



CENTRINNO

Blueprints

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BLUEPRINTS & POLICY DEVELOPMENT GUIDELINES FOR REPLICABILITY & WIDER USER

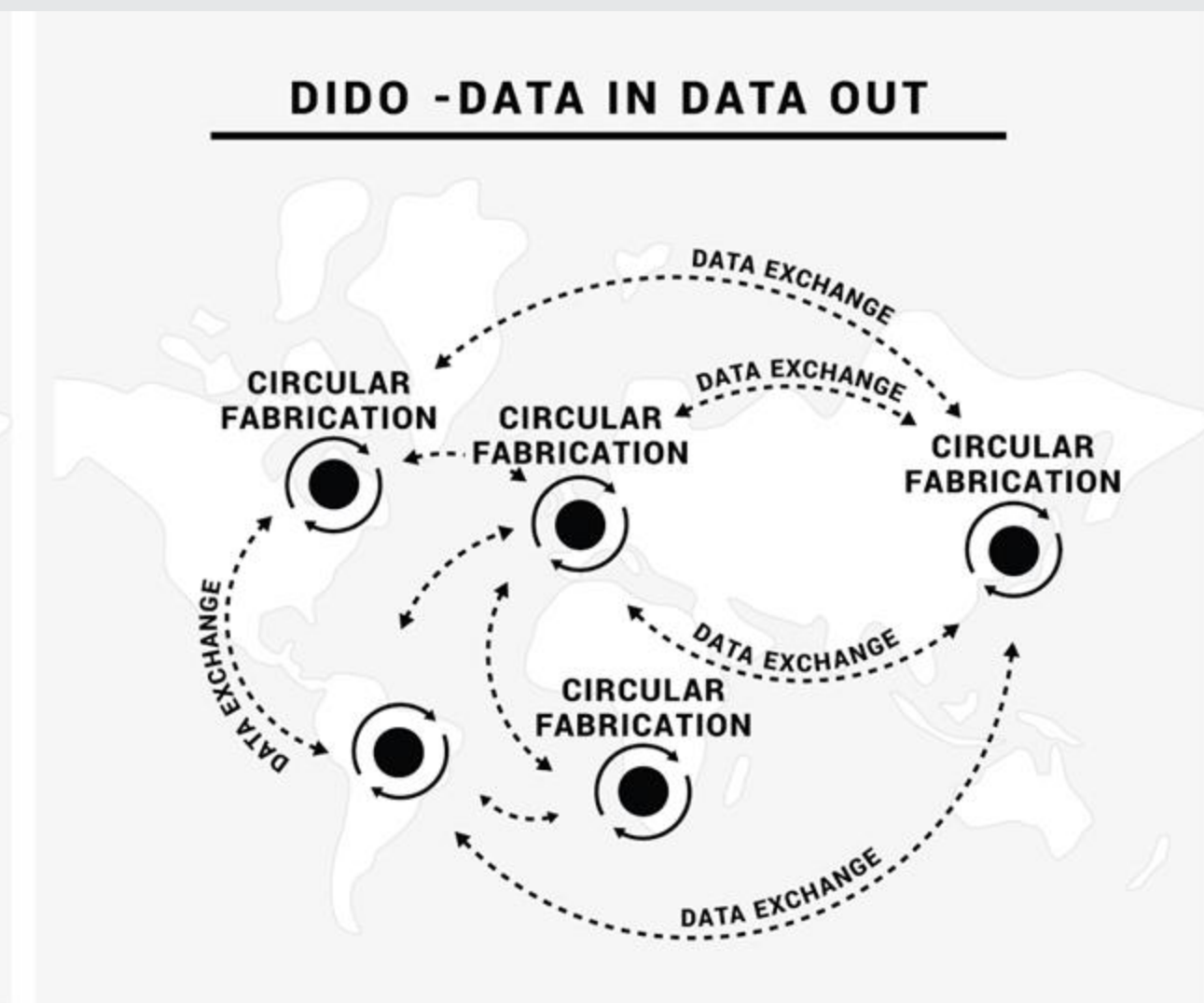


CENTRINNO

1. Objectives
2. Background: From industrial heritage to regenerative neighborhoods
3. What does a regenerative neighborhood look like?
4. CENTRINNO's platforms blueprints
5. CENTRINNO's pilots blueprints
6. Policy advocacy for EU, local policymakers, and Fab City Hubs

BACKGROUND FROM INDUSTRIAL HERITAGE TO REGENERATIVE NEIGHBORHOODS

- Industrial heritage sites as catalyzers for social innovation, circular economy, and new ways of learning
- Neighborhoods as Fab City Prototypes
 - From 'Products In Trash Out' (PITO) to 'Data In Data Out' (DIDO)



WHAT DOES A REGENERATIVE NEIGHBORHOOD LOOK LIKE?

