

How to launch Experimentation as a Service in your city

CONTENTS



ACKNOWLEDGEMENTS

AUTHORS: Laura Pye, Katinka Schaaf

DESIGNERS:

Liam Hollingham, Katinka Schaaf, Felipe Caro

SPECIAL THANKS TO:

Martin Brynskov, Michelle Bach Lindstrøm, Yalena Coleman, Juan Echevarria Cuenca, Luis Francisco Diez, Matthew Fox, Adriënne Heijnen, Sebastian Holmgård Christophersen, Lasse Vestergaard, John Lynch, Arturo Medela, Luis Muñoz, Belen Palacios, Jan-Olov Johansson, Aya Rizk

04 WHAT DOES EACH ICON MEAN?

- 06 WHAT IS ORGANICITY?
- 08 WHAT IS OUR VISION?
- 10 INTRODUCTION
- HOW TO USE THIS PLAYBOOK 12
- WHAT IS EXPERIMENTATION AS A SERVICE? 14
- **EXPERIMENTER STORY NO.1** 20
- 22 WHAT IS THE ORGANICITY EXPERIMENTATION AS A SERVICE FRAMEWORK?
- What are the OrganiCity values? 24
- What are the OrganiCity service pillars? 26
- 28 What is the OrganiCity service framework?
- Who participated in OrganiCity? 30

EXPERIMENTER STORY NO.2 32

- THE ORGANICITY PROJECT: 34
- 36 Where did we test the OrganiCity service framework?
- Who was the OrganiCity team?
- What skills did we use to manage the 38 OrganiCity service?
- What was our journey? 40
- 42 What did we learn from the OrganiCity project?
- 50 Who were our experimenters?
- What did we achieve? 52
- **EXPERIMENTER STORY NO.3** 54
- LAUNCH EXPERIMENTATION AS A SERVICE 56 IN YOUR CITY!
- 60 GLOSSARY



Second open call clinic at the Future Cities Catapult in London, 2017

WHAT DOES EACH **ICON MEAN?**

We have created some icons to help you navigate the OrganiCity Playbook.



Lessons Learned

This is a useful tip from the OrganiCity team.



Resources

This is a link to other resources for you to read more about a certain topic or experiment.



Considerations

This is a space for you to make notes and consider how you would develop your service.

This indicates that there's an explanation of this word in our glossary on page <u>60</u> in the Playbook.

Glossary



"Ensure that there is effective communication between team members. People who can understand both the technical and engagement elements of the service are incredibly valuable."



HOP Ubiguitous (HOPU) - Siidi Design, smart spot sensors in Aarhus 2016/17





<u></u>

1

011001001 6

 \bullet

01



OrganiCity is a service for experimentation, which explores how citizens, businesses and city authorities can work together to create digital solutions to urban challenges.

This experimentation service was established and developed through the OrganiCity project: a collaborative research project, which ran from 2015 to 2018. The project, funded by the European Commission through Horizon 2020, brought together 15 partners from across Europe to test whether Experimentation as a Service (we'll explain what this means later) is a useful approach for developing solutions to city challenges.







WHAT IS OUR VISION?

The data that we emit from our cities has the **potential to transform how we design for and respond to people's needs**. Gathering, connecting and analysing this data – whether from our environment, transport, homes or social media accounts – can provide us with rich and reliable insights into how our cities currently operate and, therefore, how they could operate more effectively in the future.

As we move into this digital age, more people than ever before are moving into our cities. Rapid urbanisation, growing and aging populations, extreme climates and new technologies are adding considerable strain and complexity to our cities. These challenges require us to reimagine how we can design and deliver **more flexible, sustainable and resilient systems** that not only manage our limited resources more efficiently, but also strengthen our communities, protect our environment and prioritise our health and wellbeing.

Tech companies, academia, public authorities, start-ups and citizen groups are all attempting to respond to these challenges with new solutions. Yet, one of the biggest inefficiencies of all is that we continue to tackle these issues in silos; the local knowledge of city authorities often doesn't inform the latest health app, and the resources and experience of large corporations often doesn't support the innovative ideas of small start-ups. If we all have the **same mission** to develop the most useful products and services to **future-proof our cities, then we need to start working together**.

Built upon the values of co-creation, transparency and inclusivity, OrganiCity is asking, what if our public bodies employed a new model for addressing urban challenges? One that combines our collective knowledge, perspectives and resources and applies the rich insights of data to city making? What impact could we achieve if we brought together everyone in a city to collaboratively test and develop their ideas? What scale and at what rate could we begin to address the relentless issues that affect our cities around the world every day?

