

5. Affinity Diagram based on Interviews

Affinity diagramming is a technique to organise and structure a large amount of qualitative data usually through visual display, posted for instance on a wall to make better sense of it (Hartson & Pyla, 2012). By following Lucero's (2015) process, our affinity diagramming process adapted four stages: *creating notes, clustering notes, walking the wall, and documentation*.

Five project researchers collected the data through 20 interviews. The research team conducted semi-structured interviews, in which the questions were set before but also left the space for flow of talk. After the interviews, the researchers independently wrote 20 most important affinity notes per interview and collected a total of 400 notes. The affinity notes were jointly analysed by the research team by building an affinity diagram in the Miro board eight weeks between 19 June 2023 and 9 August 2023.

The notes were written digitally and gathered on the Miro board by the researchers. The affordances of paper have played a key role in Lucero´s (2015) affinity diagram practices, with a preference for using physical paper to digital alternatives, as well as manually written sticky notes. We instead chose to fulfil the affinity diagramming process in digital forms. Choosing a digital Miro board enabled us to simultaneously test its functioning and work remotely. It enabled us to work with large amounts of data effectively and helped to discover how these kinds of processes and ways of working can be carried out totally in digital forms.

The researchers went through the sticky notes individually after which, the notes were clustered through the collaborative process online by the designers working simultaneously at the Miro board and discussing the topics in Teams. We let the topics naturally emerge from the data without trying to cluster them based on the predefined interview questions (Lucero, 2015). Notes were left on the first version clusters to specify some key findings and to add possible research questions based on the key findings of the cluster themes (see Figure 1).
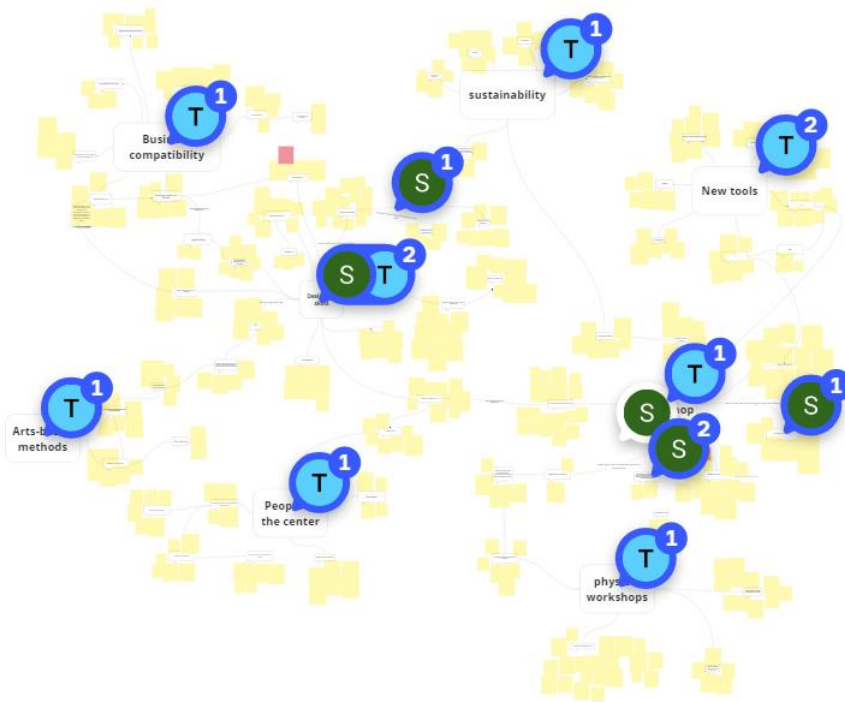
Figure 1: Draft version of the clusters

