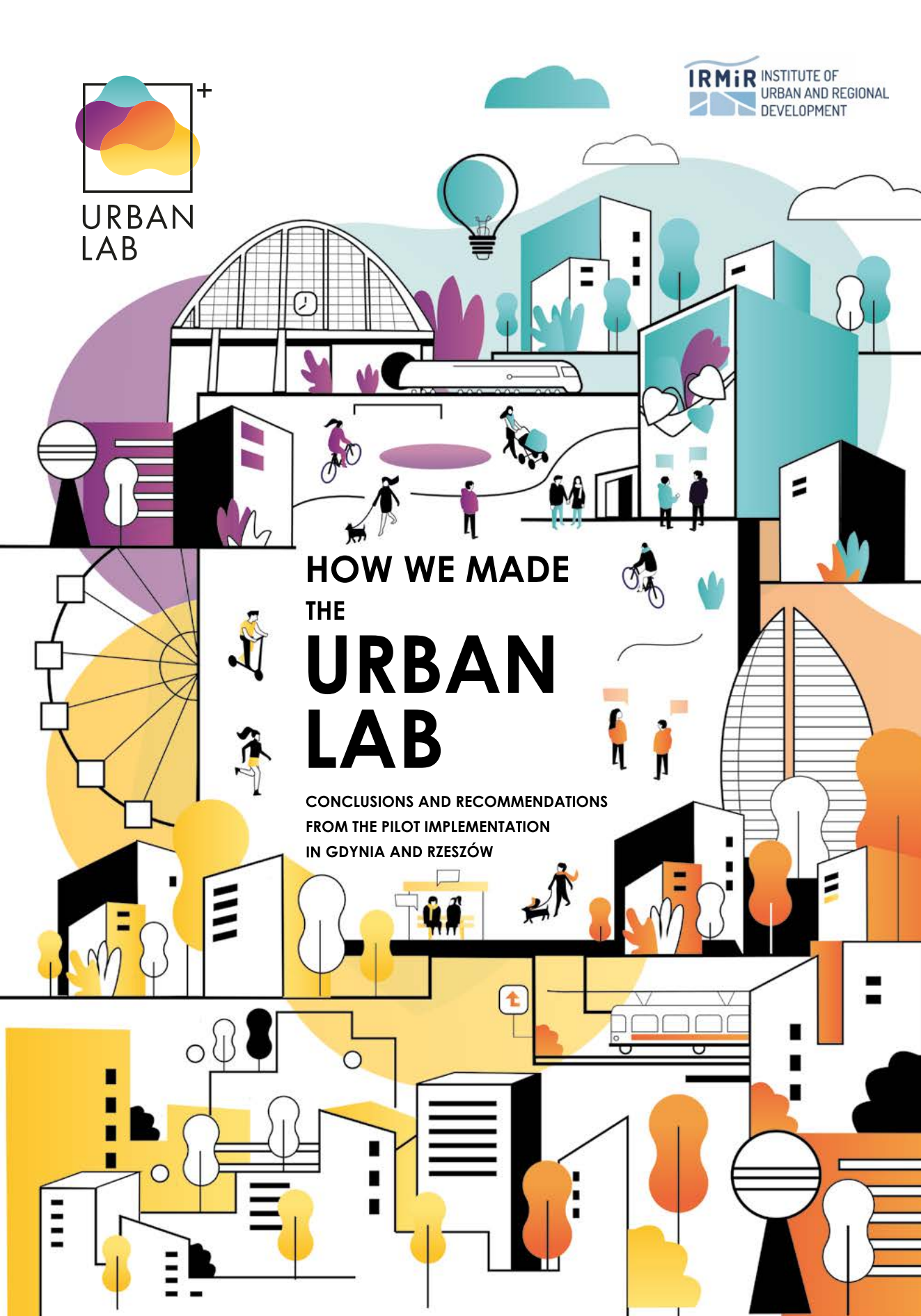




URBAN
LAB

HOW WE MADE THE URBAN LAB

CONCLUSIONS AND RECOMMENDATIONS
FROM THE PILOT IMPLEMENTATION
IN GDYNIA AND RZESZÓW





HOW WE MADE THE **URBAN LAB**

CONCLUSIONS AND RECOMMENDATIONS
FROM THE PILOT IMPLEMENTATION
IN GDYNIA AND RZESZÓW



Publication prepared by the design team of the Institute of Urban and Regional Development edited by Magdalena Bień and Bartosz Piziak, featuring: Jakub Depa, Wojciech Jarczewski, Katarzyna Ner.

Cooperation

Ewa Kubejko-Polańska, Aleksandra Markowska, Aleksandra Zemke and teams of the Ministry of Development Funds and Regional Policy: Aleksandra Guzowska and Karolina Centomirska, Urban Lab Gdynia: Joanna Krukowska, Magdalena Dębna, Magdalena Żółkiewicz and Urban Lab Rzeszów: Małgorzata Michalska, Justyna Puzio, Kamil Czyż.

Publisher:

Instytut Rozwoju Miast i Regionów
ul. Targowa 45
03-728 Warszawa
Poland
www.irmir.pl

Copyright © by Institute of Urban and Regional Development, Warsaw-Krakow 2021

ISBN: 978-83-67231-03-9

Proofreading: Anna Kędroń

Typesetting and text up: Stereoplan; Aleksandra Stowińska, Kinga Trzepla

Cover design, illustrations: Stereoplan; Aleksandra Stowińska, Kinga Trzepla

Translation: Iwona Kukla

Circulation: 300 pcs.zł.

Prepared by the Institute of Urban and Regional Development within the project *Urban Lab as a pilot tool to improve the quality of life of city residents in line with the smart city concept (2019–2021)* in cooperation with the Department of Assistance Programmes of the Ministry of Development Funds and Regional Policy co-financed by the European Union under the Operational Programme Technical Assistance 2014-2020 on the basis of the agreement no. DPT/BDG-II/POPT/18/19..



Rzeczpospolita
Polska

Unia Europejska
Fundusz Spójności



Introduction

6

1. Adaptation of the urban lab model in Gdynia and Rzeszów

– theory versus reality 9

1.1 A model approach to the urban lab adapted to Polish conditions 10

1.2. Urban Lab Gdynia 17

1.3. Urban Lab Rzeszów 27

1.4. The role of the Institute of Urban and Regional Development in the project 38

2. The organisational structure of urban labs 51

2.1. The urban lab team 52

2.2. The Strategic Group 59

2.3. The Thematic Team 63

3. Activities of Urban Labs in Gdynia and Rzeszów

– good practices 69

3.1. Opening up urban data 69

3.2. Urban Hackathon 77

3.3. Urban Innovation Incubator 82

3.4. Rzeszów Urban Research Laboratory 98

3.5. Gdynia Dialogue Platform (Decidim) 102

3.6. Urban Cafe 106

3.7. Other activities undertaken at the labs 111

References 119

List of figures 119

List of tables 120

List of photographs 121



Introduction

The project of pilot implementation of urban labs in Polish cities was conducted between 2019 and 2021 and largely coincided with the extremely difficult time of the COVID-19 pandemic. Prepared at the Institute of Urban and Regional Development in cooperation with the Department of Assistance Programmes of the Ministry of Development Funds and Regional Policy, the innovative concept of an urban institution that is aimed at solving specific problems and addresses the challenges of urban development and management by, among other things, sharing urban resources, but above all through the involvement of inhabitants, proved to be a successful idea that is worth disseminating.

The success of the project has been confirmed by numerous awards and distinctions (eight in total) received by the Municipality of Gdynia and the Municipality of Rzeszów, where urban labs were tested, and by the Institute of Urban and Regional Development. The justification for these awards often included a model – innovative in Poland – of cooperation between officials and residents with other city stakeholders, including representatives of the scientific community, business and non-governmental organisations, as well as a method of joint development of urban solutions which improve the quality of life.

The period of testing the urban lab instrument in two Polish cities also made many people realise what additional possibilities urban labs can offer and how to encourage residents to become active in them. The element of the laboratory called the "urban cafe" by the authors of the concept proved to be significant in this respect, as coffee was to play a key role in the debate and dialogue of the whole city. It fulfilled its function, and the urban cafe went from being an element constituting the background for the functioning of an urban lab to becoming one of its "driving forces". It also worked well in the formula of a virtual laboratory, when meetings,

workshops or discussions were held online, but nevertheless gathered numerous representatives of various circles interested in the directions of the city's development, as well as the exchange of ideas and views.

Three years ago we set ourselves an ambitious task: to carry out together – with the help of different institutions and teams – a three-year experimental implementation which was hindered by the COVID-19 pandemic. Today, summarizing the project in the publication you are reading, we can confirm that the objectives established at the beginning of the project were achieved and the tasks faced by both Urban Labs, in Gdynia and in Rzeszów, were successfully fulfilled. Two Urban Labs, whose diversity and individual way of realizing tasks are the added values of the project, have been implemented and their experience may now be used by other Polish cities.

This publication is addressed primarily to local government employees responsible for innovative urban projects, including mayors and presidents, who are looking for an effective and tested mechanism for co-managing cities. We would also like this book to reach out to all those who intend to get involved in the process – representatives of non-governmental organisations, academics or entrepreneurs, but also, and perhaps most importantly, residents. It aims to provide practical and concrete knowledge on the functioning of urban labs in Polish cities, along with adapting to unusual situations and responding to emerging challenges. The publication presents the experiences of the teams from the Institute of Urban and Regional Development, Urban Lab Gdynia and Urban Lab Rzeszów, as well as good practices arising from the implementation of urban labs.



1. Adaptation of the urban lab model in Gdynia and Rzeszów – theory versus reality

Developed at the Institute of Urban and Regional Development (IURD) in 2018, the author's urban lab concept and its model were a response to the lack of application of this type of instrument in Polish cities. The next step in this urban experiment was to test the urban lab in two Polish cities – Gdynia and Rzeszów – and to see in real conditions how the functioning of such labs can contribute to the co-management of cities by different stakeholder groups in order to improve the quality of residents' lives.

When in February 2019 the Urban Lab team at the IURD started, in cooperation with the Ministry of Development Funds and Regional Policy and thanks to funding from the Operational Programme Technical Assistance, the implementation of the project entitled *Urban Lab as a pilot tool to improve the quality of life of city residents in line with the smart city concept*, intensive work with the cities of Gdynia and Rzeszów was already being completed, consisting in adapting the idea of implementing urban labs to their needs and adjusting it to the conditions of each of these cities.

The assumptions for the implementation of the pilot project in both cities were therefore based on the urban lab model proposed in the IURD concept, in which the main components were defined, i.e.: the stakeholders of the urban lab, the scope and methods of its operation along with evaluation and the good urban practices developed as a result of its operation.

1.1.

A model approach to the urban lab adapted to Polish conditions

The realisation of the pilot implementation of Urban Labs in Gdynia and Rzeszów and the cooperation of the project teams from both cities with the Urban Lab team at the IURD, in the years 2019-2021 coordinating the entire project substantively, allowed to draw a number of conclusions regarding the proposed model, which are presented later in this subsection.

At the same time, testing of the urban lab in two Polish cities enabled a much broader perspective on the reception of this tool by their inhabitants and other city stakeholders, and – due to the leading role played by City Halls – also made it possible to determine the approach to the project of city officials and councillors themselves.

In the urban lab model originally proposed by the IURD, based on the concept of the quadruple helix, there was room for four groups of urban stakeholders (Bień et al. 2020). These consisted of inhabitants and representatives of the public sector, the private sector and scientific institutions. Such an approach to the implementation of urban projects – taking into account the cooperation of these four groups – was a novelty in Poland.

During the test implementation of Urban Labs in Gdynia and Rzeszów it became clear that in this model of cooperation the role of the residents is even more significant,

yet in the course of various activities it was evident that the citizens were divided into “the involved”, activists, most often engaging individually, and people gathered around municipal non-governmental organisations (NGOs), with which they strongly identified themselves.

Due to this, a change in the approach to this specific urban ecosystem was introduced and consequently two independent elements were separated from the quadruple helix: “inhabitants”, i.e. “inhabitants” and “NGOs” (fig. 1). Such a situation is described in numerous works published in recent years by Igor Calzada (2018a, 2018b, 2020) who undertakes a methodological discussion on the helix framework (moving from a triple helix, through a quadruple helix, to a penta helix) from the perspective of implementing social innovation in cities. The author also points out the unique role of urban activists and individual social entrepreneurs (2020), as they are often the initiators of change in the interaction between stakeholders. It is not infrequently indicated that such persons, while observing the society, notice certain problems or challenges and provide an impulse to introduce innovative solutions, which will prove sustainable and, as a result, will be able to change the social fabric.

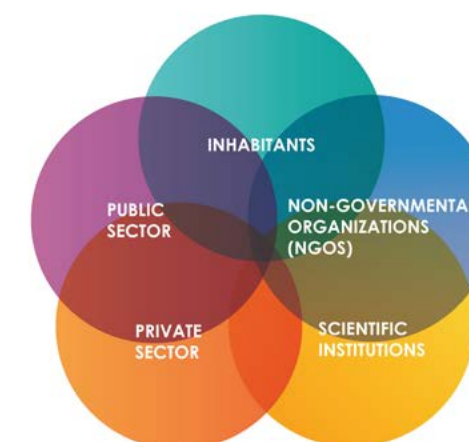


Fig. 1. A penta helix as a new model of cooperation between various groups of urban stakeholders undertaken in Polish urban labs
Source: own study

The decision to modify the figure presenting the penta helix so that the various stakeholders permeate the environments even more is not without reason, as it is not unusual for an individual to represent two or more interest groups, which further contributes to the close interaction of the key partners.

It should be clearly emphasised that cooperation in the implementation of smart projects must be based on trust and the involvement of all parties in the urban ecosystem. In order to achieve this, flexibility is also necessary to be able to try out new approaches in new partnerships which will be overseen by the Urban Lab team. What the effects of solving social problems can be and what value they can generate for society is further discussed in chapter 3.

The scopes of urban lab activities proposed in the original model by the IURD team can be very diverse and cover a wide range of urban issues. The model approach specified: open urban data, urban innovation incubator, technological innovations, social innovations and urban space management (Bień et al. 2020). At the same time, the authors stressed that this is not a closed catalogue and it can be supplemented or detailed by a given city depending on the identified challenges and assumed objectives of the urban laboratory.

It should be mentioned that in various city labs in the world only selected issues are addressed (e.g. only opening up and sharing urban data, urban mobility and transport or social innovation); rarely are all the mentioned fields of activity realised. The fact that the ambitious task set for Gdynia and Rzeszów in the pilot project has been achieved to a very large extent is all the more remarkable.

Both in the area of opening up and sharing data as well as the functioning of the city incubator with prototyping and test implementation of social and technological innovations in the two cities, a number of good practices have been developed, which are described in detail in Chapter 3. The task of managing the city space is within the competences of other units of City Halls – both in Gdynia and Rzeszów – but

it has also been possible to arouse the residents' interest in these complex issues and to involve them in the co-management of their cities, which is also discussed in subchapters 1.2. and 1.3. For many of the activities implemented, the conceptual assumptions that the proposed scopes would be complementary and intertwined have been confirmed.

At the end of the pilot project, the authors of the model urban lab decided to complement it with one additional area of activity – the **urban cafe** (fig. 2). Initially the activities within the framework of the "urban cafe", despite the fact that the authors of the concept drew attention to its important role, were placed as if in the background of the functioning of the whole urban laboratory and the processes occurring in it. However, the experiences of Gdynia and Rzeszów, where a cup of coffee was accepted by the inhabitants of both cities as an incentive for discussion about the city or, what is more, where the challenge of "coffee for an idea" was taken up, as well as a very large number of events organised as part of the urban cafe in both labs, thematic meetings for the residents and with their participation, workshops, and finally conferences and study visits, led to the conclusion that this element should be included in the distinguished scope of urban lab activities.

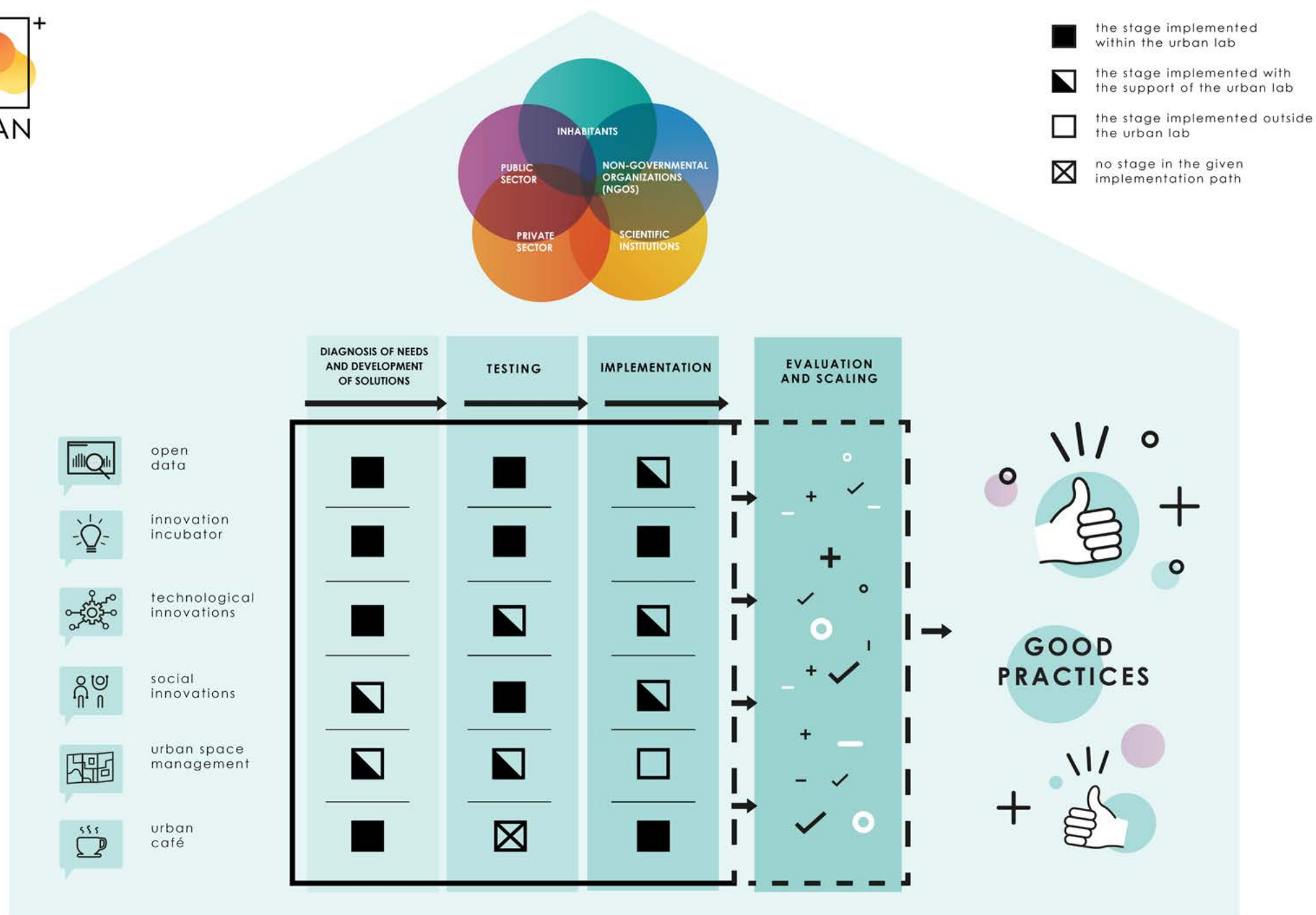


Fig. 2. The urban lab model adapted to Polish conditions updated as a result of the pilot implementation in Gdynia and Rzeszów
Source: own study

The assumption that by organising numerous events open to residents (which was effectively hindered by the COVID-19 pandemic) it would be possible to promote the idea of urban lab in both cities at a fast pace has also come true. The epidemic situation in Poland since March 2020 has also contributed to the fact that the urban cafe has been very well tested in a virtual formula, as a large part of the events were prepared by the Urban Lab teams using a video conferencing tool. This situation also influenced the fact that residents of other Polish cities started to participate in the Gdynia and Rzeszów meetings, and some also actively joined the Labs' activities.

The formula of the urban cafe as one of the pillars of the urban lab can also be an idea for smaller cities interested in implementing an urban lab, which do not have a big budget at the beginning or do not want to carry it out to the full extent, but can e.g. allocate space from city properties for meetings and discussions about the city. In the future, perhaps it might also be used for launching an urban lab.

As regards the stages of realisation of projects in the urban lab and their effects in the form of good urban practices, the authors of the urban lab model adapted to Polish conditions did not introduce any modifications (fig. 2), however, they clearly indicated (based on their experience with projects concerning e.g. urban space management) that in the case of some projects a given stage may not be realised within the urban lab at all.