We may not know how our cities will look in 20 years' time or which technologies will radically shift how we consume, communicate and co-exist, but **the conversations we have now**, **the decisions we make now and the lessons we learn now will drastically impact how our cities evolve**, so let's get started!





INTRODUCTION

INTRODUCTION

00

•

•

•

•

As an experiment itself, the OrganiCity project aimed to test whether Experimentation as a Service was an impactful approach to city-making. During the three years of the project, we learnt a lot about what did work and what didn't, where improvements could be made and how resources, skills and time will inevitably affect the quality of the service that can be delivered.

Overwhelmingly though, we learnt that Experimentation as a Service and the OrganiCity framework is a highly effective and sustainable model for using data to co-create future cities. The OrganiCity project has now come to an end, but we hope that you will benefit from our learnings, tools, resources and knowledge to continue the OrganiCity movement!

This Playbook is intended for anyone who is interested in learning how our cities can adopt an inclusive, innovative, people-centered and data-driven approach to city making. OrganiCity assumes that a city authority or an academic institution would manage this service, but as with all experiments, there may be varied approaches for taking this service forward.

This Playbook will give you an overview of what Experimentation as a Service means, the journey of the OrganiCity project, the lessons that we learned along the way, and a quick-start guide for how you can take the OrganiCity vision forward and launch Experimentation as a Service in your own city!





GOOD LUCK!





HOW TO USE

THIS PLAYBOOK





If you have never heard of experimentation as a service, start on **PAGE 12**

1 <u>-</u> ШП



If you are familiar with Experimentation as a Service and are part of the OrganiCity community, learn how to launch Experimentation as Service in your own city on **PAGE 56**





If you are familiar with Experimentation as a Service, but are new to OrganiCity, start on **PAGE 34**





WHAT IS EXPERIMENTATION **AS A SERVICE?**



"Make sure that all partners have the same understanding

Urban Mobility

OROANICITY





Second open call clinic at Future Cities Catapult in London, 2017

WHAT IS EXPERIMENTATION **AS A SERVICE?**



'Experimentation as a Service' is a service model for facilitating experimentation.

It's quite an intimidating term if you haven't heard it before so, we're going to break it up to explain what it means for OrganiCity...



01100 0

1101111

1 10 1

::

Firstly, what is experimentation?

Experimentation is the process of testing out new ideas or approaches.

What are the benefits of experimentation?

Experimentation allows us to test an idea at a small scale first to see what does work and what doesn't. If the experiment is successful, we can scale it up, and if it isn't, we can easily stop and try something new or learn from the experiment and iterate.

Testing something at a small scale first allows us to implement changes as we go and minimise the risk and costs of something not going to plan in a large scale deployment.

How do you experiment in a city context?

In a city context, experimentation is often carried out in response to city challenges, such as mobility, waste, air quality, wellbeing, sustainability or population size. Experimenting in the city itself means that proposed solutions can be prototyped, tested and observed in a real-life urban setting, rather than in the artificial conditions of a laboratory.

And how do you experiment with urban data?

Urban data is any information generated in a city that can be measured - such as temperature, pollution, traffic levels, footfall, green areas or even a tweet.

Experimentation with urban data explores new ways in which this data can be captured and used. For example:

- Deploying new sensors
- Using existing sensor infrastructure for new purposes
- Merging datasets to uncover new insights
- Analysing existing data through new algorithms
- Making data more accessible and engaging through models or visualisations
- Sharing data in an efficient way
- Encouraging people to act upon data insights

All OrganiCity experiments must gather and/or use data.



WHAT IS EXPERIMENTATION **AS A SERVICE?**

How can city experimentation be offered as a service?

In the same way that city authorities offer waste collection, road management and transportation as a service to the public, Experimentation as a Service is an approach to city making, where city authorities provide support and resources for citizens, small businesses, corporations and city authorities to test their new ideas for solving city challenges at a small scale. Successful experiments can then be scaled up and expanded to a wider area of the city.



What is OrganiCity doing with **Experimentation as a Service?**

OrganiCity has developed a service framework for collaborative city making based upon the Experimentation as a Service model. This unique service brings together multiple city stakeholders to experiment with data to improve our cities.



"Experimentation was a luxury that we couldn't afford to do without OrganiCity. It gave us the unique opportunity to take risks, fail and learn."

