

SkopjeLab

City of Skopje Innovation Center

Summary report

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The center is managed by SmartUp Laboratory for Social Innovation which specializes in developing innovation in the public sector.

Summary report

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Short resume

The City of Skopje Innovation Centre - Skopje Lab, established in 2017 as a project between the City of Skopje and UNDP, was the first public sector innovation centre founded within a public institution in the Balkans.

In the past 4 years, Skopje Lab has provided an example of the opportunities that emerge when diverse stakeholders, citizens and public administration, interact and collaborate. These opportunities include the application of new technologies and innovative processes for co-designing and co-creating solutions that can respond to contemporary challenges and improve the sustainability and urban resilience of the city. During this period, we implemented various activities, established multiple partnerships and partnership networks, attracted and secured financing, and most importantly, learned a wealth of lessons that gave us clear directions on how to continue our work in the future.

This report presents the key areas in which Skopje Lab worked, the goals, implemented activities and accomplished results.

Regarding the lessons learned, below we share some insights, vital not only for the future work of the centre but also the future workings of the City.

- Consistent and open interdepartmental communication in the City will ensure good strategic planning and effective implementation of projects and programmes and service delivery
- Digitalization or digital transformation of services and internal processes will help with more easily addressing ongoing demands from citizens, increase efficiency, improve work tracking, transparency, and aid the leadership to make better-informed decisions. In addition, digitalization will provide savings, not only in terms of working hours but also in organizational resources (human and financial) and will have a multiplying effect in decreasing the issues that arise in the city due to the need to acquire services in-person (decrease in traffic, due to a decreased need to physically arrive at the service-provider location, which will in turn help decrease the need for parking and lessen the burden on public transport, decrease crowdedness in public institutions, in turn making it easier to respond appropriately in times of a pandemic without significant interruption in service delivery, and, most importantly, decrease corruption)
- A clear, well-communicated vision for the city is key for increasing the trust citizens place in institutions, and for increasing citizen involvement, both active and passive, in the processes for planning, designing, implementing and monitoring various measures, policies and rules. A clear, well-communicated vision is especially important when it comes to attracting new partners, financiers and supporters
- Continued professional development is a trigger for public administration to more effectively carry out their work. Some of the areas identified that require capacity-building efforts are project management, financial instruments and opportunities for establishing public-private partnerships, managing processes for the active involvement of citizens and policy design

- A hands-on, creative and multisectoral approach to building and strengthening capacities in public administration can be very effective, especially when it includes the creation of spaces for collaboration and learning
- Giving employees decision-making authority can lead to increased efficiency in task completion, in initiating new activities and in generating new ideas for improving work. Additionally, it can lead to increased work-derived pleasure and motivation.
- Promoting and supporting the work of public administration is an especially influential motivation factor - the opportunity for each department to present their work is a good first step towards encouraging innovation in the public sector
- A clear understanding of ongoing issues is key for well-defined challenges and needs and solution generation
- Employees directly in contact with users (citizens) during service delivery are a vital link in the system and should be included in the design process for user-facing services because they can clearly define ongoing issues and challenges
- Designing clear, well-structured operational plans for project and activity implementation is very helpful for efficient project implementation
- Regular updates and reporting are especially important for successfully monitoring work and for knowledge transfer in public administration
- Implementing the ISO 9001 standard and regular updating of documentation will contribute to increased effectiveness and easier identification of improvement opportunities
- Regular monitoring of service delivery and a clear plan that will be communicated with the public in terms of steps towards improvement is an especially important element that can significantly contribute to increased trust from citizens and their continued participation in activities carried out by the city

Priority area

Capacity building in public administration

The capacity building process was designed with the goal of answering the needs of the public administration, in accordance with recommendations from the management of the City of Skopje and through continuous communication with the administration of the City of Skopje.

The main aim of the capacity building programme was to introduce the public administration with subjects, concepts, methodologies and tools that will enable them to effectively improve work processes, decrease service-delivery time, support the project preparation process and digital transformation, with the aim of building up the city's resilience and prepared it to face future challenges.

In the 2017-2021 period, a significant number of workshops, trainings and programmes for service design were held, with the participation of more than 150 public administration employees from the administration of the City of Skopje and its partners and collaborators, mainly other municipalities and public enterprises. In addition, events open to the public were also organized (TEDx), where representatives from the public administration had the opportunity to take part, not only as participants but also experts and share their insights and knowledge from the everyday work of the City.

