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Future of Skateboarding facilities

– The City of Turku Case

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Master’s Thesis | Abstract

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Future of Skateboarding facilities

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The aim of this study is to describe the current situation and problems within the City of Turku skateboarding facilities. The research tries to find root causes for the situation. There are many different methods used to clarify the situation. Research uses Double Diamond method for the Service Design process to follow up the whole work. The combination of innovation and research in Service Design is discussed in one chapter which can be problematic in certain projects.

Used methods include interviews, which are usually the most common method in the Service design. They showed their strength in this research also and gave reliable results during various stages of the study. Interviews with variable groups gave good aspects from different angles of the topic. Benchmarking and SWOT analysis were great tools to gather information from the field about the topic. Results from these tools can be used in future projects and learn from them. Hopefully benchmarking also creates network and learning contacts in the field. Empathy Map gave an excellent picture of the current situation from different angles. The use of Empathy Map put researchers to have new perspectives and question opinions. It is a pragmatic method for researching topics and fields where user base is vast and user backgrounds can be basically anything. Results show clear problems. Suggestions have been put there to improve and help the situation with the methods and tools of Service Design.

Keywords:

Skateboarding, Turku, Sport facilities, Service design, Future.

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Palvelumuotoilu – Service Design

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Ville Koskenniska

Tulevaisuuden rullalautailupaikat

- Turun kaupunki

Tutkimuksen tavoitteena on kartoittaa Turun kaupungin rullalautailutilojen nykytilannetta, tunnistaa ongelmat ja löytää niiden taustalla olevia syitä. Monipuolisia menetelmiä hyödyntävä tutkimus noudattaa palvelumuotoilussa yleisesti käytettyä Double Diamond -prosessia. Työ sisältää myös pohdintaa palvelumuotoilun innovaatioiden ja tutkimuksen yhdistämisestä, joka voi osoittautua haastavaksi tietyissä projekteissa.

Keskeisiä menetelmiä olivat haastattelut, benchmarking, SWOT-analyysi ja empatiakartta. Haastattelut osoittautuivat luotettaviksi, tarjoten eri näkökulmia ja syventäen ymmärrystä tutkimuskohteesta. Benchmarking ja SWOT-analyysi tuottivat arvokasta tietoa kentältä, jota voitiin hyödyntää tässä työssä sekä tulevissa projekteissa. Empatiakartta puolestaan toi esiin erilaisia käyttäjänäkökulmia ja auttoi laajentamaan tutkijan käsityksiä aiheesta.

Tulokset osoittavat selviä puutteita rullalautailutiloissa, ja tutkimuksessa esitetään konkreettisia ehdotuksia niiden kehittämiseksi palvelumuotoilun menetelmin ja työkaluin.

Asiasanat:

Liikuntapaikat, Turku, rullalautailu, palvelumuotoilu, tulevaisuus.

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1 Introduction

Skateboarding originated as a land-based alternative to surfing in the late 1940s and 1950s, with early homemade boards using roller skate wheels. By the 1960s, skateboarding gained popularity among surfers and evolved into its modern form. The 1970s marked its breakthrough with mass production, skatepark development, and the rise of influential skaters like the Z-Boys in Santa Monica, California. This era saw the creation of foundational tricks like the ollie. Over time, skateboarding incorporated elements from gymnastics and street culture, achieving Olympic recognition in 2016 and debuting in the 2021 Summer Games.

In Finland, skateboarding has experienced waves of popularity, starting in the late 1970s, resurging in the late 1980s, and growing steadily in the 2000s. Digitalization helped unite Finnish skaters, and several Finnish professionals gained international recognition. Turku emerged as a skateboarding hub in the 1980s and 1990s, with active groups creating indoor and outdoor skateparks, though much skating still occurred on the streets.

In 2022, Turku launched a project to assess and improve its over 300 city-owned sport facilities, including skateboarding venues. This study focuses on enhancing Turku's skateboarding infrastructure and introduces new design concepts using service design methods. These methods embrace learning through iteration, aiming to shape future facilities through collaboration and innovation. Question is: What actions are needed from Turku City to enhance skateboarding?

1.1 Frame of Reference

Service design focuses on understanding and addressing user, customer, and stakeholder needs. By placing users at the center and defining the context, challenges, and opportunities, it creates tailored, relevant, and impactful solutions. Its iterative approach allows continuous refinement based on feedback and changing conditions (Stickdorn, 2018).

Service design takes a holistic view, considering all touchpoints, interactions, and processes that shape the user experience. Collaboration is central, involving cross-functional teams to address different aspects of the service. In the public sector, service design enhances accessibility, quality, and efficiency while addressing unique challenges like regulations, funding, and diverse user groups (Skaalvik E., 2002).

Understanding the problem is critical, especially in the public sector, where defining a broad user base and navigating legal and ethical implications can be complex. Collaboration with stakeholders and users is equally vital, using tools like interviews, meetings, and surveys to gather and validate information. Prototyping, through mock-ups, scenarios, or storyboards, helps test

assumptions and avoid mistakes. Public services must align with culture and strategy to ensure desirability, feasibility, and acceptance, as poorly planned services can face resistance. Iteration is key to keeping services updated, addressing weak points, and fostering innovation. Learning from others' experiences through networking and shared research strengthens the design process (LinkedIn, 2023).

This thesis establishes criteria by analyzing interactions between internal and external factors, informed by existing data, stakeholder input, and extensive observations.

1.2 Service design in this work

This work utilized Service Design tools and methods, with the Double Diamond framework playing a key role. Its iterative approach allowed adjustments and new insights during the research process. Tools like SWOT analysis revealed interconnected challenges and opportunities, helping stakeholders assess risks and outcomes. Personas analysis identified recurring themes and clarified results, while benchmarking provided valuable insights for future planning, confirming existing hypotheses and offering actionable recommendations for Turku.

Co-creational workshops generated ideas and guided the study's direction iteratively. These required in-depth topic knowledge to maintain focus. Interviews were pivotal, gathering diverse perspectives and supporting the study's hypotheses. The Empathy Map, introduced in a late iteration, synthesized findings from other methods, offering unique and less obvious perspectives.

A core goal was to amplify stakeholders' voices, including users, parents, builders, and Turku officials. This led to a scalable service design concept for skateparks and similar facilities. The concept emphasizes stakeholder involvement and shared responsibility, aligning with the growing Do-It-Yourself culture in skateboarding. Testing during the study provided positive feedback, reinforcing the concept's potential.

The author's 37 years of skateboarding experience and international network informed the research, providing practical insights and innovative solutions applicable to Turku. This study lays a foundation for improving skateboarding facilities while fostering community collaboration and engagement.

1.3 Problem area

This study examines the challenges and opportunities for improving skateboarding facilities and culture in Turku, focusing on stakeholder involvement, limited resources, and skateboarding's societal impact. Turku has

been a hub for skateboarding but faces issues like facility deterioration, unclear responsibilities between city departments, and insufficient communication among stakeholders.

The division of responsibility between the Sports and Youth Departments and the lack of collaboration within the skateboarding community have caused delays and confusion. A limited budget of 700,000 euros for over 300 sports facilities has led to unsafe conditions, with some skateparks closing due to neglect. The city's DIY approach, offering land and material funding for new skateparks, lacks provisions for long-term maintenance, straining associations financially.

The Skateboarding Workgroup (Skeittityöryhmä) brings together stakeholders to foster collaboration and advocacy. Additionally, the Resident Budget (Asukasbudjetti) empowers citizens to vote on project funding, presenting opportunities for skateboarders to influence infrastructure development (Kossila, 2021).

Skateboarding addresses societal issues like physical inactivity among youth, promoting health, social interaction, and inclusivity. It's a low-cost, accessible sport that fosters community and sustainable behaviors, with younger skateboarders often using eco-friendly transportation to parks. Further investment in skateboarding facilities can support these benefits while enhancing Turku's skateboarding culture (Merimaa, 2023).

1.4 Benefits of skateboarding

There have been multiple research projects done about the benefits of skateboarding and public skateparks. The first obvious benefit of skateboarding is physical condition. It is an excellent workout that combines cardio, strength, and balance training. Skateboarding helps develop a strong sense of balance, as you're constantly adjusting your body to stay on the board. Legs, core, and upper body all get a workout from skateboarding, leading to increased strength and endurance. Skateboarding requires flexibility in your ankles, hips, and legs, which can help improve your overall range of motion (Gebel Arnd, 2020).

Skateboarding is effective to mental health also as it releases feel-good chemicals such as endorphins and dopamine, which help to reduce stress and increase feelings of happiness. It also improves cognitive function and focus, thanks to the coordination and concentration required to master tricks and navigate obstacles. Skateboarding has been shown to reduce anxiety and depression symptoms. It provides an outlet for stress, boosts mood, and fosters a sense of achievement and accomplishment (DiLorenzo, 1999; Revolution, 2014; Knapton, 2017; Thankachen, 2023).

Building a sense of community and social connections through skateboarding can have a significant impact on mental health and well-being. Being part of a

supportive group helps alleviate feelings of isolation, fosters a sense of belonging, and encourages personal growth (McMillan, 1986; Marttinen, 2023).

1.5 Benefits of public skateparks

Skateboarding has historically faced negative perceptions in Finland and hasn't been viewed as a "normal" sport like football or hockey. However, its inclusion in the Olympics is slowly changing this perspective. Public skateparks are widely recognized for their benefits, providing spaces for physical activity, fostering community, and encouraging young people to stay in the area, which offers long-term economic returns (Ollikainen, 2023)

Professionally built skateparks with quality materials, balanced design, and functionality ensure longevity and attract users. Such parks become hubs for social interaction, fostering a sense of belonging and civic responsibility. They are cost-effective for youth and encourage community participation in park development (Bradley, 2010)

Studies show skateboarding positively impacts mental health by improving physical fitness, balance, coordination, confidence, and social skills, benefiting people of all ages and backgrounds. A healthy lifestyle associated with skateboarding can persist into adulthood, reducing public health costs (Hormenu Thomas, 2018).

Well-designed skateparks also help reduce crime in problematic areas, offering youth constructive activities. Research shows crime rates can drop by up to 90% in such areas after building a skatepark (Sponranch, 2021).

Additionally, skateparks boost tourism and foster social interactions, as seen in Finland, where travelers seek parks with active communities. However, Turku's lack of outdoor parks limits its summer appeal despite winter visits to Cube indoor park (Radikonyana, 2017).

Investments in public skateparks pay off in multiple ways, though precise calculations are challenging due to the many variables involved (Whitley, 2008).

1.6 Social behavior benefits of skateboarding

Skateparks serve as venues for leisure, physical activity, and important social spaces for young people but often face negative stereotypes about antisocial behavior. Wood's research (2014) analyzed community survey and observational data on skatepark use, focusing on both antisocial behaviors (e.g., graffiti, conflict) and prosocial behaviors (e.g., cooperation, teaching). Results showed prosocial behaviors, such as socializing, respecting others, and helping, were far

more frequent, with over 50% of respondents observing these regularly. In contrast, antisocial behaviors, categorized as space issues (crowding, collisions), property damage (graffiti, littering), and drug use, were rarely or never reported by most participants.

The study challenges stereotypes by highlighting the predominance of positive interactions in skateparks. It emphasizes the role of thoughtful planning, youth engagement in design, and appropriate location in minimizing perceived issues. Visible youth amenities like skateparks convey inclusivity, signaling to young people that they are valued members of the community. Wood's study counters negative community stereotypes by providing empirical evidence that prosocial behaviors are more common than antisocial behaviors within skateparks (Figure 2). This highlights the potential benefits of skateparks as positive social spaces for young people, emphasizing the importance of informed decision-making in designing and implementing such recreational facilities (Wood, 2014).

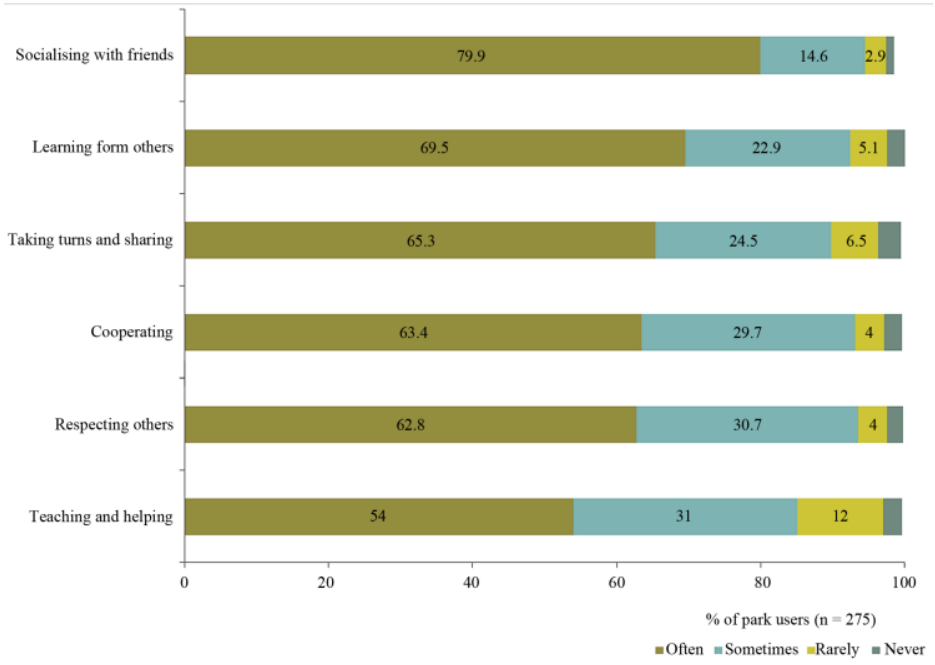


Figure 1: Frequency of positive social behaviors reported by respondents (Wood, 2014).

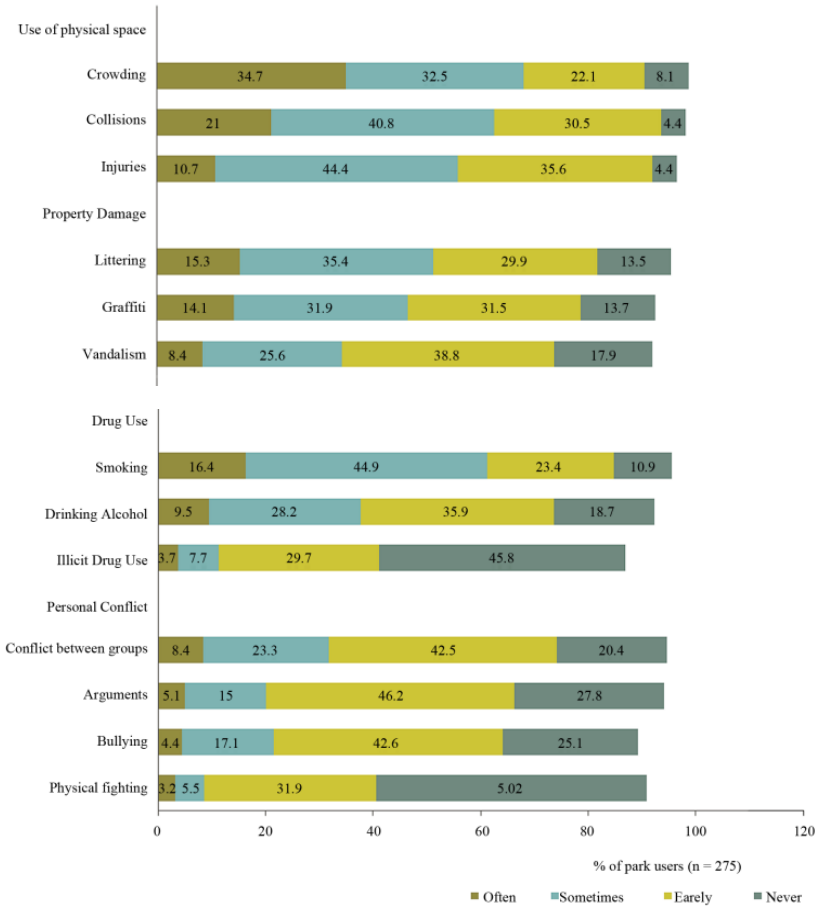


Figure 2: Frequency of negative social behaviors reported by respondents (Wood, 2014).

Opposition to skateparks often stems from fears of undesirable behavior, but research shows recreational opportunities like skateboarding reduce such risks by keeping young people engaged (Daskalov, 2015).

Skateboarding is more than a sport; it promotes physical and mental health, skill development, and community building. Skateparks offer spaces for young people to stay active, learn, and connect, fostering a sense of belonging and positive social interactions.

Strategic placement in well-lit, accessible areas and involving the community in planning can address concerns and ensure skateparks are valuable assets. They also encourage creativity, resilience, and personal growth in young users (Radikonyana, 2017).

Decisions about skateparks should be evidence-based, recognizing their benefits in reducing negative behavior, enhancing well-being, and uniting communities (Wood, 2014).

1.7 Indoor versus outdoor skateparks in Turku

The indoor skatepark, Cube (Figure 3), is managed by the Youth Department of Turku's organization. It's considered a youth community center and likely offers a space for young individuals to engage in skateboarding and related activities. On the other hand, the outdoor skateparks are managed by a Sports Department.