Why should city authorities offer OrganiCity's **Experimentation as a Service framework?**

Experimentation as a Service is a valuable model for city authorities, because they often have limited funding and resources to invest in digital expertise and innovative processes - such as experimentation - to develop their public services and address local challenges. This means that large corporations, who do have these specialist skills, resources and processes in-house, are able to experiment and develop more impactful products and services for cities than public authorities. This not only means that city authorities have to procure these products and services from the private sector for large sums of money, but also that large corporations are now driving much of the city agenda - guiding how our cities look and feel based on their own, siloed ideals.

OrganiCity believes that everyone in a city should have a say in the direction the city takes and how it addresses its challenges, rather than just those with the most money or the loudest voice. When city authorities offer Experimentation as a Service, everyone in the city is empowered to tackle their local issues and to learn from one another. The relationship between public authorities, developers, researchers, businesses and citizens shifts from one that is competitive, unaligned and often misunderstood, to one that is collaborative, open and focused on a common goal of making our cities the most resilient, sustainable and liveable spaces for people.

Experimentation as a Service provides a low-risk approach for city authorities to crowdsource, test and scale-up innovative solutions to their city challenges. The collaborative focus of OrganiCity's framework also ensures that these solutions have been informed by multiple perspectives and disciplines.

> Learn more about service design and smart cities here: www.organicity.eu/smart-city-dont-cities-feel-smart/





EXPERIMENTER STORY NO.1



EXPERIMENT: PUBLIC LIKE DISPLAYS

Team: Research[x]Design | Location: Santander, Aarhus, London

Overview:

Public Like Displays aimed to make data on city challenges - such as waste management, energy consumption and changing demographics - more accessible to citizens. The team hoped that by sharing data in a playful and tangible way, citizens would not only be more engaged in public debates, but would also feel more empowered to act upon this data in their cities. Through the experiment, the team designed a toolkit, which was open and flexible and could be easily adapted to meet the needs of the citizens using it.

Lessons learned:

- It's important to employ an iterative methodology throughout the experiment. From paper prototypes on the streets of London, to the first digital experiments in Aarhus and a functioning prototype in Santander, the team continuously made almost daily changes to the experiment based on feedback from citizens and observations. The team believe this helped accelerate the evolution of the project over the brief period of time in which it was developed.
- Conducting the experiment in three different countries provided insights into how data - such as air quality data - can be approached differently depending on the local sentiments and context.
- Keeping a blog or diary helped the team to reflect on the journey of their experiment. Without this type of record-keeping, it can be challenging to accurately remember the decision-making process due to the intense nature of experimentation.

Learn more about the experiment here:

- www.organicity.eu/experiment/public-like-displays-2
- www.architectuur.kuleuven.be/projects/
- www.citizendialogkit.org/









WHAT IS THE **ORGANICITY SERVICE?**



The OrganiCity service framework is made up of:

- Five OrganiCity values
- Four OrganiCity service pillars
- The OrganiCity framework
- What are the OrganiCity values?

OrganiCity is underpinned by a series of values. We believe that our cities would greatly benefit from being built around these values and hope that future service providers and participants will embody these values.



WHAT IS THE ORGANICITY **SERVICE?**

07







WHAT ARE THE ORGANICITY VALUES?



Transparency

OrganiCity aims to communicate with participants clearly and openly. We are building relationships with a range of people from within a city, so, it's essential that the approach, content and vision is easy for everyone to understand.

Co-creation



We encourage everyone in a city to join the discussion of how their city evolves. We expect experimenting teams to adopt this collaborative approach and create their solutions with a range of disciplines and partners. Bringing people with different skills and perspectives together to look at our city challenges ensures that we future-proof our solutions.



Inclusivity

OrganiCity aims to engage everyone in a city, make content easily accessible and ensure that people know how they can participate in the service. We have developed processes that reach people from different backgrounds and skills and have created resources that try to avoid acronyms and jargon and explain complex words.

.



Experimentation

Prototyping in a real-world setting is the best way to understand the value and impact of an idea. Experimenting teams must foster a critical mindset and evaluate results on a regular basis to produce useful insights. It can feel risky to test new ideas and you need humility to continue when things don't turn out as expected – but it's worth the effort to achieve ground-breaking innovations in our cities.

P	How woul	d you emb
•••••		
•••••		
•••••		

Iteration



Testing solutions allows us to learn what does work and what doesn't and make changes. Every experiment is documented and evaluated to extract learnings, which can then be acted upon. It's essential that the service makes failure safe and clearly communicates to experimenters that they should expect to encounter drawbacks – but that is the path to improvement.

bed these values into your service?