1.2.

Urban Lab Gdynia



The opening of the Urban Lab in Gdynia took place on 28 March 2019, and was preceded by several months of work by the team of the City of Gdynia to adapt the concept of the urban lab to the needs and challenges of the city. The project was implemented as part of the activities of the Social Innovation Lab (SIL), which is an independent municipal budgetary unit of the Gdynia City Hall, established by a resolution of the City Council.

The decision to include Gdynia Urban Lab in the structure of the Social Innovation Lab as well as to locate it in the complex of the Pomeranian Science and Technology Park (PSTP) at al. Zwycięstwa 96/98 was undoubtedly an added value to the project already at its initial stage. The functioning of Gdynia Urban Lab within the structures of the SIL ensured that from the very beginning it was provided with a competent and experienced team as well as professional background related to designing innovations and working with the residents.

The activities of the Social Innovation Lab, focusing on the creation of innovative solutions in the social field, went beyond the standard framework of the City Hall operations from the outset (in March 2016). The Pomeranian Science and Technology Park, which is a kind of a hub for business and scientific organisations, has been actively supporting the development of innovative projects since 2001 and is



Photo 1. The seat of Urban Lab Gdynia
Author: Aleksander Trafas

a place for the exchange of knowledge and experience, primarily between entrepreneurs, scientists and designers.

For each year of the project implementation in Urban Lab Gdynia, a main thematic area was chosen, within which solutions were sought and activities undertaken. It was further developed in the course of individual activities. In the first year of implementation, the key theme was the development of civil society and increase in the capacity of local communities to solve problems. The leading theme recommended by the Strategy Group for 2020 was adaptation to climate change, and for 2021 – adaptation to life after the pandemic. It is worth noting that the latter thematic area proved to be very challenging. It was an extremely timely topic and, at the same time, increasingly discussed in the public debate. Subsequent challenges were addressed through the work of the Strategy Group, Thematic Teams, working teams, the Urban Innovation

Incubator, events, discussions and trainings at the Urban Cafe or publications. They were also reflected in the designed IT tools, organised conferences, as well as in many other individual activities of the Urban Lab.

The document entitled "Adaptation of the Urban Lab Concept in Gdynia", prepared before the beginning of the test implementation of the Gdynia Urban Lab, defines the main objectives of its functioning. In accordance with its assumptions, urban challenges were to be diagnosed in order to find innovative solutions and systemic mechanisms conducive to applying those solutions. The aim was also to develop the competencies of public administration, to establish effective methods of working with various urban stakeholders and to create space for dialogue.

In case of effective functioning of the Urban Lab, cooperation between different urban stakeholders is crucial, which in model terms correspond to the elements of the quadruple helix (inhabitants, public sector, private sector, scientific institutions). As already mentioned in the previous subchapter, the experience of both Urban Labs showed that non-governmental organisations (NGOs) also play a vital role in the city, and they were one of the most active groups involved in Urban Lab activities in Gdynia and Rzeszów. Therefore, the quadruple helix proposed in the concept of the IURD was replaced – in the case of both cities – by a penta helix, in which an additional, fifth element was distinguished – namely the representatives of NGOs.

Networking proved to be a crucial function of the Urban Lab in Gdynia, in addition to the model of cooperation between different groups of urban stakeholders, tested in real life conditions. Within the framework of the undertaken activities, the team of the Gdynia Lab, together with its partners, has managed to build strong relations both at the local and – which is worth emphasising – supra-local level.

As part of the internal cooperation, communication and information exchange between different units in the offices

of both project cities was improved. The acceleration function of the Urban Lab in terms of creating collaboration between officials was, one could say, a breakthrough and a very valuable change in both Gdynia and Rzeszów. The theme of networking various stakeholder groups was also strongly developed at the supra-local level. In Gdynia's UL, very intensive cooperation was undertaken with 12 non-governmental organisations, such as the „Obszar Metropolitalny Gdańsk-Gdynia-Sopot” (Gdańsk-Gdynia-Sopot Metropolitan Area Association), “Związek Stowarzyszenia Bank Żywności” (The Union of Food Bank Associations in Tricity), the "Na Styku" Association or the Planet For Generations Foundation (Table 1). Cooperation with business representatives, facilitated by the proximity of the Pomeranian Science and Technology Park, was also significant. The benefits of networking undoubtedly include the possibility to use common resources and the strengthening of information flow, which in effect facilitates the implementation of joint projects with other entities.

Table 1. Cooperation network of Urban Lab Gdynia

No.	Name of institution/company	Degree of co-operation (1/2/3)	Who it represents (B/I/S/P)
1	Dbam o Mój Zasięg Foundation	1	I
2	Pomeranian Science and Technology Park	1	I
3	"Gdańsk-Gdynia-Sopot Metropolitan Area" Association	2	I
4	Leszczynki District Council	2	I/P
5	District Council Forum	2	M/P
6	The Union of Food Bank Associations in Tricity	2	M
7	„Na Styku” Association	2	M
8	Planet For Generations Foundation	2	M

9	National Marine Fisheries Research Institute	2	S
10	Gdynia Film School	2	S/B
11	The Institute of Oceanology of the Polish Academy of Sciences	2	S
12	Today We Have	2	B
13	Centre for Youth Cooperation and Mobility	3	I
14	Polish Diabetes Association Provincial Branch	3	I
15	Okonakino Foundation	3	I
16	Adam Mickiewicz Institute	3	S
17	The Circular Economy Institute	3	I
18	Łąka Foundation	3	I
19	European Solidarity Centre	3	P
20	EC1 – City of Culture	3	P
21	Client Earth	3	I
22	Marcin Ochociński	3	I
23	Municipality of Kraków	3	P
24	Green Future Institute Foundation	3	I
25	Koma Olsztyn Sp. z o.o.	3	B
26	SOMA Research Laboratory	3	B
27	Costa Project Sp. z o.o.	3	B
28	University of Gdańsk	3	S
29	SWPS University	3	S/B

Source: own study based on UL Gdynia data

1 – permanent cooperation (e.g. several times a month)
 2 – periodic cooperation (e.g. several times a quarter)
 3 – episodic cooperation (e.g. once a quarter or less often)

B – BUSINESS
 I – INHABITANTS/NGO
 S – SCIENCE
 P – PUBLIC ADMINISTRATION

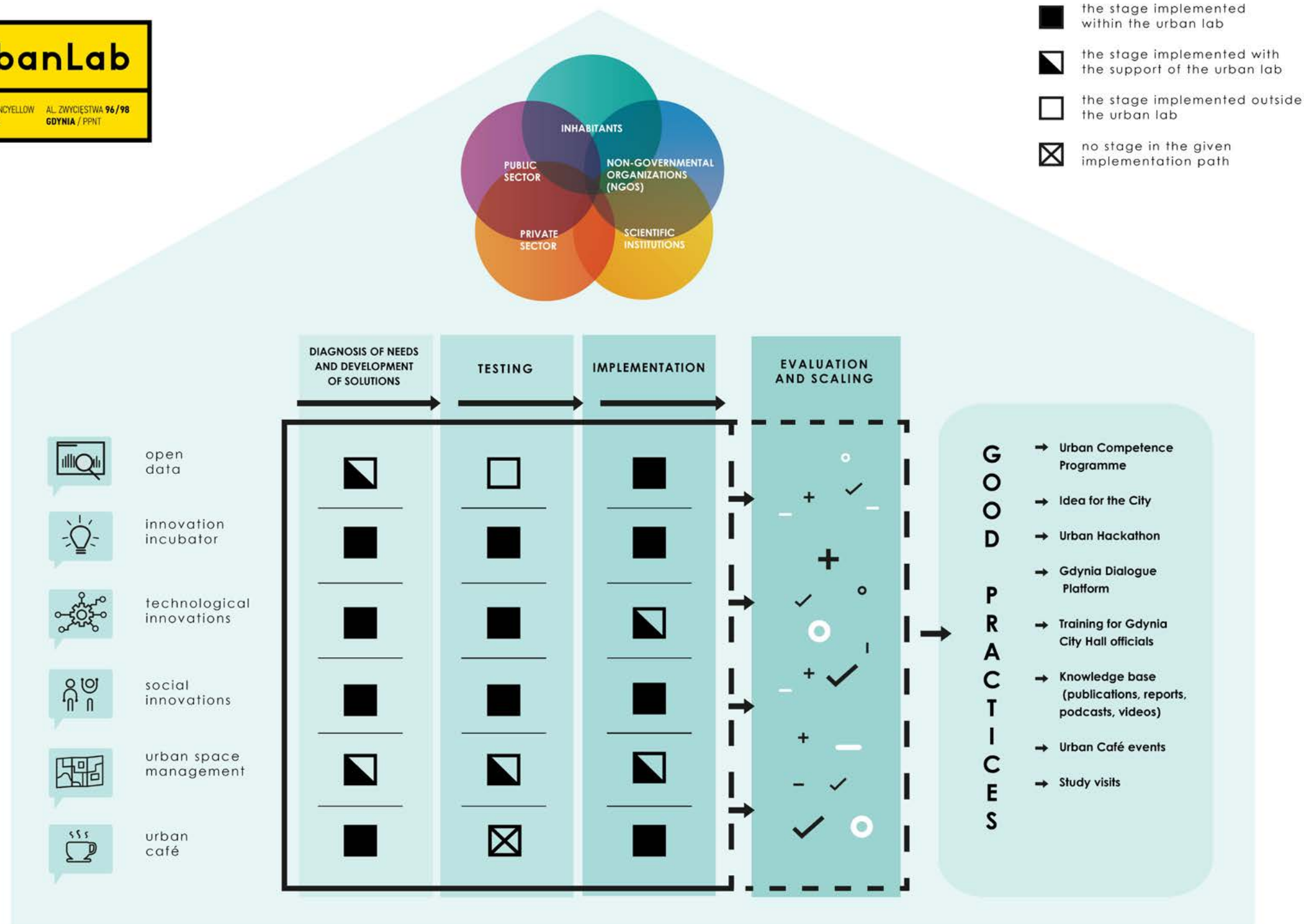


Fig. 3. The urban lab model updated as a result of pilot implementation in Gdynia

Source: own study

The tasks of Gdynia Urban Lab were executed within all areas of activities proposed in the conceptual model (fig. 3). These included:

- **Open data** – from the very start of the project in Gdynia, the Urban Lab team undertook activities related to opening and sharing city data in direct cooperation with the city unit responsible for coordinating activities between all entities in Gdynia in the field of open public data. It is worth noting at this point that since 2017 there has been a municipal open data portal (<http://otwartedane.gdynia.pl>) in Gdynia, which is supervised by a separate unit in the structure of the City Hall – an independent position for open data. At the same time, from the beginning of 2021 Urban Lab started cooperation with a person acting as an expert on open data, who for the following months was responsible for conducting the inventory, digitalization, creating schemas of data sets and developing data formats and publishing it on the server www.otwartedane.gdynia.pl. Additionally, their role was to prepare instructions for employees of the City Hall and subordinate units in order to standardize data formats. Urban Lab Gdynia, in the course of the project, also took various actions to educate and raise awareness about the importance of opening public data (trainings and workshops for officials) and to improve the process of opening data on the office level. [More about the effects of these activities in subchapters 3.1 and 3.7].
- **Innovation incubator** – this activity was implemented in Urban Lab Gdynia in the form of two complementary paths: the Urban Competence Programme (Program Kompetencji Miejskich (PKM)) and the call for the "Idea for the City". ("Pomysł na Miasto" (PnM)) The UCP is a course of practical knowledge about the city for active inhabitants and aspiring city leaders, which includes lectures and workshops on contemporary methods of city management, the creation and implementation of innovations, as well as competencies in the functioning of the city. At the end of each

edition of the UCP participants prepared a final assignment which was a continuation of one of the ideas presented in the application form for the „Idea for the City” programme. As part of the Idea for the City, there was a call for proposals for social innovation ideas that could be submitted by any inhabitant. Innovations with the highest potential were piloted in Gdynia and then evaluated. Each edition of the incubator concerned a thematic area, which was chosen as a major theme for a given project year in the Urban Lab. [More on the effects of the activities in subchapter 3.3].

- **Technological innovations** – as part of activities related to the implementation of technology-based solutions, in addition to publishing open data and supporting the plenipotentiary of the mayor of the City of Gdynia for open data in the development of the city portal, the team of Gdynia Urban Lab coordinated the process of creating the Gdynia Dialogue Platform (Gdyńska Platforma Dialogu) (<https://konsultujemy.gdynia.pl/>) based on the open source Decidim platform. The aim of the Gdynia Dialogue Platform is to build a city community and provide opportunities for easy participation in specific participatory processes. After the launch of the Platform, its management was transferred to the Research and Participation Department of the Social Innovation Lab. In the course of preparatory work for its launch, a city hackathon was organised at UL Gdynia, the challenge of which was to create an IT solution for an additional module related to the conduct of civil dialogue and a system of authentication of system users. [More on the effects of the activities in subchapters 3.2 and 3.5].
- **Social innovations** – a number of interesting social innovations were created as part of the implementation of subsequent editions of the "Idea for the City" project. In addition, UL Gdynia implemented the "Original tailor-made path" for the thematic challenge of a given project year, which consisted of many original solutions aimed at drawing

attention to the problems and needs of young people. It included, among others, the project "Leader Academy". [More on the effects of the activities in subchapters 3.3 and 3.7].

- **Urban space management** – tasks related to the management of urban space were carried out in cooperation with the Office for Spatial Planning of the City of Gdynia and were mainly in the form of thematic events organised by the UL team.
- **Urban Cafe** – is a meeting place within the Urban Lab space, where the knowledge of experts combines with the involvement of participants, motivation races with inspiration, and practical solutions and original ideas become reality. Apart from the mentioned functions, Urban Cafe Gdynia also served to promote the idea of the Urban Lab, to network urban stakeholders as well as had an educational role. Within the Urban Cafe numerous meetings, debates, lectures, workshops, film screenings or conferences were held. Due to the pandemic, the creation of podcasts on urban issues was also launched, and, as far as possible, the Urban Lab team welcomed numerous study visits from Polish cities interested in the implementation of urban labs and those carried out as part of international cooperation. [More on the effects of the activities in subsections 3.6 and 3.7].

1.3.

Urban Lab Rzeszów



The pilot implementation of Urban Lab in Rzeszów was inaugurated on 9 October 2019, however, the preparatory work related to the adaptation of the urban lab concept to the needs of Rzeszów had begun more than a year earlier.

By the decision of the Mayor of the City of Rzeszów, the implementation of the Urban Lab project was launched as part of the activities of the IT and Telecommunications Service Office of the City of Rzeszów, which operates as a department of the City Hall. The actual premises of Rzeszów Urban Lab are located in the heart of the city, at 3 Maja Street 13 – the main promenade in Rzeszów. Such an attractive location influenced the rapid growth of citizens' interest in the project itself and the recognition of the Urban Lab institution within the city space. Easy access to it also contributed to high attendance at events, the organisation of which began from the first days of the Lab's operation. Its seat, apart from short periods of hard lockdown during the COVID-19 pandemic, was open to residents – they could come in, talk, join the meetings taking place or propose their own ones. Rzeszów Urban Lab thus very quickly became a popular place for urban stakeholder activity, proving the great need of Rzeszów residents for this type of urban "institution" which would bring together different communities in joint activities.

During the almost three-year urban experiment Rzeszów Urban Lab worked in three main thematic areas. In the first year of operation, issues related to urban mobility and the implementation of solutions for sharing urban data were pursued. In 2020 the Strategic Group recommended the continuation of tasks in the area of open data and the commencement of work on issues related to improving the quality of life (*smart living*), the activities initiated earlier were also continued in 2021. The main thematic areas set for the given year were developed within the work of the Strategic Group, Thematic Teams, the Innovation Incubator, during conferences and numerous events and trainings at the Urban Cafe, as well as at urban hackathons or within a number of other individual activities of the Urban Lab. At the outset of the test implementation the main goals of the Lab were established, and to a large extent they were achieved – as part of the activities of the Urban Lab the most crucial urban challenges were diagnosed, ideas for solving them were developed, and processes were initiated to engage more groups of residents in the Lab's activities, including children and young people in social participation (designing playgrounds, elements of urban infrastructure such as bicycle, jogging and scooter paths), as well as seniors, which brought very positive results. Throughout the project, a system for opening up and sharing urban data was developed, and residents were encouraged to create and test micro-innovations that would ultimately serve them in their everyday lives. Above all, a space for joint discussion was created for various stakeholders in urban life, which in the case of Rzeszów can be considered one of the greatest successes.

In accordance with the conceptual assumptions, in order for the urban lab to be effective – which has already been mentioned in connection with Gdynia – it is crucial to create an environment for cooperation between particular urban stakeholders: inhabitants, representatives of the public and private sectors, scientific institutions and – in the expanded version of the so-called penta helix – additionally separated



Photo 2. The seat of Urban Lab Rzeszów

Source: Urban Lab Rzeszów

non-governmental organisations. Such a model of cooperation was also confirmed in the case of Rzeszów stakeholders, where a key role was played by, among others, associations and foundations actively involved in the implemented projects and tasks and very often finding space in the Urban Lab for their own activities and membership meetings.

Intensive cooperation with universities as well as scientific and research institutions, both local and from other Polish cities, could also be observed in the Rzeszów lab (Table 2). In addition to contacts at the level of inter-institutional cooperation, the personal involvement of academic staff from Rzeszów's universities, who took an active part in the work of the Strategic Group and Thematic Teams, is also noteworthy. These people had a real impact on stimulating innovation in the city space, also thanks to the involvement of students in urban lab projects. As in Gdynia, contacts established with business representatives, mainly from the very robust

IT industry (Asseco, G2A.com and the start-up environment) were a significant aspect. Examples from other industries include companies such as Early Stage or the MEDYK Medical Centre.

An important part of Urban Lab's activities were grass-roots initiatives – Rzeszowska Rada Seniorów (the Rzeszów Senior Citizens Council) was very active, as well as the already mentioned NGOs and social activists, who often used the Lab's space to organise meetings that complemented the schedule prepared by the UL team. In this way Urban Lab Rzeszów became a real platform for exchange of knowledge and experience between the involved entities.