Cube has employees on-site to monitor the facility, ensuring safety and proper use of the space. This could provide a more controlled and supervised environment for skaters. In contrast, outdoor skateparks may have less direct oversight. Cube has scheduled times for different user groups. These groups include skateboarders, young skaters, female skaters, BMX riders, scooter riders, inline skaters, and associations. This scheduling allows for a diverse range of users to access the facility at different times. This can help manage the flow of users and provide focused sessions for specific groups.

Since Cube is a controlled environment with staff present, it is likely easier to gather user feedback and suggestions for facility improvements. This feedback loop can help ensure that the skatepark meets the needs and preferences of the skaters who use it. There is a small fee associated with using Cube. This fee might help cover only a minimal part of the maintenance and operational costs. However, the fee is kept minimal, which can make the facility more accessible to a broader range of users.

One challenge with Cube is the limited operating hours (14:00-21:00). With various user groups wanting to access the facility, these hours might not accommodate everyone's schedules. This can lead to time constraints and potential overcrowding during peak hours. Outdoor parks offer more flexibility in terms of operating hours but might lack the controlled environment and direct supervision that Cube provides. The indoor skatepark and outdoor skateparks in the City of Turku have distinct characteristics, management structures, and usage patterns. Cube provides a controlled, supervised, and scheduled environment for different user groups, while the outdoor parks might offer more flexible access but with potentially less oversight. Both types of facilities cater to the needs of skaters in diverse ways.

As it can be seen in Figure 4 visitor amount has tripled during 2016 to 2019. The years 2020 to 2022 were different because of Covid-19 lockdown. Numbers are given by volumetric numbers which shows number of door openings. This method is used in the public spaces generally. The number of visitors leads to the fact that there is more demand for the indoor skateparks than the City of Turku has to offer. This has led to situation, where people and associations have started to build their own facilities (Figure 5). It is obvious that indoor skateparks have more fixed costs than outdoor skateparks. For example, indoor skatepark Cube’s employee costs are 65000€/year and rent 63000€/year (Miettinen, 2020).

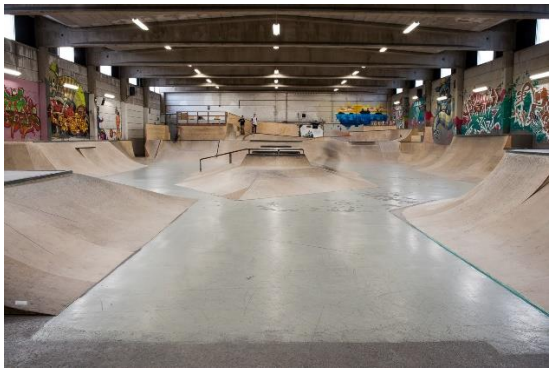


Figure 3: Indoor skatepark Cube in Turku (Cube, 2023).

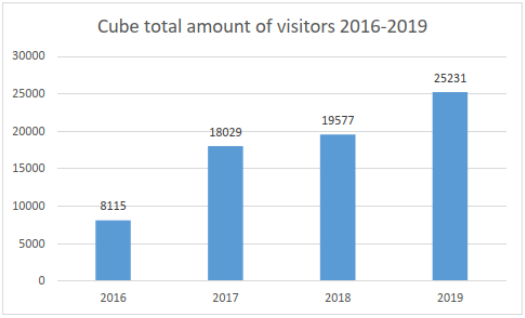


Figure 4: Visitor amount in indoor skatepark Cube, Turku (Miettinen, 2020).

Figure 5: Old Farts Sporting Club ry's indoor skatepark (Photo: Anssi Uusitalo).

Creating safe and enjoyable skatepark environments requires collaboration between local authorities, the skating community, and other stakeholders. By addressing maintenance issues and actively involving the community, it is possible to revitalize the skateparks and make them attractive places for skaters to pursue their hobby, as there is plan to so for Lauste skatepark during 2024-2025, Figure 6 (Scotland, 2024).

Figure 6: Lauste outdoor skatepark (2022) is lacking maintenance and proper design.

1.8 Stakeholders

There are two primary stakeholders in this work: the City of Turku, responsible for funding, designing, and maintaining skateboarding facilities, and skateboarders, who use the facilities and are increasingly involved in their design, construction, and upkeep.

Other stakeholders include parents, who influence their children’s hobbies and contribute as taxpayers, and designers and constructors, whose work is affected by the City of Turku's stricter building standards compared to other cities. These standards limit the pool of qualified builders, complicating facility development.

The Finnish Skateboard Association, supported by the Ministry of Education and Culture, has been a valuable resource, offering insights into Turku's challenges and broader issues in Finnish skateboarding. While their government funding cannot support national team activities, the association remains committed to advising and assisting stakeholders.

Addressing challenges requires open dialogue among stakeholders, including the city, skateboarders, parents, and constructors. Collaborative efforts, such as the skateboard working group, are a promising start. Regular forums and meetings can facilitate communication, explore regulatory adjustments, and find compromises that ensure safety and quality without overburdening builders.

Involving skateboarders in design ensures facilities meet user needs, fostering innovative and functional spaces. Community engagement through workshops, surveys, and events can build broader support and address diverse interests. By prioritizing collaboration, the City of Turku can create safe, enjoyable, and inclusive skateboarding facilities that benefit the entire community. Stakeholders are shown in Figure 7.

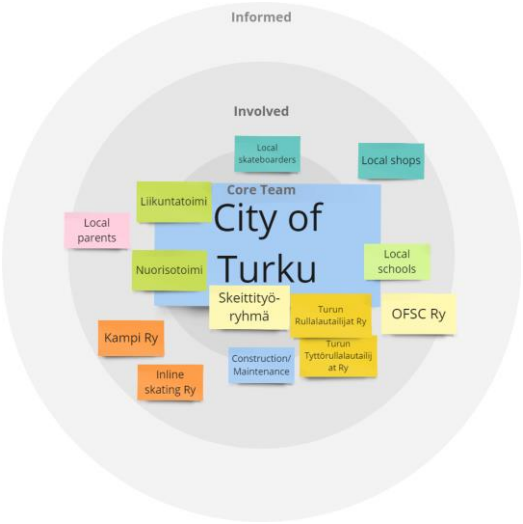


Figure 7: Stakeholder map.

Figure 8 is describing the initial focus and scope of a study related to skateboarding facilities and influencing factors in the City of Turku. The study aimed to gather comprehensive data within its defined scope, with a main emphasis on skateboarders and the city itself. The starting point was a mind map depicted in Figure 8, which illustrated various aspects of skateboarding facilities and their related factors in Turku. The study aimed to delve into these areas and collect data to better understand the skateboarding scene and its interaction with the city. The mind map likely served as a visual representation of the study's foundation and key components.

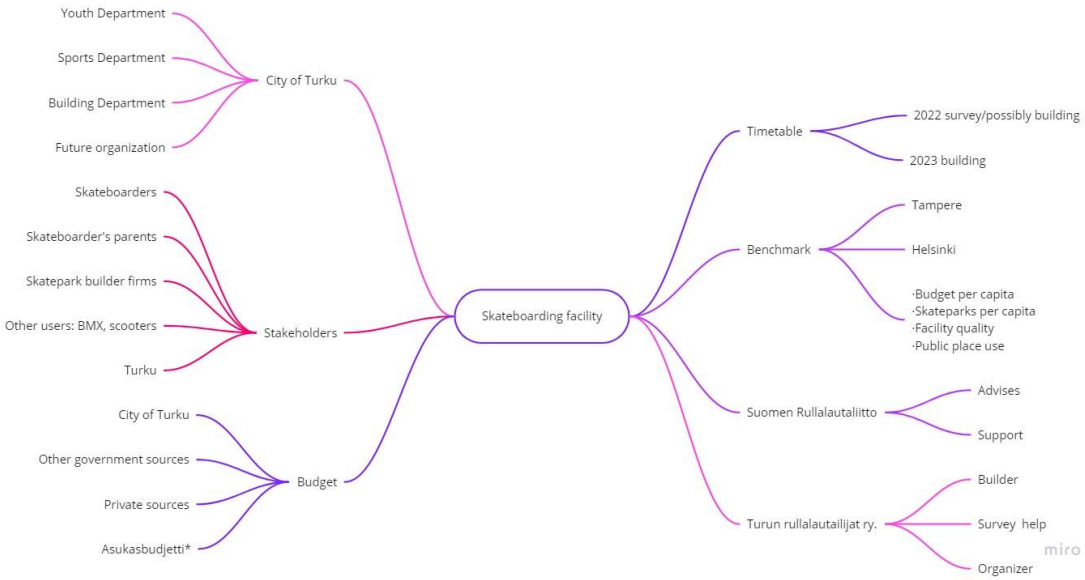


Figure 8: Mindmap of skateboarding facilities and influencing factors.

1.9 Research hypothesis and questions

A research hypothesis and research questions were related to the condition of outdoor skateboarding facilities in the City of Turku. Hypothesis suggested that these facilities are in poor condition due to minimal maintenance caused by a lack of funding, leading to decreased user engagement. This fact has become proven during this study. Research questions were shaped during observation phase. The questions are quite specific, which was needed to find unambiguous answer for the problem statement. Questions were as follows:

1. How would you improve current skateboarding facilities?
2. What kind of skateboarding facilities should Turku have in future?
3. How should skateboarders be involved in design, building and perhaps financing skateboarding facilities?
4. Why the City of Turku stands out so clearly in negative light when it comes to skateboarding facilities compared to similar cities in Finland?
5. What could be new funding possibilities in the future for sporting facilities?

2 Research methods and results

The project has been dynamic, demonstrating flexibility and adaptability as circumstances evolve. Stakeholders and the City of Turku have consistently aligned on goals, with city officials maintaining an open and engaged approach, recognizing the research's potential and participating actively.

Studying skateboarding facilities is complex due to diverse factors like skating styles, social dynamics, and facility usage patterns. The City of Turku's development processes and budgets often diverge from user preferences, presenting challenges for researchers. Methods from service design, such as empathy mapping, can help understand user behaviors, though a tailored, multi-method approach—combining surveys, interviews, observations, and data analytics—is often necessary. Transparent acknowledgment of research limitations and clear scoping of findings are crucial for meaningful insights.

A co-design workshop provided valuable ideas about skateboarding in Turku, highlighting challenges and opportunities. However, significant work remains, with open communication between the city and skateboarding community essential for progress. Greater organization within the skateboarding community could enhance their advocacy, while better coordination and transparency in city decision-making are needed. Currently, Turku is viewed unfavorably regarding skateboarding, particularly as an Olympic sport, indicating room for improvement in supporting athletes and facilities.

The skateboarding community is proactive, eager to collaborate, and optimistic about future developments. The author's deep understanding of the community aids in bridging the gap between skateboarders and decision-makers. This research aims to provide actionable recommendations and insights, serving as a roadmap for improving Turku's skateboarding infrastructure and policies for both city officials and facility users.

2.1 Double Diamond process

Double diamond is the most known Service Design model (Figure 9), which can be used in different services and products. Double Diamond was developed by the British Design Council in 2005 and it is widely used in the Service Design in various processes (DesignCounsil, 2023).

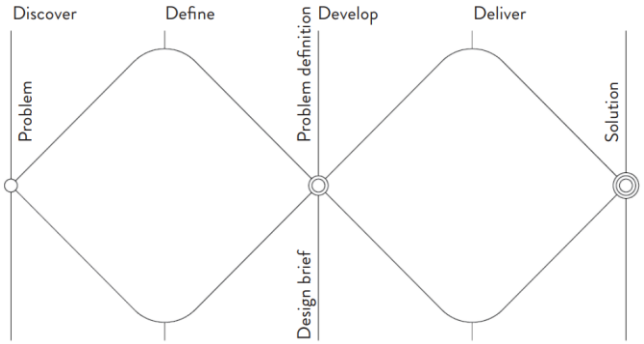


Figure 9: Double diamond model and phases (DesignCouncil, 2007)

Discover

The Discovery phase is crucial in the design process, focusing on identifying the problem, understanding its context, and gathering insights from stakeholders. Part of the Double Diamond model, which includes Discover, Define, Develop, and Deliver, this initial phase emphasizes exploration, research, and divergent thinking to deeply understand the problem and user needs. Table 1 highlights key points about the Discovery phase and their importance (Stickdorn M. , 2018; DesignCounsil, 2023).

Table 1: Discover phase tasks and goals in Double Diamond method.

Task	Goal
Idea establishment	The Discovery phase involves generating ideas and concepts, which can help in defining the scope of the problem and potential solutions.
Problem identification	The main goal of this phase is to identify and define the problem or challenge that needs to be addressed. Understanding the problem thoroughly helps in framing effective solutions.
Stakeholder involvement	Involving key stakeholders, such as users, customers, and experts, during the Discovery phase is critical. Their insights and perspectives can provide valuable information to shape the direction of the design process.
Avoiding misdirection	Skipping or not fully exploring the Discovery phase can lead to misdirection later in the process. If the problem isn't well understood or defined, the subsequent stages might result in solutions that don't effectively address the actual problem.
Customer-centric approach	In line with the design thinking philosophy, the Discovery phase emphasizes a customer-centric approach. Understanding the needs, desires, and pain points of the users is essential for creating meaningful and impactful solutions.
Data research	Thorough research and data collection are important during this phase. Data helps in making informed decisions and developing a clear picture of the problem and its context.
Course correction	If incorrect assumptions or incomplete information guide the Discovery phase, the design process might go off track. It's easier to make corrections and adjustments at the early stages rather than later.

A strong Discovery phase is crucial to the Double Diamond model, laying the groundwork for solutions that meet user needs and deliver value. While general principles apply, specific approaches vary by context. The Discovery phase ensures the design process is aligned with user and stakeholder insights, essential for project success.

Stickdorn highlights the importance of involving users early, as inadequate data can misdirect efforts. Understanding problems holistically, including cultural and goal-driven perspectives, is key (Stickdorn M. , This Is Service Design Methods, 2018). Service designers must gather data, foster a shared language among stakeholders, and use visualizations to clarify issues and focus efforts. Maintaining flexibility and a broad perspective in this “Fuzzy Front End” stage is vital for identifying opportunities and fostering innovation (Stickdorn M. , 2010).

Koen’s innovation models address the complexity of multifaceted problems by identifying key variables and integrating diverse stakeholder perspectives. These models provide structured methods for navigating challenges, enabling collaboration and informed decision-making to achieve effective outcomes (Koen., 2001).

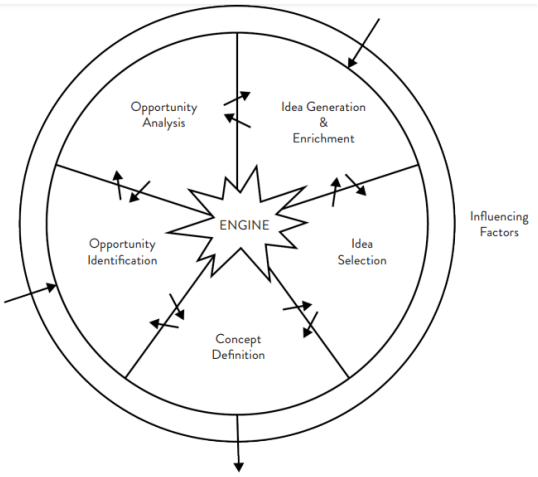


Figure 10: Innovation engine (Koen., 2001).

Understanding user needs is essential for developing innovative products and services. By analyzing user behavior, preferences, and pain points, businesses can identify gaps and opportunities for innovation, ensuring higher adoption rates and customer satisfaction (Koen., 2001).

Key methods include market research to analyze trends and competitors, user research through surveys and interviews, and data analysis for quantitative insights. Cross-functional design research fosters innovation by combining diverse perspectives. Staying attuned to evolving user needs helps businesses adapt to changing technologies and trends, ensuring long-term success

(DesignCouncil, 2007). Appendix 1: “Upframing Service Design” gives deeper insight.

Define

Define phase in the Double Diamond design method plays a crucial role in the design process by taking the information gathered in the Discover phase and turning it into a clear and actionable project brief. The Define phase involves the following key tasks shown in Table 2 (DesignCouncil, 2007).

Table 2: Define phase tasks and goals in Double Diamond method.

Task	Goal
Needs assessment	This phase begins by deeply understanding the needs, problems, and ideas that have emerged from the Discover phase. It involves thorough research and analysis to ensure a comprehensive understanding of the current situation, historical context, and the evolution of the process that has led to the current state.
Problem definition	Based on the insights gathered, the design team works to define the core problem that needs to be addressed. This involves framing the problem statement in a way that is actionable and focused.
Ideation and solution exploration	The Define phase includes generating multiple approaches and potential solutions to the identified problem. This might involve brainstorming sessions, workshops, and collaboration among team members to explore various possibilities.
Stakeholder engagement	It is essential to consider the perspectives and needs of all stakeholders involved. This phase involves engaging with stakeholders to gather their input, feedback, and insights, which helps in shaping the direction of the design process.
Iterative process	The Define phase can involve multiple rounds of iteration as the design team refines and narrows down the potential solutions. This iterative process ensures that the chosen solution aligns with the goals and interests of the project.
Project brief creation	One of the key outcomes of the Define phase is the creation of a project brief. This document outlines the problem statement, goals, constraints, and potential solutions in a clear and concise manner. It serves as a guide for the next stages of the design process.
Alignment with goals	Throughout the Define phase, the design team ensures that the emerging project brief aligns with the overall goals and objectives of the project. It's important to maintain focus and coherence to prevent the project from drifting off course.
Synthesis of insights	The insights gathered during the Discover phase are synthesized and distilled into actionable tasks that will guide the subsequent development of new or existing products or services.