.....

WHAT ARE THE **ORGANICITY SERVICE PILLARS?**

The OrganiCity service framework is built upon four pillars.



tools for evaluating experimentation results at a small scale before iteration and expansion.

developing collaborative processes around engagement, discussion and ideation. for users and data subjects.

Management of liability and intellectual property rights



The service provides a framework of legal protections for those collaborating in the innovation process.

WHAT IS THE ORGANICITY SERVICE FRAMEWORK?

1

Our Experimentation Framework ensures that experiments are executed in a systematic manner and provides tools for administrative, financial and communication processes. Our service includes application forms for experiment proposals, reporting and budget templates to monitor progress and feedback, a communications strategy, a service blueprint – which describes the interactions between users and the internal team at each stage of the process – and a helpdesk system.



2

3

Our Urban Data Observatory provides standard and interoperable access to data. Whilst data stores deal with historic data, our innovative approach enables access to near real-time data from a diversity of sources with different technology readiness levels in a homogeneous manner. We gather heterogeneous data and translate it into standards, which make it interoperable with other sources of data. We display information in context to enable a better understanding of the source and reputation of each data asset.

OrganiCity Technical Environment ••••

Our OrganiCity Technical Environment includes a set of tools and APIs that support the co-creation and validation of services and applications under real conditions in the prototype of an innovation ecosystem. The Technical Environment enables experimenters to develop websites, web services, desktop applications or smart-phone applications, which interact with OrganiCity through APIs. The tools have functionality for advanced developers, as well as citizens with a medium level of technological literacy.

You can find these documents at:

organicity.eu/resources

You can explore the first prototype of the Urban Data Observatory at:

observatory.organicity.eu

You can learn about our tools and explore their demos and documentation at:

organicity.eu/technicalenvironment You can download our Trustworthy Legal & Ethics documents at:

You can find our documents and

templates on co-creation at:

organicity.eu/resources

You can download our Guide

To Engage With People Across

The City at:

organicity.eu/resources

organicity.eu/resources

Our Inclusive Co-Creation facility includes methods and templates for running workshops that bring people from different backgrounds and disciplines together to collaboratively define city challenges, discuss potential solutions, form teams and develop experiment proposals.

We have developed seven Engagement Principles for connecting with different stakeholders across the city. Our Engagement Guide provides an overview of these principles and actionable steps for your engagement journey. Based on our experience and research, these principles are instrumental for establishing a positive and impactful relationship between the service provider and participants.

Our Trustworthy Legal & Ethics framework provides a servicelevel agreement, which addresses intellectual property, liability and data protection and an Ethics and Privacy Checklist to ensure experiments comply with up-to-date regulations. Legal and ethical considerations can often create friction during the innovation process and potentially slow things down, so this framework protects those involved in the service – including those who may not be aware that they are contributing data.

28

••••• Engagement Principles

••••• Trustworthy Legal & Ethics



WHO PARTICIPATES IN ORGANICITY?

. . .

Experimenters

The experimenters are at the core of the OrganiCity movement. Groups of citizens, entrepreneurs, small and large businesses, grassroots organisations, research institutions, charities and local communities all come together to form experimenting teams.

The OrganiCity Community

Experimenters are a key part of the OrganiCity community too, but the community also includes those who support the OrganiCity vision in other ways - from following us online and engaging in conversations to attending events and contributing to research in the field. We call members of the OrganiCity community, OrganiCitizens.



((•



nity?	?
-------	---

ΠŢ	y																										
•••					 	 •		•	•	 	•			 		•	 						•	•			
•••				• •	 			•	• •	 			•	 			 				• •						
•••					 	 •	•	•	• •	 		•	•	 		•	 	•					•				



EXPERIMENTER STORY NO.2



EXPERIMENT: CO-CREATING NEW WAYS TO GATHER AND UTILISE SUBJECTIVE WELLBEING DATA

Team: Colour-in City | Location: London

Overview:

Colour-in City aimed to improve the wellbeing of parents living in overcrowded housing in Lambeth. Working with Lambeth Early Action Partnership (LEAP) and Lambeth Council, the team used chatbots to gather stories and perceptions of what it feels like to be a parent living in social housing. They then used this subjective data to develop a better understanding of the needs of residents, track a range of interventions against live data and build support around the needs and aspirations of residents. The experiment also resulted in LEAP commissioning the Colour-in City team to develop and implement a service design practice within their organisation.