Table 2. Cooperation network of the Urban Lab Rzeszów

No.	Name of institution/company	Degree of cooperation (1/2/3)	Who it represents (B/I/S/P)
1	University of Rzeszów	1	S
2	Rzeszów University of Technology	1	S
3	Rzeszów Senior Citizens Council	1	I
4	Kreatywny Senior Association	1	I
5	Spice Gears Academy Podkarpackie	1	B/I
6	SARP Rzeszów Branch	1	I
7	MEDYK dla Zdrowia Foundation	1	I
8	APROBATA	1	I
9	G2A.com	1	B/I
10	Union of Polish Metropolises	1	P/I
11	Association for the Support of Education "Promotor"	1	I
12	MEDYK Medical Center	1	B

13	Primary schools and kindergartens in Rzeszów	1	S
14	Cooperation with artists from Rzeszów	1	I
15	Association of People with Chronic Wounds	1	I
16	Cooperation with the Departments of the City of Rzeszów	1	P/I
17	Polish Information Processing Society – Podkarpackie Branch	2	S/B
18	Public Benefit Council	2	I
19	Warsaw University of Technology – Faculty of Transport	2	S
20	Early Stage	3	B
21	European Association for Promoting Active Mobility 50+	3	I
22	BRUNO Association	3	I
23	Parasol Foundation	3	I
24	Rampa – a portal for the disabled	3	I
25	Softwarehouse	3	B

Source: own study based on UL Rzeszów data

1 – permanent cooperation (e.g. several times a month)
 2 – periodic cooperation (e.g. several times a quarter)
 3 – episodic cooperation (e.g. once a quarter or less often)

B – BUSINESS
 I – INHABITANTS/NGO
 S – SCIENCE
 P – PUBLIC ADMINISTRATION

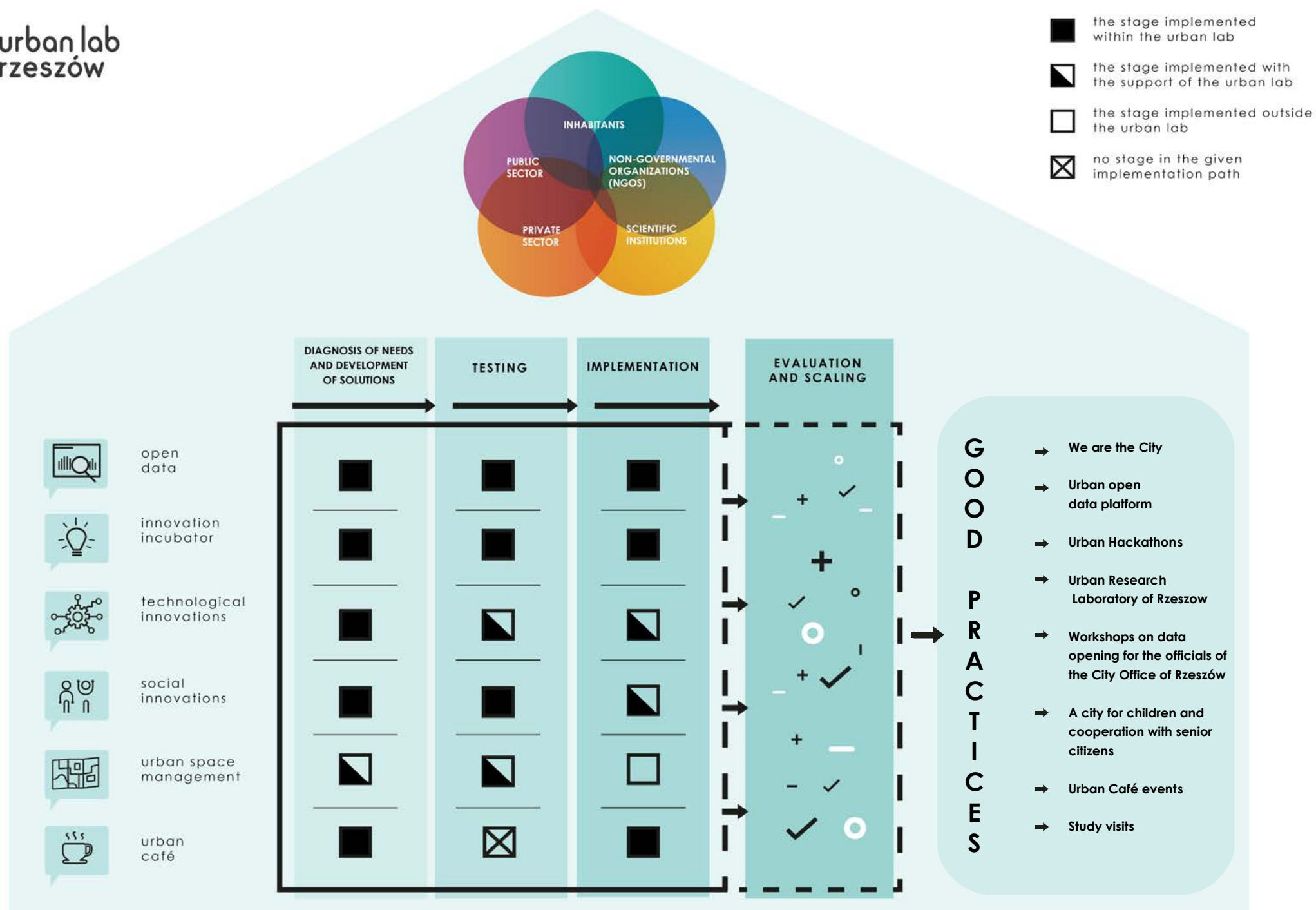


Fig. 4. The urban lab model updated as a result of pilot implementation in Rzeszów
Source: own study

In Urban Lab Rzeszów, the planned tasks were performed within the framework of all areas of activities proposed in the conceptual model, but to the greatest extent in the field of opening and sharing data, urban cafe and innovation incubator. To a lesser extent in the area of space management, since activities related to the space of Rzeszów are assigned to the competences of the City Development Bureau, with which UL cooperated closely, e.g. by providing space for open consultations on the study and local plans. Within the framework of the assumed areas of activities the following were conducted:

- **Open data** – the whole task was performed by a team from the IT and Telecommunications Service Office of the City of Rzeszów, in the structures of which Rzeszów Urban Lab operates. It included the creation and continuous development of the Urban Open Data Portal (<https://otwartedane.rzeszow.pl/>), where subsequent urban data sets are published. In the last year of the project an open data specialist responsible for the inventory and publication of data was hired and thus joined the Urban Lab team. Training sessions, followed by workshops on data opening for managers and officials of the City Office of Rzeszów were also held. [More on the effects of the activities in subsection 3.1].
- **Innovation incubator** – at UL Rzeszów, in addition to supporting the development of projects proposed by the winning teams during hackathons and organising inspiring meetings with successful people in various walks of life, "We are the City" ("Rzeszów to MY") programme was also implemented, and one of its incubation components was a competition for innovative ideas to be introduced in the city, in the form of an open call for urban micro-innovations. The best ideas were pilot tested and implemented in Rzeszów, and then evaluated. Each edition was conducted in a thematic area related to improving the quality of residents' lives. [More on the effects of the activities in subsection 3.3].

- **Technological innovations** – The implementation of the assumed tasks related to opening up and sharing urban data already in the first year of operation of the UL was the basis for the creation of an urban open data portal, and then – for the organisation of thematic urban hackathons in the Urban Lab, during which innovative solutions based on shared data sets were developed. Cyclical workshops for children and young people on designing urban spaces in the Minecraft software were also held, laying the foundations for the organisation of the Hackathon Kids event. [More on the effects of the activities in subchapters 3.2 and 3.7].
- **Social innovations** – in Urban Lab Rzeszów, a series of meetings and workshops for urban researchers and practitioners was initiated as part of the Rzeszów Urban Research Laboratory. The originators of this project were representatives of the Polish Sociological Association and the University of Rzeszów. Numerous workshops for children and youth were also organised as part of the City for Children campaign. In addition, cooperation was established with groups of senior citizens, who became actively involved in the activities of the UL. Intergenerational cooperation and activation became a very important part of the activities carried out by the UL. [More on the effects of the activities in subchapters 3.4 and 3.7].
- **Urban space management** – the Urban Lab hosted, among other things, open consultations concerning the works on the study of land use conditions and directions and local spatial development plan. Close cooperation was also established with the Rzeszów branch of the Association of Polish Architects (SARP). Its members proposed a number of open events, which were included in the UL schedule in the form of, among others, "ArchCzwartki" (ArchThursdays), i.e. close meetings with architecture, and architectural workshops for children entitled "City of Children".

- **Urban Cafe** – within the framework of Urban Cafe numerous meetings, debates, lectures, workshops and even art exhibitions were organized, which was possible due to large space of Urban Lab Rzeszów. Very active measures undertaken within the Urban Cafe also contributed to the promotion of the idea of urban laboratory among the citizens of Rzeszów, as well as the cooperation of urban stakeholders by bringing them together during various events. A conference was organised annually to address the main theme of the implementation year. There were also meetings held by different groups of residents' representatives: seniors, youth or NGOs. The team of the Rzeszów Urban Lab also received numerous delegations from Poland and abroad on study visits, during which the guests were introduced to the idea of the functioning of the urban lab. [More on the effects of the activities in subchapters 3.6 and 3.7].

Testing of the urban lab model developed by the IURD team took place in both cities under various, changing circumstances (including periods of hard lockdown during the COVID-19 pandemic and total or partial closure of urban facilities), but brought satisfactory results. A key role in the success of this project, already in its initial phase, was played by the great willingness and favour of the municipal authorities to undertake such an ambitious experiment. It is worth emphasising here the preparation and very good knowledge of the subject among the authorities of the city of Gdynia, and on the other hand the courage – despite initial difficulties and delays – of the employees of the City Office of Rzeszów and the city councillors.

The pilot projects in Gdynia and Rzeszów have confirmed – with full conviction – that the Urban Lab can be effectively implemented and managed by an appropriate team of officials and can constitute a link between various institutions in the city, helping to establish cooperation and networking this collaboration and contacts. However, the influence

on the activities of other organisational units and the possibilities of developing cooperation with them should be taken into account when deciding to place the Urban Lab team in the structure of the city office. This decision can have a real impact on smaller or larger share of some areas of activities undertaken in urban labs, as the examples of these two projects show.

Both Urban Labs have become effective instruments for addressing urban challenges and developing solutions, due to their interdisciplinary formula, undertaking activities with the involvement of citizens and experts, and implementing innovative ideas of an unprecedented nature. In areas where the resources of the Urban Lab are insufficient, it can also be a supporting tool – a space for dialogue and competence building for parties responsible for strategic decisions on city development.

Urban Labs can be treated more strategically in the planning of urban projects, but thanks to the possibility to scale their activities they may also be perceived on a smaller scale, as their tasks can be realised e.g. in a smaller urban centre.

1.4.

The role of the Institute of Urban and Regional Development in the project

The project of pilot implementation of urban labs in Poland included activities undertaken both in the Institute of Urban and Regional Development (IURD) in cooperation with the Ministry of Development Funds and Regional Policy (MDFRP), which were formalised by signing a relevant grant agreement, and between the Municipality of Gdynia and the Municipality of Rzeszów, which in order to test the urban lab instrument signed relevant agreements with the MDFRP. IURD cooperated closely with the MDFRP team, both in terms of substantive assumptions of the whole project and implementation work in Gdynia and Rzeszów.

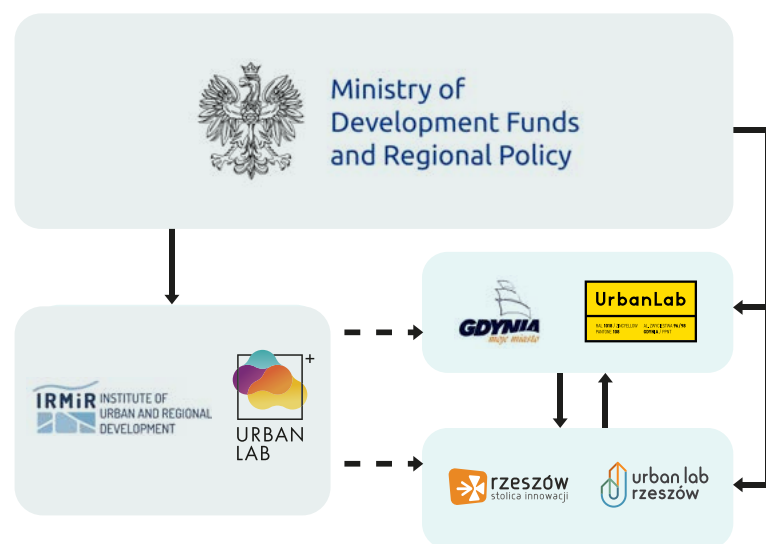


Fig. 5. Urban Lab cooperation scheme

Source: own study

At the initial stage, these activities focused on familiarizing the representatives of the above mentioned cities with the assumptions of the concept of establishing urban labs in Polish cities, and then supporting them in the preparation of documents aimed at adapting the concept developed at IURD to the needs of Gdynia and Rzeszów. This process assumed the elaboration of a detailed plan of functioning of both Urban Labs in their first year of activity together with their budgets and a framework programme of activities for the next two years.

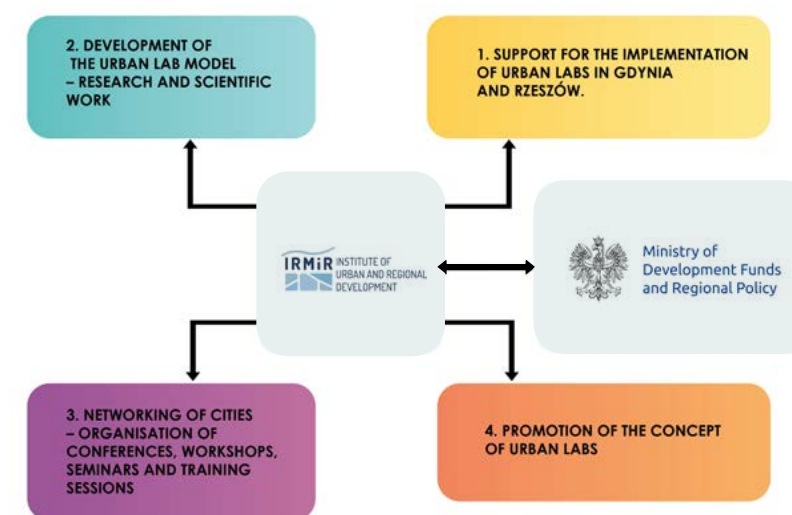


Fig. 6. Main tasks of the Urban Lab team at IURD performed within the project

Source: own study

The IURD project team was in direct contact with people involved in the preparation of laboratories in both cities – they consulted them, among other things, on the location of Urban Labs or adaptation work on premises designated for these purposes, and also advised the cities on the creation of visual identification.

The difference in starting date of the two labs was due to the more efficient course of these works in Gdynia

and the faster process of assembling the Gdynia team. Moreover, the city had premises which could be used, without major renovations, as the headquarters of Urban Lab. As it was mentioned before, it was located in the complex of the Pomeranian Science and Technology Park, at Aleja Zwyciestwa 96/98. This fact, which is worth mentioning, was also reflected in the logo of the Urban Lab in Gdynia. After proper adaptation of a part of the building, the prestigious space in Galeria Paniaga, located in the centre of Rzeszów at 13, 3 Maja Street, was chosen as the seat of Urban Lab Rzeszów. As a result of the preparatory work performed in both cities, Urban Lab Gdynia inaugurated its activities on 28 March 2019 and Urban Lab Rzeszów on 9 October 2019.

The activities of the Urban Lab team at IURD within the scope of the project were focused on four main tasks (fig. 6), namely:

1. Substantive support for the implementation of Urban Labs in Gdynia and Rzeszów.
2. Research and scientific work, including primarily the development of the Urban Lab model.
3. Networking of cities interested in the urban lab instrument, involving the organization of conferences, workshops, seminars and training sessions.
4. Promotion of the concept of urban labs.

Table 3. A detailed description of the tasks of the Urban Lab team at IURD performed within the project and their effects

No.	Task name	Precise description	Effects of actions taken*
1	Substantive support for the implementation of Urban Labs in Gdynia and Rzeszów	<ul style="list-style-type: none"> – weekly briefings, – monthly reports, – quarterly reviews, – annual project progress reports 	<ul style="list-style-type: none"> 68 briefings, 19 monthly reports, 9 quarterly reviews, 3 annual reports

2	Development of the urban lab model – research and scientific work	<ul style="list-style-type: none"> – Textbook <i>Urban Lab. A tool to improve the quality of life of city residents in line with the smart city concept</i> – Guide <i>Otwarte Dane. Techniki racjonalnego klasyfikowania i udostępniania (Open Data. Techniques for rational classification and sharing)</i> – Scientific paper <i>Urban laby jako eksperymentalne platformy współpracy interesariuszy miejskich – przegląd definicji oraz podejść do funkcjonowania tego instrumentu (Urban Labs as Experimental Platforms of Urban Stakeholders' Cooperation – a Review of Selected Definitions and Approaches to Functioning of this Instrument)</i> – The subchapter entitled <i>Urban lab jako generator rozwiązań na podstawie otwartych danych (Urban lab as a solution generator based on open data)</i> in <i>Zarządzanie danymi w miastach. Podręcznik dla samorządów. (Data management in cities. A handbook for local governments)</i> (ed. W. Łachowski) – Scientific paper in English <i>Attempt at Summarising Studies on Urban (Living) Labs</i> 	<ul style="list-style-type: none"> – Printing and distribution of 2000 copies – Sharing the publication in the form of an e-book – over 1,600 downloads of the PDF file; – Printing and distribution of 500 copies – More than 200 downloads of the e-book in PDF format – Over 60 reads on ResearchGate.net – Printing and distribution of 1500 copies – The paper under review
---	---	--	---

3	Networking of cities interested in the urban lab instrument – organization of conferences, workshops, seminars and training sessions	<p>Conferences and seminars held:</p> <ul style="list-style-type: none"> – A seminar in Krakow for institutions involved in the project – The Urban Lab Seminar in the framework of the Urban Policy Congress in Kielce – The "Social Dimension of a Smart City" panel (co-organisation) during the Urban Policy Congress– hybrid formula, – Urban Lab Open Day <p>Workshops organised:</p> <ul style="list-style-type: none"> – Open Data – a meeting with Joanna Samulska – Project management workshops for representatives of institutions involved in the project, – Three online workshops on open data for institutions involved in the project and entities collaborating with Urban Labs A study visit to Barcelona, A study visit (virtual) to the City Innovation Exchange Lab (CITIXL) Amsterdam with workshops Active participation as invited speakers at congresses, conferences and seminars (10 events in total) 	<p>Number of participants: 16</p> <p>Number of participants: 64</p> <p>Number of live stream viewers: 69 Number of views of video recordings from the Panel: 950</p> <p>Number of live stream viewers: 67 Number of views of video recordings from the event: 2800</p> <p>Number of live stream viewers: 23 Number of views of video recordings from the Panel: 4400</p> <p>Number of participants: 10</p> <p>Total number of participants: approx. 120</p> <p>Number of participants: 10</p> <p>Number of online participants: 12</p> <p>Total number of listeners: approx. 1600</p>
---	--	---	---

4	Promotion of the concept of urban labs	<p>UrbanLab.net web portal</p> <p>Facebook profile</p> <p>Linkedin profile</p> <p>Monthly newsletter</p>	<p>Users: 10 176 Page views: 37 682</p> <p>Followers: 1555</p> <p>Followers: 65</p> <p>Number of recipients: 255</p>
---	--	--	--

*the statistics given were summarised as of 30 November 2021.

Source: own study

The first and most crucial task set for the IURD team from the very start of activities of both Urban Labs was focused on individual support of Gdynia and Rzeszów in implementing the urban lab instrument, through constant supervision of the progress of works and assistance in flow of information and exchange of experiences between Gdynia and Rzeszów. These activities were performed by means of telephone and electronic communication (e-mail, instant messaging), as well as during face-to-face meetings within the delegation of IURD team representatives with Urban Lab teams in Gdynia and Rzeszów. The Institute's representatives also took part as observers in the meetings of the Strategic Groups of both Urban Labs and the Thematic Groups established within them, during which the current and planned activities of the Urban Labs were discussed.

The situation changed during the COVID-19 pandemic, when business travel became impossible. Together with the MDFRP team, it was decided to introduce regular weekly meetings – briefings, organised online using the ZOOM video-conferencing tool (see Table 3 for a detailed summary of actions taken in this regard). They contributed to intensifying the online activities undertaken during the implementation of the work schedules of both Urban Labs, as well as to an even better flow of information between the project teams. Due to successive restrictions introduced by the Government of Poland during periods of increasing numbers of COVID-19 cases,

it also became necessary to close the Urban Lab to the residents of both cities, which made it impossible to organise events and activities held at the UL. At that time (May-June 2020), together with the ministerial team and teams from both cities, a decision was made to change the way the labs functioned. Adaptation work began, involving moving the activities of the Urban Labs to a virtual space, changing the means of communication between urban stakeholders and organising events in an online or hybrid format.



Photo 3. The Urban Lab team at IURD during the organisation of the Seminar summarising the URBAN LAB project

– 15 December 2021

Author: Krzysztof Mosiężny

As part of Task 2, i.e. research and scientific work consisting primarily in developing the urban lab model, the Urban Lab team at IURD prepared a number of book publications and scientific articles, the most important of which is a manual on the urban lab instrument, entitled *Urban Lab. A tool to improve the quality of life of city residents in line with the smart city concept*. The book presents a complete concept with a model of an urban lab adapted to Polish conditions. Thanks to the broadly

presented topic of urban laboratories, also in relation to those functioning in other countries, and good urban practices developed in them, the printed edition of the book reached over 2,000 recipients, and its electronic version was downloaded by another 1,600 people (as of 30 November 2021).

At the same time scientific articles addressed to both Polish and foreign academic community were prepared, in which IURD staff shared their research, expertise and insights into the Polish experience in implementing urban labs. This paper summarises the research work within the Urban Lab project.

The lively contacts of IURD staff and the cooperation established with numerous urban laboratories from all over the world were also significant in the implementation of Task 1. Constant contact – through videoconferencing, participation in working meetings or conferences – was maintained with over a dozen cities, among them: Eindhoven, Amsterdam, Malmö, Vienna, Graz, Yerevan, Nuremberg, Helsinki and Barcelona. Due to the lack of urban labs operating in Central and Eastern European countries, the IURD team together with partners from the Czech Republic, Slovakia, Ukraine and Hungary prepared and then submitted a project application to the Visegrad Fund. The grant received for the project "Urban Lab Network in V4+ – the innovation tool for smart cities" allowed the organisation of numerous events aimed at promoting urban labs in the V4 countries and development of a network of institutions interested in their implementation in partner countries.

The main assumption of Task 3 was to network Polish cities interested in the urban lab instrument for its implementation. In connection with this and in order to share the experience gained by Urban Lab Gdynia and Urban Lab Rzeszów during the project, conferences and seminars were organised, among others, also during the largest events devoted to the creation and implementation of urban policies in Poland – two editions of the Urban Policy Congress: in Kielce and in Katowice. Thematic events aimed at promoting

the idea of urban laboratory among local government units, such as Urban Lab Open Day, were also held. Due to the continuing restrictions related to COVID-19, it was organised in a hybrid format in Urban Lab Rzeszów, from which it was broadcast live. In addition to those who attended the event online on the UrbanLab.net Facebook profile, the shared video recording was viewed over 2800 times within 11 months of its publication (Table 3).