- Neighborhoods play a unique role within the urban fabric
 - Urban Challenges
 - People's stories
 - Opportunities



WHAT DOES A REGENERATIVE NEIGHBORHOOD LOOK LIKE?

- **Urban challenges** based on environmental and social foundations
 - Materials, water, biodiversity, climate
 - Economic inclusion, culture, health & wellbeing, society



WHAT DOES A REGENERATIVE NEIGHBORHOOD LOOK LIKE?

- Individual **stories** valorized to collectively re-imagine the future of our cities



Crafting resilience between tradition and transformation

Barcelona
City

El Poblenou
Location

For more than 40 years, a family business has devoted its life to producing leather belts, bags, jewelry and accessories on the third floor of an industrial building in Poblenou. Feeling affected by the urban transformation underway in the neighborhood, the manufacturers are worried that at some point they will lose their permit to manufacture in the workshop, as local manufacturing permits are no longer easy to obtain.



Roland the beekeeper

Tallinn
City

Kopli peninsula's
Location

In 2019 at the time just before COVID-19 crisis, at Kopli peninsula's professors village, our community member Roland took over his grandfather's apiary. He understood that he was the only one who could do it, first in the countryside, where the apiary originally was, and using the tools provided by his grandfather he learned the profession that had been his grandfather's passion. This activated memories from earlier life, things that grandfather had taught him, and in the context of a friendly bear visiting, the apiaries ended up at Kopli area, in Tallinn.

WHAT DOES A REGENERATIVE NEIGHBORHOOD LOOK LIKE?

- **Opportunities**

What are the new initiatives we want to see emerging in regenerative neighborhoods?

Examples:

- Creating shared waste infrastructure in maker districts
- Building a circular innovation cluster

