

# COLLABORATIVE DESIGN SPRINT:

## EMPOWERING MUNICIPALITIES IN CLIMATE ACTION

### WHAT IS DESIGN SPRINT?

Design sprint is an **intensive workshop** that brings together individuals from diverse backgrounds to collaboratively search for optimal solutions to predefined problems. Its inherent nature fosters creativity and validates outcomes in real-world scenarios.

The design sprint methodology was created by Jake Knapp, John Zeratsky, and Braden Kowitz, who, while working at **Google Ventures (GV)**, recognized the need for a structured and time-efficient process to move quickly from ideation to product development. Their book "Sprint: How to Solve Big Problems and Test New Ideas in Just Five Days" introduced the design sprint methodology to the public in 2016. Since then, it has gained popularity as a powerful approach for problem-solving and innovation across various industries.

In contemporary times, design thinking has gained significant popularity. It simplifies even intricate problems, holds universal applicability, and invites participation from representatives of all stakeholder groups involved in a specific problem. This inclusive approach enhances the likelihood of achieving **successful solutions**. Design thinking is proving to be ideal for **addressing the complex and challenging problems** confronting our society today.

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### WHEN IS IT APPROPRIATE TO ORGANIZE A DESIGN SPRINT?

This poster highlights the application of Design Sprint as an empowering tool for municipalities in tackling climate change impacts through participatory approaches. By leveraging the principles of collaboration, rapid prototyping, and user-centered design, Design Sprint offers a structured framework for municipalities to engage stakeholders, co-create innovative solutions, and foster climate resilience. Drawing on interdisciplinary research and case studies, this poster explores the scientific merits and practical benefits of Design Sprint in enabling municipalities to navigate the complex challenges of climate change. It showcases the potential of Design Sprint as a catalyst for participatory decision-making, efficient problem-solving, and sustainable transformation, providing a pathway for municipalities to actively address climate change impacts and shape a more resilient and sustainable future. Join us in exploring the transformative possibilities of Design Sprint for municipalities at the intersection of climate action and participatory governance.

### WHAT DOES DESIGN SPRINT LOOK LIKE?

Design Sprint, in general, involves tackling a specific challenge or problem for which a solution is sought. It brings together a diverse team of individuals with various areas of expertise and experience, collectively working towards finding innovative solutions. The process typically unfolds in several distinct phases, each serving a specific purpose.

By following iterative and structured design thinking process, Design Sprint enables the team to rapidly progress from understanding the problem to creating a tangible prototype that can be tested and refined based on user feedback. This approach fosters innovation, reduces the risk of failure, and provides a streamlined path towards effective solutions.

### WHAT ARE THE BENEFITS OF DESIGN SPRINT FOR THE PARTICIPANTS AND THE CITY ITSELF?

The design sprint methodology offers numerous benefits to all stakeholders involved, including both the participants and the city as a whole. The primary objective is to streamline the service delivery process, which in turn brings advantages to various parties involved.

For the participants, the design sprint places them at the heart of an intensive and creative process. It provides them with a unique opportunity to contribute their own ideas and test their feasibility in practical scenarios. Additionally, working in diverse teams allows participants to engage with individuals they may not have otherwise encountered, fostering collaboration and expanding their professional networks. Ultimately, by participating in the design sprint, they demonstrate their responsibility towards the city of Prešov and its residents, actively engaging in the pursuit of positive change.

As the design sprint aims to deliver tangible improvements, representatives from the city are invited to be part of the design process and participate in decision-making regarding the selection of ideas and solutions. This involvement significantly increases the likelihood that the resulting prototype will be further developed and seamlessly integrated into the city's governance structure. By incorporating these improvements, the quality of life for the city's inhabitants can be enhanced, ensuring a positive impact on their overall well-being.

Overall, the design sprint methodology offers a win-win situation. Participants gain valuable experience and the opportunity to make a meaningful contribution, while the city benefits from innovative ideas and solutions that lead to an improved service delivery process, ultimately enhancing the quality of life for its residents.