Some of the events organised by the Urban Lab team at IURD were primarily aimed at the institutions involved in the project and were therefore held internally. Some of them invited experts from abroad, as in the case of a series of three workshops on the practical aspects of opening and sharing public data, which were conducted by experts from the Eindhoven City Council and the Data Management Department of the then Ministry of Digital Affairs of Poland.

The study visit to Barcelona organised by IURD in autumn 2019, which was attended by representatives of all the institutions involved in the project, also played a major role at the initial stage of the project. Its purpose was to exchange knowledge and experience with similar urban laboratories and the institutions supervising them in Barcelona and other cities in Catalonia, as well as to participate in the Smart City Expo World Congress 2019, the world's largest congress and trade fair event on smart cities. It also provided another opportunity for project team members from the various institutions implementing them to get to know each other better.

At the same time, IURD representatives actively participated in scientific conferences and industry congresses, where they were invited as speakers. In the period 2019-2021, the most important ones included: 10th edition of the Smart City Forum in Warsaw (18 September 2019), the conference "The Future is Data." (19 November 2020), Connect & Scale up – a meeting of urban innovators organised by the Polish Agency for Enterprise Development (21 January 2021), the "Business Without Limits" Congress in Rzeszów (24 June

2021), the Urban Movements Congress in Lublin (26 June 2021) or "MiastoLab"(Citylab) – the Festival of Urban Innovations in Dąbrowa Górnicza (3 September 2021).

The global COVID-19 pandemic, which has been affecting Poland since March 2020, heavily limited the IURD team's organisational capabilities for stationary seminars and away study visits due to the online format adopted.

From the information point of view, a significant element of the project carried out by the IURD were activities undertaken within the framework of Task 4 – promotion of the Urban Lab idea. They resulted in the creation of an Internet portal at <http://urbanlab.net> and a Facebook fanpage under the same name (available at <https://www.facebook.com/UrbanLab.net/>), run by the Urban Lab team from the very beginning. Both the website and social media are used to publish news related to the implementation of the project at the IURD and the Urban Labs in Gdynia and Rzeszów. Press and information materials about the project activities are prepared and used in online publications. In order to share good practices developed, among others, in Gdynia and Rzeszów Urban Labs, a monthly Urban Lab Newsletter is also created. Although a relatively small group of people dealing with cities are interested in the topic of urban laboratories, the popularity of these communication channels is constantly growing, which has also resulted in the recent launch of the UrbanLab.net profile on LinkedIn. A crucial part of promotional and informational activities were also the already mentioned events organised by the IURD, during which not only the concept of urban lab and its model were presented, but later also the first effects of the pilot implementation in Gdynia and Rzeszów as well as good urban practices developed in both cities.



2. The organisational structure of urban labs

The main idea behind urban labs is to create cooperation between various groups of urban stakeholders with the involvement and participation of residents and to bring them together in a common goal, the realisation of which is to contribute to an improved quality of life in their city.

Testing the functioning of an urban lab in real conditions requires building a certain organisational structure and combining adequate personal potentials, which may result in the formation of a full-time team prepared for difficult multidisciplinary urban tasks. As both the team building process and the participation in the work of the Strategic Group (SG) and the Thematic Team (TT) are multifaceted activities, the support of external persons (experts and practitioners) and the involvement of various urban stakeholders is essential.

Therefore, we asked experts in the field to give their opinions on the indicated topic: Aleksandra Markowska – director of the Social Innovation Lab in Gdynia, within the framework of which the Urban Lab Gdynia project was implemented, Aleksandra Zemke – founder of Smileundo and member of the Strategic Group of UL Gdynia, and Dr. Ewa Kubejko-Polańska from the University of Rzeszów, who participated in the work of the Smart Living Thematic Team functioning at UL Rzeszów.

2.1.

The urban lab team

From the point of view of the functioning of the urban lab institution, undoubtedly the key element is the "project team" established for ongoing planning, coordination and implementation of city activities related to the running of the urban lab and animating cooperation between different entities. It is a team of city employees – both financed by the project and engaged using municipal funds. It is responsible for carrying out tasks related to, among others, project management, administrative and accounting support, contacts with stakeholders, dissemination of work results. It is also accountable for the substantive side of individual activities within the urban lab, e.g. functioning of the urban cafe or innovation incubator, as well as ensuring their connection with other undertakings conducted in the city. Such a team consists mainly of the main coordinator of an urban lab and the coordinator of an urban cafe. The experience of the Urban Labs in Gdynia and Rzeszów have shown, however, that this composition should be complemented by a coordinator of the innovation incubator, an administrative and technical coordinator, exercising formal and legal control, and – at least partly – an accountant. In the case of carrying out specific tasks, e.g. in the field of opening up and sharing city data or managing city space, it is advisable for the team also to include a specialist in open data or an urban planner, or possibly for the urban lab team to cooperate closely with such people employed, for example, in specialised units of the city office.

Aleksandra Markowska – Director of the Social Innovation Lab in Gdynia



It is quite a task to build a team with potential, consisting of people with different skills and competences, and additionally with knowledge in various fields. People willing to both participate and co-create the pilot project, not afraid to experiment and at the same time take responsibility for the results of the experiment and for laying the foundations for further development of this method in Poland. The bar is set high, since involvement in the pilot implementation of the urban lab means openness to an ongoing educational situation. The challenge is the multiplicity of topics and the dispersion of activities constituting the whole urban lab formula. The difficulty is not only in the diversity of thematic areas (urban challenges), but also in the method – comprising multiple, interrelated components, which are separate innovations, requiring simultaneous testing and implementation. Urban lab, by definition, undertakes pioneering threads, about which there is no certainty as to the direction they will develop in the course of operationalization. In order to work in such logic it is necessary to have a team which will make this attempt, a collective which sees the value in experimentation, which makes the city the object and the subject of their reflections and actions.

Innovation team

In accordance with the decision of the Mayor of the City, the implementation of the Urban Lab Gdynia concept is the responsibility of the Social Innovation Laboratory – a budgetary unit of the municipality of the City of Gdynia, which has experience in implementing programmes

related to revitalisation, social participation, development of neighbourhoods, creation of spaces for activity of the inhabitants, development of social services and social innovations. This is an important context, as the implementation of the urban lab concept was another stage in the development of activities previously undertaken by the Gdynia local government and the use of team, institutional and inter-institutional experience.

Project team

A specific project team of several people was responsible for the adaptation of the concept of the urban lab in Gdynia. It was constituted of people recruited from the resources of the Social Innovation Laboratory. There was no external recruitment. The formula of conscious selection of team members, due to their experience, skills, competencies and interests, was applied. From the perspective of time, it can be admitted that it was a form of "picking talents" from the institutions. Particularly desirable were people with experience in implementing projects, running shared spaces (places of activity for young people or residents), developing participatory processes, cooperating with NGOs, local leaders or business representatives. In the course of project implementation, the catalogue of particularly desirable skills was extended to include the ability to act on the basis of procedures and task budgets, as well as to create formal and legal solutions. Not without significance was also the capability of working with research results, expertise, specialist knowledge – e.g. in the field of adaptation to climate change or implementation of IT solutions and, above all, interest in the city – both in the dimension of social and material space, as well as processes and phenomena crucial for (lack of) urban development.

Teamwork

The concept of the pilot project originally assumed a team consisting of five interrelated roles: **a content coordinator, an administrative and technical coordinator, the coordinator of the Urban Innovation Incubator, the coordinator of the Urban Cafe and the financial coordinator.** Due to the rather experimental method of operation, the project team had rotated several times before it was constituted. This is well illustrated in the figure below (figure 7).

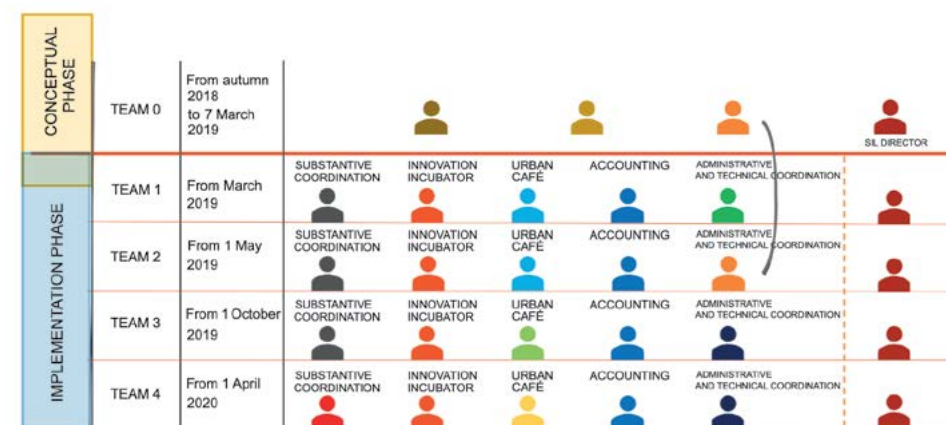


Fig. 7. The team of Urban Lab Gdynia – the dynamics of changes of personnel in the period 2018-2021

Source: study by dr Magdalena Muszel (Muszel 2021)

Only one person (Director of Social Innovation Laboratory) was present in the phase of concept preparation and went through all implementation stages of the project, cooperating with all team members. Also, only two functions in the project (Urban Innovation Incubator, Accounting) were led by the same people from start to finish. Despite this variability, the final team was permanently constituted, and in the current phase of project closure it has developed

into the permanent structures of the Social Innovation Laboratory – the UrbanLab department (with the content coordinator as head, the coordinator of the Urban Cafe and the coordinator of the Innovation Incubator) and the Organization and Personnel department (with the administrative and technical coordinator as head). The experience gained in the implementation of the project is incorporated in the work of the accounting department and other departments in the Social Innovation Laboratory.

Looking at the reasons for high turnover in the team and the occurrence of the need to make changes in the concept of staff selection and team leadership, two aspects can be identified.

1. Adaptation of the concept was operationally demanding – moving from the concept to real implementation. Adaptation of the concept prepared by the Gdynia team had a strategic horizon. However, the question of how to achieve the objectives had to be answered by the team practically every day. The transition from the visionary concept to the implementation practice was relatively difficult, especially at the first stage, which included the selection of the team, defining the philosophy of the Urban Cafe or the Incubator, determining the rules of establishing and functioning of the teams and groups. Not without significance was also conducting implementation during the COVID-19 pandemic, requiring rapid and flexible reformulation of the already developed implementation assumptions.

Interpreting and implementing the concept of Urban Lab Gdynia was even more challenging due to the fact that the team that mainly prepared the adaptation of the concept was not part of the team that had initiated the implementation of Urban Lab Gdynia. Moreover, owing to the scope, multidimensionality of the project and the role it played for the Gdynia local government, its activities involved both people from the Social Innovation Lab, local

government structures, city institutions and organisations (altogether, at different stages of implementation, there were over 100 people involved).

2. Adaptation of the concept required very diverse competences. The fact that Urban Lab Gdynia is a citywide programme for sharing knowledge, strengthening the management of the city in an open and participatory way, making it possible to involve the inhabitants in the discussion about the present and the future of Gdynia, entailed very specific expectations towards the team. It was necessary to employ people who knew the city and the conditions of its functioning, and at the same time were aware of their competences, open to learning and feedback, as well as adapting their methods of operation to changing conditions. The people involved in the project had to be ready to create a "new brand", test the urban lab tool and disseminate it. The implementation of urban lab also required very practical and analytical skills, including those related to fundraising and project implementation with the EU funding, experience in public procurement, and contracting in project rigour.

Urban lab works in a specific context. For it to thrive, it is necessary to create a supportive and open ecosystem – in the institution where the team is rooted and in the city as a whole. The right selection of people, mutual trust, belief in the competence and efficiency of employees, rapid reaction to crisis situations, quick learning, treating obstacles as challenges and not as limitations, orientation towards teamwork and cooperation, combining operational activities with understanding of strategic assumptions – these are the features of functioning not only of Urban Lab Gdynia, but of the whole institution of the Laboratory of Social Innovation. The citywide context is also significant. In Gdynia, the philosophy of thinking about innovative and unconventional methods is sewn into the urban

fabric, willing to test new solutions and share the results of pilots and experiments. The implementation of the urban lab concept would certainly not be possible without the effective use of the potential on the basis of which the whole city is developing.

2.2. The Strategic Group

The Strategic Group (SG) is the team responsible for diagnosing needs, defining challenges and setting directions for the development of a specific urban lab. It determines what the lab will do in a given project year and how it will evolve in search of new, more effective solutions. In the case of Gdynia Urban Lab the Strategic Group was established for three years and it was permanent, while in the case of Rzeszów Urban Lab the Mayor of the City appointed new members, however, some of them were the same as previously.

The SG comprises key representatives of the local administration and city authorities as well as external experts dealing with urban development issues in the broad sense (e.g. representatives of universities, but also experts practitioners in business or non-governmental organisations). These are people with experience in the field of local development, strategic management, who have knowledge of spatial planning, social policy, economics, as well as are familiar with scientific and journalistic activities. When appointing individuals to the SG it is important to know whether they will be able to commit themselves, at least to a minimum extent, to the problematic issues and actively engage in the Group's work and cooperation with Thematic Teams in seeking specific solutions as an answer to the identified problems.

Aleksandra Zemke – Founder of Smileundo, member of the Strategic Group of Urban Lab Gdynia



The assumption of the Strategic Group was to study the needs and identify the challenges for Urban Lab Gdynia. The first meeting of the Group took place in the second half of 2019. The joint session with the Mayor and Vice-Mayors of the city very quickly proved that a meeting where the city authorities can juxtapose thoughts and discuss with external experts, is a very high value in the project.

Since the composition of the Strategic Group was so diverse, it provided a lot of intellectual capital and created space for stimulating conversation and reflection. The city authorities were able to question different courses of action, seek priority paths using external support. This kind of space does not exist in the standard structure of city halls. The external view and wide openness of the members of the SG enabled them to broaden their perspective, search for answers and inspiration for the future. In the daily work of the office it is not easy to find time and space for such discussions.

The first meeting of the Strategic Group concluded with full agreement that adaptation to climate change ought to be a priority for action. This was the only physical meeting of the Group, as the COVID-19 pandemic completely changed the form of work. The strategic priority for the following year became obvious, did not require significant discussion, and thus the Group became more of a supportive body than a strategic one during the pandemic.

Although moving the group's activities to the online space created a sense of insufficiency, an unmet need for more engagement with experts, it also provided new opportunities. It allowed for quicker responses and remote

meetings. At the beginning of the pandemic, the Strategic Group could assist the city authorities in identifying areas requiring the most urgent support, share experiences from other cities and countries. Expanding the activities of the Urban Lab with the virtual space, organising two conferences "Conscious Cities – Global Challenges, Local Solutions", working on a joint publication allowed better use of the intellectual potential of the Strategic Group. Thanks to these activities we managed to reach a wider audience, strengthen the position of the Urban Lab as one of the most important spaces in Poland to talk about the future of cities. Through these activities the Strategic Group exceeded the framework resulting from the project assumptions and helped in positioning the expert activity of the Urban Lab.

Lessons for the future. How to involve experts?

In Urban Lab Gdynia the involvement of experts in setting strategic goals undoubtedly proved its worth. Although the city authorities and the UL team itself are very aware of the challenges, the interaction with the experts helped to confirm the right direction. This part of the Group's activities should be maintained, but the experts unanimously expressed their desire to be more involved in the work at lower levels. Many of the issues raised during the Strategic Group meetings were directly reflected in concrete projects. It is important that in the future the results of these activities are reported to the Strategic Group, which is willing to support the work of the Thematic Teams.

One possibility for greater involvement of SG members could be to assign a specific expert as a mentor to the Thematic Team – he/she would assist in defining

the framework of the projects, help in optimising the activities and in the successful implementation of the objectives. This could certainly give a greater sense of fulfilment and empowerment to the experts, but perhaps would not be effective for the city as it would require a different organisation of work.

Based on the experience of Gdynia, we can see that the activities of the Strategic Group should be perceived more broadly, as the intellectual capital accompanying the project. Experts ought to be involved not only in strategic meetings, but also as ambassadors of the project, persons joining side activities: conferences, publications, podcasts, ongoing support in the work of Thematic Teams. Not only did the Strategic Group help to create a framework for action, but it also strengthened the expert position of the Urban Lab, so that in three years of its operation it became an important space for urban innovation in Poland.

2.3. The Thematic Team

A Thematic Team (TT) is a group of several people, consisting of specialists with knowledge and extensive experience in the thematic areas of urban labs designated for a given year. The team analyses and works on operationalising solutions to urban challenges. The role of the Team is to search for "systemic" solutions which will require the involvement of the local government and the use of various city resources (e.g. when initiating new city activities, adopting necessary local legal acts, introducing changes to the city budget). The Team may operate in a closed formula (selection of a full composition of members through a competition at the beginning of its activity, work in one group) or an open formula (rotation of members depending on the undertaken issues, work in thematic sub-groups). Thematic Teams are established in annual cycles and their activities are an integral part of the activities of the urban laboratory.

Dr Ewa Kubejko-Polańska – Assistant Professor at the Institute of Economics and Finance, University of Rzeszów, member of the Smart Living Thematic Team at Urban Lab Rzeszów



The primary objective of the functioning of the Thematic Teams within the Urban Lab is to create proposals for solutions in the areas recommended by the Strategic Group. The key factors for the effectiveness of Thematic Teams' work include: the defined scope of activities, the selection of members, as well as the form and conditions of cooperation within the team.

Members of the Thematic Teams are experts in various fields. They work on a daily basis in public institutions, non-governmental organisations and economic entities, which allows them to bring diverse skills and professional experience as well as interdisciplinary knowledge to the team's work. Their professional contacts and social competences are also an added value. Individuals, selected through a competition, usually have extensive experience in project work and are active in various areas of the city's socio-economic life. A prerequisite for effective team work is knowledge of the objectives and priorities of city development and the urban community, as well as the ability to perform a multi-factorial evaluation of projects submitted for their opinion.

In organisational terms, the realisation of tasks in a group of several experts requires flexibility of form and working time. A significant role is played by the heads of the TT, who within their teams are responsible for coordinating the work at individual stages, as well as for cooperation with the inhabitants and the external environment. The form of cooperation within the team is also a strong point. Activities within the framework of individual tasks are performed within set deadlines, in accordance with the developed schedule. Moreover, taking into account clearly defined primary objectives, individual members of the TT also propose particular activities, initiate additional actions and realise cooperation with citizens and local communities. Depending on the area, scope and specific objectives, TT members work individually or in teams. This allows the tasks to be completed in an organised and dynamic manner. Experience shows that the best results were achieved by combining the implementation of planned team tasks with individual activity and creativity of all TT members.

In 2020 and 2021, during the COVID-19 pandemic, the situation of partial or total reduction of face-to-face contacts demonstrated the importance of flexibility in the work of the Thematic Teams. The appropriate adaptation of working tools to new circumstances and the ability to react quickly to changing external conditions meant that activities continued in a remote form. Both the cyclical meetings of the Thematic Teams and the numerous conferences, debates, training sessions and consultations with inhabitants were run using online platforms for videoconferencing. It should be emphasised that the use of these solutions did not entail additional costs for private users (i.e. city residents), and for many people it was a solution increasing accessibility. The participation of a larger number of people or the playback of video recordings of events (e.g. debates or meetings with experts) at a later date was made possible due to the ease of access to the recorded material and its dissemination in social media operated by Urban Lab Rzeszów. In addition, a range of activities were organised to raise the digital competences of the citizens of Rzeszów, including the group most at risk of exclusion, i.e. seniors. Particular attention was also paid to activities involving children and young people. Conducting meetings or online collaboration, as well as working on e-documents and using electronic correspondence ensured safety and uninterrupted efficiency during the teams' activities.

One example of effective use of remote working was the Smart Living Thematic Team's online consultations in the form of duty hours according to a schedule previously published on the Urban Lab Rzeszów website for residents during the call for ideas for urban micro-innovations in the competition "We are the City". Residents who submitted ideas received support and explanations necessary to properly complete and file the application form, so

that they could submit their project proposals that have a direct impact on improving the quality of life of inhabitants and users of the city.