The Define phase in the Double Diamond design method transforms initial ideas and insights into a well-defined project brief. This brief serves as a foundation for the subsequent stages of the design process and helps ensure that the design efforts remain focused, aligned with goals, and responsive to stakeholder needs. If a problem or solution is found in the Discover phase the Define phase can focus

on the context in which the problem or solution underlie. Designers usually use a variety of methods and tools in the Define stage to determine which approaches or innovations would best serve the issue or opportunity. Methods can include prototyping, scenarios, brainstorming, sketching and quick and dirty prototyping. As the Design Council describes Define phase has a big role as “a filter that allows designers to identify which idea has legs and should be pursued and developed” (DesignCouncil, 2007).

Develop

The Develop phase of the Double Diamond method emphasizes iteration, design methods, and multidisciplinary collaboration. Prototypes, user involvement, and a human-centered approach are key. This iterative phase refines the product or service based on insights from the Discover and Define phases. Table 3 summarizes the key tasks of this phase (Stickdorn M. , 2018; DesignCounsil, 2023).

Table 3: Develop phase tasks and goals in Double Diamond method.

Task	Goal
Iteration and refinement	The development phase involves continuous refinement and iteration to ensure that the final product or service meets the desired objectives and user needs. Rarely does a design get it right the first time, so iterations are essential to make improvements.
Design methods	Various design methods, such as brainstorming, visualization, prototyping, testing, and scenarios, are used during this phase to explore possibilities, generate ideas, create tangible representations, and envision potential scenarios.
Convergence from previous phases	The focus of the development phase is to build upon the insights gathered during discover and define phases. While some methods might be carried over, the emphasis shifts toward turning concepts into tangible solutions.
Multi-disciplinary collaboration	Professionals from different fields collaborate during this phase, pooling their expertise to create a holistic and well-rounded solution that addresses various aspects of the product or service.
Visual design management tools	Tools for visual design management play a crucial role in organizing data, communicating progress to stakeholders, and facilitating effective collaboration among team members
Prototyping	Prototypes are pivotal in conveying the essence of the final product or service. The choice of prototype type depends on the level of detail required to effectively communicate the design intent.
Human-centered approach	Ensuring a human touch in prototypes is essential to maintain user-centered design principles. It helps ensure that the final product or service resonates with the target audience and addresses their needs and preferences.
User involvement	Involving users in testing the prototypes during the development phase allows for valuable feedback and insights. This input can guide further refinements and improvements.

The development phase focuses on iteration, prototyping, and testing, as initial designs rarely succeed on the first attempt. Key methods include brainstorming, visualization, prototyping, testing, and scenarios. Building on insights from Discover and Define, this stage refines the product or service with minimal changes but a focus on results. Multidisciplinary teams use visual design management tools to organize data and communicate with stakeholders. The goal is to iterate and prototype a solution as close to the final product as possible. (DesignCouncil, 2007; Rodriguesa, 2017).

It is important to keep human touch in the prototypes. Many products and services are at the developing phase and that is why prototypes are important, but it is important to choose the right type of prototype. It should describe the service or product as well as possible. Users should be involved with testing the service or product at this phase if possible (Stickdorn M. , 2010).

Deliver

The Delivery phase in the Double Diamond method is well described in various places like by the Design Council in 2007. This phase involves the final testing, approval, and delivery of the product or service to the customer, while ensuring customer involvement throughout the process. The key points mentioned are shown in the Table 4 (Stickdorn M. , 2018; DesignCounsil, 2023).

Table 4: Delivery phase's tasks and goals in Double Diamond method.

Tasks	Goal
Final testing and sign-off	Before delivering the product or service to the customer, it undergoes thorough testing and evaluation to ensure it meets the required quality standards. Once the testing is successful and any necessary adjustments are made, the product or service is signed off, indicating that it's ready for delivery.
Customer involvement	Throughout the development process, customer involvement is essential. This might include regular communication, reviews, and feedback sessions to make sure the final product aligns with the customer's specifications and expectations.
Delivery according to specifications	The main end-product is delivered to the customer based on the specifications provided by the customer and agreed upon by the designers or developers. This ensures that the product or service fulfills the specific requirements and needs of the customer.
Evaluation and data collection	During the delivery phase, evaluating the entire project, service, or product is crucial. This evaluation helps gather valuable data and insights that can be used for future improvements or similar projects.
Feedback and development	The delivery phase also includes obtaining feedback from all involved parties, including the customer. This feedback is used to further refine and develop the service or product, making it better aligned with the needs and preferences of the customer and addressing any issues or shortcomings identified during testing or early usage.

The delivery phase is not only about physically providing the product or service to the customer but also about ensuring its quality, aligning it with customer expectations, collecting data for future improvements, and incorporating feedback for ongoing development.

Double Diamond theory summary

The Double Diamond design process is a flexible framework consisting of four phases: Discover, Define, Develop, and Deliver. While these phases provide structure, their boundaries are fluid, especially in the early stages.

- **Discover**: Focuses on gathering insights and exploring ideas through research and brainstorming. Overlap occurs when early ideation influences ongoing research.
- **Define**: Narrows insights into a clear problem statement. Refining this understanding may overlap with ongoing research and ideation.
- **Develop**: Involves creating and testing solutions. Preliminary testing might refine the problem statement, leading to overlap.
- **Deliver**: Completes and executes the solution. Late-stage feedback or challenges may require adjustments, creating overlap.

The process is iterative, allowing revisiting earlier phases as new insights emerge. This adaptability ensures thorough exploration and refinement, leading to user-centered solutions (Stickdorn M. , 2018).

2.2 Double Diamond for the City of Turku

The Double Diamond process was followed during this thesis, and it has shown to be useful for this project. There have been multiple aspects to analyze. This method is helpful to keep on track of what has been done and what needs to be done. Double Diamond analysis for the City of Turku is shown in Figure 11.

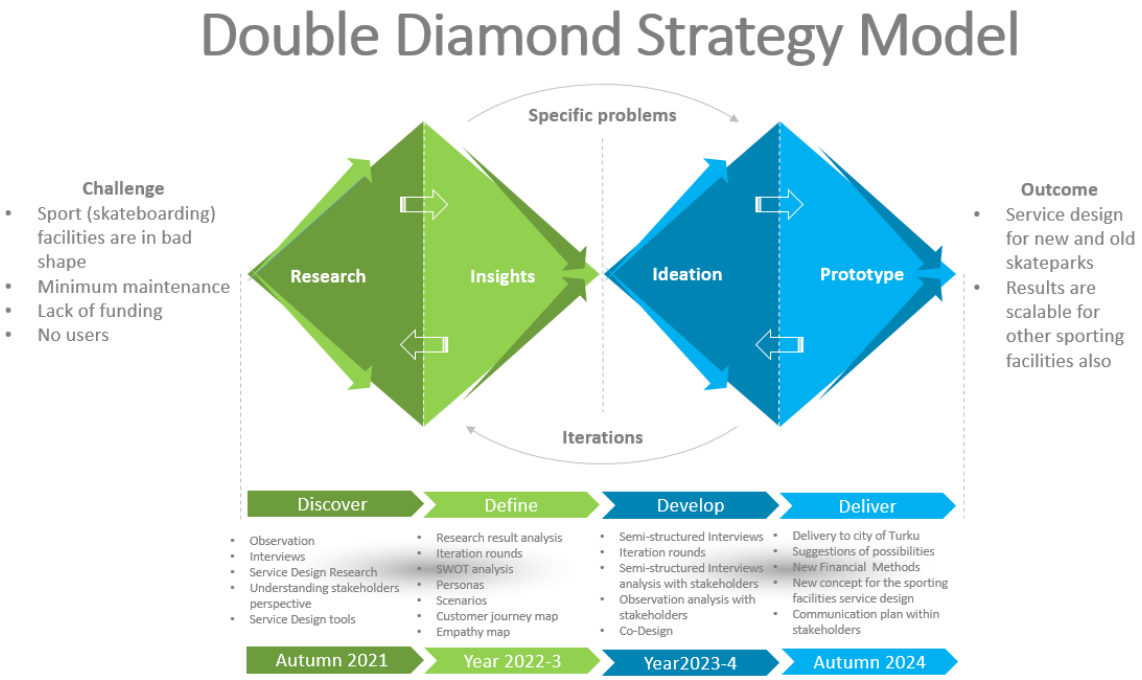


Figure 11: Double Diamond for the City of Turku.

Discover phase for the City of Turku

The project started on a positive note when the City of Turku was approached and the issue of deteriorating sports facilities, particularly skateboarding infrastructure, was introduced. The city's willingness to engage and support the project reflects strong initial collaboration. The City of Turku recognized the validity of the problem statement regarding the poor and potentially hazardous condition of skateboarding facilities, establishing common ground for the project's focus. Both the project team and the City of Turku began working together to understand the reasons behind the poor condition of the facilities. This indicates a shared effort to diagnose and address the root causes. The author brings significant expertise in the skateboarding field, along with an established network built over years. This background strengthens the project's credibility and provides valuable insights for driving solutions.

Identified fundamental issues

A key issue is the lack of **adequate funding** for maintaining or upgrading skateboarding facilities. Addressing funding gaps is critical for improving infrastructure. **The structure of governance** and management related to sports facilities might be disorganized or fragmented, leading to inefficiencies in maintaining public skateboarding spaces. Ensuring clear **communication** between all stakeholders, including city officials, skateboarders, and other community members, is essential for aligning goals and expectations. The

availability and allocation of **public space** for skateboarding are major concerns. This could include challenges related to zoning, land use policies, or competing demands for public space.

Analyzing City of Turku Skateparks

All Turku skateparks were analyzed during summer 2022. This was made by Old Farts Sporting Club ry. All skateparks were filmed (video and photo) and tested by a group of skateboarders. Each skatepark was rated from a 0-10 scale. Results can be seen in the Table 5 (Nieminen, 2023).

Table 5: Turku skatepark ratings by users, 2023 situation.

Skatepark	Condition	Skatability	Total
Pansio	2	2	2
Kupittaa	7	5	5
Iskoinen	0	0	0
Rummunlyöjä	3	2	2
Runosmäki	4	1	2
Pikkunotko	1	2	2
Hirvensalo	4	2	3

* scale 0-10

Some skateparks in Turku, like Iskoinen, have deteriorated or been removed due to poor maintenance and outdated designs. Limited funding for upkeep has led to facilities that are unsafe, unattractive, and underutilized, with many lying empty even during peak skateboarding seasons. Outdated designs fail to meet modern skateboarding standards, making them unappealing for skaters accustomed to better facilities. This disconnect is evident as long-term Turku residents often try these parks for the first time only later in life, indicating a lack of community connection.

Instead, skateboarders favor DIY parks or urban spaces like UJP, Luolavuori, and Telakkaranta, which better suit their needs. However, these informal spaces often face removal by the city, further straining relations between skateboarders and officials. Missteps, such as the unannounced removal of the Kupittaa miniramp, highlight a lack of communication and collaboration, causing frustration within the skateboarding community (Alakoski, Riitta, 2022).

To address these issues, improved dialogue and collaborative planning are essential. The Skateboarding Work Group is a step in the right direction, fostering discussions between skaters and city officials. Further solutions include involving skateboarders in park design, formalizing certain DIY spaces, and allocating resources to upgrade and maintain parks to meet modern standards. These measures can create safer, more appealing spaces while fostering a better relationship between skateboarders and the city.

Define phase for the City of Turku

Stakeholders agree on the poor condition of skateparks in Turku, which are outdated, unsafe, and underutilized. Despite differing perspectives, everyone shares the goal of improving these facilities to create a more supportive environment for skateboarding. The primary issue is the unsafe condition of the parks, which limits their usage and effectiveness. The lack of internationally accepted skateparks also prevents hosting larger events. Turku has gained a negative reputation compared to other cities that have invested in better skateboarding infrastructure.

While progress has been made in involving skateboarders in planning, challenges remain in communication and coordination among multiple city departments. Other cities have improved efficiency by assigning skateboarding to a single department, which Turku could adopt. The biggest obstacle is inadequate funding, partly due to the low registration of skateboarders in official associations. This underestimation of skateboarding numbers leads to limited funding, as seen with the local association, Turun Rullalautijat ry, which only has around 100 members, though the actual skateboarding community is likely much larger.

Ideas

Idea generation has been executed with all stakeholders, which were mentioned in the stakeholder earlier.

Table 6: Ideas from stakeholders for skateboarding facilities to the City of Turku.

Idea	Source of Idea
DIY parks	Skateboarders
Collaborative parks with Turku and skateboarders	Skateboarders and Turku
Small parks in suburban areas	The City of Turku
Skate plaza in central area	Skateboarders
Safe skateparks in suburbs	Parents
More indoor possibilities	Parents, skateboarders
DIY skate spots around the City	Skateboarders
Events (competitions, skate schools)	Skateboarders, parents, artists
Schools involved	Parents, schools, skateboarders

Develop phase for the City of Turku

This study emphasizes the need for Turku to reconsider its approach to sports facilities, particularly skateboarding, to better serve current and future users, especially the younger generation. The goal is to generate innovative ideas for improving skateparks, based on input from users most affected by the existing infrastructure.

Turku lags behind cities like Tampere and Helsinki in skatepark investment, resulting in lower facility use and a lack of commitment to youth sports. In contrast, other cities view skatepark investments as beneficial for promoting a healthy lifestyle.

The decline in youth physical activity poses long-term health risks and affects mental well-being. Despite being branded a “sporting city,” Turku’s limited budget and bureaucratic processes have hindered facility development, leaving the city unable to compete with others attracting young talent.

Although Turku offers skateboarding at some schools, it lacks broader support, unlike other cities with established programs. This underinvestment in an Olympic sport limits Turku’s potential to attract and retain young talent, signaling a missed opportunity for growth.

Turku gives the possibility to choose skateboarding at secondary level school when principal took it as an issue. “In the city's sports venue surveys, skating is still not considered worthy of exercise, so for that reason a more than good micro-mini ramp was built in a school, so that you could get to know the sport safely, for example in a team, with the school's equipment and instructions.” (Laine, Jukka, 2023). Turku’s absence of such programs further diminishes its appeal to this demographic, which could influence young talent’s decision to live, study, and work in the city (Malminen, 2023).

Development of ideas in the City of Turku

The study highlights a longstanding negative attitude towards skateboarders in Turku, which has led to underinvestment in skateboarding facilities despite its growing popularity. While the study doesn't directly address changing these perceptions, raising awareness is a crucial first step.

Recently, Turku has started recognizing skateboarding as an Olympic sport, marking a shift in its approach to the skateboarding community. This opens up opportunities for future investments, though significant structural changes are still needed. The city's decision-making process regarding skateboarding facilities is overly rigid and bureaucratic, causing delays and inefficiencies. There's also a lack of transparency, leaving stakeholders unsure about decisions, responsibilities, and timelines.

The study challenges the myth that skateparks cause neighborhood disturbances, showing that they can actually reduce antisocial behavior when integrated properly, benefiting local communities. (Bradley, 2010).

Deliver phase for the City of Turku

This thesis has shown that multiple stakeholders were heard. It was stated at the beginning that there will be a new concept to help designing and communicating

with each stakeholder. Service design methods and tools have helped to have good idea of the big picture. The new concept includes the following aspects to make it easier to find the right path for future skatepark design and maintenance for current skateparks:

- Clear communication path for associations and local skateboarders.
- Involvement of needed partners for each phase.
- New funding methods for the skateparks.
- Land and space usage in useful ways.
- Organization transparency for the City of Turku.

2.3 Empathy map

In the design thinking processes empathy phase is distinguishing and pivotal stage. Stakeholders are analyzed by researching a certain scenario from their perspective. This method enables systematic information gathering and reveals actual needs, expectations and problems around the topic. Problems can be unique and really specific, which makes empathy mapping a useful method for service design (Pileggi, 2021).

Empathy Map is a widely used method in service design. Empathy map gives holistic view of service designing models according to customer perspectives. Empathy map describes an environment beyond demographic characteristics and creates a clear understanding of the customer's behavior, tendencies, environment and distress. The Empathy map's goal is to create a degree of empathy for a specific person. According to Bratsberg, Empathy Map is a user-centered approach as the most Service Design methods. The idea is to understand the target group by looking at the world through their eyes (Figure 12). Stakeholders must understand users so that they are capable of understanding that small changes in design have a big impact on users (Osterwalder A., 2013; Gray D., 2010; Bratsberg, 2012).

Empathy Map consists of six areas:

1. See – What the users sees in their environment?
2. Say and Do – What the users say and how they behave in public?
3. Think and Feel – What happens in the user's mind?
4. Hear – What influences environment has to users?
5. Pain – Which risks, frustrations and pitfalls users experience?
6. Gain – What users really want to achieve and what can be done to reach their goals? (Bratsberg, 2012).