Reviving food and seed heritage to increase urban biodiversity

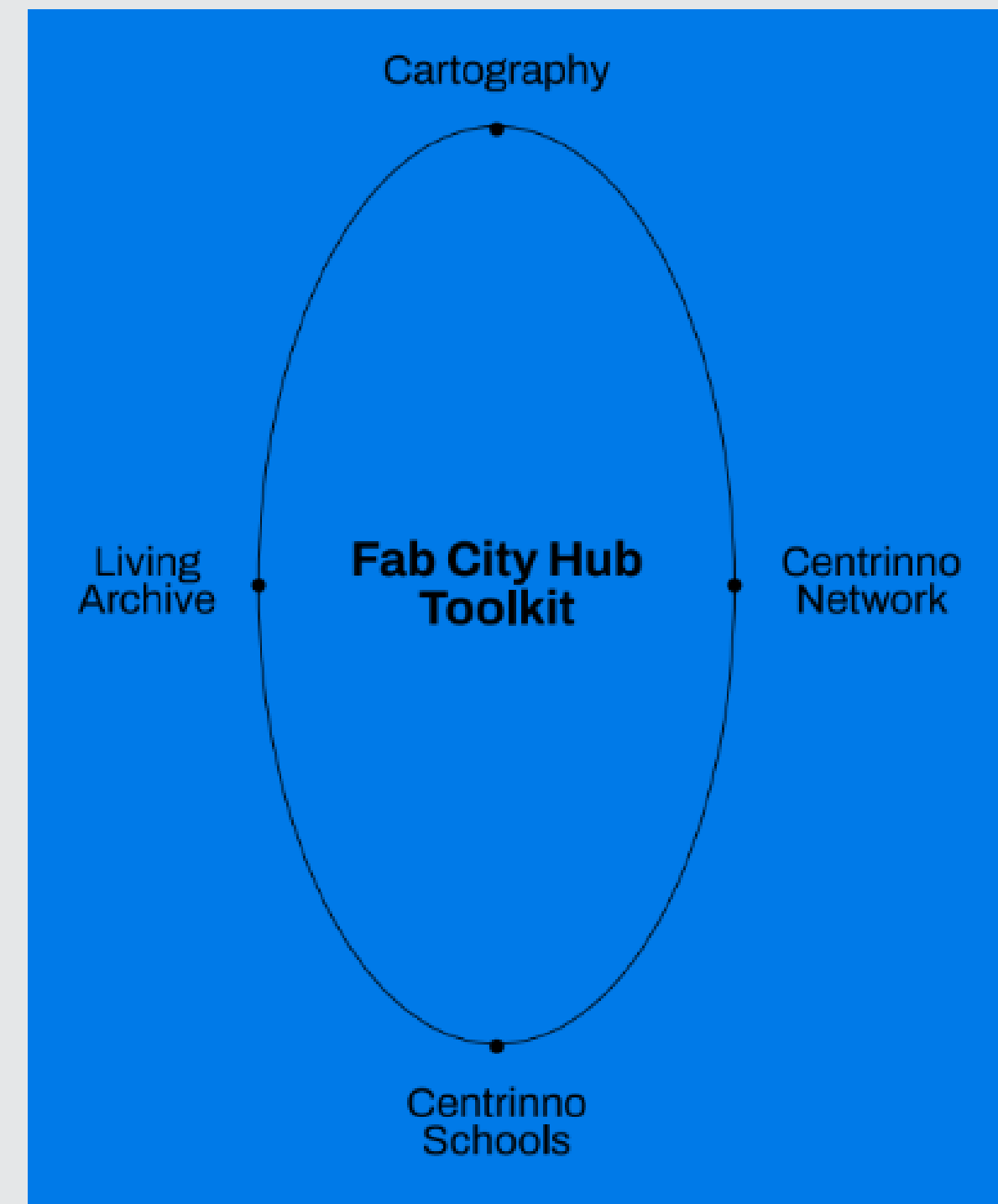
OPPORTUNITY

Often times, cities will have their own history with food production. Looking back at Paris between 1870 and 1930, shows how the city had numerous urban-agriculture plots and ecosystems which together constituted a unique type of market farm. Over the years, Paris grew too fast for this system to be sustained. However, by taking this heritage in mind, the Fab City Hub Paris has been looking into ways of delivering urban food transformation. By bringing together diverse players around the Paris food system and developing a rich programming around urban food, heritage and agriculture, the hub aims to “reboot local food production, distribution and transformation” in line with the city’s heritage.



DISCOVER THE FAB CITY HUB TOOLKIT AND CENTRINNO'S PLATFORMS

- A guide to understand what are the **main toolkits and platforms** created during the project to facilitate its **adoption** in other contexts



Platform & results

Core resources created during the projects

Stakeholders & targets

Actors that take part of the process including users and knowledge providers

Process

Step by step activities that allow to make an operational use of the platform and reach specific outcome

Tools

Resource that could be used for a specific purpose. It relates to a process and should support arriving at a specific outcome.

Case studies

Stories or inspirations that retraces the experience of pilots during the CENTRINNO project

WEAVING LOCAL RESOURCES INTO REGENERATIVE URBAN ECOSYSTEMS

What aims for ?

The CENTRINNO Cartography is a platform that supports communities in facilitating a circular economy transition in their neighbourhood. It helps communities to map, build and mobilize local makers, businesses and other organizations to engage in resource exchanges and shared learning pathways towards circularity.

The Cartography is seen as a tool for **facilitators of circular economy transitions**.

What do we mean by that? Sometimes, **grassroots organizations or non-for-profits work on advocacy and community building around circularity**. Also **municipalities** often have an agenda to transition to a circular cities. These actors can use the Cartography to **help them structure the process of engaging local communities in their circular transition**. Further, **schools and universities** can profit from some of the steps of the Cartography that focus on mapping the social and ecological context of cities - for example as part of local geography classes or urban studies curricula.

Where to access it?

The cartography can be easily accessed here: <https://www.CENTRINNO-cartography.org/>

Start mapping - <https://www.CENTRINNO-cartography.org/start-mapping>
 Case studies - <https://www.CENTRINNO-cartography.org/case-studies>

How was it created?