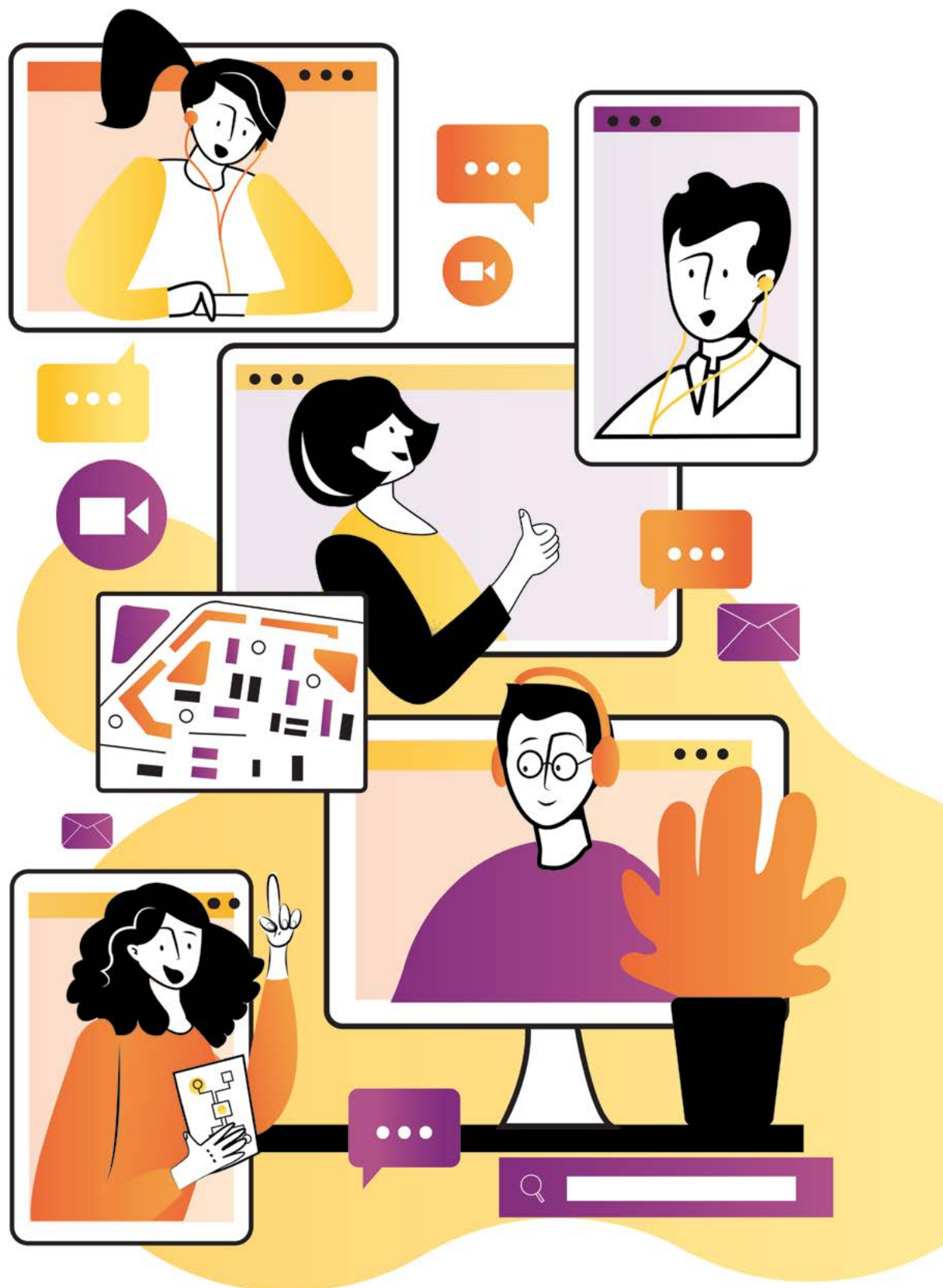
Being a member of the Smart Living Thematic Team at Urban Lab Rzeszów, I can say with full conviction that this is an extremely effective, dynamic and rewarding form of cooperation with city residents.

In Urban Lab Gdynia, the opinions and recommendations developed by the Thematic Teams form the basis for the establishment of **working groups**. They constitute a tool for operationalising the solutions identified in the given thematic area by the Thematic Team and the inhabitants, within the "Idea for the City" programme. The task of working groups is to create specific innovation projects for further testing or to submit them to the relevant units of the City Hall for implementation. Working groups are not universal. Their form (a group of experts, the analytical team, evaluation committees, etc.) and the formula of work (social consultations or other participatory activities, closed expert groups, externally commissioned analyses or forecasts) fully depend on the solutions sought, indicated in the process, and the capabilities and resources of Urban Lab Gdynia. Working groups worked on specific implementations, including adaptation of the Decidim platform (www.konsultujemy.gdynia.pl) to Polish conditions, as well as solutions to the needs of young people during the pandemic (the campaign to raise awareness of the needs of young people in the pandemic). Representatives of both local government, business, academic units and NGOs were involved.

In Rzeszów Urban Lab working groups were not established, but their role was somehow played by Thematic Teams. During the whole implementation their functions were forming;

in 2021 the scope of Thematic Teams' duties expanded – apart from developing ideas they were often responsible for their testing and implementation.

The experience of both Urban Labs showed that it is crucial that the members of SG and TT represent different backgrounds, various economic sectors, as thanks to their interdisciplinary nature they can inspire and enrich the activities of the Urban Labs and the municipal authorities. The time frame of the pilot implementation of Urban Labs was of great significance – it helped to test the working methods in a conscious way. Assigning specific teams to particular tasks helped to organise the processes, but there is no need to have a rigid organisational structure throughout the whole time of the urban lab operation – it is important that the teams performing the tasks are flexible and that their engagement is adapted to the current conditions and needs.



3.

Activities of Urban Labs in Gdynia and Rzeszów – good practices

3.1.

Opening up urban data

Local government units (LGU) have a vast amount of data concerning both the functioning of cities and the behaviour of their inhabitants. With the exception of legally protected data (e.g. sensitive personal data), both static data (e.g. on the location of the city's infrastructure, including, among others, bus stops, offices, schools and sports facilities) and real-time updated data (e.g. on the current location of public transport vehicles according to GPS indications or readings from air quality sensors) can be opened and shared. Data collected in one place from various city institutions is a source of huge knowledge and at the same time it allows administrators and citizens to save money and time.

Undoubtedly, in the era of digitalisation of local government offices and subordinate units, open data has become

a very valuable "raw material" – that can be used, on condition that it is properly prepared and made available, by various city stakeholders in applications and services serving inhabitants. Its value is also increasingly appreciated by scientists and entrepreneurs, which is why cities decide to open further sets of data to interested parties, especially in order to stimulate entrepreneurship and actively involve citizens in the processes of creating changes in cities.

Opening urban data was identified by the IURD team in the concept of implementation of urban labs in Polish cities as one of the basic areas of their activity. The urban lab was considered to be the one that should support the city office in making these resources available to other stakeholders, so that innovative solutions developed collaboratively in the lab can more often be based on open urban data. The literature refers to such activities as "civic technology", for it is thanks to them that local governments can perform their tasks more effectively (Jurczyk-Bunkowska et al. 2018) using solutions containing IT tools. Their aim is to support the local government in providing services and performing public functions. The introduction of such solutions by LGUs allows the development of civic participation and democratic methods of city management. During the project implementation, the COVID-19 pandemic also became a catalyst for the digitalisation of many tasks undertaken by Polish local governments, and many local government units improved their internal and external processes thanks to the implementation of modern IT systems.

The creation of a comprehensive system for opening up and sharing urban data and then using it in urban projects has become one of the most crucial tasks that the City Office of Rzeszów has set itself since the beginning of the Urban Lab. It was recognised that the inventory of existing data sets, their opening and further sharing can have a great impact in the latter perspective on:

- transparency of activities of city authorities and public life,
- increased participation of inhabitants in the man-

- agement of public space and deepening of cooperation within the framework of an open civil society,
- better city management and accuracy of decisions made on the basis of data analysis
- stimulation of the local economy – economic entities gaining access to city data may optimise their operations and create new, innovative services and products,
- building closer relations with the start-up community and numerous ICT companies,
- the use of data in scientific research, and thus the benefits arising from the publication of the results of such research (Bień, Piziak 2021).

The whole task is performed by the IT and Telecommunications Service Office team of the City of Rzeszów, within whose structures Rzeszów Urban Lab operates. It established a Thematic Team for Open Data, which developed the following guidelines for sharing city data:

- development of a formal basis in the form of an ordinance of the Mayor allowing data sharing,
- development of the scope of opening and sharing city data, followed by training in this field for managers and employees of individual city office units,
- development of a concept and subsequent implementation of a municipal open data portal,
- preparation and implementation of workshops on opening data and the possibilities of using it,
- inventory of available urban data resources,
- preparation and implementation of a tool for analysis and visual presentation of data,
- preparation and implementation of a tool supporting automation in the process of opening and sharing data.

The result of the work of the above-mentioned Thematic Team was also the development of a functional diagram (fig. 8),

which was used in the implementation of the portal <https://otwartedane.erzeszow.pl>.

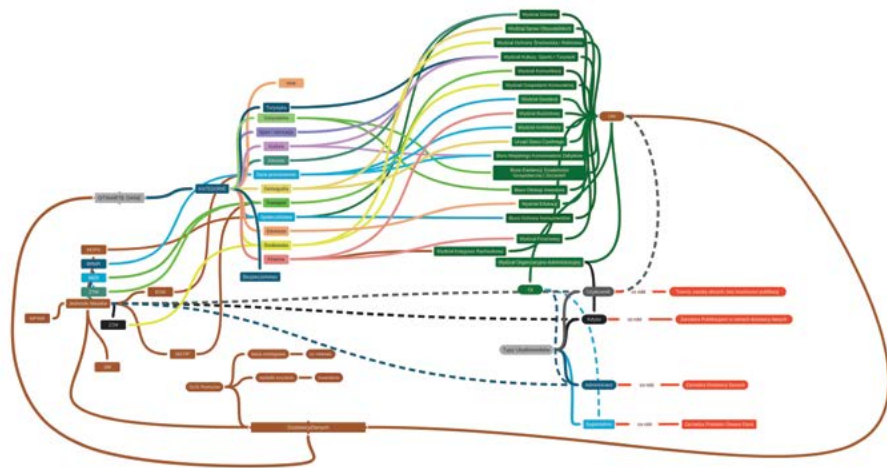


Fig. 8. "The map of thoughts" – a functional diagram showing the principles of functioning of the urban open data portal developed by the Open Data Thematic Team of UL Rzeszów

Source: Urban Lab Rzeszów

The goals set for the IT and Telecommunication Service Office team of the City Office of Rzeszów, as well as the Urban Lab team, which was joined by an open data specialist in 2021, were practically fully accomplished during the pilot project. Already in the first year of Urban Lab Rzeszów, after completing the official formalities related to the possibility of data sharing, the work on the creation of a modern urban open data portal commenced. It was made available to inhabitants in 2019 at <https://otwartedane.erzeszow.pl> (fig. 9). This was a ground-breaking step in the whole process, as it made it possible to make ready data sets available; in the same year it became the basis for organising in the Urban Lab an event called the Mobility Hackathon, the aim of which was to design and prepare innovative urban solutions related to mobility and transport within a given timeframe. This issue is described in detail in the next subchapter.

As part of the activities of Rzeszów Urban Lab, training sessions and, at a later stage, workshops for city officials

on opening and sharing data were also held, covering the most important aspects related to these processes. The objective was also to raise awareness of the important role of public data and how it can be re-used by different people. Officials were also introduced to the functionalities of the Rzeszów "open data" portal. The Urban Cafe also included thematic events aimed at various groups of urban stakeholders to diagnose their needs in terms of opening up urban data.

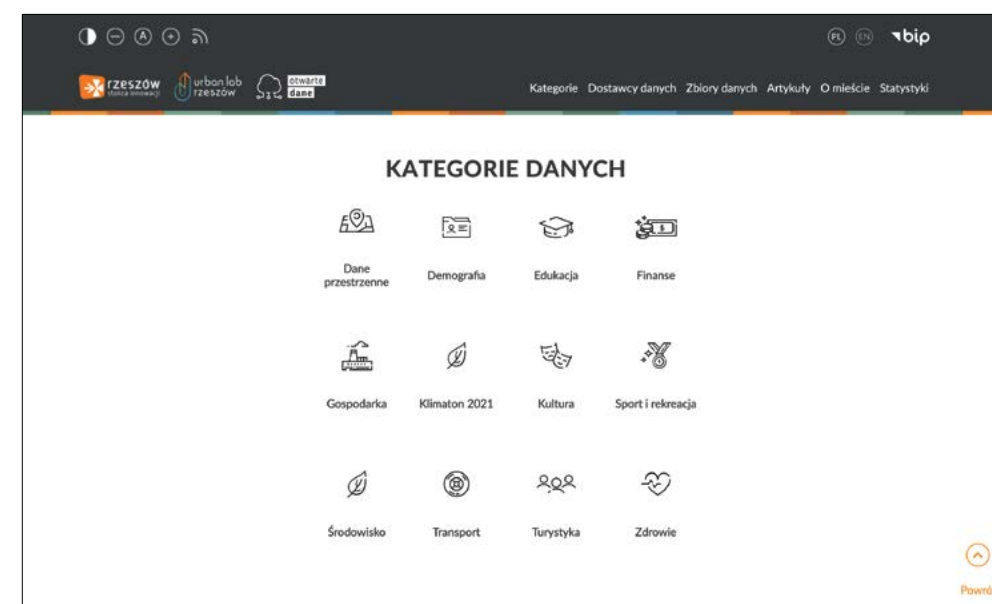


Fig. 9. The page with data categories of the otwartedane.erzeszow.pl portal

Source: www.otwartedane.erzeszow.pl

For the city's open data portal to be of interest to companies, researchers and those actively using the records provided, it needs to be systematically fed with new data sets. For this purpose, in cooperation with a specialist external company, the City Office of Rzeszów conducted a comprehensive inventory of available urban data resources. The next stages of work will concern the preparation and implementation of tools to automate the process of opening and sharing data, and to analyse and visually present data on the portal.

In turn, Gdynia has had a municipal open data portal (<http://otwartedane.gdynia.pl>), the purpose of which is to make

datasets of particular significance for the development of innovation of the city and its inhabitants available (fig. 10). It is run by a separate unit in the structure of the City Hall – an independent position for open data. In July 2021, Małgorzata Czaja, who heads this unit, was appointed as the plenipotentiary of the Mayor of Gdynia for open data, becoming at the same time **the first local government "chief data officer" in Poland**. The actions she undertakes are aimed at successively expanding the city's open data portal, among others by sharing further sets of data that are particularly crucial for the development of innovative city projects.

The Gdynia Urban Lab team established – since the launch of its activities in 2019 – close cooperation with the above-mentioned unit of the City Office of Gdynia, consisting, among others, in sharing data on NGOs and the civic budget, as well as on waste management, air quality, electricity, green space management or electrified public transport. In subsequent years of the project, the opening of data, e.g. on participation, climate or pandemics, was continued and made available on the city's open data portal.

As already indicated in subsection 1.2, from the beginning of 2021 the Gdynia Urban Lab started to cooperate with a person serving as an open data expert. Their tasks included conducting inventories, digitising data, creating schemas for data sets and developing data formats, as well as publishing them on the www.otwartedane.gdynia.pl portal server. Moreover, this person was responsible for preparing instructions for the employees of the City Office and subordinate units in order to standardise data recording formats.

During the implementation of the project, the Urban Lab Gdynia team also undertook various activities to educate and raise awareness on the subject of open data and to facilitate the process of opening data at the office level. As part of these activities trainings and workshops were held to educate officials on facilitation, including the scope of open data

(its digitisation and aggregation within the existing system). Training on MS Excel was also organised for officials related to the preparation of city data for publication on the portal. For a wider audience, a meeting was arranged to provide information on what open data is, how to use it and why it is worth doing so.

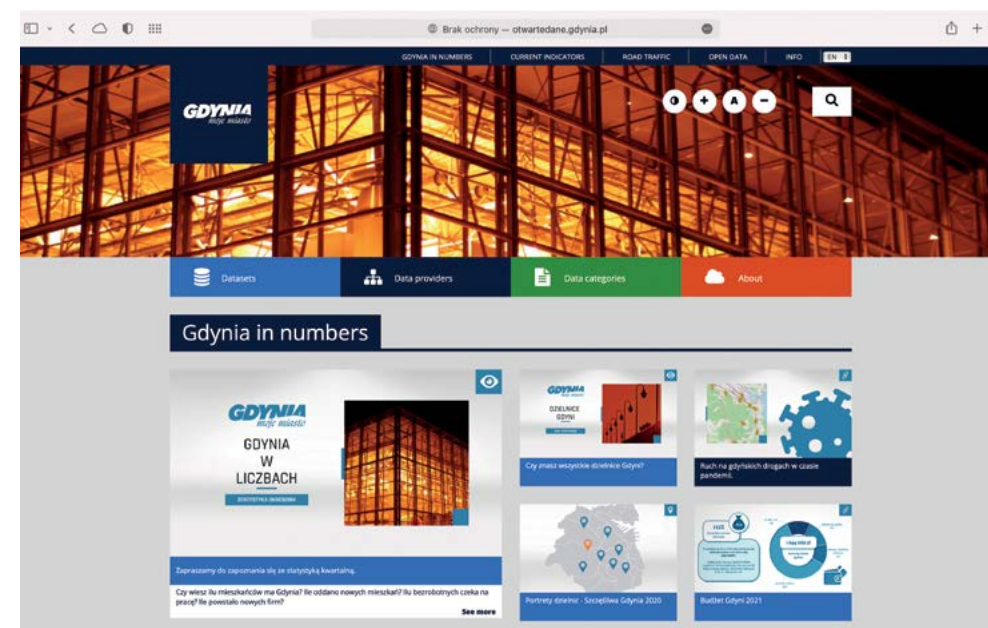


Fig. 10. Homepage of the otwartedane.gdynia.pl portal
Source: www.otwartedane.gdynia.pl

Training materials in the form of videos were also prepared and published on the YouTube channel of the Social Innovation Lab in order to make the results of the work also available to other local governments in Poland. A series of eight videos introducing step by step the world of open data is also available on the Urban Lab website at <https://urbanlab.gdynia.pl/artykuly/otwarte-dane-a-urbanlab-gdynia/>.

The development of competencies of public administration supported by Urban Lab Gdynia consisted also in interdisciplinary cooperation and intersectional activities. Such measures made it possible to “pick” and engage internal

experts in cooperation, which demonstrated that officials have extensive knowledge and competencies enabling them to work out innovative solutions together with the inhabitants.

Open data is today a mine of information on various areas of city life. Seeing the positive effects of the activities of both Urban Labs in making data available and disseminating it, as well as educating other city stakeholders in this matter, one can only hope that other Polish cities will also decide to act even more transparently, as open data is the easiest way to obtain information, presented in a transparent way and compliant with global standards and legal regulations.

3.2.

Urban Hackathon

The amount of data produced in the world is growing exponentially. Cities collect increasingly large sets of diverse data from internal and external sources (e.g. from companies subordinate to the city hall, from modern devices installed in urban space, whose main purpose is to provide amenities for residents and optimise costs of e.g. utilities).

More and more often, urban data is made available to other entities and stakeholders, e.g. through urban open data portals. The highly open data sets shared there can be used to create applications, services or products to facilitate everyday life in a city. Cities are also looking for new opportunities to use data effectively, and one way to unlock this potential is to organise **urban hackathons**, or programming marathons, with the overarching aim of engaging young people and using their talents to improve the quality of life in the city by creating IT solutions for the city (Bien et al. 2020). A hackathon can be described as a method of participatory innovation – it also strives to create an environment where you can not only develop (while working hard) innovations, but also meet new people, discover new things, have fun in a "computer geek" style.

Hackathons have become increasingly popular in recent years as they are a modern tool for working out innovations with a relatively small engagement of resources and in a fairly short period of time. Such events are mainly aimed

at programmers, IT specialists, graphic designers, interface developers and project managers who face the task of finding a solution to a specific problem related to the functioning of the city. Participants work intensively for several hours, and in the case of some hackathons – even for several days.

The structure of the event is very simple. Initially, hackathons were held in a stationary formula, but now the global situation related to the COVID-19 pandemic has forced the organisers to run them in a virtual space – using online platforms and tools, which has proved to be a very good move.

In their stationary form, hackathons are held in specially prepared premises, such as conference rooms, headquarters of IT companies or, more and more often, city labs or innovation hubs. For the duration of the event, the organisers provide the participants with catering, drinks and a special leisure zone. The hackathon starts with team registration, then the organisers officially open the event and introduce participants to the problem to be solved. The main part of the hackathon is very intensive team work on a prototype solution and an attempt to test it. In most cases, the participants do not sleep, so as to prepare the best solution and the final presentation in time, presented to the jury of the competition, which evaluates the effects of the work of individual teams. As a rule, the teams are awarded financial prizes for the best solutions, although very often young people attending such competitions are also offered internships or jobs in companies engaged in organising the event. Very importantly, these types of events have a threefold purpose: to strengthen the community involved, to attract and welcome new participants (innovators) and to provide an opportunity for participants to learn something new.