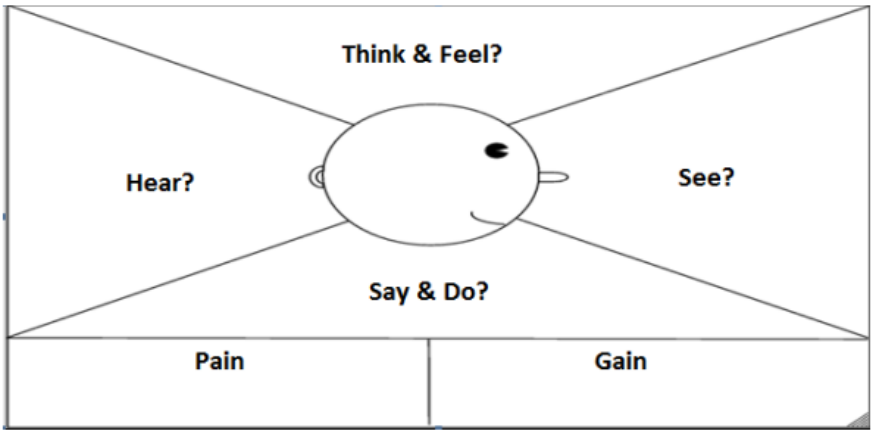


Figure 12: Empathy map example (Bruna, 2015).

Empathy map for City of Turku

The empathy map used in this project captures the perspectives of key stakeholders in Turku's skatepark development, offering valuable insights into their concerns and suggestions for improvement.

The main issue identified is poor **communication** between the City of Turku and the skateboarding community. Skateboarders feel unheard, despite having contact information, with frustrations rooted in historical neglect. Additionally, differing terminologies between the city and skateboarders hinder collaboration.

DIY skateparks are an integral part of skateboarding culture, and the city should explore ways to support or integrate them into urban planning, recognizing their ongoing importance.

Skateboarders' reluctance to join formal associations limits access to public **funding**. New funding methods, such as sponsorships or crowdfunding, should be explored to support skatepark development.

Some skateparks are poorly located, making them hard to access for younger skateboarders. Future skatepark planning should prioritize accessible locations near public **transportation** and community centers.

Skateboarders feel the city lacks an understanding of the sport’s needs. Appointing a skateboarding **coordinator** could bridge this gap, improving decision-making and facility design.

The poor **condition** of existing skateparks is a significant issue. Prioritizing regular maintenance and upgrades is essential to ensure safe and functional spaces.

Empathy Map Results

The empathy map highlights the need for clearer communication, support for DIY skateparks, innovative funding models, accessible locations, a skateboarding coordinator, and improved maintenance. By addressing these issues, the City of Turku can foster a more inclusive environment for skateboarding, improving relationships between the city and the community (Figure 13).

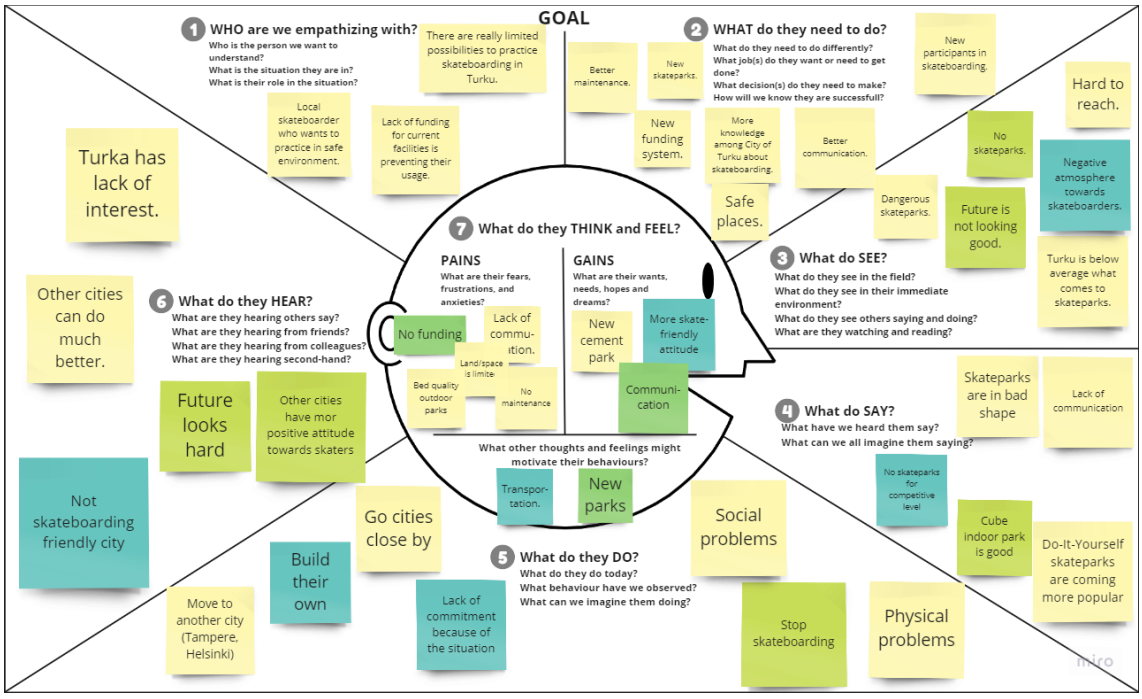


Figure 13: Empathy map from skateboarders' point of view in the City of Turku.

2.4 Co-design workshop

Workshop questions

Workshop questions were in Finnish language because all stakeholders were Finnish speaking persons. Using English language would have restricted participation of certain stakeholders. Open board questions were made to all stakeholders. Discussions have been held with the City of Turku which has given directions and focused the scope of the Open Board Questions

Workshop questions were:

1. How would you improve current skateboarding facilities?
2. What kind of skateboarding facilities should Turku have in future?
3. How should skateboarders be involved in design, building and perhaps financing skateboarding facilities?

4. Why the City of Turku stands out so clearly in negative light when it comes to skateboarding facilities compared to similar cities in Finland?

Participants were actively answering the questions. The platform was open for seven days, which is a long time, but that gave stakeholders time to think of answers.

Platform

Co-design workshop was executed in Flinga platform (https://flinga.fi/). Flinga platform combines different devices to function as a tool for collaborative knowledge construction. Flinga allows people to participate either individually or simultaneously in conversations or questions asked by the teacher. With Flinga it is possible to collect people's comments, questions and answers quickly and easily for all to see. Stakeholders can simultaneously participate in collaborative working in a new, easy and attractive way.

Workshop results

Results of the workshop are shown in Figure 14 in Finnish and in Appendix 2 in English. There were 74 answers to the questions mentioned above. Some people sent author emails to give longer answer to certain topics, which is helpful for the future of this project. Answers are put in four categories, and they are combined if there is over-lapping.

Figure 14: Workshop answers from stakeholders in Flinga platform (https://flinga.fi/).

Workshop analysis

The Anonymous Online Co-design Workshop aimed to gather diverse feedback from key stakeholders in a participatory format.

The anonymous, online format encouraged candid participation, allowing stakeholders to share honest opinions without fear of judgment. This approach

was ideal for collecting critical perspectives and engaging a broad range of participants.

Key Stakeholders

- **City of Turku**: Responsible for land, funding, and maintenance of skateboarding facilities, balancing the needs of skateboarders with budget and public standards.
- **Skateboarders**: Primary users of the parks, actively involved in design, construction, and maintenance to ensure facilities meet modern standards and are safe and accessible.
- **Parents**: Concerned with the safety and accessibility of skateparks, ensuring they benefit both youth and the community.
- **Designers and Constructors**: Responsible for building facilities that meet both skateboarder needs and city standards, though strict city regulations have limited the pool of potential builders.

Anonymity encouraged open discussion, revealing concerns about Turku's strict building standards, which hinder progress by reducing the number of builders. This issue, along with bureaucratic challenges, has delayed skatepark development. Skateboarders' increased involvement in design is a positive step but requires better communication with the city. Parents emphasized safety and accessibility.

The workshop highlighted the need to address communication gaps, simplify construction standards, and explore alternative funding and location strategies to support the skateboarding community in Turku.

2.5 Interviews

Semi-structured interviews are a key method in Service Design for gathering data, combining predefined open-ended questions with the flexibility to explore responses further. This balance allows for in-depth insights while maintaining consistency across interviews. Engaging key stakeholders ensures access to valuable perspectives that may not emerge through other methods. Open-ended questions encourage detailed, diverse responses, often leading to unexpected insights that refine research focus and conclusions. Success hinges on careful question planning and skilled interviewing, including active listening and adaptability (Jamshed, 2014).

In this research (2021–2024), contextual interviews were conducted at skateboarding facilities to understand user behavior and experiences. Observing participants in their natural setting provided insights into their interactions, challenges, and adaptations. This approach revealed how facility design and social dynamics influence user behavior. By combining observation and

interviews, researchers gained a holistic view, enabling more nuanced conclusions. However, challenges such as privacy concerns, researcher bias, and the effort required for analysis must be managed.

Interviews included diverse stakeholders—city officials, skateshop owners, park designers, manufacturers, and top Finnish skateboarders. These conversations, tailored to participants' varied backgrounds, focused on themes similar to Open Board Questions, offering comprehensive insights for the study.

The City of Turku Interviews

There has been a collaborative process between different departments of the City of Turku, Sport Department and Youth Department, involving interviews and meetings from late 2021 to late 2024. These interactions aimed to clarify problem statements and ensure that all parties involved had a shared understanding of the situation, despite their differing approaches. Interviews and meetings included questions as follows:

- What are the biggest problems in public sector sport facilities in Turku?
- How current problems could be solved?
- What would be the most important area to improve in the future for sporting facilities?

Interviews revealed following issues:

- Sport and Youth Departments are undermanned.
- The sporting sector has been lacking funding for long time.
- Maintenance is under budgeted, which had led to severe maintenance debt.
- Employees change their workplace rather often.

Questions in these interviews revealed several critical issues facing the City of Turku's sports facilities and related departments. One main concern was insufficient funding for sport facilities. In 2022, Turku had about 300 sports facilities, with a yearly maintenance budget of 700,000 euros. This equates to approximately €2,333 per facility per year. The allocated budget is clearly insufficient to meet the maintenance needs of these facilities. Even without deeper analysis, it's evident that the maintenance debt, the backlog of necessary repairs and upkeep, will increase in the coming years. This financial shortfall means that there is little hope for the development of new skateboarding facilities in the near future unless either: 1) Additional funding is allocated specifically for skateboarding or/and 2) A new funding scheme is introduced to manage the city's resources more effectively.

Like the funding challenges, manning issues at both Youth and Sports Departments are significant. While an increased workforce may not solve all the

problems, it could enable proactive planning, which would help prevent some issues from escalating. Lack of manpower limits freedom for creative planning and addressing long-term needs for sports facilities.

Frequent personnel changes within the City of Turku have led to knowledge gaps. These changes disrupt the flow of information both within the city and with external stakeholders. Even when there is a well-functioning communication channel, it takes time for new staff to re-establish effective information sharing, which can cause delays and confusion. These gaps impact both departments' ability to address pressing issues effectively, such as budgeting and facility maintenance.

Meeting with Elina Rantanen

The meeting on May 10, 2023, between Elina Rantanen, Vice Mayor of the City of Turku, and members of the Old Farts Sporting Club ry, highlighted several important points regarding the development of skateboarding facilities in Turku.

Vice Mayor of the City of Turku, Elina Rantanen, acknowledged that the City of Turku faces challenges in adequately responding to the needs and questions from the skateboarding community. This recognition from the vice mayor signals an awareness of gaps within the city’s organizational response.

Skateboarding facilities have been a topic of ongoing discussion in the city council for years. However, in recent years, the frequency of these discussions has increased, and more council members are now aware of the situation and the needs of the skateboarding community. This suggests a positive shift in the city’s internal dialogue, with more decision-makers involved in addressing the needs of skateboarders. The City of Turku as an organization has indicated a genuine will to develop new skateboarding facilities. This is an encouraging sign that the city acknowledges the need for action, although challenges in budget and manpower, as previously mentioned, remain key issues.

Meeting with Rotary Club and Turku representatives

The involvement of the Rotary Club in supporting skateboarding facilities in Turku marks an important step in the development of the skateboarding culture in the city. The Rotary Club played a significant role by delivering and funding new obstacles for Telakkaranta, Turku. These obstacles were installed on May 4, 2023, which indicates concrete action towards improving skateboarding facilities in the area. Their commitment extends beyond this single project, as they’ve expressed willingness to continue supporting the development of skateboarding culture in the future.

On April 1, 2023, the author presented thesis findings at the Uusikaupunki Rotary Club conference, where the work was well received. This presentation likely raised awareness about the needs of the skateboarding community and helped generate further interest from the Rotary Club in supporting the cause. The

Rotary Club expressed interest in being involved with the future development of skateboarding facilities in the City of Turku, reflecting their growing role as a community partner.

A meeting on August 3, 2023 (Figure 15), between Rotary Club ry (represented by Tommi Sundquist) and Turku (represented by Mika Maaskola) discussed future projects and the current situation at Telakkaranta. All parties were positively surprised by the reception of the new skateboarding curbs at Telakkaranta, suggesting that the recent developments have been well received by the local skateboarding community. This positive feedback could inspire further investments and projects.

Figure 15: Rotary Club announcement at Telakkaranta 11.5.2023.

Turun Rullalautailijat ry (TRU ry)

The Turun Rullalautailijat ry (TRU ry) association plays a crucial role in the development of skateboarding in Turku. However, the association faces several challenges that impact its growth and effectiveness. Skateboarders generally resist joining associations, which has led to a consistently low membership count for TRU ry. The low number of members directly impacts the association's ability to receive adequate funding, creating frustration for the existing members who work hard to improve skateboarding facilities.

Interviews conducted with Chairman Teemu Lönnroth (July 2022) and Chairman Robert Sundman (June 2023) show that skateparks in Turku are in bad condition. This is consistent with findings from other interviews and sources. Due to poor maintenance and limited upgrades, only a small number of people currently use the skateparks in Turku, further limiting the scope for community growth.

There were concerns within the community about the development and sustainability of DIY skateparks. These unofficial skateparks may offer temporary solutions but are often not as reliable or safe as officially maintained ones.

The Teräsrautela skatepark, which is rented to TRU ry by the City of Turku, has been working well. This shows that when partnerships between the city and the association exist, positive results can be achieved. Unfortunately there is no funding to maintain skatepark and park will the most probably be closed down.

Despite the valuable work TRU ry has done over the years, their efforts are often hindered by recurring issues such as lack of funding and poor park conditions. The City of Turku has recognized the hard work associations like TRU ry are doing, and both sides would benefit from more collaboration. However, without addressing the underlying issues such as poor infrastructure and funding challenges, progress will remain slow.

Skateboarders outside Turku

The interviews conducted with experienced skateboarders and professionals from outside of Turku, such as Harri Puupponen, Anssi Paukkunen, Samu Karvonen, and Mikko Huttunen, reveal a concerning view of Turku's skateboarding environment. All interviewees expressed that the skateboarding scene in Turku is not attractive when compared to similar cities in Finland. Turku has earned a reputation for restricting skateboarding in public places rather than supporting it. This has created a negative image of the city within the skateboarding community.

Other cities, like Tampere, have developed positive relationships with their skateboarding communities by actively supporting them. For example: The City of Tampere provided land in the city center for skating and even allowed the construction of a statue of professional skater Jaakko Ojanen, celebrating local talent and fostering community pride (Figure 16). Tampere's long-term collaborative efforts with skateboarders have yielded positive outcomes, including a vibrant skateboarding culture and well-maintained facilities. This highlights the stark contrast with Turku, where communication between skaters and city officials has been lacking. The case of Tampere illustrates how proactive collaboration between a city and its skateboarding community can create a positive environment that benefits both the city and its residents (Kyrönviita, 2022).

Turku lacks the same level of attraction and appeal that other cities offer to skateboarders. This is largely due to poor facilities that are not well-maintained or accessible, and a restrictive attitude towards skateboarding in public areas, which has diminished the city's potential as a hub for the sport.

Summary of Interviews (Dates and Participants):

31.8.2022: Harri Puupponen, multiple-time Finnish skateboarding champion, evaluated Turku's skateboarding scene as lacking appeal.

4.4.2022: Anssi Paukkunen and Samu Karvonen, representing the Finnish Skateboarding Association, echoed concerns over the restrictive stance Turku has towards skateboarders.

20.4.2023: Mikko Huttunen, CEO of Napalm Custom Skateboards, pointed out that Turku's negative profiling in skateboarding hinders its potential to grow into a more skateboarder-friendly city.

Implications for Turku's Skateboarding Community

The lack of communication between city officials and skateboarders is a missed opportunity. Improved dialogue and collaboration could lead to better facility development and a more skateboarding-friendly city. The success of cities like Tampere in working with their skateboarding community serves as a model that Turku could follow. With strategic planning and collaboration, Turku could improve its facilities and image (Figure 16).

Figure 16: Jaske statue, Tampere (SSB Oy. Picture: Samuli Heino).

Some feedback examples from the interviewees regarding the state of skateparks in Turku brings attention to following issues:

1. Indoor skatepark (Cube) receives positive feedback, generally.

The Cube indoor skatepark is well-regarded by interviewees, receiving good grades for its condition and usability. This suggests that with proper planning and resources, Turku can provide safe and functional spaces for skateboarding.