After the first draft clustering, we walked through the sticky notes by giving them specific colours to see at a glance the number of post-its covering the same issues. We also edit the wall by dividing big clusters into smaller ones, arranging post-its, and adding arrows to point out the relations between different clusters. The cleaned version of the wall showed the data in the ways that it is comprehended at a glance (see Figure 2).
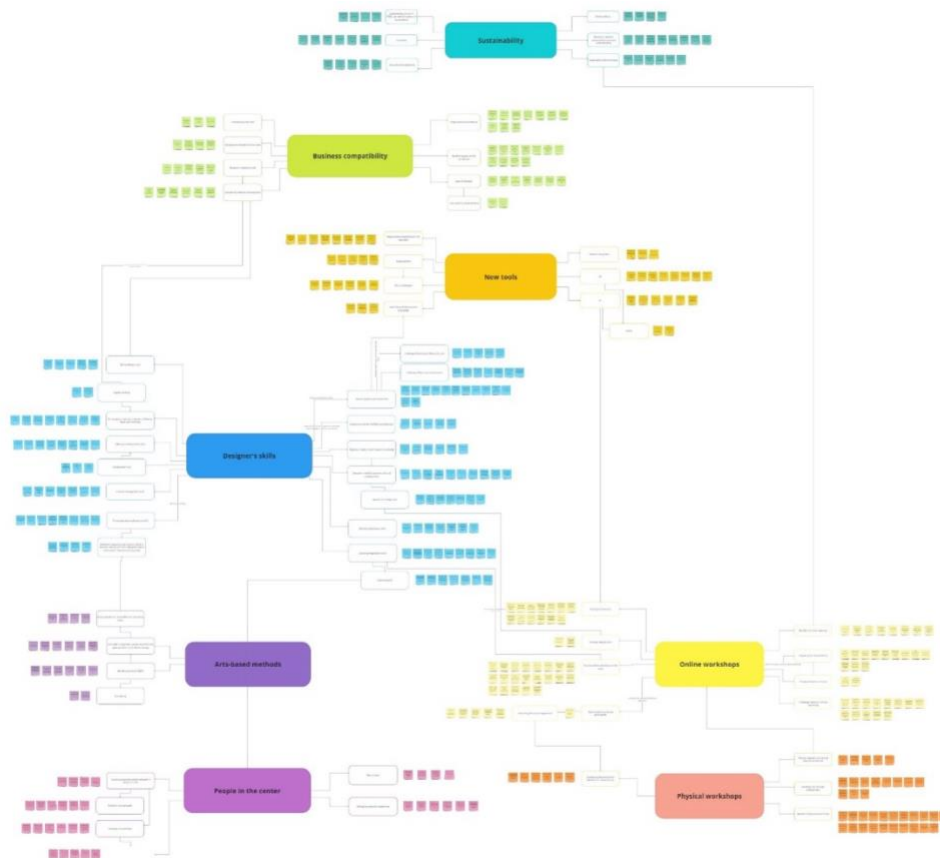
Figure 2: Cleaned version of the wall

After finishing the cleaned version of the wall, we documented the main findings from clusters into the research questions and ideas for the Proof-of-Concept development. Each cluster had 2-5 research questions, and 1-3 Proof-of-Concept ideas for further research.

5.1. Main clusters in Affinity Diagram

The main clusters of the Affinity Diagram were Sustainability, Business compatibility, New tools, Designer's skills, Art-based methods, People in the centre, Online workshops, and Physical workshops.

Sustainability
Digital solutions help to address sustainability, but the social inclusiveness of the digital solutions, all aspects of SDG levels, sustainable tools, and understanding are important to consider when designing sustainable solutions. One research question: How to incorporate sustainability in the service design project planning through investigating the suitable tools to use, and the design's impact on sustainability?

Business compatibility
Business compatibility comprehends the organisational boundaries, the compatibility, cost, and managing the tools for business purposes, designer's mediating role enabling different languages, and connecting creativity into business. One research question: How to support

the integration of creative processes in organizations through digital ways of working and designing?

New tools
The requirement of new tools was brought up in the data. The technological tools were divided into mapping tools, Miro, data using tools, and XR and AI technologies. Learning and sharing knowledge of the tools is valuable. One research question: How to use data and technology in the service design processes?

Designer's skills
Designers need variety of skills including using the design and online tools, logical thinking, encouraging spirit, industry knowledge, business understanding, and facilitation, communication, listening, collaboration, process management, strategic, and tutoring skills. One research question: How to manage designer's skills development through empathic approach?

Art-based methods
Often art-based methods need justification and a warm-up for companies to use them. Art-based methods such as narratives, sounds, storytelling, and movie making methods can offer ways to express inner feelings, creating trust, memories, and atmosphere. One research question: How can art-based methods combined with technological solutions enhance empathy in service design?

People in the center (human-centered design)
People in the centre covers involving and understanding customers, managing customer experience, and building empathy with the people involved in the design process. One research question: What does empathy mean in the context of "system-centred" or "planet-centred" design rather than only human-centricity?

Online workshops
Online workshops have their benefits and challenges and require specific tools, skills from the facilitator and the participants. One research question: Can we create a support package for designers to facilitate online workshops that are focusing on empathy and inclusivity?

Physical workshops
Physical workshops help to build trust and togetherness, which helps working in longer processes. Physical and online workshops can be combined. One research question: How to connect physical and digital workshops into a meaningful creative session?

The research identified design methods, needs and challenges related to the development of digital tools in service design and business development. Affinity diagramming on Miro for making sense of the interview data enabled the researchers to discuss their insights collaboratively. Unlike Lucero (2013) who preferred paper notes, the researchers, this time, could work together with their notes online.

The main clusters identified in this process can support developing Proof-of-Concepts for digitized interfaces. In addition, the open data can be used for discussing the future of the design field in the face digitalization.

Link to the Miro board.
https://miro.com/app/board/uXjVNr7sbYE=/?share_link_id=376627709957

References

Hartson, R. & Pyla, P.S. (2012). *The UX Book: Process and Guidelines for Ensuring a Quality User Experience.* Morgan Kaufmann, Amsterdam.

Lucero, A. (2015). Using Affinity Diagrams to Evaluate Interactive Prototypes. In: Abascal, J., Barbosa, S., Fetter, M., Gross, T., Palanque, P., Winckler, M. (eds) Human-Computer Interaction – INTERACT 2015. INTERACT 2015. Lecture Notes in Computer Science(), vol. 9297. Springer, Cham. https://doi.org/10.1007/978-3-319-22668-2_19