Lessons learned:

- Co-designing with digital tools and data requires a lot of groundwork especially if you are working with marginalised groups. Many of the parents were low-income, single parents who had little time and limited access to digital technology.
- It was valuable for the team to employ a user-centred process, as they uncovered rich insights about how to make the chatbot's interactions meaningful and engaging for the parents.
- The parent testing groups were very flexible and were able to attend many co-design workshops and give feedback, meaning that the team could test and iterate quickly.
- It was helpful to have such an active and trusting partner in the experiment. LEAP gave the team free range to develop a digital tool that met the needs of the user, contributed their expertise at key moments and actively helped arrange workshops, engage with parents and facilitate discussions.
- The team learned that there is huge potential for collaborating with citizens to co-design the communities and cities of the future.

Learn more at about the experiment and contact them here:

- www.colourincity.com
- www.organicity.eu/experiment/colour-incity/









THE ORGANICITY PROJECT

The OrganiCity project ran from 2015 to 2018. The project was funded by the European Commission through Horizon 2020 and brought together 15 partners from across Europe to develop and test our Experimentation as a Service framework. To learn more about our process, open calls and experimentation phases, visit **www.organicity.eu**.





. . .

What was our methodology?

As an experiment itself, OrganiCity followed a human-centred, design-led, collaborative and iterative approach. We endeavoured to 'learn on the go' by reflecting on our processes, achievements and failures and embedding our learnings into future iterations of the service. We followed our five values and seven engagement principles throughout.

THE ORGANICITY PROJECT

09







. . .

• €1.8 million to fund experimentation

WHERE DID WE TEST THE **ORGANICITY SERVICE FRAMEWORK?**

.

WHO WAS THE **ORGANICITY TEAM?**

In the first phase of the project, we developed and tested the OrganiCity framework in three European cities, each with extensive experience in using data and digital technologies to develop their urban spaces: Aarhus, London and Santander. This helped us evaluate how cultural differences impacted the service. We then expanded the service offering in our second open call to include cities from around the world. Any city that adopted and tested the service became an OrganiCity.



"How-to guides can be very helpful for ensuring consistency and quality in communications across different cities."





•



Future Cities Catapult

Imperial College London

Santander



- Cantabria University
- Santander Municipality
- **TST Sistemas**





WHAT SKILLS DID WE USE TO MANAGE THE ORGANICITY SERVICE?

The OrganiCity team was made up of a number of different disciplines to ensure that we could deliver a quality service that was informed by multiple perspectives.

Experimentation as a Service team:



PROJECT COORDINATOR

The project coordinators lead and drive the vision of the service. Similarly to content leads, they work closely with all service team members to ensure that they are moving in the same direction, and manage external relationships with the public and private sectors.

PROJECT MANAGER

The project managers are responsible for ensuring that the teams achieve their goals, meet deadlines and stick within budget.

CONTENT LEAD

The content leads translate the vision of the service into tangible and digestible outputs.

SERVICE DESIGNERS

The service designers oversee the structure and design of the service. They map user journeys and consider how the service offering – comprising the communication channels, materials, events, systems and processes – can be tailored to the users' needs.

COMMUNICATIONS TEAM

The communication team establishes the story, brand and design of the service and communicates this in the most accessible way to audiences online and offline.

DEVELOPERS AND TECHNOLOGISTS

The developers and technologists develop the OrganiCity Technical Environment and assist with any enquiries regarding data, loT and any other digital elements required for experimentation.

CITY AUTHORITY REPRESENTATIVE

The city authority representatives build relationships with other city stakeholders and ensure that cultural and political agendas are embedded into the service framework.



"Face-to-face meetings were very useful for training people in the technical tools and resolving technical issues."



WHAT WAS **OUR JOURNEY?**



Issue

Applicants had a clear idea of what

they wanted to create but struggled

Issues

Onboarding the

new cities was

Solution

Allocate time and budget to support

new cities. Ensure consistency

(10) EVALUATION OF APPLICANTS

MEASURED IMPACT & SUSTAINABILITY OF EXPERIMENTS

-0 0-





Issues Insufficient resources to adequately plan and ensure sustainability of the movement.

Solution

Ensure that enough resources are scoped for considering the future of the

41

FINISH

SUSTAINABILITY OF ORGANICITY

WHAT DID WE LEARN FROM THE **ORGANICITY PROJECT?**

Overview of the years:

Year one aimed to build a community of citizens, businesses and academics who were engaged in the concept of Experimentation as a Service and facilitate discussions around the city challenges of our three core cities.