2. Kupittaa skatepark – Outdated and unsafe

Kupittaa skatepark was acknowledged, but interviewees considered it outdated, as it is over 20 years old and poorly designed for modern skateboarding needs. Crossing lines for skateboarders, scooter riders, inline skaters, and BMX riders, making the park unsafe for younger or less experienced users.The lack of clear divisions or dedicated spaces for different sports leads to confusion and increases the risk of accidents, especially for those unfamiliar with skatepark etiquette.This highlights the need for redesigning and modernizing Kupittaa skatepark to ensure better safety and functionality for all users.

3. Fragmented skateboarding community in Turku

A recurring concern is the dispersed nature of the skateboarding community in Turku. Interviewees pointed out that skateboarders are divided into different groups, and association membership in TRU ry remains low relative to the actual number of skateboarders in the city. A larger membership base would bring in more funding, which could be used to improve skateboarding facilities and advocate for better resources from the city. A more organized community could work together on projects and collaborate with the city, as seen in cities like Tampere, to improve skateparks and develop new spaces.

4. Call for skateboarders to be more proactive

The interviewees also pointed out that skateboarders in Turku need to take a more proactive role in maintaining and improving skateparks.

Local Turku skateboarders

The interviews and conversations with local skateboarders, spanning from 2021 to 2024, provide a comprehensive look into the challenges and frustrations the skateboarding community in Turku faces, particularly with regard to skatepark conditions and the city’s communication failures. Here’s a detailed analysis based on these interactions:

1. Communication breakdown with the City of Turku

One of the primary issues raised by local skateboarders, including Teemu Lönnroth, Topi Määttä, and Robert Sundman (interviewed in June 2022 and July 2023), is the certain gap of communication between the City of Turku and the skateboarding community. The city has been making decisions about skateboarding facilities without consulting users, leading to inappropriate or unsafe designs that don’t cater to skateboarders' needs. This disconnect is particularly concerning because it results in facilities that do not work for the community, further diminishing the appeal of skateboarding in Turku. A notable example is the city's decision to block popular skateboarding spots like Åboa Vetus Nova, as well as the removal of self-made obstacles in locations such as

Paavo Nurmi Stadium, Telakkaranta, and Varvintori without prior communication with the skateboarders. Good example is Hirvensalo skatepark case which Turun Sanomat also reported 2022 (Alakoski, Riitta, 2022).

2. Skatepark quality

Interviews with skateboarders like Harri Huuhtanen and Anssi Uusitalo (10.5.2023) highlight the poor condition of city-maintained skateparks. This issue has been persistent, leaving local skateboarders feeling discouraged and disconnected from the city's efforts. The city's failure to maintain these spaces properly has turned the situation into a "joke" among skateboarders. This shift in perception shows that the community no longer trusts the city to provide suitable spaces, which is alarming because it indicates that skateboarders are becoming apathetic toward the city's efforts. This situation has persisted since at least 2020, as Anssi Uusitalo had already voiced similar concerns during an interview with Åbo Underrättelser in July 2020 (Holmström, 2020).

3. DIY Skateboarding Culture and its frustrations

There is a strong DIY culture within the Turku skateboarding community. Many skateboarders expressed a desire to build their own obstacles and even entire skateparks. The DIY skatepark Urheilujuomapuisto (Figure 17) has been a key project, but it is set to be torn down due to upcoming housing developments in the area. This represents another instance where the city's urban planning conflicts with the needs of skateboarders. Interviewees felt that the city could support these efforts by designating areas for DIY skateparks and providing materials. This would not only harness the community's energy but also foster a more collaborative relationship between the city and local skateboarders.

4. Concerns from the older generation (OFSC ry)

The Old Fart Sporting Club ry (OFSC ry), representing an older generation of skateboarders, expressed concerns that their children do not have safe spaces to practice skateboarding. This issue was raised during interviews in November 2021, April 2022, July 2023 and October 2024. The lack of safe and accessible skateparks is preventing younger generations from engaging in the sport, which is worrisome for the long-term future of skateboarding in Turku.

5. Critical opinion of the city's approach to skateboarding

Interviews with figures like Harri Huuhtanen, Anssi Uusitalo, and others reflect a critical view of the City of Turku's approach to supporting skateboarding. The city's lack of support, combined with inconsistent communication and poorly maintained facilities, has led to widespread discontent within the community (Figure 17).

Figure 17: Urheilujuomapuisto, UJP. Photo: Harri Huuhtanen, 2024.

2.6 Observation / exploring

Observations were used at Turku skateboarding facilities and on the streets of Turku by author and colleague skateboarders. This includes friendly conversations and skateboarding among others. This has been done by author with fellow skateboarding colleagues and it has continued actively during the whole study.

Turku Skateboarding Workgroup (Skeittityöryhmä)

The establishment of the Turku Skateboarding Workgroup (Skeittityöryhmä) marks a significant shift in how the City of Turku approaches the development and maintenance of skateboarding, BMX riding, inline skating, and scooting facilities. Based on observations, interviews, and the author's involvement in this group, there are improvements done and new projects planned for the future.

Improved communication and collaboration is one main notably fact. In the past, the City of Turku made decisions regarding skateboarding and related sports facilities without consulting the actual users, leading to facilities that were often unsuitable or unsafe. The Skateboarding Workgroup has changed this dynamic by creating a forum where all relevant stakeholders, including skateboarders, BMX riders, inline skaters, and scooter riders, can share their perspectives and contribute to discussions about facility design and maintenance. By including members from the City of Turku, such as Tommi Virtanen (2021-23) and Timo Koljonen (from 2023 onward), as well as representatives from key skateboarding associations like Turun Rullalautailijat ry, Turun Tyttörullalautailijat ry, and Old Farts Sporting Club ry, the group ensures that decisions are more informed and balanced. The regular meetings (approximately twice a year or when needed)

and the inclusion of facility builders, such as in the April 2023 meeting, enhance the planning and development process. These meetings have created a supportive atmosphere, where stakeholders are now more aligned in their goals.

The author has actively participated in three work group meetings during this study, specifically on December 13, 2022, April 26, 2023, August 7, 2023, April 24, 2024 and September 25, 2024. These meetings were described as informative, and the overall atmosphere was collaborative and constructive. Through these discussions, the shared understanding of the challenges faced by all parties has grown. This has led to a better alignment of priorities, and the City of Turku has shown a genuine willingness to consider the input of facility users. The involvement of multiple stakeholder groups, such as Kampi ry for BMX riders, TuTo for scooter riders, and various skateboarding associations, provides a comprehensive view of the facility situation and helps ensure that all perspectives are heard.

The Skateboarding Workgroup has made great strides in improving the design and safety of skateparks and related facilities in Turku. Previously, the city's approach lacked user input, leading to unsafe designs or poorly maintained spaces. Now, with user consultation embedded in the process, future facilities will likely be more user-friendly and safer. The inclusion of facility builders in the April 2023 meeting indicates that the planning process is becoming more technical and informed, allowing the group to discuss specific design and maintenance issues directly with the people responsible for construction. The role of city officials like Tommi Virtanen, Timo Koljonen, Janina Mäkinen, Anna Salminen and the Head of Sport Department Markus Kalmari has been crucial in maintaining this positive shift in communication and ensuring that the needs of skateboarders and other users are properly addressed.

The importance of continuity in leadership is emphasized. Having consistent personnel in these roles helps to build institutional knowledge and develop long-term relationships with the community. A revolving door of leadership could potentially undo the progress made by the workgroup. It would be beneficial for the City of Turku to ensure that key personnel involved in skateboarding facility development stay in their positions long enough to establish a permanent working culture in this field, ensuring that the collaborative approach continues to flourish.

2.7 Benchmarking

Benchmarking focuses on improving processes and enhancing organizational performance by learning from others. It involves comparing services, processes, or products with similar operations in other organizations to identify best practices. These practices are then adapted to enhance efficiency, effectiveness, and functionality. Benchmarking helps organizations understand why others

perform better, set performance goals, and measure progress using metrics like cost efficiency (Figure 18).

By identifying gaps between current and desired performance levels, organizations gain insights and foster innovation through a structured learning process. Benchmarking is a proactive strategy for identifying improvement opportunities and achieving higher efficiency and functionality (Huq, 1999; Stroud, 2010; Sammut-Bonnici, 2015).

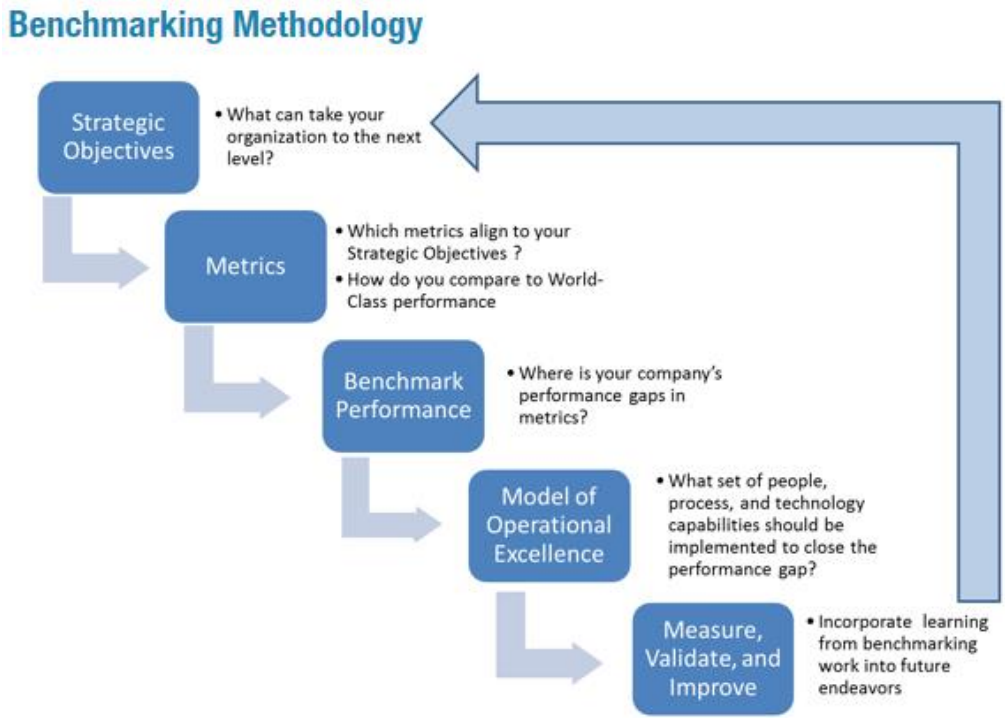


Figure 18: Benchmark methodology (Littlefield, 2012).

Benchmarking Finnish cities

There are some cities in Finland that have had similar situations in the past. Helsinki is a naturally good example and there is a lot to learn from our capital. Tampere is an obvious city for benchmarking because it is approximately the same size, has a similar population, university and certain amount of industry. The situation in Tampere has not always been as it is right now and there is a lot of work behind creating such skateboarding environment physically and culturally. Now there are multiple indoor and outdoor skateparks in Tampere and also a special high school line for skateboarders which has been really popular outside of Tampere also. Tampere has created well working network of professionals, who can provide their knowledge in various task what is required,

for example building materials, constructors, teaching skateboarding, places to skate and city support (Mäkinen, 2017; Olympiakomitea, 2021; Konttinen, 2024).

It is well documented how much work there has been done in Tampere to make everything possible for such a positive and lively skateboarding culture. Kyrönviita shows in their study different phases from early 2000 to this date. It is easy to see similarities between what has happened in Tampere and what Turku has been struggling with earlier and currently. Kyrönviita and Wallin present in their study, that it is possible to find way for better and active skateboarding culture, where skateboarders and City are talking same language and atmosphere is supportive. In their study DYI skateparks were in the focus at first, but afterwards the scope of the co-operations with City became deeper and more productive (Figure 19). Communication was the issue in Tampere, and it obviously is also in Turku (Kyrönviita, 2022).

Figure 19: Tampere, Iso-Vilunen. Jonas Bünger in Manserama contest 2019. Photo: Aleksi Martikainen (Kyrönviita, 2022).

Following were comparable numbers to be analyzed:

- Skatepark count
- Facility quality
- Public place use.

Skatepark count

The numerical count of skateparks within a city does not inherently unveil the comprehensive urban scenario; nonetheless, it provides a preliminary insight. Table 7 presents both the formally computed skatepark figures and

supplementary estimations. It is impossible to estimate the amount of private skateparks and DIY facilities. Therefore, they were left out.

Table 7: Comparison of cities' outdoor skateparks, indoor skateparks and estimated general quality.

City	Outdoor parks (Pcs)	Indoor parks (pcs)	General quality (0-10)	Usage of parks (0-10)
Turku	6 (Turku, 2023)	1	3	2
Tampere	2 (Maintained by City of Tampere) (Tampere, 2023)	3	8	8
Jyväskylä	8 (Jyväskylä, 2023)	1	7	8
Kuopio	2 (Kuopio, 2023)	2	8	8
Oulu	9 (Oulu, 2023)	1	7	8
Kokkola	10 (Kokkola, 2023)	0	5	6
Helsinki	21 (Helsinki, 2023)	3	8	8

Skatepark quality

The quality of the skateparks gives deeper insight into benchmarking. Quality is one of the main aspects in skateparks and it is one main issue why skateparks in Turku are not attractive or used by skaters. There is also safety issue included in this section, because many skateparks in Turku have surface discontinuities at the critical places, which cause a big risk to hurt oneself.

The quality of the skateboarding facilities was estimated by the personal visits, interviews, webpage pictures and information, number of competitions held and general opinion among stakeholders. Quality estimate is not actual fact, but it is number of many different factors which have surfaced during this study (Table 7).

Public usage

Public usage is really hard to define and measure. According to observations and interviews it can be concluded that more publicly accessible quality skateparks reduce skateboarding in public places. Although, the nature of skateboarding is in the streets, which leads to the conclusion that it can never be taken away from the public streets or facilities. Public usage was estimated similar way as quality of the skateboarding facilities. Number is not then actual fact but general opinion that has developed during this study during 2021-2024.

2.8 SWOT analysis

SWOT analysis is a widely used strategic tool for evaluating internal and external factors affecting an organization or individual. It assesses four components: **strengths** (internal advantages like expertise, unique products, or skilled workforce), **weaknesses** (internal disadvantages such as outdated technology or lack of resources), **opportunities** (external factors like market trends or emerging technologies), and **threats** (external risks like competition or economic downturns).

SWOT provides a structured framework to understand the current state, set realistic goals, and develop strategies that leverage strengths and opportunities while addressing weaknesses and threats. Its versatility allows application across industries, organizations, and personal situations, offering clear insights and prioritization of key factors (Figure 20).

SWOT has limitations, such as potential overcomplexity if too many themes emerge. Focusing on impactful factors is essential. Despite this, it remains a valuable starting point for strategic planning and decision-making, fostering a holistic view and aligning strategies with goals. (Gürel, 2017; Dudovskiy, 2023).

	Strengths	Weaknesses
Opportunities	Achieve opportunities that greatly match the organization's strengths.	Overcome weaknesses to attain opportunities.
Threats	Use strengths to reduce the organization's vulnerability to threats.	Prevent weaknesses to avoid making the organization more susceptible to threats.

Figure 20: Two-by-Two matrix, SWOT analysis (Gürel, 2017).

SWOT analysis faces several challenges. Its subjectivity can lead to varying interpretations and inconsistencies among team members. Collecting relevant data across dimensions like finance, operations, and marketing can be time-consuming and may require cross-departmental expertise, potentially causing discrepancies. Categorizing factors can also be tricky, as some may fit into multiple categories, leading to redundancy or contradictions. SWOT may not offer detailed competitor comparisons, limiting its strategic effectiveness. It is often conducted at higher organizational levels, potentially reducing relevance and engagement for lower-level employees. Additionally, thorough analyses may require significant time and costs, particularly if external consultants are involved. Despite these challenges, SWOT remains valuable when applied thoughtfully. Involving cross-functional teams, ensuring clear communication, and combining SWOT with other strategic tools can enhance its effectiveness and provide deeper insights for strategic planning (Gürel, 2017).

SWOT analysis for City of Turku

SWOT analysis is a serviceable tool for research use. It reveals possible aspects that can stay hidden. SWOT analysis was used with stakeholders and also together with observation. Figure 21 shows SWOT analysis based on interviews, workshops between stakeholders and desk study on the topic.