The Cartography has been conceptualized and developed by Metabolic Institute as part of the CENTRINNO project. Metabolic has worked together with the nine pilots cities to collect and organize their data, develop maps and identify circular opportunities. In the last part of the project, Metabolic has worked with the Fab City Foundation to make the Cartography available to other cities.

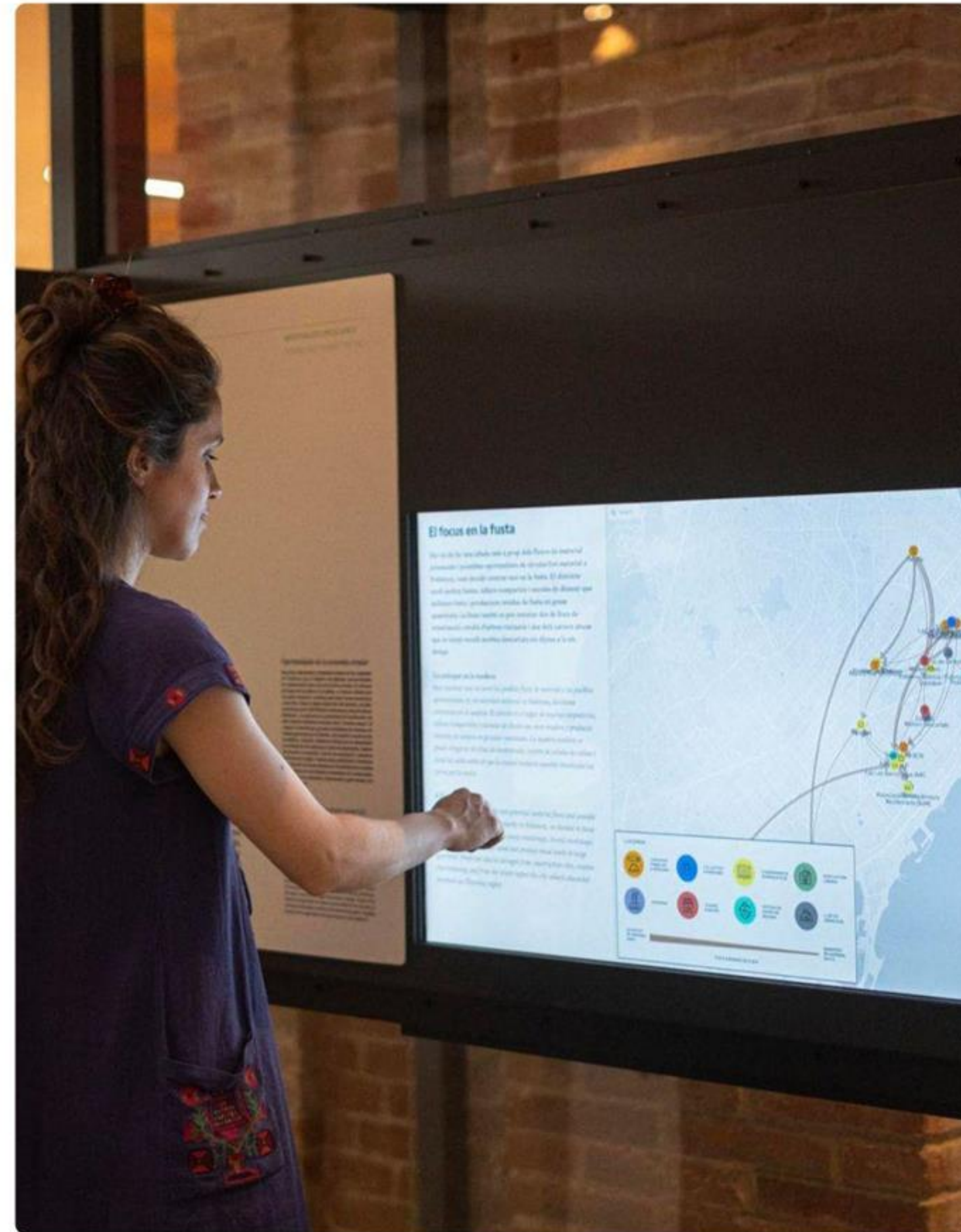


Photo by Fab Lab Barcelona

THE CARTOGRAPHY IN THE UPCOMING YEARS

Activating Fab City ecosystems

The Cartography becomes a widely adopted tool within the existing **Fab City network**. As a network of cities interested in creating self-sufficient and circular economies at the local scale, the Cartography can function as an onboarding tool for new members.