For the past few years, hackathons have begun to settle in more Polish cities, including Rzeszów. The first event of this kind, titled Hackathon Rzeszów, was organised in 2015 and attracted more than 150 participants. The opening of Rzeszów Urban Lab in 2019 therefore became a natural step to initiate

the organisation of an urban hackathon in its space. As a result, the first event of this kind was organised in December 2019, entitled the Mobility Hackathon (14-15 December 2019), the idea of which was to develop new solutions in the field of eco-mobility and alternative forms of transport.

Rzeszów became the place to test the prototypes developed during the hackathon. In order to develop solutions for the city, participants of this programming marathon were given access to open city data, which allowed them to tackle one challenge from five different categories:

1. a dynamic map of city traffic flow,
2. display of weather for mobile people,
3. traffic measurement at crossroads,
4. optimisation of public transport costs,
5. alternative forms of transport as a challenge – surprise.

The great interest in the hackathon and the organisational success of the event, whose prize pool amounted to 35 thousand PLN, contributed to the fact that in the subsequent years of the project's implementation two more urban hackathons for adults were organised in Urban Lab Rzeszów and, what is extremely interesting and worth recommending, three aimed at children and young people: Robot Challenge, Kids HACK Rzeszów and HACK CITY FOR KIDS (Table 4). As a result, the urban hackathon has become, in a way, a showcase of Urban Lab Rzeszów.

Owing to the COVID-19 pandemic and the associated restrictions, most public events moved to the virtual space. It was no different with the organisation of hackathons. One might even say that the online form has become a permanent feature of such events, as it has helped to reduce the costs of their organisation and provided an opportunity to attract a wider range of participants, without geographical and logistical limitations. There are also special search engines for hackathons, so that you can find the event that interests you most.

The first hackathon organised by Urban Lab Gdynia (12 December 2020), due to the continuing state of the pandemic and the restrictions in force in Poland, also took place online, via the ZOOM platform. The hackathon in Gdynia was marked by a civic dialogue. During the event, the submitted teams worked on an open source platform for social participation, Decidim, which was implemented in Gdynia. The prize pool was 15 thousand PLN.

After the first experience of the UL Rzeszów team in preparing an online hackathon in a two-day formula (#HACK ONLINE – Smart solutions for cities), a sort of breakthrough event was the organisation of a hackathon entitled EDU HACK – Rzeszów Education Atlas, between June and August 2021.

Table 4. Hackathony miejskie zorganizowane przez Urban Lab Rzeszów i Urban Lab Gdynia

No.	Event name	Date	Formula / Organiser	Theme	Prize pool
1	Robot Challenge – mobility in the future city	29.10.2019	Stationary / UL Rzeszów	Promotion of robotics, exact sciences and modern technologies	In-kind prizes
2	Mobility Hackathon	14–15.12.2019	Stationary / UL Rzeszów	Ecomobility and alternative forms of transport	35 000 PLN
3	Kids HACK Rzeszów	27–28.05.2020	Online (Discord and Facebook broadcast) / UL Rzeszów	Safe Rzeszów	In-kind prizes
4	#HACK ONLINE – Smart solutions for cities	14–15.11.2020	Online (ZOOM and Facebook broadcast) / UL Rzeszów	1. An Interactive Map of Investment Areas 2. Location of persons in a building, based, inter alia, on the services of the European Galileo system	35 000 PLN
5	Hackathon for civil dialogue	12.12.2020	Online (ZOOM) / UL Gdynia	Improvements to the Gdynia Dialogue Platform	15 000 PLN
6	HACK CITY FOR KIDS	16–18.12.2020	Online (ZOOM and Facebook broadcast) / UL Rzeszów	Public transport	In-kind prizes

7	EDU HACK – hackathon for urban education	30.06 – 25.08.2021	Online (ZOOM and Facebook broadcast) / UL Rzeszów	Rzeszów Education Atlas	40 000 PLN
---	--	--------------------	---	-------------------------	------------

Source: own study based on UL Gdynia and UL Rzeszów data

In the case of the EDU HACK hackathon, the innovation was not only to extend its duration to almost two months (Table 4), but above all to work with teams during the predefined three stages:

1. Research– prototyping of solution.
2. Incubation of the selected idea.
3. Evaluation.

From the point of view of the hackathon participants, it was also important to precisely define the goal that the organisers wanted to achieve through the proposed solutions. The aim of the hackathon was to create the Rzeszów Education Atlas which was to consist of, among other things, an innovative and interactive 3D online map showing up-to-date information about all educational units in the Municipality of Rzeszów.

Thanks to such a precise definition of the requirements, and also as a result of the work of the mentor teams with the participants of the hackathon, the City of Rzeszów received a complete solution, and not just its prototype, and the winning team was awarded the main prize of PLN 40,000.

3.3. Urban Innovation Incubator

One of the fields of activity of Urban Labs are incubation activities based on urban resources. Both in Urban Lab Gdynia and Urban Lab Rzeszów there is an urban innovation incubator, the role of which is to search for innovative solutions in order to apply them in the city. The urban incubator can take different forms: from a complex formula of workshops for inhabitants and recruitment of ideas for innovative solutions, then test-implemented from scratch with the involvement of inhabitants, to competitions for innovative solutions, executed point by point in the city space.

The innovation incubator is implemented within Urban Lab Gdynia in the form of two complementary paths: the Urban Competence Programme (UCP) (Program Kompetencji Miejskich (PKM)) and the call for "Idea for the City" ("Pomysł na Miasto" (PnM)). The Urban Competence is a city knowledge course for active citizens and budding leaders of social change, which includes lectures and workshops on contemporary methods of city management, the creation and implementation of innovations, as well as competencies in city functioning. At the end of the Programme, participants prepare a final work, which is a development of one of the ideas shown in the application form for the "Idea for the City". As part of the "Idea for the City", a call for ideas for social innovations is conducted – they can be submitted by any inhabitant and should have the form of micro-innovations, i.e. point and nimble solutions that truly engage the local community. The best ideas – innovations with the highest potential – selected by the Evaluation

Committee are tested and piloted in Gdynia, and then evaluated. Each edition of the incubator is focused on a thematic area, which has been chosen as a guiding theme for a given project year in Urban Lab.

In Rzeszów, the innovation incubator is de facto a competition for innovative ideas to be implemented in the city; it is called „We are the City” („Rzeszów to MY”) and consists of one component – an open call for urban micro-innovations. The best ideas selected by the Project Council are piloted in Rzeszów and evaluated. Each edition is implemented in the thematic area of improving the quality of life of the inhabitants (*smart living*). It is worth mentioning that in this programme, projects often concern a specific point, physical change in the city space, therefore the implementation path is slightly different from the one used for the "Idea for the City".

Both in the framework of the "Idea for the City" and „We are the City” the applications sent by the citizens contain ideas which need to be operationalised in order to be projects ready for testing. Therefore, the teams appointed by the Urban Lab deal with specifying and adapting the ideas to the formal and organizational conditions in the city. Then the ideas are tested and, as finished projects, piloted in the urban environment in cooperation with different municipal entities or private sector partners. The thematic areas of the subsequent editions of the Incubator are the same as the main themes established for the Urban Lab project year. The total amount allocated for testing ideas is 90 thousand PLN per city in one call, while the budget for the test implementation of one idea should not exceed 30 thousand PLN. The pool of ideas which are not selected for implementation is then made available in an open nationwide catalogue, which can be used by other cities.

Urban Lab Gdynia – Urban Innovation Incubator

Anyone can take part in the open call for the **Urban Competence Programme**: individuals, representatives of NGOs as well as business or officials. It consists of workshop activities

and the creation of models of ideas to be tested within the "Idea for the City". Urban Lab Gdynia has conducted three editions of the programme so far. As mentioned, each of them concerned the thematic area chosen as the leading one in a given project year at the UL. The course took place in the form of group lectures and workshops, during which better communication and mutual understanding, basic knowledge about the city and its organisational structure were taught. Topics such as modern methods of working with groups or project work methods of *design thinking* and *service design* were also addressed.

The major theme of the 1st edition of the Urban Competence Programme in 2019 was the development of civil society and social participation. Six training and workshop meetings were organised, particularly focused on urban participation issues. The second edition was conducted in 2020, with the theme of adaptation to climate change in the city. The implementation of this edition coincided with the outbreak of the pandemic, and therefore the form of the classes was changed – from stationary (at the Urban Lab's headquarters) to online. Seven training and workshop meetings were held, during which – in addition to the regular programme of expanding urban competences – topics related to social awareness of the urban climate and micro-activities for climate change mitigation were discussed.

In the last (2021) year of the pilot implementation of the Urban Lab, the major theme was adaptation to life after the pandemic. Nine online meetings were held as part of the 3rd edition, culminating in a mini cycle of lectures and expert presentations with elements of a workshop on the different perspectives of life in and after the pandemic – as life in times of crisis of imagination.

Those taking part in the UCP had the opportunity to submit their final work to the "Idea for the City". Sometimes a participant came to the workshop with an idea and a plan/solution, which they modified and improved after completing



Photo 4. Workshops during the 2nd edition of the UCP in 2020.

Source: <https://www.facebook.com/UrbanLabGdynia>

the programme. The "Idea for the City" were submitted both by people who participated in the UCP and by those who prepared them on their own. An advantage of submitting proposals by the participants of the "Idea for the City" was that they often turned out to be more refined. Already after several editions, positive effects of the programme can be observed in the form of activation of the inhabitants, who develop their interdisciplinary activities in the city also after the course. It represents a good practice that can be used and implemented in other municipal units.

The second component of the Urban Innovation Incubator at UL Gdynia is the open call for innovations entitled "**Idea for the City**". It seeks ideas for urban micro-innovations focused on identifying local solutions that build a sense of achievement among local communities. The incubation path is carried out using the service *design thinking* method. The submitted ideas are evaluated by a Commission appointed



Photo 5. Effects of workshops during the 2nd edition of the UCP in 2020.

Source: <https://www.facebook.com/UrbanLabGdynia>

by the Director of the Social Innovation Laboratory. In the first and third edition of the Incubator applications could only come from Gdynia and the neighbouring towns. The second edition attempted to extend the group of recipients of the programme and was also addressed to people from other regions of Poland and abroad.

In addition to the formal assessment, the ideas are also evaluated on their merits – among other things, the following are taken into account:

- Inclusiveness – ensuring that as wide a range of stakeholders as possible can participate in the process or that the idea is directed to groups that are excluded or underrepresented in activities improving the quality of life.
- Participation – understood as the creation of opportunities for the exchange of perspectives, co-determination, co-responsibility and cooperation for a specific need.
- Innovation – to what extent the solution is new to

the area or to a particular group of residents.

- The effect of change – how likely is it that a given idea will change the current situation, solve a temporary crisis or address a specific need – systemic or for a specific group of stakeholders (https://urbanlab.gdynia.pl/wp-content/uploads/2020/06/UrbanLab-Gdynia_Pomysl-na-Miasto_Regulamin.pdf).

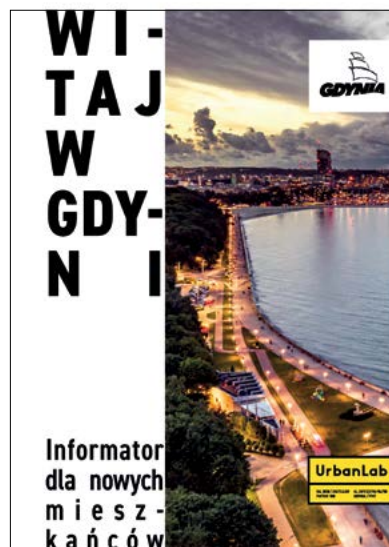
Each edition of the Gdynia Urban Lab's "Idea for the City", similarly to the UCP, concerns the main thematic area chosen in a given project year. The selected ideas were adapted to the existing situation and developed so that they are suitable for implementation. Joint pilot activities were carried out in order to develop selected ideas into projects and create prototypes, in cooperation with selected units / city departments, e.g. Gdynia Sports Centre, Department of Social Communication and Information or Department of Urban Gardening. The inclusion of substantive employees working in various organisational units of the City Hall and city units was intended to increase interdisciplinarity and provide space for intersectoral and interdepartmental work on topics that concerned all the interested groups.

As part of the first edition of the "Idea for the City" run in 2019, four innovations were elaborated under the guidance of the Urban Lab Gdynia's expert team and then test-implemented in the Gdynia environment:

1. "Urban gardeners/urban growers" – test implementation included: a series of meetings to gain gardening knowledge and develop soft skills such as co-determination and self-organisation. The participants, together with experts, created a publication entitled *Ogrody społecznościowe w Gdyni. Poradnik nie tylko dla miastowych badylarzy* (Community Gardens in Gdynia. A guidebook not only for urban growers).
2. „Eco-tailors” – test implementation included

a city-wide collection of clothes together with workshops for converting them into shopping bags. The aim of the innovation was to develop a sense of unity among inhabitants and encourage them to change their future together.

3. "Local leisure animators" – testing included support for the independent grassroots organisation of sports and recreation events in the districts. Conducting workshops for people willing to promote outdoor exercise allowed the selection of local leisure animators.
4. „A guide for new residents” – a participatory guidebook was created to equip new residents of Gdynia with knowledge about the city, its functioning, institutions and rules, with the aim of providing necessary information on the city and encouraging them to take action.



← Fig. 11. A guide for new residents of Gdynia

Source: Urban Lab Gdynia

During the 2nd edition, conducted in 2020, 17 ideas were submitted, 13 of which were evaluated and three were selected for incubation, to be operationalised, tested and implemented in the first half of 2021:

1. "Neighbourhood communities take care of common greenery – for the planet, for the city, for themselves" – an educational programme for neighbourhood communities on greenery and environmental activities. It included gardening courses, a research walk with representatives of the neighbourhood community and gardening workshops.
2. "Be an ECOist in Gdynia – get yourself and others moving" – action as part of World Earth Day celebrations, aimed at promoting pro-ecological attitudes in the Gdynia society. Creative workshops were held to co-create a set of recommendations for effective ways of communicating ecology-related content. Additionally, the "Be an ECOist" campaign was run – as part of it, citizens of Gdynia sent individually recorded videos showing how they contribute to environmentally friendly activities and motivate others to change their daily habits in favour of the climate. On the basis of the collected videos, a final clip summarising the action was produced and published.
3. "Creation of a biodiverse space between the blocks" – engaging neighbours in adaptation to climate change: creating a community garden in cooperation with neighbours, which is to be a space for establishing neighbourhood ties. The idea is also to have the process observed by a researcher (sociologist, social psychologist). Together with experts/officials, recommendations were developed for the process of implementing community gardens in the city by inhabitants. Consultation meetings were held on the establishment of a biodiverse space for the local initiative group involved in testing.

In addition to the ideas that were sent for test implementation, two were selected to be operationalized and disseminated and five to be made available in an open catalogue. These featured charging stations powered by solar panels, small urban forests and a rain garden.

The 3rd edition of the "Idea for the City" sought ideas to meet the needs of groups of inhabitants who were particularly prone to experiencing the effects of a pandemic. The following were selected for test implementation: „Stolik pod palmami” – mobilna przyczepka rowerowa, której celem jest stworzenie w miejscu publicznym przestrzeni do aktywności na świeżym powietrzu oraz dającej pretekst, żeby spędzić wspólnie czas w sąsiedzkim gronie.

1. "A table under palm trees" – a mobile bike trailer, aimed at creating a public space for outdoor activities which provides an excuse to spend time together in the neighbourhood.
2. "Tea at granny's" – originally the idea was to pay regular visits to elderly and sick people to help them with their everyday chores or to spend time together. However, the first version of the idea had to be transformed into organising meetings in open, generally accessible places, e.g. in the premises of Przystań (Haven) or Neighbourhood Houses.
3. "Active picnics" – creation of outdoor places in the city for joint integration games, and at the same time for building relations and communication among local communities. Pilot activities include the preparation of games and attributes to encourage male and female residents to be active outdoors.

It is worth noting that the form of the "Idea for the City" differed from classic incubator forms – its participants did not receive funding for implementation and were only responsible for designing an idea, which was later refined and implemented

on behalf of the UL together with other contractors. When designing the "Idea for the City" submission forms, the UL team focused on enabling the inhabitant to provide sufficient information for an adequate assessment and subsequent operationalization. The content submitted by residents in the forms, apart from the idea itself, also provided information about their view of the city and allowed them to interpret their needs. During implementation, the UL team tried to be in constant contact with the originators.

Each edition of the Incubator, although held in a similar format, required a different, individual approach. There were also new ideas for workshops or proposals for another way of implementing them. During testing, projects were often modified on an ongoing basis, which made it possible to observe which implementation path had a greater chance of success. A major challenge was the introduction of restrictions due to the pandemic and the need to adapt the project to the new conditions while maintaining the spirit of the idea. In the course of execution, it was possible to assess which ideas worked better and which not, whether they met the real needs of the inhabitants. In the course of the "Idea for the City" projects, a growing interest in community gardens was observed, accompanied by a change in attitudes towards connecting with nature and a growing need to work with plants.

The biggest change was the transition from in-person meetings to online ones. This was a challenge on both an organisational and formal level. There were modifications in the way the applications were called for and documents were submitted, but also in conducting the workshops – moving to an online/virtual form. During live meetings it was quicker to build a direct relationship, to establish a rapport with the inhabitants. In the online format it took longer to break the ice and set the rules of communication. However, the advantage of meetings via the Internet was better availability of participants in terms of time. It is impossible to say unequivocally which form of meeting attracted more interest. Both

had their pros and cons. Undoubtedly, however, the pandemic conditions proved to be quite a challenge due to the fact that it was necessary to adapt to them during the implementation.

The most common themes during the calls were **gardening** and **greenery**, e.g. active picnics, community gardens, a table under palm trees.

In Urban Lab Gdynia there is a team that deals with formal issues, public procurement or accounting, so the organizational activities at the Incubator went very smoothly. The challenge was to comply with all the guidelines set out in the project along with maintaining the spirit of innovation and meeting the real needs of the inhabitants.

The fixed amount of 30 thousand PLN to be spent on the implementation of one of the three ideas, on the one hand, helped to define the needs more precisely and to present a budget, and on the other hand – often required reformulation of some elements of the idea and replacing them with others. The lack of a predetermined fixed amount allows for a more flexible approach to the execution of the idea.

According to Magdalena Żółkiewicz, the coordinator of the Urban Incubator, it is crucial to approach the programme holistically, taking into account the assumptions of the urban lab itself. It is necessary to listen to the inhabitants, try to cooperate with them and be in constant dialogue. The aim of the UCP and the "Idea for the City" at UL Gdynia was to communicate with the inhabitants and show how complicated the city is and how many issues need to be reconciled (education, conversation, participatory tools) in order to achieve the goals. It was also essential to present what the Urban Lab tool is, and to draw attention to the conditions in the city and the needs of the inhabitants. Dialogue is pivotal.

A big advantage was the fact that the Incubator in Gdynia consists of two components: the Urban Competence Programme and the "Idea for the City". This dual character, resulting from the combination of the two tools, allows different groups of recipients to join the Incubator's activities

– some of them prefer substantive involvement in the "Idea for the City", participation in the classes and only then complement this by submitting an idea, but it is also an open way for people who do not want to participate in the workshops but intend to share their idea.

According to Joanna Krukowska, the content coordinator of Urban Lab Gdynia, we can observe positive effects of the activities of the UCP graduates, who become more active in the city and develop their urban activities. It is becoming increasingly visible that the Urban Lab actually helps to establish cooperation between various institutions and activates citizens to take action.

Undertakings within the Incubator were piloted, some of the conclusions emerged on the ongoing basis, but some will be verified only in hindsight, after the implementation has been completed – to be as objective as possible.

Urban Lab Rzeszów – „We are the City”

The Innovation Incubator, which operates at UL Rzeszów, involves supporting the development of ideas designed by inhabitants, submitted as part of the "We are the City" ("Rzeszów to MY") programme, hackathons and other themed events. Moreover, "We are the City" includes a whole range of other activities planned as part of the umbrella promotional campaign of the City Office of Rzeszów. These include debates, as interesting conclusions and recommendations on co-management of the city by its residents are collected from them. The goal of the acceleration programme itself is to involve inhabitants in shaping the urban space, which is why the local community is specially involved in the execution of some selected projects. The programme was originally called "Rzeszów Startup Urban Accelerator", but before the second edition was run the name had been changed.

Within the framework of the open call for city micro-innovations the Project Council of **"We are the City"**, on the basis

of the analysis of the submitted applications, selects in principle no less than three ideas for test implementation and dissemination. The Council gives its opinion on the ideas submitted to the programme and has an advisory function in matters related to their execution. The rest of ideas that pass the initial assessment are selected for dissemination – transferred to designated departments and units of the City Office of Rzeszów as recommendations of good practices proposed by project participants. Application forms are formally evaluated by Urban Lab Rzeszów employees and then passed to the Project Council appointed by the Mayor of the City of Rzeszów for the substantive evaluation.