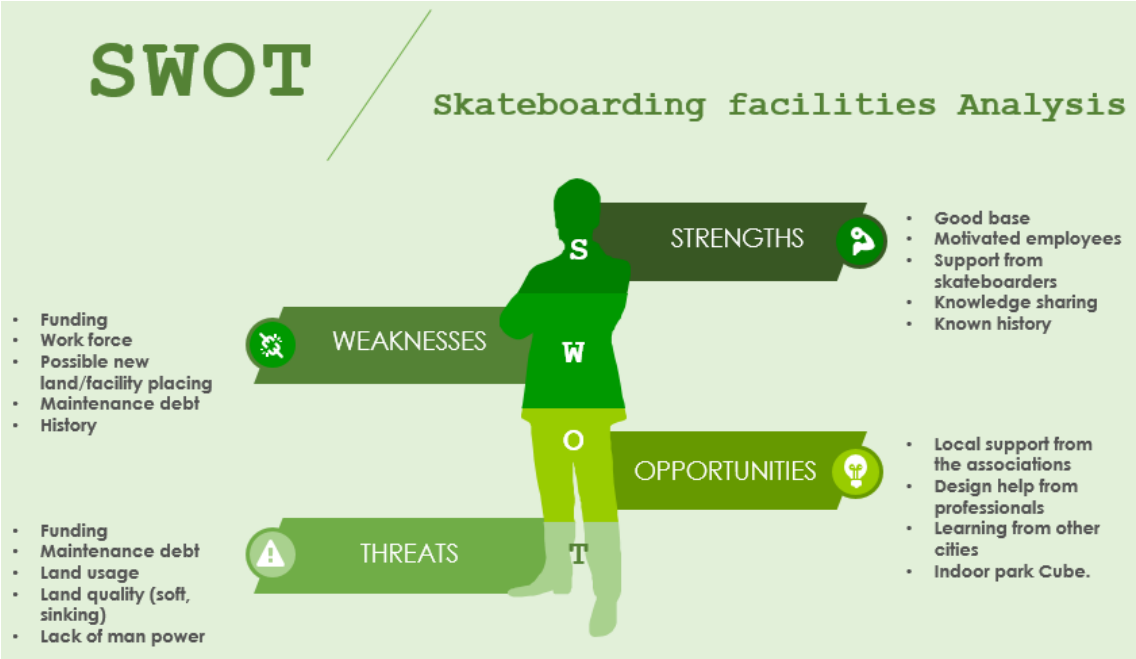


Figure 21: SWOT analysis Turku skateboarding facilities.

Strengths

The City of Turku has a solid foundation for developing skateboarding facilities, with strengths to build upon for future improvements. Existing infrastructure, while needing some updates, provides a base for progress. Motivated city employees and engaged stakeholders understand the challenges and opportunities, fostering a supportive environment for change.

Local skateboarders and associations, like TRU ry, are eager collaborators, offering expertise to ensure facilities meet user needs. Turku's rich skateboarding history provides valuable lessons to avoid past mistakes and enhance future projects. Strong connections between skateboarders, officials, and decision-makers enable effective communication and quicker implementation of improvements.

The city also leverages funding tools like the Resident Budget, allowing public input on resource allocation. While not without flaws, this system empowers

residents to direct funds to skateboarding facilities, ensuring targeted investments.

Weaknesses

Funding is the primary weakness and threat to developing and maintaining skateboarding facilities in Turku. Persistent underfunding affects workforce availability, maintenance, and infrastructure development, leading to delays and accumulated maintenance debts.

Workforce shortages, driven by limited funding, hinder routine repairs and proactive planning. This issue is exacerbated by Turku's clay ground base, which increases the cost and complexity of building durable concrete skateparks, further straining the budget and limiting viable construction sites.

Without a clear plan to address maintenance debts, existing facilities will continue to deteriorate, compromising safety and usability. Current budgets are insufficient for both upkeep and new projects, requiring alternative funding solutions.

Funding shortfalls are common in public projects, and Turku’s skateboarding facilities are no exception. While no single solution exists, the study proposes creative funding ideas in its New Concept chapter to help alleviate financial constraints and support future developments.

Opportunities

A SWOT analysis of Turku’s skateboarding facilities highlights opportunities to address challenges in funding, maintenance, and community engagement. Local groups like TRU ry and OFSC ry offer valuable support, insights, and manpower for planning, design, and maintenance, ensuring direct collaboration with facility users.

Turku can learn from successful examples in cities like Tampere, which provide centrally located, well-maintained skateparks through strong community partnerships. The indoor Cube skatepark serves as a model for effective design, funding, and engagement, offering lessons for outdoor facility development.

The Resident Budget allows the skateboarding community to influence funding allocation through public voting. By raising awareness and mobilizing support, skateboarders can secure more resources for facility improvement and new projects.

With skateboarding’s global rise, particularly after its inclusion in the Olympics, Turku can invest in better facilities, host events, and position itself as a skateboarding hub, attracting visitors and boosting the local economy.

Threats

The SWOT analysis identifies key threats to the sustainability of Turku's skateboarding facilities, including maintenance debt, land use challenges, tendering issues, and public opposition (Figure 22, Figure 23).

Maintenance debt: Years of underfunding have led to deteriorating facilities, raising safety concerns and limiting resources for new projects or proper upkeep.

Land use challenges: Limited availability of suitable, central land restricts skatepark development. Urban noise concerns and opposition from residents further complicate site selection, with remote locations reducing accessibility for young skaters.

Geological issues: Turku's clay foundation increases construction costs and limits potential sites, as seen in the canceled Hirvensalo skatepark project.

Tendering process: A focus on lowest bids often results in subpar materials and poor-quality construction, leading to higher maintenance costs and dissatisfaction, as evidenced in past projects.

Public opposition: Concerns about noise and perceived disturbances can reduce political and community support, hindering land allocation and project approval.

Figure 22: Hirvensalo obstacles are crumbling and wearing out, 2023.

Figure 23: Hirvensalo skatepark obstacles were not safe anymore after one summer, 2023.

2.9 Scenarios

Scenario-based service design uses detailed scenarios to envision and plan services at the early stages of development. These scenarios illustrate potential user interactions, providing concrete examples to guide design and ensure the service meets user needs effectively. They define service functions, clarify operations, and help craft user-centered functional specifications. This lightweight yet impactful technique fosters rapid communication and feedback among stakeholders, enabling iterative refinement of the design. By capturing the service's essence and functionality, scenarios align teams and enhance understanding of the service in action. While solution-first approaches can be energizing, they risk rushing results, reusing outdated designs, or neglecting alternatives. Scenario-based design complements this approach by mitigating risks and encouraging exploration of diverse possibilities, ensuring a more thoughtful and effective service development process (Rosson, 2002).

Hazards of the solution-first approach	How scenario-based design can help
Designers want to select a solution approach quickly, which may lead to premature commitment to their first design ideas	Because they are concrete but rough, scenarios support visible progress, but also relax commitment to the ideas expressed in the scenarios
Designers attempt to quickly simplify the problem space with external constraints, such as the reuse of familiar solutions	Because they emphasize people and their experiences, scenarios direct attention to the use-appropriateness of design ideas
Designers are intent on elaborating their current design proposal, resulting in inadequate analysis of other ideas or alternatives	Because they are evocative and by nature are incomplete, scenarios promote empathy and raise usage questions at many levels

Figure 24: Concerns derived from the solution-first approach to design, and aspects of scenario-based design that address each concern (Rosson, 2002).

Using scenarios designers can combine concreteness and flexibility when describing services. The main point is to visualize concrete design in many levels of details. First scenarios can be coarse and focus only on the principal points, which users most definitely will utilize. It is known that scenarios address “representational bias” in human cognition, which means that people overestimate the significance of matters that are familiar to them (Rosson, 2002).

Scenarios are powerful tools for projects where there are multiple stakeholders, and the big picture is hard to describe in a few sentences. Scenarios expand the thinking of stakeholders and give aspects. It is also good to describe both inevitable and near-inevitable futures. Group thinking and conventional wisdom can be detrimental for organizations. Using scenarios process can help to give more room for different ideas. Communication is highly important when creating scenarios. Communication should be open, and all silent voices must be heard. Scenarios methodology is helpful for researchers to describe complex and uncertain contexts. In this research complexity comes from multiple stakeholders. There are many variables that are uncertain, and scenarios are good method to describe these (Roxburgh, 2009).

Turku scenarios

The use of scenarios is an effective way to illustrate the key challenges and opportunities facing skateboarding facility development in Turku, especially for those who may not be closely connected to the skateboarding community. By presenting clear, possible outcomes, these scenarios can help city officials and other stakeholders understand the implications of different approaches to improving skateboarding infrastructure. Below are the four scenarios this study has found possible, along with an analysis of the potential outcomes for each.

Continue as now

This scenario involves maintaining the status quo, where no significant additional investments are made in existing or new skateparks, and current maintenance efforts continue at the present level. Maintenance debt will continue to accumulate, leading to further deterioration of current skateparks, which are already in poor condition. Public dissatisfaction will likely increase as facilities become less usable, particularly given the growing popularity of skateboarding. No improvements in accessibility or safety for skateboarding facilities, making it difficult to attract new users or sustain the existing skateboarding community. The City of Turku risks falling behind other cities in Finland, such as Tampere, in terms of providing quality recreational spaces for skateboarding.

While this scenario is the least resource-intensive in the short term, it comes with long-term consequences. Failing to invest in skateboarding infrastructure could lead to increased maintenance costs in the future, reduced usage, and missed opportunities for community engagement.

Invest in smaller skateparks

This scenario focuses on investing in multiple smaller skateparks spread across different parts of the city, rather than concentrating resources on one large facility. These smaller skateparks would be designed to serve local neighborhoods and be more accessible to different user groups. Smaller skateparks spread throughout the city would make skateboarding facilities more accessible to a larger number of people, especially young skaters who rely on public transport or walking. Smaller parks would likely cost less to build than one large facility, and their modular nature could allow for incremental improvements over time. Localized skateparks can foster community identity and give local neighborhoods a sense of ownership over their facilities. However, smaller parks may lack the variety and features that more advanced or dedicated skateboarders seek, limiting their appeal for competitions or attracting serious skaters.

Investing in smaller, distributed skateparks is a cost-effective approach that could provide broad benefits for the local community. However, it may not meet the needs of more experienced skaters who prefer larger, more complex facilities.

Build one big skatepark

This scenario involves the construction of a single large, high-quality skatepark in Turku, which would become the central hub for the city's skateboarding community. This park would offer a wide range of obstacles and features, catering to all skill levels. A large, well-designed skatepark would position Turku as a key destination for skateboarders both locally and nationally, potentially drawing visitors from other regions. A large facility could host skateboarding events, competitions, and even international contests, boosting Turku’s reputation and potentially bringing in economic benefits. The upfront costs for a large skatepark are significant, and ongoing maintenance would require dedicated funding, especially considering the challenges posed by Turku’s clay ground base. If the park is located far from the city center, it might be difficult for some users to access, particularly younger skaters without access to transportation.

Building one centralized, high-quality skatepark would offer long-term benefits in terms of reputation and economic potential but comes with higher financial risks. This scenario would also need to be paired with strategic planning around location and long-term funding for maintenance.

Invest in small skateparks and one big skatepark

This hybrid approach combines the investment in both smaller neighborhood skateparks and one large flagship skatepark, aiming to provide broad accessibility while also creating a central hub for more serious skaters. By building several smaller parks while also creating a large central facility, this approach ensures that all skill levels and geographical areas are served. Smaller skateparks can cater to casual or younger skaters, while the larger park can attract more experienced skateboarders and host events, offering a complete solution for the city's needs. This scenario is the most resource-intensive, as it requires funding for both the small and large parks, along with ongoing maintenance for each. Managing and maintaining both large and small parks would require efficient coordination and could strain the city’s resources, especially given the existing maintenance debt.

This is the most ambitious and holistic scenario, addressing both accessibility and the need for a high-quality facility. However, it comes with the highest costs and would require careful planning to ensure the long-term sustainability of both types of parks. Skateboarding facilities scenarios are summarized in Table 8.

Table 8: Scenarios for City of Turku.

Scenario	Key benefits	Key challenges	Suitability
1. Continue as now	Low short-term costs	Increasing maintenance debt, worsening conditions	Not sustainable
2. Invest in smaller skateparks	Broad accessibility, community involvement	Lacks features for advanced skaters	Suitable for local engagement
3. Build one big skatepark	High-quality facility, attracts events	High cost, accessibility issues	Suitable for attracting serious skaters and events
4. Invest in small and large skateparks	Comprehensive solution for all skaters	High cost, logistical challenges	Best long-term option if funding is available

The investment for a big concrete skatepark would cost approximately 1-3 million euros depending on size, land quality and obstacles. There are firms in Finland which can execute project like that. Park would be more multipurpose than current parks and possibility of hosting Finnish championships like in Kuopio 2022

(See Figure 25). Turku has taken a step towards this option and there are political and official consensus for this alternative.

Figure 25: Kuopio Lippumäki skatepark (Kuopio, 2023).

Investment in this scenario is highly depend on scope of plans and designs. This perhaps requires a special funding scheme for today's available information. There could be outside investors or other not-so-conservative ways for funding like there are in the other large public projects in Turku (Turun Ratapihan Kehitys Oy, 2024).

2.10 Personas

Personas are essential tools in user-centered service design, helping designers understand target audiences by personifying user needs, behaviors, and goals. Rather than focusing on demographics, personas capture behavioral archetypes to provide realistic and relatable representations of user groups. Avoiding stereotypes is crucial, as demographic details alone may not reflect diverse behaviors and needs (Stickdorn M. , 2018).

Typically, 3–7 personas are created in a project to represent different user perspectives, ensuring relevant and focused insights. They guide designers in empathizing with users, targeting specific groups, and addressing real problems through meaningful solutions. Personas are often developed by blending initial

research insights, co-creative workshops with stakeholders, and detailed analysis (Goodwin, 2009).

In this study, four personas were crafted to represent the primary users of skateboarding facilities. While fictitious, they strongly correlate with real-world users, offering valuable insights into behaviors, needs, and aspirations.

Persona: Jake

Jake represents the youth generation, being in their early 20's (Figure 26). He is full of energy and wants to develop and explore new things. He is a future hope for Turku also. He is not too happy with current situation and gets frustrated during long winters. Few of his friends have moved to Helsinki for a better life.

Jake sees Turku as nice place and great place to study. He wishes there could be more than that. Jake visits indoor skatepark Cube now and then but is not glad about the time slots they are offering for skateboarders. Cube is also crowded at the times he can reach it. Jake is an active member of the Turun Rullalautailijat ry. He tries to skate daily with his friends during summer, but winter it is impossible. He is actively thinking that nothing really keeps him in Turku after studies. It is a high possibility that he will be searching for jobs outside Turku after graduation.

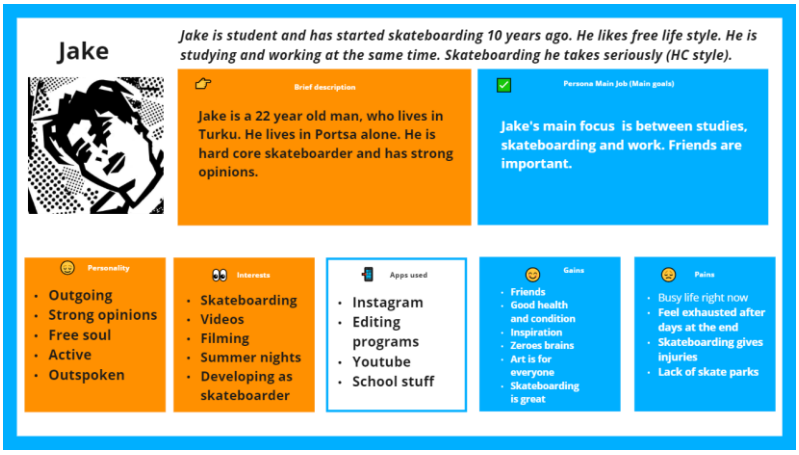


Figure 26: Persona Jake.

Persona Kerpal

Kerpal is in his mid-30 and has been skating for over 20 years (Figure 27). He really wants to develop in skating and also filming and editing. He is an engineer and has great job in Turku. He is basically skating daily during summers, but he is not really using Turku skateparks, but visits often Naantali, Nousiainen, Salo or Kaarina.

Kerpal is quite frustrated about the condition of the skateparks in Turku. He sees that there is potential, but it has been thrown away. Now he sees them little as a joke. Kerpal is actively building private skateboarding places and DIY parks. He enjoys that greatly. This has been a trend latest year in Turku for a reason. Kerpal is happy living and working in Turku with his future wife and plans to stay at least a few years. He is trying to develop Turku skateparks as much as he can with other skaters. Kerpal is not happy with same old objects in Cube indoor park.

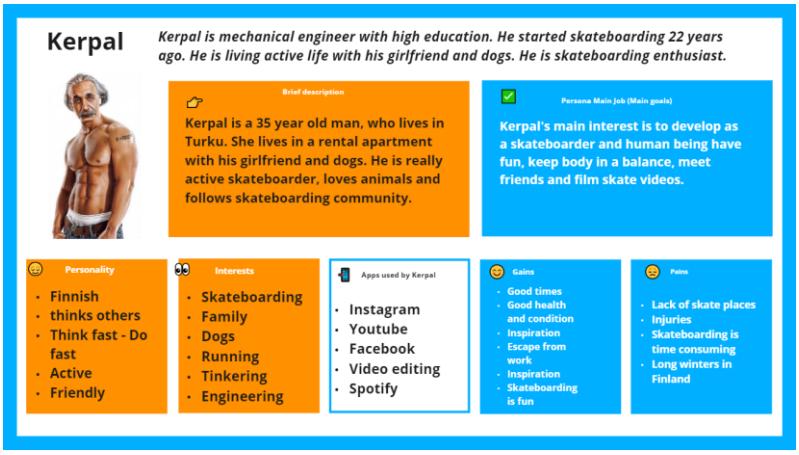


Figure 27: Persona Kerpal.