Some of the subjects covered over the past 4 years through the work of Skopje Lab were:

- Human-centred design for improving public services
- Public sector innovation / Social innovation
- System thinking and system innovation
- Methods and tools for digital research
- Digitalization and digital transformation
- Project development
- Impact investing

Additionally, a number of trainings and guides were developed to ensure knowledge will be preserved internally and improve knowledge transfer.

Completed activities and results achieved:

- Developed the first innovation framework of the city - process, service and policy innovation - [see more](#).
- Conducted 3 workshops on the subject "Human-centred design for public service innovation" and 6 other workshops on the same subject as part of other projects. A total of 25 employees were afforded a basic level of training in designing and developing innovative public services
- Conducted a 2-day workshop on the subject "Design thinking for project proposal development". A total of 17 participants developed 3 project concepts that can, later on, be evaluated and developed further (Landfill management, Hydro powerplants on the water pipes in the City of Skopje, Partnerships for active management of air pollution) - [see more](#).
- Conducted 6 workshops on tools and methods for digital innovation
 - Introduction to "Typeform", a tool for the creation of interactive forms for improved citizen engagement - 15 people - [see more](#).
 - Introduction "Canva", a tool for the creation of fast and simple designs - 15 people
 - "Digital storytelling in government" for improving interaction with citizens and citizen participation - 15 people
 - These workshops were attended by people from the Department for International Cooperation, the unit for Culture, the Department for Support of the Mayor, and the Skopje Urban Living Lab
 - "Freshdesk" and "Fresh connect" tool for tasks management - attended by 60 people coming from the Department of the Inspectorate - [see more](#).
 - "Social media training for the Skopje Urban Living Lab assistant"
- Conducted 1 workshop on the subject "Research design and digital research methods" with 10 participants from several departments
- Conducted 5 introductory technical workshops for using:
 - Google Drive, Google Docs and Excel - for the employees of the Citizens information centre
 - Stroymaps platform - 1 employee from the IT sector
 - Mailchimp tool for creating newsletters - 2 employees from the Environmental Protection Department
 - Typeform tool - 2 employees from the Trade Union of employees of the City of Skopje
- Prepared 4 digital handbooks and video material for 4 digital tools (Advanced Word, Excel, Survey Monkey, and Zoom) - [see more](#).
- Developed an "Innovation development handbook" - [see more](#).
- Conducted a training for using drones, flying and analysing thermal maps in collaboration with the Faculty of Computer Science & Engineering - see more.

Priority area

Citizen engagement

The goal of the following activities was to inform the public about SkopjeLab, the work it does and the opportunities it offers for more active citizen participation in service, project and policy design processes. Additionally, the goal was to inform citizens and all stakeholders about new trends, opportunities, concepts and ideas that will, in the future, contribute to the development of new initiatives for better functioning of and living in the city.

In the past 4 years, Skopje Lab completed the following activities:

- Open survey for gathering citizens visions on Future Skopje 2020 - [see more](#).
- Open survey for evaluating citizens satisfaction with the public services offered by the City of Skopje 2018-2019 - [see more](#).
- Open call - competition for multidisciplinary teams for the design of a Velo Parking (bike parking). Organized 2 workshops for participating teams with the aim to introduce them to the user-centred design process. Organized a public presentation of the concepts, where a winning solution was chosen. For the process, see more [here](#) & [here](#). See the presentation of the solutions at the City Hall [here](#).
- Organized a discussion on the subject "Design for the benefit of pedestrians" 2021 - [see more](#).
- Organized the first Creative Business Cup 2021 - [see more](#), [Facebook event page](#).
- Organized a conference on the subject "Creative industries - the new engine of the Macedonian economy" 2021 - [see more](#).
- Open call for promotional material design for awareness-raising for citizens on energy efficiency (posters and badges) - 1st and 2nd places awarded - [see the call](#)
- Developed 1 booklet in 3 languages, 4 brochures and 1 promo video in collaboration with the Environmental Protection Department for awareness-raising
- Promo video in 3 languages - [mk](#), [en](#), [alb](#).
- Printed brochures in 3 languages - [mk](#), [en](#), [alb](#).
- Participated in [SKEEOR 2020](#) a student conference, where SkopjeLab and the promo materials for EE were presented
- Organized a webinar on the subject "Solar Energy in Skopje - challenges and opportunities" 2020, with 4 experts taking part (MANU, City of Krizhevci, Solar Association, City Energy Systems) and around 200 viewers - [event video](#), [insights](#).
- Organized a week-long campaign Energy Facts, promoted by Skopje Lab and the City of Skopje, 2020
- Development of questionnaires for mapping locations to plant trees and gathering suggestions for street names