During the pilot of Urban Lab Rzeszów, two call editions were held with the theme of improving the quality of life in the city. Ideas were sought for urban innovations with an emphasis on local solutions, promoting citizen participation and covering the following task areas:

- A modern and friendly urban space for inhabitants.
- Solutions facilitating movement around the city.
- Greenery in the city.

During the first edition of “We are the City”, which started in 2020, 16 ideas were submitted, and three of them were selected for operationalisation and pilot implementation:

1. An eco-mural – created with special paints that absorb pollutants from the air. It was carried out in cooperation with the Department of Promotion of Education and the primary school on the wall on which it was painted. The design of the anti-smog mural was selected in an open vote from works created by children from the primary school.
2. A bumblebee area – a landscaped area within the park which creates a habitat for bumblebees – very important pollinators. Implementation in cooperation with the Municipal Green Space Authority.
3. A solar city bench – equipped with an ecological power source: photovoltaic panels, electronic



Photo 6. The eco-mural in Rzeszów created as part of the “We are the City” competition
Author: Grzegorz Bukala

circuit and accessories that allow charging electronic devices and access to the Internet.

The remaining projects, not qualified for implementation, were submitted to the Thematic Teams of UL Rzeszów for consultation and dissemination.

The completion of the implementation of the projects from the first call took place in the first half of 2021. This year, the second edition of the programme was also run, during which consultation meetings on filling in the application form were held in the Urban Lab. The following ideas were recommended for implementation:

1. A social fruit and vegetable garden at a primary school – the aim is to integrate different age groups in the city. The garden is to include fruit trees and vegetable gardens and to cover an area of approx. 360 m². It will be created and cultivated by pupils together with teachers, parents and grandparents.

2. Nest boxes for swifts and houses for hedgehogs – let's help wildlife living in urban areas: nest boxes for swifts and houses for hedgehogs have been installed throughout the city, with the emphasis on kindergartens and municipal buildings. These species are very precious as they feed on mosquitoes (swifts) and other insects (hedgehogs). Each hedgehog house has an information board with details on these mammals, their needs and what to feed them with.
3. Feel the nature – touch, smell, hear and see – realization of the first in Rzeszów naturalistic wild playground with unusual play equipment such as wooden logs, labyrinths, hideouts, all made of natural materials. The playground is to support children's sensory development and be a space for play, but also a form of therapy for children with disabilities. The implementation of the playground is planned in cooperation with the Faculty of Architecture.

During the call for proposals residents had the opportunity to consult their idea with members of the Thematic Teams in the Urban Lab – which also allowed them to assess the level of innovation of the project. Some applicants found it difficult to estimate the budget in detail. If the budget for the idea was larger than expected, the idea was recommended for implementation within the city budget. Sometimes a rigid budgeted amount limited the choice of materials or made it hard to find a contractor, but more often it helped to frame the idea or to compare proposals for evaluation.

The Urban Lab was responsible for the majority of the elements of the pilot implementation of the selected projects, but it could also count on the support of other municipal units, e.g. in terms of drawing up the description of the contract or making the design of the bumblebee area, in which the Municipal Green Space Authority assisted. The decision on the location of the ecomural was consulted with the Municipal Green

Space Authority, the IT and Telecommunications Service Office and the Department of Promotion of Education. Ideas that were not sent to the Urban Lab for pilot implementation were passed on to other city departments and units, which were willing to use and implement some of them on their own.

Among the ideas submitted, those covering the subject of **greenery and recreation** in the city prevailed.

As the coordinator of the programme, Kamil Czyż, believes, a general obstacle encountered during the implementation of “We are the City” was the lack of citizens' awareness of what innovation is, which often resulted in the submission of non-innovative ideas whose execution had already been attempted in the city. Therefore, it is crucial that before the realisation of such a task, an educational campaign is carried out in the city, bringing closer the issue of innovation and the activities which have already been undertaken in the city in the field of innovative projects. In addition, it is vital that the process of realising ideas together with the inhabitants is disseminated – to encourage others to act together and to build trust between residents and decision-makers in the city. In most of the implemented projects, their originators were interested in the progress of the different stages of test implementation. It is also essential to confront the idea with the reality in the city.

The competition for urban innovative solutions in Urban Lab Rzeszów is undoubtedly a tool to support the activity and potential of its inhabitants. Already after the first edition, the active involvement of the originators was observed, and the proposed ideas largely reflect the needs of the users of the urban space of Rzeszów.

3.4.

Rzeszów Urban Research Laboratory

Rzeszów Urban Research Laboratory (Rzeszowskie Laboratorium Badań Miejskich (RLBM)) is a series of workshops and meetings of urban researchers and practitioners, resulting from an initiative of the Section of Urban Sociology of the Polish Sociological Association (PTS) – RLBM was born out of the previously functioning Backstage of Urban Research (Kuchnia Badań Miejskich). The first edition of the Backstage workshop took place in February 2019 in Poznań at the Institute of Sociology of Adam Mickiewicz University, and the second in February 2020 in Rzeszów, where it was organised by the Section of Urban Sociology of the PTS, the Institute of Sociological Studies of the University of Rzeszów and Urban Lab Rzeszów.

Rzeszów Urban Research Laboratory is however not a direct continuation of the Backstage of Urban Research, but only an initiative based on its idea. The main assumption of RLBM is to create a platform for exchange of experience between representatives of academic environment, city managers and representatives of other environments related to urban development. Experts from scientific centres all over Poland, whose academic, professional and social interests focus on urban issues, are invited to participate in the meetings.

RLBM was organised by the Section of Urban Sociology of the PTS together with the Institute of Sociological Studies of the University of Rzeszów and Urban Lab Rzeszów. A methodological workshop was organised in 2020 to which urban researchers were invited. During the two-day workshop,

80 participants explored issues such as participatory urban green space design, the use of a research walk and geolocation in sociological urban research, non-human agents in the city – research strategies and tactics, the role and place of NGOs and urban movements in urban development or open data as a new source of knowledge for urban research. A significant element of the event was a plenary session during which experiences in conducting research on the quality of urban life and socio-economic development of cities, conducted by the Institute of Sociological Studies of the University of Rzeszów in cooperation with the City Office of Rzeszów, were presented. This provided an opportunity to deepen skills in research practice and to exchange experiences in urban experimentation.

A series of five expert meetings and online workshops were organised in 2021. Participants were researchers from various academic centres conducting research on urban issues. The meetings were planned in two editions: spring and autumn. The topics of the spring meetings included the theoretical part and such topics of the presentations as:

- How to measure the quality of life?
- How to involve citizens in the design and management of the city?
- Why is open data a new resource for urban research?
- Why is greenery important in a city? Participatory design of greenery in the city.
- How to use *design thinking* in a city?
- Why is evaluation research needed in local government units (LGU)?
- Strategic management in local government units (LGU)?

The spring seminars introduced the topics and methodology of applying research in urban space. In the autumn, the knowledge gained during the seminars was applied in workshops, where experts focused on the practical application

of the knowledge covered in the lectures. A total of seven workshop meetings were held.

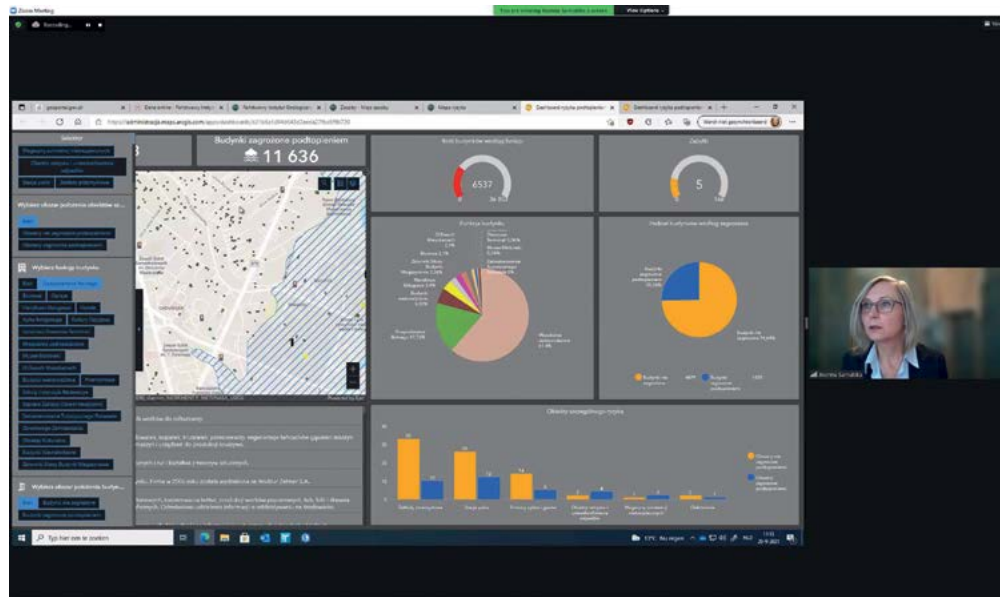


Fig. 12. Online workshop by Joanna Samulska from Eindhoven City Hall (29 September 2021)

Source: <https://www.facebook.com/UrbanLabRzeszow>

The effects of RLBM implementation include:

1. Release of the synergy of the scientific community – academic (Institute of Sociological Studies, University of Rzeszów) and local government (City Office of Rzeszów – Urban Lab Rzeszów).
2. Creation of a space for discussion and exchange of experience between scientists, representatives of local government units, representatives of NGOs, urban activists and inhabitants.
3. Invitation of scientists, researchers – empiricists as well as practitioners – local government and NGO representatives as experts to look at the city from different perspectives.
4. Reduction of the shortage of knowledge concerning the analysis of processes taking place in contemporary cities, occurring mainly among people

managing cities and those responsible for planning their development.

5. Identification of specific ways, methods and tools to study, analyse and manage social processes taking place in cities.
6. Popularization of the Urban Lab project concept as a space for free discussion as well as for "learning the city" and the needs of its inhabitants.

Problems encountered:

1. A mental/psychological barrier regarding the "scientific nature" of the Rzeszów Urban Research Laboratory, especially in the case of representatives of local government units.
2. The necessity to select and limit to only a few topics, while the subject matter of urban studies – city research is very broad.

During the 2021 pandemic, meetings were organised in an on-line format through an online platform.

According to Hubert Kotarski, PhD, from the University of Rzeszów, one of the RLBM organisers: "The Rzeszów Urban Research Laboratory is a kind of urban think tank, a response to the need for scientific approaches, methodologies, methods and tools for studying and monitoring processes taking place in contemporary cities, signalled mainly by representatives of city self-governments. Local government in Poland needs expert support from the scientific community in the process of designing the development process of territorial units. The Rzeszów Urban Research Laboratory is an example of such a ready-made solution".

3.5.

Gdynia Dialogue Platform (Decidim)

Digital platforms for public participation are created to support the processes of involving citizens in co-determining the course of events in the city. Their essence is the combination of technology and the philosophy of citizen participation. They make it possible to use the creativity and knowledge of the local community to propose solutions to local challenges.

Due to increasing digitalisation, more and more cities and various organisations are using online platforms for urban participation. Well-established and widely used platforms include CONSUL and Decidim, which are based on an open source licence (so-called open source software – the source code is released under a licence whereby the copyright holder grants users the rights to examine, change and distribute the software under a free software licence) and executed with international cooperation. CONSUL is a software that was developed in Madrid and is described as "the most complete citizen participation tool for an open, transparent and democratic government" (<https://consulproject.nl/pl>). The Decidim IT platform, on the other hand, was created in Barcelona and is described as a tool to "help inhabitants, organizations and public institutions in democratic self-organization at any scale" (<https://decidim.org>). Local governments, institutions and organisations from various countries around the world are involved in the development of these platforms, thanks to which they are constantly being modified and improved.

The Gdynia Dialogue Platform (Gdyńska Platforma Dialogu) was created as part of the activities of Urban Lab Gdynia on the basis of the open source Decidim platform and was launched on 13 September 2021 at www.konsultujemy.gdynia.pl (fig. 13). Its aim is to involve all citizens of Gdynia in the work on improving the quality of life in the city. A working group established at the Urban Lab and the Research and Participation Department of the Social Innovation Laboratory worked on launching the Platform.

The main objectives of the Gdynia Dialogue Platform are:

- to build a community in Gdynia focused around dialogue processes;
- to locate in one place the knowledge on all participatory processes as well as councils and teams functioning in the city;
- to standardize urban activities engaging the inhabitants;
- to provide an easy way to participate in specific processes taking place on the Platform (<https://konsultujemy.gdynia.pl>).

Gdynia provides for various forms of consultation for different groups of citizens – the Platform is one of the tools for dialogue in the city. An account can be created using an e-mail address. Gdynia's residents can also add to their profile a Resident's Card, which is integrated with the database.

The website gives information on the many participatory processes taking place in the city. It is divided into three spaces: "Processes", "Teams" and "Dialogue Essentials". "Processes" collects all activities taking place in the city with their detailed descriptions and basic information (start and end of activity, current stage, etc.). Processes can be filtered by individual neighbourhoods and the type and theme of the activities. There is information about the process, forms of participation, how to get involved, meeting dates or a direct place to submit

comments or proposals. Residents can mark threads that are particularly important to them. Depending on the specificity of the process, the Platform enables the use of various functions, such as surveys, debates, proposals, meetings, support, observing or commenting. The "Teams" space contains information about the councils and teams that operate in the city. When you enter a team, you will find information on the team's statutes, current membership, meeting dates and minutes of meetings held. "Dialogue Essentials" is a collection of the most important information on how to get involved in activities for the city or how to implement your ideas for change in the city. Information on public consultations, tools for influencing the city, and people to contact on specific issues is available here (<https://konsultujemy.gdynia.pl>).

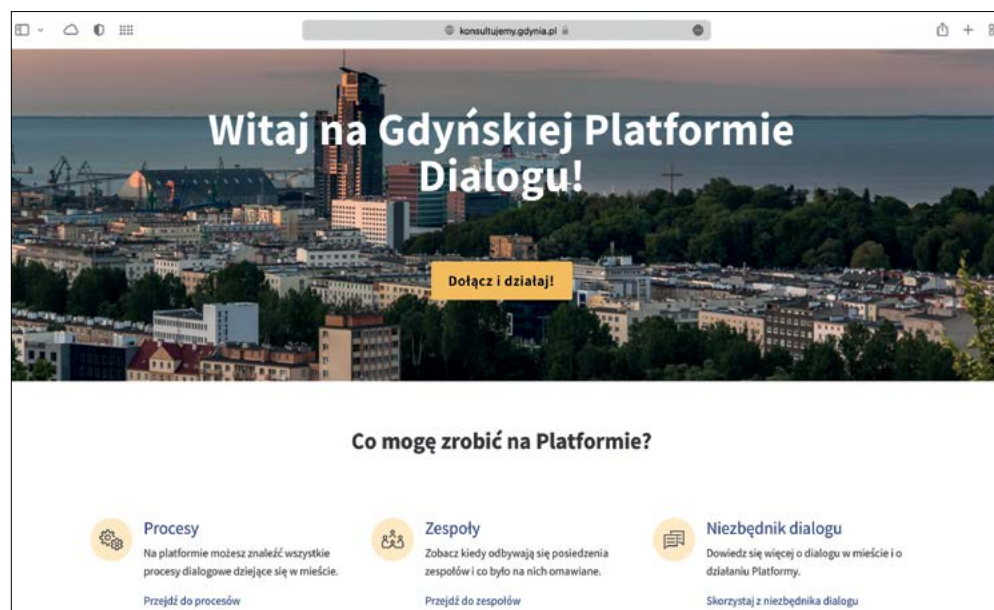


Fig. 13. A start screen of the Gdynia Dialogue Platform portal

Source: konsultujemy.gdynia.pl

Prior to the launch of the platform, Urban Lab Gdynia had organised a hackathon, the challenge of which was to create an IT solution concerning an additional module related to the conduct of a civic dialogue and an authentication system for users of the platform.

The functioning of the Gdynia Dialogue Platform could be tested by the inhabitants of Gdynia immediately after its official launch. Along with the inauguration of the service, a citywide survey of neighbourhood relations was conducted. The aim of this process was to get to know the needs of Gdynia inhabitants – related to life in neighbourhoods, the development of neighbourhood relations and the direction in which the network of neighbourhood centres "Przystań" (Haven) should develop.

When developing such a tool, it is crucial to first map the needs and challenges and prepare materials and data on the basis of which the processes can be managed. It is also worth taking into account the possibility of misunderstanding or resistance on the part of officials at the beginning, as they may need time to get convinced of the effectiveness of the tool.

A great success of the implementation of the Gdynia Dialogue Platform is the fact that it was possible to adapt the idea on a city-wide scale, and not just leave it at the testing stage, which is often the case with similar initiatives in cities. Already from the first consultation processes, the platform seems to be a very useful tool, which will certainly be even more widely used in the future. The fact that it is based on the so-called open software provides great opportunities for expansion with new functionalities for officials and residents. Currently the Gdynia Dialogue Platform is managed by the Research and Participation Department of the SIL.

3.6.

Urban Cafe



An Urban Lab, according to the concept, is supposed to be "a place for inspiring meetings, a space for exchange of modern urban thought, where numerous thematic events are organised for and with the participation of the residents and invited guests – experts in their field, from Poland and abroad". (Bień et al. 2020). Therefore, the formula of the urban cafe created within the project is by definition a physical space open to everyone, adapted to people with disabilities, where you can drink delicious coffee and talk about the city, its potentials and problems, share ideas and propose solutions. Coffee here becomes a pretext for conversation, debate on urban problems and an opportunity to seek solutions together. The Urban Cafe is also a creative space, which influences the activation of the local community. It is also a place for less official meetings, e.g. for members of social/non-governmental organisations or other groups of city stakeholders.

The Urban Cafe has been run since the beginning of the implementation of Urban Labs in Gdynia and Rzeszów. In both cities it has become a new form of public participation. Its formula has been adapted to the individual character of the functioning of the Urban Labs. The biggest hardship

encountered during the operation of the Urban Cafe was definitely the COVID-19 pandemic, when it became necessary to abruptly convert previously prepared stationary events to the online mode. In Gdynia, most of the events are still organised online – this provides a rich database of meetings on various urban topics broadcast on the Facebook profile of Gdynia UL (www.facebook.com/UrbanLabGdynia). It turned out that this formula favours the participation of a larger number of interested people and additionally gives the possibility to replay recorded meetings at any time. In this – previously unintended – way the events organised within the Urban Cafe gained much more value, as they spread knowledge about the city on a nationwide scale. In Rzeszów, on the other hand, the easy accessibility of the location of the UL's headquarters influenced a great interest in using the physical space among representatives of different groups of urban stakeholders. From the beginning, the friendly space attracted residents to thematic meetings organised within the Urban Cafe, and with time it also became a place shared for meetings organised independently by NGOs, youth or seniors. At the beginning of the pandemic, the activities of the Rzeszów Urban Cafe were moved to the Internet, but after a short time they largely returned to the stationary form, observing the appropriate sanitary restrictions.

In the Urban Lab in Gdynia, the most successful and most attended events were those focusing on climate, human psychology, public space and housing policy. In Urban Lab Rzeszów, on the other hand, the most popular were activities for children and young people (Tab. 5).

Table 5. Number of participants attending stationary and online events at Urban Cafe since its launch (data until September 2021)

	Number of stationary events	Number of participants	Number of online events	Number of participants
Urban Lab Gdynia	45	668	68	3229
Urban Lab Rzeszów	113	4886	136	3741

Source: own study based on UL Gdynia and UL Rzeszów data

In total, almost 12,500 citizens from various backgrounds took part in nearly 360 meetings on the challenges Gdynia and Rzeszów are facing. The difference in the number of events organised in both cities is due to the application of stricter restrictions in the budgetary units of the City Office of Gdynia.



Photo 7. *Where did climate change come from?* – lecture by Anna Sierpińska on 16 October 2019 at UL Gdynia
Author: Ilona Budzbon

Both in Gdynia and in Rzeszów the Urban Cafe fulfils a number of vital functions: educating the inhabitants (by spreading knowledge about the urban lab and its very idea), networking (through initiating cooperation between various groups of urban stakeholders) and promoting (thanks to its existence the inhabitants often find out about the functioning and activities of the Urban Lab). Moreover, and very importantly, it connects the city office with the citizens – it removes the formal character and facilitates communication, being a symbol of the openness of the city. Meetings at the Urban Cafe take place in a neutral space for residents, on a non-official ground, which significantly contributes to removing the psychological barrier concerning a meeting with an official.