Persona Kate

Kate is a late born skater and really enthusiast one (Figure 28). She has two grown up kids. She is living with her husband and working in the marketing sector. She is active in the associations and also politically. She wants to develop herself in different ways and skateboarding is one of these. She is worried about the condition of the skateparks in Turku, because she sees that young kids are suffering from it. Kate's life is in Turku, and she is staying here. That is why she wants to contribute her work for better skateparks in Turku also.

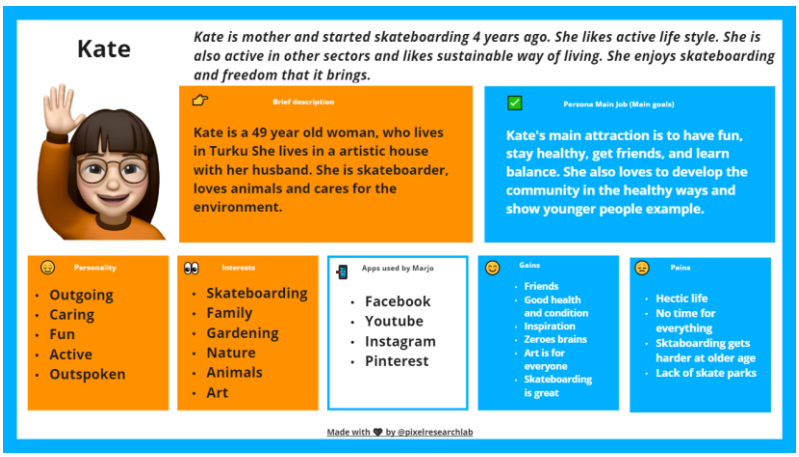


Figure 28: Persona Kate.

Persona Leo

Leo is 14 years young and life ahead (Figure 29). He tries to skate as much as possible with his friends. This is not always possible because of the lack of youngster slots in the Cube indoor skatepark during winters. During summer there are not many possibilities to go skating with his friends, but Leo and his friends are creative and have built some of their own obstacles at the same time as their friends were looking cellphones.

Leo is hoping to start high school studies in Tampere skateboarding focused study line. He knows it is not an easy task to get in, but he is motivated and already knows people from there. Leo was born in Turku and loves his home city. He hopes to study in Tampere and perhaps come back, but that is a big perhaps.

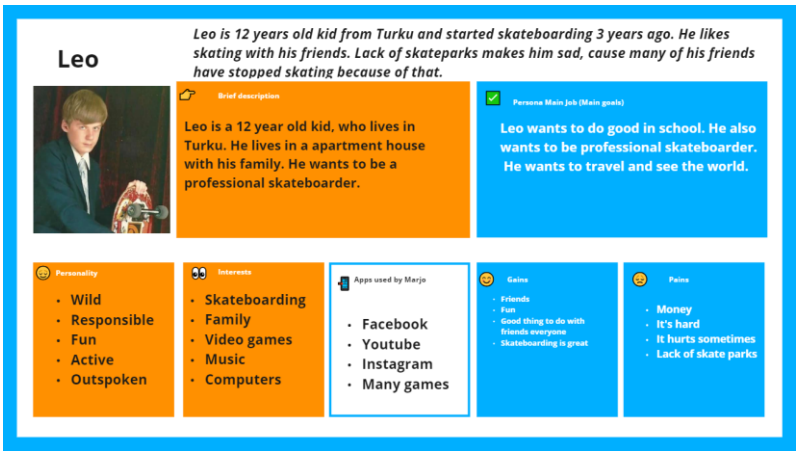


Figure 29: Persona Leo.

Personas analysis

Persona analysis provides unique insights into skateboarding in Turku by examining diverse life situations, interests, and personalities. Despite their differences, all personas share a frustration with the poor condition of local skateboarding facilities. Unsafe and unmaintained parks hinder their hobby during summer, while overcrowded and restricted times at Cube, the indoor skatepark, diminish their winter experience.

Personas show an eagerness to improve facilities, but they face challenges navigating the city's bureaucracy. Official parks are city-managed, leaving skateboarders with limited influence. DIY skateparks offer a creative outlet but lack suitable locations for development. Poor facilities risk driving passionate skaters to relocate to cities with better opportunities, contradicting Turku's branding as a sporty city.

The analysis highlights skateboarding's role in building friendships and helping newcomers adapt, vital in a university city welcoming thousands of new residents annually. Continuing hobbies eases transitions into new environments, as the author and others have experienced firsthand.

One recurring issue is Turku's complex bureaucracy. While necessary for large cities, it creates barriers for citizens unfamiliar with processes or contacts. Streamlining skateboarding-related information and assigning a single point of contact could significantly reduce frustration and improve community engagement.

2.11 The New Concept

The new service concept focuses on delivering a layered customer experience through core, assisting, and supporting services (Figure 30).

- **Core Service:** The main offering that addresses customer needs (e.g., locker room access at a skatepark).
- **Assisting Services:** Supplementary offerings to enhance the core service (e.g., personal teacher, plans).
- **Supporting Services:** Additional features that increase satisfaction and loyalty, such as stretching room or mobile apps.

Together, these layers create a seamless, customer-oriented experience, integrating service concept, process, and system. The **service concept** (Figure 31) defines the value and benefits, guiding design decisions and ensuring alignment with customer expectations. The **service process** includes all visible and behind-the-scenes activities required to deliver the service, while the **service system** ensures resources like staff, infrastructure, and technology work in harmony (Komppula, 2005).

Customer satisfaction, a key metric, depends on understanding needs and refining services based on feedback. Public services require a user-centered approach to address diverse audiences, and customer involvement is crucial for successful outcomes. Expectations, shaped by interaction between customers and providers, must be clearly defined and balanced to achieve high service quality (Bitner Mary Jo, 2007).

Effective service design incorporates customer outcomes (value added) and customer processes (co-creation), ensuring all elements work together to meet needs, foster loyalty, and deliver a compelling experience (Ostrom, 2015).

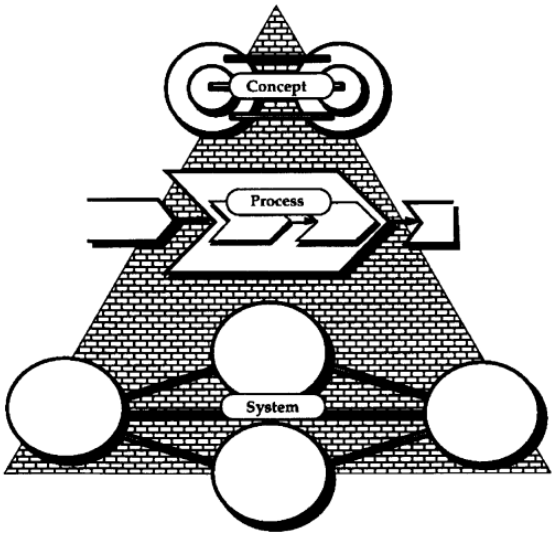


Figure 30: Model of prerequisites of service (Edvardsson & Olsson, 1996).

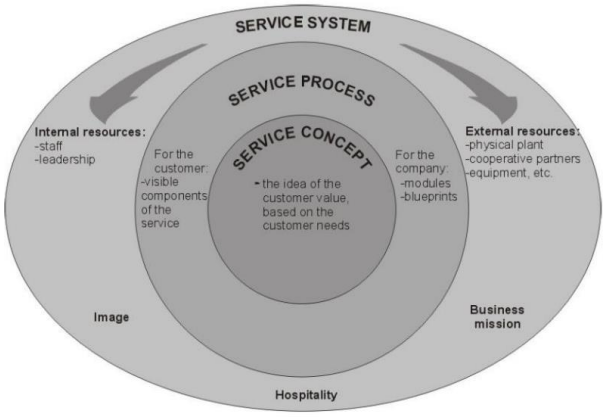


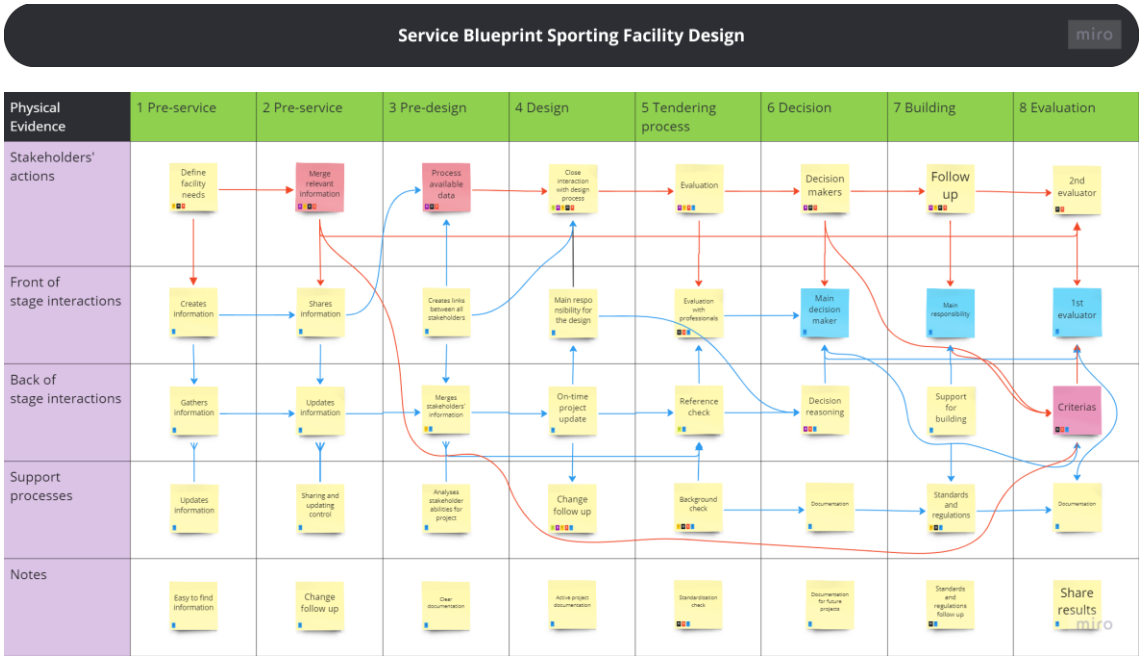
Figure 31: Prerequisites for the customer-oriented tourism product (Komppula, 2005).

Service Blueprint for new skateboarding facility

Service blueprint is an effective tool for visualizing the service delivery process and understanding the interactions between various actors. By distinguishing between front-stage activities, which is visible to the customer, and back-stage activities which are invisible to the customer, organizations can identify areas for improvement, enhance customer experience, and streamline operations. Service blueprint is used for aligning front-stage and back-stage processes and understanding cross-functional relationships. This includes clear visualization, touch point identification, highlighted dependencies, communication facilitation, efficiency improvement and enhanced customer experience. Service blueprint is the most usable for existing service. The new concept can be described also with

service blueprint where service is described more precisely (Bitner Mary Jo, 2007).

Service blueprint is showed in Figure 32. Model is based on information that was gathered during this study. Model is applicable for new projects and renovation of old facilities. Main actors in the model are City of Turku, facility users and stakeholders.



Participant colors: T – Turku, S – Skateboarders, D – Designers, O – Others, C – Construction, F – Facility related (land, regulations, standards)

Figure 32: Service Blueprint for skateboarding facility development.

The Service Blueprint outlines the development process for new skateboarding facilities in Turku, emphasizing stakeholder collaboration, communication, and transparency at every stage:

1. **Pre-Service Phase:** Stakeholders identify needs, and the City of Turku provides information on existing facilities and plans. Clear communication and accessible resources ensure shared understanding.
2. **Data Gathering:** Information on current facilities, user needs, and locations is collected and shared. Transparency and accurate documentation keep all parties aligned.
3. **Design & Planning:** The city collaborates with designers and stakeholders to create plans reflecting community needs. Regular updates and documentation ensure alignment.
4. **Tendering:** Tendering documents prioritize quality, with stakeholder involvement ensuring standards are met. The city oversees the process while engaging stakeholders for review and feedback.

5. **Decision Making:** The City of Turku selects the contractor with stakeholder input, ensuring transparency and accountability. Decisions are clearly documented and communicated.
6. **Construction:** Regular monitoring ensures adherence to design, safety, and quality standards. Updates are shared to keep stakeholders informed.
7. **Post-Service Evaluation:** After completion, the project is evaluated against initial goals, with lessons documented for future initiatives. Stakeholder feedback ensures the facility meets expectations.

New facility development

The new concept for skateboarding facilities in Turku offers an innovative and adaptable approach, potentially extendable to other public sports facilities. Key elements include:

- **Scalability and Flexibility:** The concept is scalable and adaptable to other sports, allowing modifications to meet unique needs while maintaining a consistent framework for public sports facilities.
- **Public Sector Integration:** It aligns with the City of Turku's processes for planning, approvals, and operations, ensuring resources, maintenance, and public engagement fit within the city's governance model.
- **System and Process Design:** Built on system design principles, the facility integrates into a larger public service network. A process-oriented approach optimizes activities like maintenance and user engagement, ensuring seamless operation across subsystems.
- **Implementation:** The facility complies with public sector norms for accessibility, safety, and inclusivity. Community involvement through workshops and consultations ensures it meets local needs. Sustainability is prioritized for long-term maintenance and viability. Visible aspects like events enhance engagement, while operational tasks remain behind the scenes.
- **Broader Application:** While designed for skateboarding, the concept's scalability and integration principles make it adaptable to facilities like BMX parks, basketball courts, or gyms, with adjustments for specific sports.

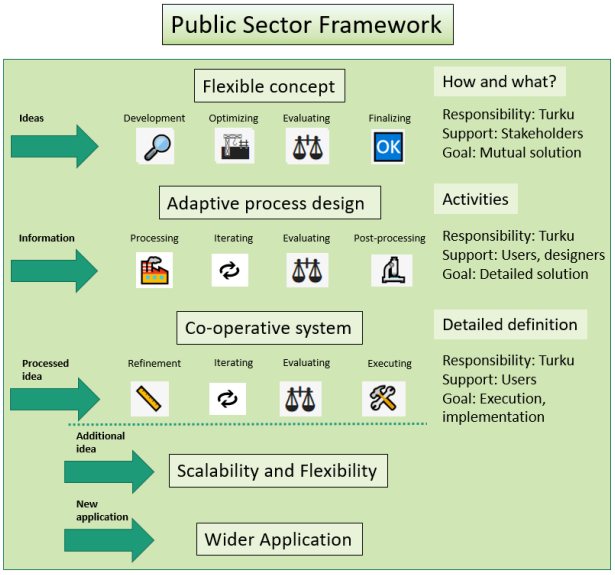


Figure 33: New concept framework.

The new concept is a forward-thinking approach for skateboarding and public sports facilities (Figure 33). Scalable and based on system principles, it offers a flexible model that can adapt to public sporting needs. Aligning with the City of Turku's service project systems ensures a community-oriented, sustainable solution. This framework is always evolving.

The planning phase is crucial and should involve thorough stakeholder engagement, clear communication, and defined timelines. Responsibilities for each project phase must be established early. The planning should account for various possibilities, balancing user needs with practical limitations.

The City of Turku has several options for land use:

1. The city builds and maintains the facility.
2. The city rents land for external parties to build the facility.
3. A combination of both.

Stakeholders must agree on design, ownership, and maintenance responsibilities. Professional design is key to ensuring quality, as previous projects in Turku have suffered due to poor design. Associations can help with design and provide expertise.

Ownership and responsibilities, including financial support, must be clarified in the planning phase. The city can decide ownership, but associations and companies may also participate, with public sector support.

Funding for facilities remains a major challenge. A new funding concept should explore external funding sources, including sponsorships, associations'

contributions, and DIY initiatives where users take on design, building, and maintenance. A combination of these approaches may work best.

Construction must consider land analysis, materials, and user needs. Professional skatepark builders, preferably with experience, should be used to ensure quality.

Maintenance is critical for facility usage. Without proper maintenance, facilities remain underused and unsafe. A clear maintenance plan should be part of the planning phase.

3 Conclusion and discussion

This study used various methods, with the most effective being direct user feedback through interviews, workshops, meetings, and observations, which provided crucial insights into user needs.

Double Diamond
The thesis introduces a new concept for skatepark design and communication, emphasizing:

- Clear communication with associations and skateboarders.
- Involving relevant partners at each project stage.
- New funding methods for skateparks.
- Efficient land usage and organizational transparency.

These strategies aim to improve design, communication, and maintenance of skateparks.

Empathy Map: The Empathy Map helped explore diverse perspectives, encouraging new insights into user experiences and challenges.

Co-design Workshop: The workshop provided a space for honest feedback, highlighting issues like bureaucratic delays, safety concerns, and the need for better coordination between skateboarders and the city. Parents emphasized safety and accessibility.

Interviews: City officials acknowledged challenges in meeting the skateboarding community's needs. TRU ry faces funding and participation issues, while maintenance concerns have caused dissatisfaction. However, collaborative efforts, like the Teräsrautela skatepark, show potential for improvement. Interviews reveal frustration with poor communication, unsafe parks, and a lack of proper design.