- Organized an event ["#FutureCities: through the prism of neighbourhoods"](#) in collaboration with UNDP, with the aim of including key stakeholders in the process of identifying the challenges Skopje faces
- Organized the ROCK Hackathon, Young Ecopreneurs Climathons 2018 and [ROCK Project](#) - [see more](#).
- Conducted field research focused on how households separate and throw away waste and organized 5 workshops (2017-18) based on the design thinking process with a user-centred approach, with 20 participants from the public, the private and non-government sector and citizen - users, in order to identify and design solutions for improving primary selection and waste disposal from households. Developed 4 solutions to the challenges - [see more](#).
- In collaboration with Nula Otpad (Zero Waste) organized a youth event "Kuliraj, recikliraj, doniraj" - [see more](#).
- Organized 7 TEDxSalon events - 2017-2018 (The future of public services; Carsharing - The future of mobility; Education: Flipped classroom; Creative industries - A spectrum of possibility or a closed circle of ideas?; [Your choice for urban mobility: Biking](#))
- #ZapoznajGiSkopjani initiative with the goal to tell the stories of citizens and reach local and national leaders and other citizens and initiate positive change in the lives of Skopje citizens

In addition to these events, the Skopje Lab team regularly organized meeting with citizens and stakeholders (companies, NGOs, public sector representatives, academia representatives) with the goal of identifying opportunities for collaboration and collective action.

Priority area

Digitalization & Service redesign

This part includes all the activities where the focus was on (re)design and digitalization of public services. To identify the needs for (re)design and digitalization, internal research was conducted with the employees of the City, as well as, with the public services users. According to the outcomes of the research, multiple analyses, co-creation and public service redesign processes were conducted, resulting in solutions with varying degrees of complexity and granularity.

The aim of the activities from this priority area was to improve on public services, both from the user perspective (by making them more intuitive, easy to use and efficient) and from employee/service provider perspective (by improving internal organization and synchronizing process).

The guiding principle for these activities was the active inclusion and participation of all relevant stakeholders - users, employees/service providers, external collaborators - in the service redesign process, to effectively utilize their experiences and knowledge and create relevant services that will be easy to use and provide.

Completed activities and results achieved

Digitalization

- Support for the Department of Culture in developing a grant application form and setting up a system for automatically generating documentation for each call applicant
- Results: 538% increase in application numbers from 2018-2020
 - 2018 (offline) - 138 application
 - 2019 (online form) - 490 applications
 - 2020 (online form) - 711 applications
- Development of an [NGO register](#) and [user manual](#). The goal was to enable NGOs to better present themselves, share information on their activities and receive regular updates on opportunities for collaborations and project applications.

Service redesign

- Redesign of a service for the submission of grants for NGOs
 - Conducted 3 workshops for identifying challenges in the ongoing procedure, mapping the service flow and stakeholders, mapping and developing new processes for online application for grants and UX design for several types of users on the platform
 - Result - fully mapped redesign process that in the future can be a basis for a fully developed technical solution - [see more](#).
 - Development of a simple version for the suggested platform according to the available budget - [see more](#).
 - Organized 5 training for familiarizing administration with the new process

- Testing the system with 20 users
 - Organized 4 additional sessions with the Commission for subsidy approvals and representatives from the relevant City departments, in order to ensure a successful knowledge transfer process and e-application evaluation
 - Organized 3 working sessions with the IT company responsible for maintaining the City's IT system, to synchronize and automate the process for receiving applications
- Redesign of the bulky waste collection service - see more [here](#), [here](#) & [here](#)
 - Active participation of citizens, experts and other relevant actors through 4 design thinking workshops to ensure the redesigned service will meet user needs adequately
 - Design of the digital service platform
 - Development of detailed instruction for implementing the redesigned service, including an action plan, additional service and a draft ISO procedure for managing bulky waste
 - Creation of a campaign for promoting the service
 - Testing the service with end-users to validate the design
 - Identifying multiple opportunities for the development of new commercial services for the City
 - Redesign of the "Correct address" service - in consultation with the relevant departments in the City, to digitalize the service and synchronize the systems used by the various actors involved in service delivery - [see more](#)
 - Analysis of the ongoing service - challenges, ISO procedures, technical requirements, communication models
 - Conducting 2 working sessions to validate the insight and to evaluate the redesigned service respectively
 - Draft for the redesign and digitalization of the service, with detailed process mapping
 - Format in accordance with the e-uslugi.gov.mk form
 - Testing the new model with 50 users