Year two aimed to expand this community, introduce them to the OrganiCity framework and guide them through our first open call and experimentation phase.

Year three aimed to support our second open call and experimentation phase, onboard new OrganiCities and shape the sustainability of the project.



PLANNING

As with any service, thorough planning is essential for delivering impact. The OrganiCity project had dedicated project managers and content leads, but we would recommend that every member of the service team is involved in the planning process.



.

- It's important to identify your vision for the service as early as possible and make sure that everyone in the service team understands this vision and what their responsibilities are in helping to achieve it.
- Collaboratively develop the service in person with all partners/team members, as they will each provide a unique perspective.
- It's valuable to consider how your vision fits into the larger scope of public procurement and public service innovation.
- It's essential to define what impact actually means and how it can be measured.
- Ensure that collaboration is designed into the internal service team processes.

- When you start, consider how you will interact with your users to deliver your service. There may be existing software that can help you manage these interactions or you may have to develop your own tools and platforms - either way, identifying these processes early on will help you put the best systems in place.
- Working in such a large consortium, it was essential for us to align the agendas of all partners to a common goal and find compromises when there were different opinions.
- The city and political environment will change as you develop your service, so build a plan that is flexible enough to adapt to the evolving needs and circumstances of your users, whilst maintaining a stable vision.
- Don't leave everything to the last minute or underestimate small activities - they often take more time than you'd think.
- It was difficult to ensure the provision of a good service. Given the service infrastructure wasn't in place and that we were testing at a very large scale, the user experience often suffered. For example, the service depended on users interacting with multiple OrganiCity partners at once.
- Have more than one round of open calls and experimentation to implement lessons learned from previous rounds.





"It's essential that all service partners agree on what the impact of the service should be and what each partner's role is. The team can then work together in reaching these goals collaboratively."

WHAT DID WE LEARN FROM THE ORGANICITY PROJECT?

ENGAGEMENT & COMMUNICATIONS

Whether through our social media accounts, at events or in publications, our communication efforts were essential for ensuring effective co-creation, engagement and the sustainability of the OrganiCity movement.

- Meet the partners in person at the earliest opportunity it really helps with effective communication, especially in a large consortium.
- Ensure that the service team is clear on the story, brand and vision of the service.
- Clearly communicate what Experimentation as a Service is and how people can join the service.
- Ensure that your communications are tailored towards the local culture and language.
- Ensure that all communications are underpinned by the OrganiCity values.
- Establish internal communication channels for experimenters to keep in touch with one another, e.g., Slack or Trello. This establishes a sense of community between experimenters and creates a space for them to observe and learn from one another.
- Run webinars and training sessions for experimenting teams on best practice communications. How-to guides can be very helpful for ensuring consistency and quality in communications throughout different cities.
- Don't promise something you can't fulfil this is especially important as a public body. Set realistic expectations.



- Stay in touch with other city stakeholders and onboard them to the service as co-creators.
- Encourage experimenters to write blogs to capture and share their process.
- Invest time and money in reaching out to new people and running high engagement in-person events.
- Circulating a monthly newsletter was an effective way to share updates, blogs and information on upcoming events.
- Organise physical meetings they are high engagement and create a collaborative atmosphere.
- Ensure that there are clear processes embedded in the service for the OrganiCity community to share feedback, issues and lessons learned with the service provider and with one another.
- Establish personal relationships within large public bodies to build trust. In-person conversations are much higher engagement than online communication.
- Ensure everyone in the service team is equipped with the materials and guidance on how to communicate on behalf of the project. Help them understand the audience and create empathy.



"Effective communication does not just involve having something to say; to achieve impact, you must consider how your message will be heard."

WHAT DID WE LEARN FROM THE **ORGANICITY PROJECT?**

TECHNICAL

3

•

•

.

.

• . .

.

. . .

•

As data was a central element of the project, we developed a number of technical tools within the OrganiCity framework to aid experimentation and offered technical expertise to support the experimenters' use of data in their experimenters.

- Clearly communicate what the OrganiCity Technical Environment is and clearly communicate what it can and can't do.
- Ensure there is a common understanding and alignment of what the OrganiCity Technical Environment is between the technical and non-technical partners of the service.
- Use simple language when discussing the technical elements of the service - people may not be versed in technical terms.
- Consider whether experiments must use the OrganiCity Technical Environment or whether they can incorporate other data and software into their experiment.
- Consider offering a digital helpdesk for applicants and experimenters to access technical expertise.