Observations with Skateboarding Workgroup: The Turku Skateboarding Work Group has improved collaboration, leading to better communication and safer, higher-quality skateparks.

Benchmarking: Turku lags behind cities like Tampere and Helsinki, which have better-designed and more accessible skateparks. Turku can improve by learning from these cities' success in communication and facility development.

SWOT Analysis: Turku has a solid base, but funding, maintenance, and challenging terrain limit progress. The city can learn from Tampere's collaborative efforts and leverage its Resident Budget to fund skateboarding projects. The global rise in skateboarding presents an opportunity for Turku to become a skateboarding hub.

Scenarios

1. **Status Quo**: No new investments, but skateparks continue to deteriorate.
2. **Smaller Parks**: Multiple smaller parks across neighborhoods, fostering community engagement but limited for advanced skaters.
3. **Large Skatepark**: A central, high-quality facility could boost Turku's reputation, but it’s costly and may face accessibility issues.
4. **Hybrid**: Combining smaller parks with one large facility balances accessibility and advanced needs, but it requires significant investment and coordination.

Personas: The persona analysis highlights frustrations with poor facility conditions and bureaucratic obstacles. Skateboarders want to contribute to improvements but face challenges in doing so. Simplifying communication and centralizing information would help address these issues and retain skaters in Turku.

Service Blueprint: The blueprint for skateboarding facilities in Turku outlines a collaborative process involving stakeholders and focuses on sustainability, accessibility, and inclusivity. It suggests flexible approaches to land use and funding, with a strong emphasis on proper planning, construction, and maintenance to ensure long-term facility success.

3.1 Potential solutions

Organization: A centralized department or task force for skateboarding would improve communication, streamline decision-making, and foster collaboration with skateboarders. Other Finnish cities have seen positive results from this approach, enhancing both facilities and relationships with city officials.

Communication and Planning: Regular meetings between city officials and skateboarding representatives ensure community involvement in planning. Reducing bureaucracy and improving transparency in facility decisions can prevent misunderstandings and foster trust. The city should clarify timelines, funding decisions, and roles to improve coordination. A flexible, adaptive decision-making process is needed to address urgent needs and simplify application procedures.

Skateboarder Engagement: Encouraging skateboarders to join local associations and host events or competitions can raise awareness and increase support for better facilities. This engagement may also help secure more funding.

Sustainability: The city should prioritize sustainable designs, such as concrete skateparks and modular facilities that can be updated. Supporting DIY projects like the Teräsrautela miniramp builds community involvement and ownership.

Youth: Turku has high demand for skateboarding lessons, indicating a need for expanded infrastructure and programs. The city could benefit from skateboarding educational pathways in high schools, attracting youth and supporting the local skateboarding community. Modernizing facilities will attract more youth and promote physical activity Figure 34.

Land and Space: Skateparks should be multi-functional, integrating with the local community through seating, greenery, or public art. Proper placement and community involvement in planning will ensure accessibility and minimize resistance.

Funding: Innovative funding options include sponsorships, private fundraising, facility rentals, community-driven construction, and public-private partnerships. These can provide sustainable solutions for facility development and maintenance.

Figure 34: Teräsrautela miniramp. Operated by Turun Rullalautailijat ry on the City of Turku land.

Conclusion

The proposed new concept offers a comprehensive and future-oriented framework for improving skateboarding facilities in Turku. By addressing communication, stakeholder involvement, funding, land use, and the need for a skateboarding coordinator, this approach provides a clear path forward. It recognizes the complexities of managing urban skateparks but also offers realistic solutions that can be implemented over time.

4 Future work

The study’s outcome exceeded expectations, with a new, larger skatepark now under planning for the City of Turku. This development is supported by city officials and many politicians, showing a strong collective will to see the project realized in the coming years. While the final outcome depends on the political decision-making process, the momentum behind the project is promising.

The success of this initiative is credited not to the study itself but to the many individuals who have long supported and worked toward improved skateboarding facilities. The skateboard community is optimistic about the future, and this research provides valuable ideas and guidelines on improving skateboarding spaces. It serves as a resource for city officials, decision-makers, and facility users, helping to shape the development of better skateboarding infrastructure in Turku.

In the Skateboarding Workgroup meeting on August 7, 2023, the City of Turku announced its plan to build a new large skatepark, ideally located near public transportation for easy access. This news came as a surprise to many attendees, including the author. The study's objective has always been to advocate for a large skatepark near the city center and well-connected by public transport.

The workgroup meetings have been an effective platform for sharing information, and the city has recognized the need for improved facilities. Skateboarders have also engaged with politicians, helping to raise awareness among decision-makers. The active involvement of local skateboarding associations has contributed significantly to this progress, leading to a positive outcome.

There is now a shared understanding among political parties in Turku regarding the situation. Plans are underway to design the new facility in the Kupittaa area, with construction expected between 2026 and 2028. The park will cater to skateboarders, BMX riders, scooters, and inline skaters, accommodating all skill levels from beginners to advanced users (Kossila Eino, 2023; Hovi, 2023; Mäkinen Janina, 2023).

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Appendix 1: Upframing Service Design

Service design research and usage area is really wide, but it fits perfectly to this research study. The main issue from the research point of view is to understand problem correctly, develop possible solutions and provide solutions Double Diamond is a great method to approach the problems area. However, upframing the Service Design (Figure 35) in this case could bring more knowledge for the City of Turku about Service Design process (Patrıcio Lia, 2018; Katzan Harry, 2011).

It is well known fact that Service Design, methodological traditions and different perspectives are lacking full understanding between each other. Service innovation is focusing more on the process development and not certain end-product, even process can be called end-product as well. The developing process that supports Service Design process has been found useful and in this study, it would bring extra value for the City of Turku. For example, the most researched area in this field is healthcare, which needs new innovations in the whole Finland (Ostrom, 2015).

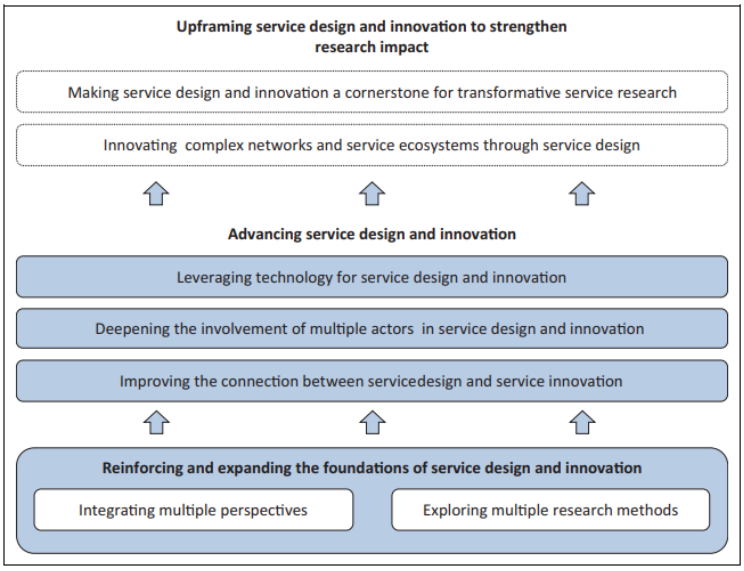

Figure 35: Strengthening the foundations to advance and upframe service design and innovation (Patrıcio Lia, 2018).

Reinforcing the foundations of service design and innovation

In service design and innovation, it is important to integrate multiple perspectives and use various methodological approaches during the process. This is a conclusive aspect of developing successful and impactful services.

Integrating Multiple Perspectives for Service Design and Innovation

In service design and innovation, it's essential to consider viewpoints from various stakeholders, such as customers, employees, partners, and even competitors. Each perspective brings valuable insights and can contribute to creating a holistic and effective service. By involving these different perspectives, it is possible to enhance user-centricity, which can be done by understanding the needs, preferences, and pain points of various stakeholders. This ensures that the designed service aligns with real-world requirements. Knowledge helps to identify opportunities of diverse perspectives. Diverse perspectives can uncover opportunities for innovation that might not have been apparent from a single viewpoint (Figure 36).

Risk mitigation is a must when researching different angles. Examining a service from different angles helps identify potential risks and challenges early on, allowing for proactive mitigation. Collaboration with different stakeholders usually creates good service. A common language (Figure 36) and shared understanding among stakeholders facilitate collaboration and communication, leading to more successful implementation (Patrıcio Lia, 2018).

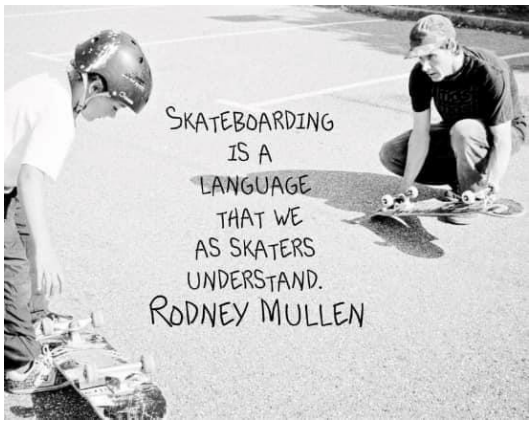

Figure 36: Skateboarding language meaning by Rodney Mullen.

Exploring methodological approaches to service design and innovation

Service design and innovation are complex processes that benefit from a multidisciplinary approach. Exploring various methodological approaches ensures a comprehensive understanding of the problem and encourages creative solutions. Different methods reveal diverse sides of a problem, leading to a deeper understanding of its complexity. Employing various methodologies can spark innovative ideas and solutions that might not appear through a single approach. A combination of methods allows you to address distinct aspects of the problem, leading to more well-rounded and effective solutions. Not all problems can be solved using a single approach. Different challenges require different methods, and being adaptable in your approach is key.

While integrating multiple perspectives and exploring diverse methodological approaches are valuable, it's important to acknowledge the challenges.

Incorporating various viewpoints and employing multiple methods can be time-consuming and resource intensive. Managing and synthesizing diverse perspectives and methodologies can be challenging, requiring skilled facilitation. Different perspectives can lead to disagreements. Effective conflict resolution is essential to ensure that the process remains productive.

The process of service design and innovation benefits greatly from embracing diversity in perspectives and methodologies. This inclusive and adaptable approach enhances problem-solving, generates innovative ideas, and increases the likelihood of creating services that truly meet the needs of users and stakeholders (Patrıcio Lia, 2018).

Connection between service design and service innovation

There can be misconceptions and overlaps between design and innovation, especially in the context of services. The relationship between service design and service innovation is crucial for creating successful and impactful services. Service design focuses on creating user-centered, efficient, and effective service experiences, while service innovation involves generating innovative ideas, processes, or technologies to enhance services. Bridging the gap between these areas is essential to ensure that innovative ideas are translated into practical and user-friendly services.

New forms of involving customers

Customer involvement is vital in service design to understand their needs, pain points, and preferences. Traditional methods like surveys and interviews may not always capture the full spectrum of customer insights. Exploring new ways, such as co-creation workshops, ethnographic research, and participatory design sessions, can provide deeper and more holistic customer engagement. Involving other stakeholders, such as employees and partners, can also lead to more comprehensive service solutions (Patrıcio Lia, 2018).

Leveraging technology for service design and innovation

Technology has significantly transformed the landscape of service design and innovation. Advances in data collection, analysis, and visualization have enabled designers to gain valuable insights into customer behavior and preferences. Machine learning and AI can help predict customer needs and personalize services. Virtual and augmented reality can aid in prototyping and testing service concepts. Embracing these technological tools can lead to more efficient and effective service design processes (Patrıcio Lia, 2018).

Keeping the customer at the center

Placing the customer at the center of service design is fundamental. It ensures that the resulting services address real customer needs and provide valuable experiences. Techniques like journey mapping, personas, and empathy mapping can help designers gain a deep understanding of customer perspectives. Regular

user testing and feedback loops also contribute to continuous improvement (Patrıcio Lia, 2018).

Challenges in customer involvement

While involving customers is decisive, it can sometimes be challenging to gather meaningful insights. Some customers might not be readily available for participation, or their feedback might not accurately represent the entire user base. Creative methods for remote involvement, such as online collaboration platforms and virtual focus groups, can help overcome geographical and scheduling constraints (Patrıcio Lia, 2018).

Historical development and future trends

The evolution of service design since 1982 reflects the changing landscape of customer expectations and technological advancements. Looking forward, staying updated with emerging technologies and design methodologies is essential. Collaborations between designers, technologists, and domain experts can foster innovative solutions that meet the evolving needs of customers and businesses. Focus on advancing the connection between service design and innovation, enhancing customer involvement, and leveraging technology is aligned with the contemporary trends in these fields. By addressing the challenges and opportunities that has been identified, it is possible to contribute more effective and user-centered service solutions (Patrıcio Lia, 2018).

Upframing Service Design

In the pursuit of advancing research impact, a strategic approach to Service Design and Innovation emerges as a pivotal factor. This strategy reaches its zenith in the final stage, which should be embraced only when the preceding stages have been meticulously executed. The category titled "Innovating Complex Value Networks and Service Ecosystems through Service Design" encapsulates this intricate phase. A notable characteristic of this phase is the substantial volume of data, the intricate interplay of networks, and the involvement of numerous stakeholders. The culmination of these efforts yields a new process, underpinned by accurate data, disseminated through interconnected networks, and endorsed by engaged stakeholders.

The dynamism intrinsic to the Service Design process becomes apparent as it evolves through its various stages. Within this paradigm, the emergence of Transformative Service Research as a nascent service-oriented discipline holds significance. This research avenue is characterized by its dedication to enhancing human well-being through the medium of services. Positioned as the linchpin for this evolving domain, Service Design and Innovation claim a pivotal role. This trajectory has witnessed the gradual crystallization of making Service Design and Innovation a cornerstone for Transformative Service Research.

Throughout this journey, the human aspect emerges as a focal point. The crux of Transformative Service Research revolves around enhancing human well-being, and this sentiment is mirrored in the central position accorded to Service Design and Innovation. These elements converge to cultivate an environment where the intricacies of complex value networks, the dynamics of service ecosystems, and the aspirations of stakeholders coalesce.

Integration of Service Design and Innovation into Transformative Service Research constitutes a multi-faceted progression. It thrives on the foundation of sequential stages, thrives in the domain of intricate networks and stakeholder engagement, and converges on the shared goal of augmenting human welfare. This narrative not only reflects the evolving landscape of service-oriented research but also underscores the transformative power of aligning design and innovation with the betterment of human lives (Patrıcio Lia, 2018; Oertzen Anna-Sophie, 2018).

The last stage is quite advanced and should be only used when stages before are fulfilled. Category: “Innovating Complex Value Networks and Service Ecosystems through Service Design” is understandable, but it consists large amount of data, networks and stakeholders. This is one of the last stages to develop new processes and all data should be right, networks must know about the new process and stakeholders have to be involved.

Service Design process is usually dynamic process. Transformative service research is a relatively new service research area that focuses on improving human wellbeing through service. Making Service Design and innovation a cornerstone for transformative service research is growing subject and human aspect is in the center (Oertzen Anna-Sophie, 2018).

Appendix 2: Co-design results in original words

Wording in English is translated and edited by author to be understood right way.

Current facilities

- Investing in certain destination(s) and not to every facility too little.
- Clear fencing of the skateboarding area and rules.
- Fixing and enlarging Kupittaa skatepark like it was done in Naantali (piece by piece during few years).
- Covered places for skating in the rain/wind, for example Teräsrautela miniramp.
- Fixing current small places with professionals. Good flat ground is important.
- Thinking more about beginners in the parks.
- What is future of the great indoor skatepart Cube? It is overcrowded and obstacles are the same (Skate, BMX, scooters, different associations).

Future facilities

- Concrete park immediate vicinity of the Turku center.
- Urban spots in the city center.
- More covered skateparks (old parking halls, factories, etc.).
- Concrete skateparks, pool and/or miniramps with lights in the parks. This could be combined with other activities also (coffee, music, etc.).
- Indoor skatepark Cube should be transferred under “Liikuntatoimi”, which could allow better opening hours.
- Possibility to loan/rent equipment.
- Skatepark in Hirvensalo should be re-design properly and not just buy cheapest obstacles there.
- Professionals should build possible concrete parks and skateboarders should be actively involved in the design process.

Skateboarders’ involvement

- It’s not enough if the City of Turku is listening if skater made designs do not happen.
- If skaters do place themselves in the city, as is suggested, who is responsible? Why don’t all sports have a similar approach? Ice hockey and football players could build their own also then?
- Skateboarders could build new places, but there should be a promise not to tear places down from the city and also appropriate compensation.
- Appreciating skateboarders’ wide knowledge in building and designing new parks.

- Seems that there is lack of knowledge and will from the City of Turku to develop skateboarding facilities. This does not motivate skateboarders.
- The City of Turku has been rather quiet. No information sharing. No idea what to do with indoor skatepark Cube in the future. Minimum information about Telakkaranta situation.
- Public skateparks will only be there if there is public funding.

Turku in negative light?

- No understanding or knowledge.
- No funding or will.
- Other sports get funding.
- Fragmented decision making in City of Turku.
- Skateboarding is not seen as preventive medicine for youth problems.
- There is clearly missing someone, who takes responsibility in the City of Turku when it comes to skateboarding.
- Problem solving motivation versus Positive motivation.