- UX testing for the National portal and Single Point of Service - with the aim to evaluate, validate and generate future directions for improving user experience - [see more](#)
 - Conducted testing of the National portal with 40 users
 - Conducted testing of the Single Point of Service with a spatial prototype and 40 users
 - Developed 2 reports with recommendations on improving both services, with the aim of meeting user needs and improving user experience

Priority area

Urban resilience

The activities in this area are focused on building up urban resilience through addressing diverse, multisectoral challenges - such as building databases focused on the challenges the city faces, increasing green spaces and developing solutions for the management of greenery in the city.

Completed activities and results achieved

- Public space redesign - a multi-phase project, with the aim of identifying public spaces that need to be revitalized and developing concepts for their redesign, co-created with users - [see more](#)
 - Ethnographic and user research, with the aim to identify needs, challenges and ideas, including observation, interviews and an online questionnaire
 - Development of redesign concepts for 10 locations
 - Conducting 2 workshops for developing redesign concepts for 9 more public spaces
 - 9 concepts delivered, with detailed visualization for further development
 - Participation of 35 young professionals in the co-design process
 - Including and connecting multiple stakeholders from the private sectors and securing co-financing to implement part of the projects
- Green cadastre - facilitated 2 workshops for developing a management and maintenance model for the City of Skopje Green Cadastre - [see more](#)
 - With the participation of representatives from the City of Skopje, PE Parks and greenery and the 10 municipalities in Skopje, to define a proposal for a management and maintenance model for the City of Skopje Green Cadastre
 - Developed a report, based on the workshop outcomes, with a proposed model for management and maintenance of the City of Skopje Green Cadastre
- Open Data for the Inspectorate of the City of Skopje - see more [here](#) & [here](#)
- [SkopjeSeZagreva](#) - interactive web-platform with data visualization based on the data gathered through research on how citizens in Skopje heat their homes in 2017д
 - Conducted research with ~5000 answers
 - Data analysis
 - Developed an open, publicly available platform with interactive data visualizations

Priority area

Green & Sustainable development

Completed activities and results achieved

- Development of a Guide for Impact Investing for the City of Skopje, that can be used by other municipalities or local self-government units - [see more](#).
- The Case for the Economic Decarbonization of Skopje - [study](#).
- Impact Investment portfolio - development of a project portfolio with projects with the potential for positive impact - [see more](#).
- Mapping of existing strategic documents and including relevant stakeholders with the aim to build up a database of projects with impact potential.
- Summary report on accomplished results - [see more](#).
- Development of a framework for evaluating impact potential - part of the Impact Investing Guide.
- Evaluating the gathered projects based on their impact potential, structuring them in a portfolio of ~60 projects for the City of Skopje.
- "SE Europe Regional Financing Mechanism for Thriving Cities" - [see more](#).
- Developed an interactive visualization platform about the circular economy in North Macedonia - [see more](#).

Attracting financing

Financing was key to implementing the planned SkopjeLab activities, their scaling-up, which opened up the possibility of including more partners for implementing the project portfolio. In the past four years, SkopjeLab has actively been working on identifying opportunities for financing, preparing concepts and project applications.

Part of the applications were implemented and as such are included in this report, part are yet to begin with implementation and are listed below, and part were unsuccessful, but present an opportunity in that they can be further developed and used when future opportunities for applying have been identified.

Ongoing and/or implemented:

EIT Climate KIC - Future Cities of SEE - prepared in collaboration with SmartUp - submitted and approved, ongoing implementation

EY проект - Digital ALL - prepared in collaboration with SmartUp - submitted and approved, ongoing implementation

EIT Climate KIC SE Europe Regional Financing Mechanism for Thriving Cities - submitted, approved and implemented

GIZ - Velo Parking - prepared in collaboration with SmartUp - submitted and approved, rejected

IPA 2 for Municipalities: Improving Local Government Services through Innovative Concepts - RE-Construct (Re-use and management of Construction and Demolition Waste) - approved and awaiting to begin implementation

Prepared and rejected

Bloomberg Mayors challenge 2021 - applied and rejected

IKI Small Grants - Climate change mitigation through scalable municipal bio-waste management model in the Republic of North Macedonia - in collaboration with SmartUp - submitted and rejected