- Don't underestimate the administrative tasks involved in processing technical issues and questions - especially when you are dealing with high numbers of applications and large number of cities.
- We reduced the number of tools available to experimenters in the second open call - this allowed us to devote more time to the improving those that were most useful.
- Webinars were very useful for introducing people to the tools.
- Ensure that you keep the users in mind when developing the technical elements of the service. Bring technologists and designers together to learn from one another.



"Consider who you are developing the service for. At the beginning we thought we should focus on developing the technical side to attract tech companies, but we realised there was far more value in developing a community around the service."

> The open call was the process we went through for selecting experiments. Each open call ran for three months and applicants could receive funding of up to €60,000 to experiment. During this time, the OrganiCity team provided applicants with guidance and support on finding a diverse mix of skills for their teams and developing their experiment ideas.

- We recommend to set aside sufficient resources for developing and managing the open call.
- Offer one-to-one sessions with applicants during the open call process to answer any technical questions they may have.
- Have a matchmaking section on the website to help people to connect with one another and form experimenter teams.
- Establish a balance of expertise in the review team that's evaluating the experiment applications.
- Ensure your selection process is thorough and fair, allow for a wider diversity of applicants and project ideas - keep in mind your mission.
- Ensure that the city challenges that you set in the open call are aligned with the city authority's strategy.

OPEN CALL



WHAT DID WE LEARN FROM THE **ORGANICITY PROJECT?**

- Make sure that each team has a diverse mix of disciplines.
- Set clear expectations of deadlines and the criteria for experiment proposals.
- Don't assume that potential experimenters will just come across your content. Assure that your content is shared on channels they use and physical spaces that they visit.
- Showcase people examples of previous experiments to help them with their project ideas.
- Don't neglect people who aren't successful in the open call - they are a valuable part of the OrganiCity community.



EXPERIMENTATION

OrganiCity ran two experimentation phases, which lasted 5 - 8 months each. Teams were expected to report on the journey of their experiments with an interim report and take part in an interview at the end. We supported 26 experiments in our first experimentation phase and 17 in our second experimentation phase.

- Plan your experimentation processes in detail. How will you support experiments and manage any issues that arise?
- Set clear experimentations around deadlines for the experimenter teams, e.g. when they should report back on the success, failures and learnings.
- Don't underestimate how much support and mentorship experimenting teams will require.
- Provide experimenters with mentors from the service team and introduce them to one another as early as possible to establish a trusting relationship.



- Consider potential business models for experiments before they come to an end - one size fits all doesn't work.
- We found that although some teams originally applied to experiment because of the funding available, they were surprised at how much their experiment ideas developed as a result of the OrganiCity process.
- Many experimenting teams needed support on their communications, so it was useful for us to provide communication guidelines on how to share their story and capture the process of their experiments. Teams also requested advice on how to run events and write press releases.
- Identify local ambassadors who can champion the experiments in their communities.

Sustainability is a very important part of the OrganiCity project. We needed to grow the OrganiCity movement and had to ensure that the project will continue after the funding period. We also needed to educate the experimenter teams how to sustain and scale their experiment after the experimentation phase.

- Make sure to tap into existing communities, networks and events this is an effective way to grow the OrganiCity community.
- Visit other cities to learn how they are addressing city challenges and share the vision of OrganiCity.
- SMEs need more support and hand-holding than mature SMEs.
- Encourage knowledge exchange between teams. It was valuable for just learning about the project on a website.
- initiatives allowed us to share our lessons learned and meet interesting companies who are trying to solve similar challenges.

SUSTAINABILITY



Be aware of the Technical Readiness Levels (TRL) of your teams, immature

applicants to meet experimenters and hear their experiences, rather than

Encourage knowledge exchange between service providers. Joining other



WHAT DID **WE ACHIEVE?**

ORGANIČÍŤY **EXPERIMENTS BETWEEN 2016-2018**



1677 **TWITTER FOLLOWERS** JOINED THE ORGANICITY COMMUNITY

11 **NEW CITIES JOINED ORGANICITY IN OUR SECOND ROUND OF** EXPERIMENTATION

130 EVENTS, TALKS AND **WORKSHOPS BETWEEN** 2015-2018

> "I have a say in how technology develops in my city"