### DESIGN THINKING ADVANTAGES

- ✓ Streamlines the service delivery process
- ✓ Enhances the experience of service users, improving their quality
- ✓ Empowers participants to contribute their ideas and test feasibility
- ✓ Fosters collaboration and networking among participants from diverse backgrounds
- ✓ Demonstrates responsibility towards the city and its residents
- ✓ Involves city representatives in decision-making for selecting ideas and solutions
- ✓ Increases the likelihood of prototype development and integration into city governance
- ✓ Positively impacts the quality of life for city inhabitants

At any given time, companies, organizations, or service providers may encounter situations where they need to propel ongoing projects forward, resolve critical issues, or tackle complex problems. In such scenarios, a design-oriented approach, coupled with creativity and teamwork, can be immensely helpful.

Design sprint is one of the tools offered by the design thinking approach. It emulates the various stages of the design process, but in an intensive and condensed format. Its notable advantage lies in its ability to provide a glimpse into the future, saving resources, energy, and, importantly, time. In fact, it can be completed within a few days, as opposed to the several months typically required for the traditional product or service development process.

Integral to the design sprint is the involvement of users and all stakeholders. This inclusive approach ensures that representatives from all parties and invited experts engage in meaningful dialogue, working together to address specific tasks using targeted tools.

Just as physical products continuously evolve, the services provided by cities can also be intentionally designed and improved. Design has the power to shape and enhance the intangible aspects of our surroundings. A notable strength of design thinking is its unwavering focus on the user, placing their needs and experiences at the forefront of the problem-solving process.

Additionally, design thinking combines the elements of what is humanly desirable - addressing the needs and wants of service users - with what is feasible and economically viable. When it comes to city service design, the ultimate end user is the citizen.

By embracing a design thinking approach, municipalities can ensure that their services are not only effective and efficient but also genuinely meet the needs and aspirations of their residents. This user-centered perspective enables cities to create meaningful and impactful solutions that enhance the overall quality of life for their citizens.

### CASE STUDY 1

**Design sprint challenge: Mitigating the Heat Island Effect in the city of Košice**

Certain areas in Košice experience significantly higher temperatures compared to their surrounding regions, leading to discomfort for residents, particularly during the summer months. This phenomenon, known as urban heat islands, adversely affects the city's overall quality of life and the well-being of its inhabitants.

In response to this challenge, participants of the Design Sprint focused on developing innovative solutions with the aim of mitigating the heat island effect. Their proposed solutions revolved around three key areas:

- **Increasing Urban Green and Water Areas** (urban greenery, water retention...)
- **Applying Smart Solutions** (sensors, data-driven analysis to identify hotspots...)
- **Architectural Solutions and Landscaping of Public Spaces** (green roofs, vertical gardens, shade, airflow...)

### CASE STUDY 2

**Design sprint challenge: Efficient Management of Textile Waste in the City of Prešov**

Textile waste poses a significant environmental challenge that demands immediate attention. With recent legislative changes mandating cities and municipalities to take responsibility for waste from the textile and clothing industry, the City of Prešov is actively seeking solutions that promote sustainable consumption and production while minimizing the environmental impact of textile waste.

The Design Sprint teams focused on addressing several key issues related to efficient textile waste management:

- **Communication with Citizens:** One of the primary concerns was establishing effective communication channels between the city and its residents regarding textile waste management. Participants explored innovative ways to raise awareness, provide clear guidelines, and encourage active participation in textile waste collection and recycling initiatives.
- **Placement of Textile Waste Containers:** Another challenge discussed was the strategic placement of textile waste collection containers throughout the city. Design Sprint participants analyzed the city's infrastructure, public spaces, and residential areas to identify optimal locations that would maximize convenience for residents and encourage proper disposal of textile waste.

- **Reuse of Textile Waste:** Recognizing the importance of circular economy principles, the teams also focused on promoting the reuse of textile waste. They brainstormed creative solutions to encourage upcycling, donation, and repurposing of textile materials, thereby reducing waste generation and extending the lifecycle of textiles.

Throughout the workshop, valuable feedback was provided by an employee from the City of Prešov Department of Environmental Protection. This collaboration enriched the learning experience for the students, as they gained insights into the practical considerations and challenges faced by the city in implementing sustainable waste management practices.

The Design Sprint event served as an excellent platform for students to refine their critical thinking and problem-solving skills while actively contributing to addressing the pressing environmental issue of textile waste management. By developing innovative solutions in collaboration with city representatives, the participants aimed to pave the way for a more sustainable and responsible approach to textile waste in the City of Prešov.

## DESIGN THINKING PROCESS