H2020 - LC-GD-3-2-2020 - URBANABILITY - application prepared for the City of Skopje portion, in partnership with SmartUp and 14 EU partners - submitted and rejected

H2020-LC-GD-2020 (Building a low-carbon, climate resilient future: Research and innovation in support of the European Green Deal) - DG - NUDGE - in collaboration with SmartUp and 15 EU partners - submitted and rejected

PA Civil Society Facility and Media Programme 2018-2019 - CE4Good Citizen Empowerment For sustainable Green urban Development - Prepared in collaboration with SmartUp and 5 EU partners - submitted and rejected

H2020-LC-GD-2020 (Building a low-carbon, climate resilient future: Research and innovation in support of the European Green Deal) - TREE - in partnership with SmartUp and 35 partners - submitted and rejected

Media presence and promotion

Blogs - <https://skopjelab.medium.com/>

- Interview with Skopje Lab coordinator - Public spaces can be enhanced with the active participation of the local community
- Redesign of Public Spaces in Skopje 2.0: Molding Creative Mindsets
- The future of decision making in the public sector
- Measuring the Immeasurable: SHAPE TOMORROW TODAY: SKOPJE CASE
- Skopje is my city - the urban transformation starts with the citizens
- A Revived Skopje Cityscape by 2023
- Designing an Impact Investment model for Local Government
- How does Skopje from the Future look like?
- Solar potential in Skopje - Opportunities and challenges
- The use of drones by local governments: collecting data for monitoring rivers and streams
- SKOPJE'S FIRST THERMAL MAP! Are Urban Heat Islands Real? Blog about Green public space project
- Innovation in the public sector – reality or illusion?
- Redesign of Green Public Spaces in Skopje
- Let's Reduce, Reuse, Recycle E-waste!
- Measuring the Immeasurable – A Public Space Profile of Skopje
- Measuring the Immeasurable – Sustainable Development Goals and Public Space in Cities
- Skopje Thermal Map – the warmest hotspots in the city and measures to tackle the problem
- Analysis of the effects of urban heat islands in Skopje

Some of the online events Skopje Lab has participated in

- Placemaking in the Western Balkans - Symposium on Sustainable Cities through Place-Led Development
- #VozmoznoE - Real discussions for real solutions for ambitious climate actions
- Cities as places of hope - Green European Foundation
- UNDP BiH Future Cities Virtual Forum 2020
- UN Online discussion - Digitalization, innovation and public services
- Presentation of the Open data platform of the Department for Inspectorate in front of the representatives from the Municipal groups from the whole country

Guides

- NEW GOVERNANCE MODELS FOR CREATIVE, SUSTAINABLE AND CIRCULAR CITIES
- GROWING GOVERNMENT INNOVATION LABS An insider's guide



Redesigned public space in Aerodrom - Public Space Redesign project, 2020



Velo Parking - Public Space Redesign project, 2020

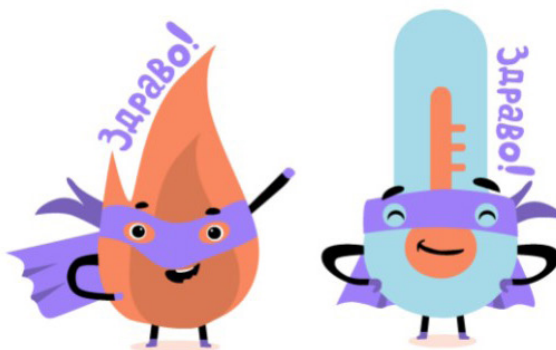
#SkopjeSeZagreva Open Data

Погледни ги сите
податоци и
сценарија

Во продолжение на ова алатка се наоѓаат податоци од спроведеното истражување во Јануари, 2017 - #СкопјеСеЗagreва, каде беа анализирани начините на кои граѓаните во Скопје ги загреваат своите домови. Алатката има за цел прикажување на интерактивни сценарија како и отварање на можности за специфична анализа на податоците согласно потребите на граѓаните и експертите. Истата е изработена со финансиска поддршка од UNDP во Microsoft алатката "PowerBI".

Селекција на параметри (одберете еден или сите три)

Општина
All <input type="checkbox"/>
Изолација
All <input type="checkbox"/>
Какво гориво користите како ОСНОВНО за греење на објектот?
All <input type="checkbox"/>



Главни податоци

Interactive platform "Skopje Se Zagreva" (Skopje is Heating Up)



First regional workshop, Future Cities of South East Europe, 2019

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