423 **EXPERIMENT APPLICATIONS RECEIVED IN OUR TWO OPEN CALLS**





EXPERIMENTER STORY NO.3



EXPERIMENT: SAVEOURAIR: LOCAL DATA STORIES TO MOBILISE DATA

Experiment Team: Public Data Lab | Location: Copenhagen, London

Overview:

SaveOurAir was an experiment in telling 'local data-stories' about air pollution to make the issue of air quality tangible for architects, city planners, activists, educators and others. Two co-creation workshops were held as part of this experiment - one in London and one in Copenhagen - with field experts, local citizens, secondary school pupils and civil society groups. These workshops helped SaveOurAir develop three sub-experiments. Each sub-experiment produced a functional prototype with its own, distinct way of telling local data-stories about air pollution. By the end of the experiment, the team had designed a website to communicate the story of SaveOurAir and the three sub-experiments.

Lessons learned:

- Air pollution is an interdisciplinary and multidisciplinary issue, as well as a complex socio-technical problem, which is relevant at a local, regional and national level. Air pollution was not treated with the same significance in Camden and Copenhagen. This may be because air quality is less of a problem in Copenhagen, but the team also found that politics and culture impacted how air quality was perceived and acted upon; they were easily able to find activists and citizen engagement groups in London, whilst it was almost impossible to find them in Copenhagen.
- The team learned how data can play a role in the hypothesis-generating aspects of a workshop and not just function as evidence to be memorised.
- Deciding who was responsible for an issue, making decisions about design, gathering data and deciding what to focus on were time-consuming processes, but these were important elements to prioritise when planning the experiment.

Learn more at about the experiment here:

- www.saveourair.publicdatalab.org
- www.organicity.eu/experiment/saveourair-local-data-storiesmobilize-action/











LAUNCH EXPERIMENTATION AS A **SERVICE IN YOUR CITY!**



WHERE TO START?

1. Build your service plan 2. Map your service journey

GOOD LUCK!



"OrganiCity is an extraordinary and very mundane thing at the same time: extraordinary because it moves way beyond the current state of play in developing new services for and with citizens using technologies in an agile way. It is mundane in the sense that all cities and communities, in our view, will need this capacity to make the best of the digital transformation.

Experimentation as a service is prerequisite for modern service delivery. It is the basis for efficient operations that are in sync with the expectations of citizens and communities worldwide. It has been an honour and a pleasure to work with the OrganiCity team and all the experiment groups in this step towards a more robust foundation for city making. The vision of standards-based innovation, and subsequently procurement, has evolved over the course of the project.

The movement has evolved. And that was the purpose: to contribute to the digital transformation that all societies are currently going through. Certain elements of the project are being taken further by the many adjacent communities, locally and globally. Thanks to everyone who contributed. We're not done just yet."

Martin Brynskov

Organicity Project Coordinator



000000000

ORGANICITY

Waar komt het fijnstof vandaan?

000000



Stem hier!

132175-1-1

HOE WIL JIJ HELPEI

Join the OrganiCity community and explore our resources at organicity.eu

Research[x]Design - Data on Site (public visualization toolkit) in Aarhus, 2018

GLOSSARY



- API: Application programming interface these allow you to connect and send or recall data from a server or platform.
- Clinics: Clinics are one-to-one in-person sessions, which we ran during the open call
 process to support applicants and answer any questions they had.
- Co-creation: The process of people from different fields working in collaboration with one another towards a joint goal.
- **Experiment:** The process of testing an idea at a small scale through various methods to tackle a specific challenge.
- Experimentation: A process of trying out new ideas, methods, technologies and activities.
- Internet of Things (IoT): A network of objects with sensors connected to each other through the internet.
- **OrganiCities:** Cities that offer OrganiCity's Experimentation as a Service framework.
- Open call: An open call is the time during which applicants can apply to experiment. The OrganiCity open calls lasted 3 months and provided teams with guidance and support on forming teams and developing their experiment ideas.
- **Sustainability:** The future of a movement or idea. For OrganiCity, this refers to the continuation of the service framework, ideology and experiments.
- **Smart city:** Smart cities incorporate technology, data and devices to improve urban environments and make them a better place.
- **Systematic Experimentation:** Experimenting in a methodological manner, evaluating the results of each step to inform the development of the next steps or to scale an idea to a new location.



Workshop with the Aarhus OrganiCity team at Dokk 1 Aarhus Municipality, 2016





This project has received funding from the European Union's Horizon 2020 research and innovation program under the grant agreement No. 645198