An attractive offer of events organised in the urban cafe may significantly contribute to the promotion of the urban lab itself and encourage inhabitants to become involved in its activities. Thanks to the urban cafe, it is far easier for experts, both from the public, social and private sector, to learn about the urban lab and draw inspiration for their work from the issues raised. As part of urban cafe management it is worth taking care of active promotion in social and traditional media (city newspaper, radio). Regular publication of a timetable of events will help citizens plan their visit or join the event online.

When running an urban cafe it is worth to:

- appoint a person to coordinate and animate the activities,
- draw up regulations on the use of the urban cafe,
- clearly communicate the subject of the meetings and the audience to which they are addressed,
- provide space for a recording studio (in case of on-line events),
- provide adequate kitchen facilities (preferably with a large counter/talking area).

The Urban Cafe was intended as a "background" for the activities of the lab and constituted one of the elements supporting the achievement of the goals set by the Urban Lab. However, after the piloting of this tool it turned out that it played much more important functions: networking, promoting and educating, as well as shaping the image of the city hall. Therefore, in the urban lab model the urban cafe formula was included in the main activities of the lab, as equivalent to opening data or running an innovation incubator. In the case of smaller cities or those considering the implementation of an urban lab, the urban cafe itself as a place for meetings and discussions (even in the absence of an urban lab in the form of a physical space) can become the first step towards joint activities to improve the quality of life of inhabitants.

„An urban cafe is a tool to build and unite a community of people who care about creating good and responsible future for city dwellers. Officials, scientists or activists, who were invited to urban cafe activities as experts, take part in subsequent events as participants and slowly build a community. It is worth investing in the social capital generated in this way, not being afraid to raise topical issues and challenges related to urban issues”

– Magdalena Dębna, the coordinator of the Urban Cafe in the Urban Lab Gdynia.

3.7.

Other activities undertaken at the labs

The daily activities of both Urban Labs were complemented by numerous tasks conducted in collaboration with various groups of urban stakeholders. The most important ones included:

- organisation of thematic conferences,
- reception of study visits from other cities in order to learn about the functioning of the urban laboratory,
- “An original tailor-made path” („Autorska ścieżka szyta na miarę”) in Gdynia
- "A City for Children" ("Miasto dla dzieci") activities in Rzeszów, as well as
- preparation of numerous publications related to urban issues (knowledge base).

Conferences

Both Urban Labs were active in organising conferences and thematic seminars addressed to various groups of urban stakeholders. Their aim was a city-wide discussion and the development of new standards on the way to building a modern, sustainable city that is open to dialogue.

The conference "Smart Living – Good Practices" took place on 8 September 2021 in UL Rzeszów. Its goal was to exchange experiences and good practices in the field of building urban spaces for social dialogue and the use of modern tools to implement the idea of a smart city. During the conference, experiences and good practices were exchanged on both

the national and international arena. Urban Lab Rzeszów was also the organiser of the conference "Open City Data in Theory and Practice", which was held on 9 October 2020. The main theme of the conference was not accidental, as since the beginning of the implementation of the Rzeszów Lab, opening data by the City Office of Rzeszów was one of the leading fields of the UL. The conference was divided into four discussion panels, each focusing on the benefits of opening data for different stakeholder groups – local government, scientific institutions, business and inhabitants.



Photo 8. A conference at Urban Lab Rzeszów

Author: Grzegorz Bukala

Two editions of the conference "Conscious Cities – Global Challenges, Local Solutions" were organised in Gdynia, but due to the restrictions related to the pandemic they took place in a hybrid formula and were transmitted online. During the first one, on 1-2 December 2020, invited experts shared their observations on global trends in the areas of climate change and urban living, as well as population ageing and the broader resilience of cities, which gained publicity

in the context of the COVID-19 pandemic. The conference programme also included workshops devoted to designing solutions that could be implemented by local governments in fields such as the quality of space, systemic solutions for socially excluded people, economic development and building local communities as a driving force for urban development. At the second one, held on 17-18 November 2021, the invited guests debated the effects of an urban experiment involving the implementation of the urban lab concept in Poland. They also discussed how cities had changed as a result of the pandemic, what social innovations the near future may bring and what a youth-friendly city should be like. The Gdynia Dialogue Platform, the first Polish implementation of the Decidim tool based on open source software, was also presented. This tool complemented the range of paths for local civic participation in Gdynia, and its premiere provided an opportunity to talk about building a democratic society with the use of digital solutions.

Study visits

Both UL Gdynia and UL Rzeszów received numerous guests on study visits from Poland as well as from abroad. In Gdynia these included a delegation from the Kraków Technology Park and the Association for Communities Participatory Development from Ukraine, and in Rzeszów – representatives of twin towns and cities associated in the Union of Polish Metropolises. Thanks to these visits, participants were able to learn how urban labs work, in which thematic areas tasks are undertaken and what their effects are. It was also an opportunity to present to participants methods of activating different groups of residents and activities in the field of civic participation. Numerous study visits prove that both Urban Labs quickly became recognizable among local government officials as well as representatives of business environment institutions and NGOs.

An Original Tailor-made Path

"An original tailor-made path" („Autorska ścieżka szyta na miarę”) is a series of solutions aimed at drawing attention to the problems and needs of young people, which were designed on the basis of a needs assessment survey among young people conducted in Gdynia, a review of research on the situation of young people during the pandemic, and an analysis of conclusions from the Gdynia support and education system. As part of the programme, activities related to psychological support were undertaken for young people who found themselves in a special psychological situation caused by the pandemic. A series of 12 challenges for young people – „rusz się po pandemii” (move on after the pandemic) – was also organised.

"A City for Children" and cooperation with seniors

Children and seniors are groups often neglected in the programming of urban events. Therefore, in order to counteract such practices, the team of Rzeszów Urban Lab organised a series of meetings and workshops especially dedicated to the above mentioned residents of the city.

"A City for Children" ("Miasto dla dzieci") is a whole range of activities that were directed to children at UL Rzeszów. These initiatives included classes entitled "Urban Vision in Minecraft and 3D Printing", "Robot Challenge for Smart City" and "Robot Challenge – Mobility in the Future City". The first fully remote classes on urban space design in Minecraft and 3D printing were organised in cooperation with the Union of Polish Metropolises (Białystok, Bydgoszcz, Gdańsk, Katowice, Kraków, Lublin, Łódź, Poznań, Rzeszów, Szczecin, Warsaw, Wrocław). Children from participating primary schools were able to transfer their vision of the city into digital reality and show how they think recreational and sports areas in their city should be planned and designed. During the second classes the children built robots, programmed them and placed them

on a city board where they carried out missions, paying attention to difficulties for the disabled, elderly and families with children. The aim of the third activity was to design a robot based on the global FIRST Tech Challenge supported by NASA. For the children, participation in this project was an opportunity to get to know the extraordinary land of robotics and automation, full of exciting knowledge. Such workshops are also a great introduction for children to the world of advanced robotics, programming and, as a result, to acquiring the competences of the future.



Photo 9. Intergenerational workshops at Urban Lab Rzeszów
Author: Grzegorz Bukala UM Rzeszów

Urban Lab Rzeszów cooperates with the Creative Senior Association (Stowarzyszenie Kreatywny Senior) and together they organised, among others, a discussion entitled *When will Rzeszów be friendly to seniors and their families?* during which representatives of the Rzeszów City Council, science and medicine discussed the role seniors currently play in the modern family and, in addition, how they are perceived.

A series of expert meetings entitled "A Healthy Senior" was also prepared for elderly inhabitants, in cooperation with the Podkarpackie Association of People with Chronic Wounds (Podkarpackie Stowarzyszenie Osób z Ranami Przewlekłymi). Such meetings are a good opportunity to gain quick and easy access to specialist knowledge in the field of medicine, podiatry and cosmetology. The online lectures enabled the participants to learn how to take better and more effective care of their own and their loved ones' health.

Knowledge base

Apart from sharing numerous video recordings of meetings that took place online as part of the activities of Urban Cafe Gdynia and publishing thematic podcasts that are a source of knowledge about the city, Urban Lab Gdynia also prepared several publications:

- The experiences of the first year of the Urban Lab were collected in the popular science publication *Poznajmy się na mieście* (Let's get to know the city).
- The outcome of cooperation with experts who took part in the conference "Conscious Cities – Global Challenges, Local Solutions" was the preparation of the publication *Miasto wobec wyzwań* (The city in the face of challenges), discussing city-forming factors, as well as ways to build local community and search for what makes agglomerations resilient.
- As part of the micro-innovation submitted to the "Idea for the City", an e-book on community gardens was developed, entitled *Poradnik nie tylko dla miastowych badylarzy* (A guide not only for urban growers).
- On the basis of experience gained in designing and running selected participatory processes in Gdynia, a study entitled *Standardy partycypacji w Gdyni na przykładzie wybranych procesów konsultacyjnych* (Participation standards in Gdynia on the example of selected consultation processes) was prepared.
- The activities of UL Gdynia and the idea of urban labs, issues of public participation and opening public data are described in the e-book *Poznajmy się na mieście* (Let's get to know the city). It also presents information about the projects within the Innovation Incubator, profiles of the members of the expert teams and the challenges that contemporary cities face.

- Moreover, the content about the current activities of Urban Lab Gdynia and events at the Urban Cafe was periodically published in the bulletin of the Mayor and City Council of Gdynia "Ratusz". (City Hall).

Urban space management

Urban Lab Rzeszów for a month became a place of everyday work for the staff of the Office for the Development of the City of Rzeszów, who carried out consultations on the draft study of land use conditions and directions of the City of Rzeszów entitled "Let's talk about the Study". Later on, consultations were also held on subsequent local spatial development plans. Noteworthy was also the cooperation of the UL Rzeszów team with the Rzeszów branch of the Association of Polish Architects, which resulted in meetings with architecture for the general public called "ArchThursdays" ("ArchiCzwartki") and architectural workshops for children called "City for Children" ("Miasto dla dzieci"). These activities are also mentioned in section 1.3.

Information and promotion activities

As a summary of the various tasks undertaken by both Urban Labs throughout the project, it is worth highlighting also the massive amount of work done by their teams in terms of information and promotion activities on the Internet.

Apart from regular editing and supplementing of the content of the websites (<https://urbanlab.gdynia.pl>, <https://urbanlab.erzeszow.pl>), both labs also ran Facebook profiles (with 3053 followers of the Gdynia profile, <https://www.facebook.com/UrbanLabGdynia>, and 3077 followers of the Rzeszów profile, <https://www.facebook.com/UrbanLabRzeszow>), and UL Gdynia had a LinkedIn profile as well (<https://www.linkedin.com/company/urbanlab-gdynia>), at the same time making multimedia materials available for listening via Spotify

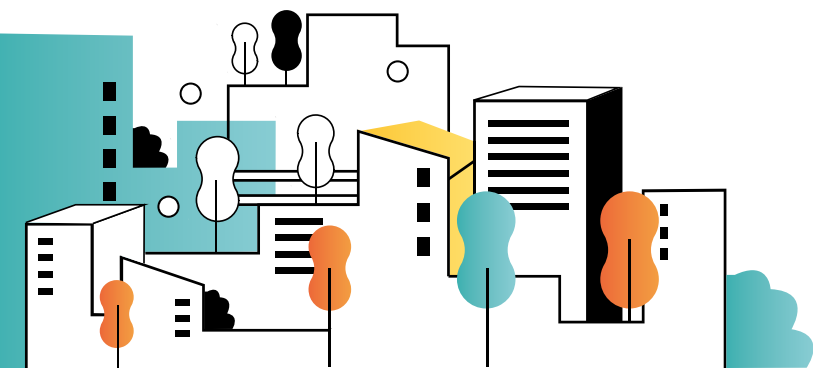
and Podbean. The factual content of the prepared materials and their technical quality should be emphasized. The information and promotional activities of Urban Labs were very significant not only for the dissemination of the effects of the entire project and the achievements, but also for the promotion of the very idea of urban lab among other Polish cities.

References

- Bień M., Jarczewski W., Piziak B., 2020, *Urban Lab as a pilot tool to improve the quality of life of city residents in line with the smart city concept*, Institute of Urban and Regional Development, Warsaw–Kraków.
- Bień M., Piziak B., 2021, *Urban Lab jako generator rozwiązań na podstawie otwartych danych*, [in:] W. Calzada I., 2018a, *From smart cities to experimental cities?*, [in:] V.M.B. Giorgino, Z. Walsh (Eds.), *Co-Designing Economies in Transition: Radical Approaches in Dialogue with Contemplative Social Sciences*, Springer, Cham.
- Calzada I., 2018b, *(Smart) citizens from data providers to decision-makers? The case study of Barcelona*, *Sustainability*, vol. 10.
- Calzada I., 2020, *Democratising Smart Cities? Penta-Helix Multistakeholder Social Innovation Framework*, *Smart Cities*, vol. 3.
- Jurczyk-Bunkowska M., Pawełoszek I., Wieczorkowski J., 2018, *Technologia obywatelska we wspomaganiu zarządzania procesem innowacji społecznych*, *Zeszyty Naukowe Politechniki Częstochowskiej. Zarządzanie*, nr 31.
- Łachowski (red.), *Zarządzanie danymi w miastach. Podręcznik dla samorządów*, Instytut Rozwoju Miast i Regionów, Kraków–Warszawa.
- Muszel M., 2021, *Ewaluacja zadania „Adaptacja Koncepcji UrbanLab w Gdyni”. Raport końcowy*, Fundacja Zatoka (dokument wewnętrzny UL Gdynia).
- Gdynia Dialogue Platform, <https://konsultujemy.gdynia.pl/> (access: 06.12.2021).
- Regulations of the call for ideas for the City of UrbanLab Gdynia, https://urbanlab.gdynia.pl/wp-content/uploads/2020/06/UrbanLab-Gdynia_Pomysl-na-Miasto_Regulamin.pdf (access: 30.11.2021).

List of figures

- Fig. 1. A penta helix as a new model of cooperation between various groups of urban stakeholders undertaken in Polish urban labs
Source: own study
- Fig. 2. The urban lab model adapted to Polish conditions updated as a result of the pilot implementation in Gdynia and Rzeszów
Source: own study
- Fig. 3. The urban lab model updated as a result of pilot implementation in Gdynia
Source: own study
- Fig. 4. The urban lab model updated as a result of pilot implementation in Rzeszów
Source: own study
- Fig. 5. Urban Lab cooperation scheme
Source: own study



- Fig. 6. Main tasks of the Urban Lab team at IURD performed within the project
Source: own study
- Fig. 7. The team of Urban Lab Gdynia – the dynamics of changes of personnel in the period 2018-2021
Source: study by dr Magdalena Muszel (Muszel 2021)
- Fig. 8. "The map of thoughts" – a functional diagram showing the principles of functioning of the urban open data portal developed by the Open Data Thematic Team of UL Rzeszów
Source: Urban Lab Rzeszów
- Fig. 9. The page with data categories of the otwartedane.erzeszow.pl portal
Source: www.otwartedane.erzeszow.pl
- Fig. 10. Homepage of the otwartedane.gdynia.pl portal
Source: www.otwartedane.gdynia.pl
- Fig. 11. A guide for new residents of Gdynia
Source: Urban Lab Gdynia
- Fig. 12. Online workshop by Joanna Samulska from Eindhoven City Hall (29 September 2021)
Source: <https://www.facebook.com/UrbanLabRzeszow>
- Fig. 13. A start screen of the Gdynia Dialogue Platform portal
Source: konsultujemy.gdynia.pl

List of tables

- Table 1. Cooperation network of Urban Lab Gdynia
Source: own study based on UL Gdynia data
- Table 2. Cooperation network of Urban Lab Rzeszów
Source: own study based on UL Rzeszów data
- Table 3. A detailed description of the tasks of the Urban Lab team at IURD performed within the project and their effects
Source: own study
- Table 4. Urban hackathons organised by Urban Lab Rzeszów and Urban Lab Gdynia
Source: own study based on UL Gdynia and UL Rzeszów data
- Table 5. Number of participants attending stationary and online events at Urban Cafe since its launch (data until September 2021)
Source: own study based on UL Gdynia and UL Rzeszów data

List of photographs

- Photo 1. The seat of Urban Lab Gdynia
Author: Aleksander Trafas
- Photo 2. The seat of Urban Lab Rzeszów
Source: Urban Lab Rzeszów
- Photo 3. The Urban Lab team at IURD during the organisation of the Seminar summarising the URBAN LAB project – 15 December 2021
Author: Krzysztof Mosiężny
- Photo 4. Workshops during the 2nd edition of the UCP in 2020.
Source: <https://www.facebook.com/UrbanLabGdynia>
- Photo 5. Effects of workshops during the 2nd edition of the UCP in 2020.
Source: <https://www.facebook.com/UrbanLabGdynia>
- Photo 6. The eco-mural in Rzeszów created as part of the "We are the City" competition
Author: Grzegorz Bukata
- Photo 7. Where did climate change come from? – lecture by Anna Sierpińska on 16 October 2019 at UL Gdynia
Author: Ilona Budzbon
- Photo 8. A conference at Urban Lab Rzeszów
Author: Grzegorz Bukata
- Photo 9. Intergenerational workshops at Urban Lab Rzeszów
Author: Grzegorz Bukata UM Rzeszów



In my view Urban Lab is the "eyes of the city". An organism that serves to observe and learn a holistic and integrative approach to problems. An innovative laboratory where we respond to the existing and emerging crises of the city, and analyse the human, technological and environmental factor, creating a city for the benefit of all. It's a place where we unlock the potential of activists, local communities, businesses and organisations.

Konrad Fijołek,
the Mayor of Rzeszów



Urban Lab is not only a place, but above all the culture of cooperation. It is a practical instrument that addresses the challenges cities have to face. Teamwork and interdisciplinary work are used here to solve increasingly complex local problems. These are new ideas for supporting urban leaders, creating common spaces, cross-sector dialogue. Urban Lab's experience shows how significant role inhabitants play in thinking about development challenges. The COVID-19 pandemic has clearly demonstrated that Urban Lab is a flexible tool, which also works well under crisis circumstances. It is a method worth developing further. I hope that it will be disseminated in more cities.

Michał Guć,
Deputy Mayor of Gdynia



After three years of testing, Urban Lab Gdynia has settled permanently into the urban fabric. Joint reflection on the future and the present full of challenges allowed us to look at our city in a new light. The urban lab method incorporates the voices of various sectors and disciplines in order to understand better and search together for adequate solutions. Urban Lab is also about the networking that surrounds each component, allowing us to build bridges between different pieces of the city and to connect the unconnected in the reflection on the city. I encourage everyone to urban experiments on a micro scale. I hope that more cities will decide to establish urban labs, adapting them to their needs.

Joanna Krukowska,
Urban Lab Gdynia Coordinator



Urban Lab is a friendly urban space engaging local community and government in cooperation to improve the quality of life in our city. In my opinion, by implementing a pilot project such as Urban Lab, Rzeszów addressed the needs of the community, resulting in the creation of a welcoming space for designing the urban fabric primarily with the inhabitants in mind.

Małgorzata Michalska,
Urban Lab Rzeszów Coordinator



As the Ministry of Development Funds and Regional Policy, we had the pleasure of supporting the pilot implementation of the urban lab, which is an innovative in Polish conditions tool for cooperation, working out solutions to urban problems and testing novel ideas. The Institute of Urban and Regional Development coordinated the implementation in the pilot cities – Gdynia and Rzeszów – and at the same time monitored, analysed, advised and networked the cities' activities. At present we can observe the results with great satisfaction – two efficiently operating Urban Labs. I am glad that three years of hard work will pay off in the future also in other ways. This publication presents experiences, conclusions and good practices, thus being a valuable reading for all Polish cities interested in effective implementation of this tool.

Grzegorz Puda,
Minister of Development Funds and Regional Policy



The aim of the publication "How We Made an Urban Lab..." is to present in as much detail as possible the experiences of practical implementation of the urban lab instrument in Gdynia and Rzeszów. It is not, however, a classic album promoting the project with numerous photos of mothers and fathers of success, shiny office buildings and smart gadgets (although we left some pictures). Yet it would be hard for me to deny that this modest word "success" represents a fairly precise and synthetic assessment of the several years of efforts by both cities. In this book we have rather tried to describe the process, the way in which the individual elements of this undertaking were implemented. The project was a pilot, a sort of urban experiment and the first such a widespread attempt to implement the idea of an urban lab in practice. The special feature of this pilot was an effort to simultaneously implement the maximum number of types of undertakings that can be performed in urban labs, including: data sharing, social and technological innovation, innovation incubator, city space management, and urban cafe. I hope that this publication will become a kind of testimony of the process or a study of good practices, especially useful for all those who would like to develop similar initiatives in their cities.

Wojciech Jarczewski,
Director of the Institute of Urban and Regional Development



BY

NC



Fundusze Europejskie
Pomoc Techniczna



**Rzeczpospolita
Polska**

Unia Europejska
Fundusz Spójności