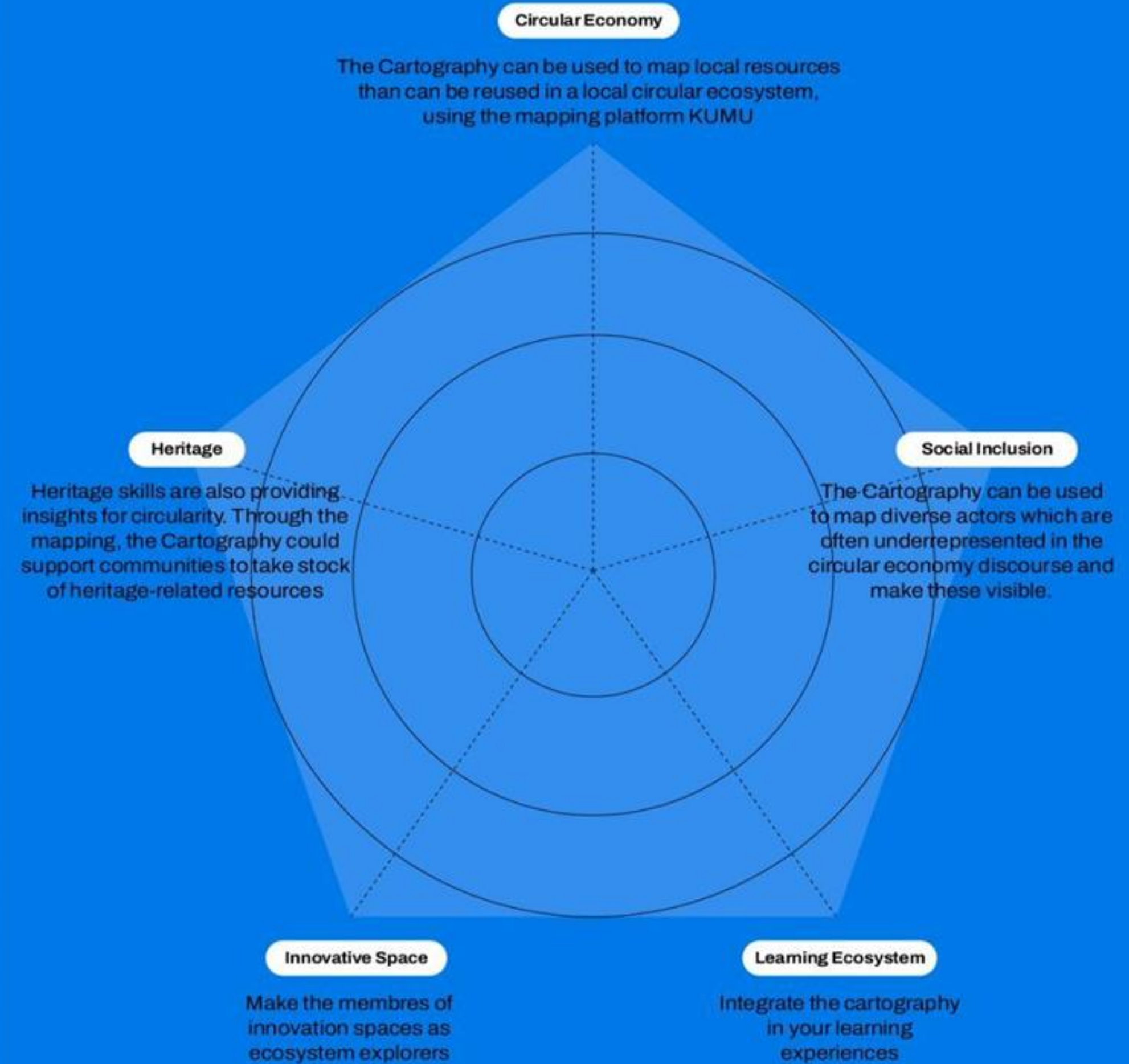
Open source tool that enrich through practices

Beyond Fab Cities, many other **organizations** will pick the key steps and resources of the Cartography that inspires them and brings most use to them.

HANDS-ON Manual for future interventions in neighborhoods

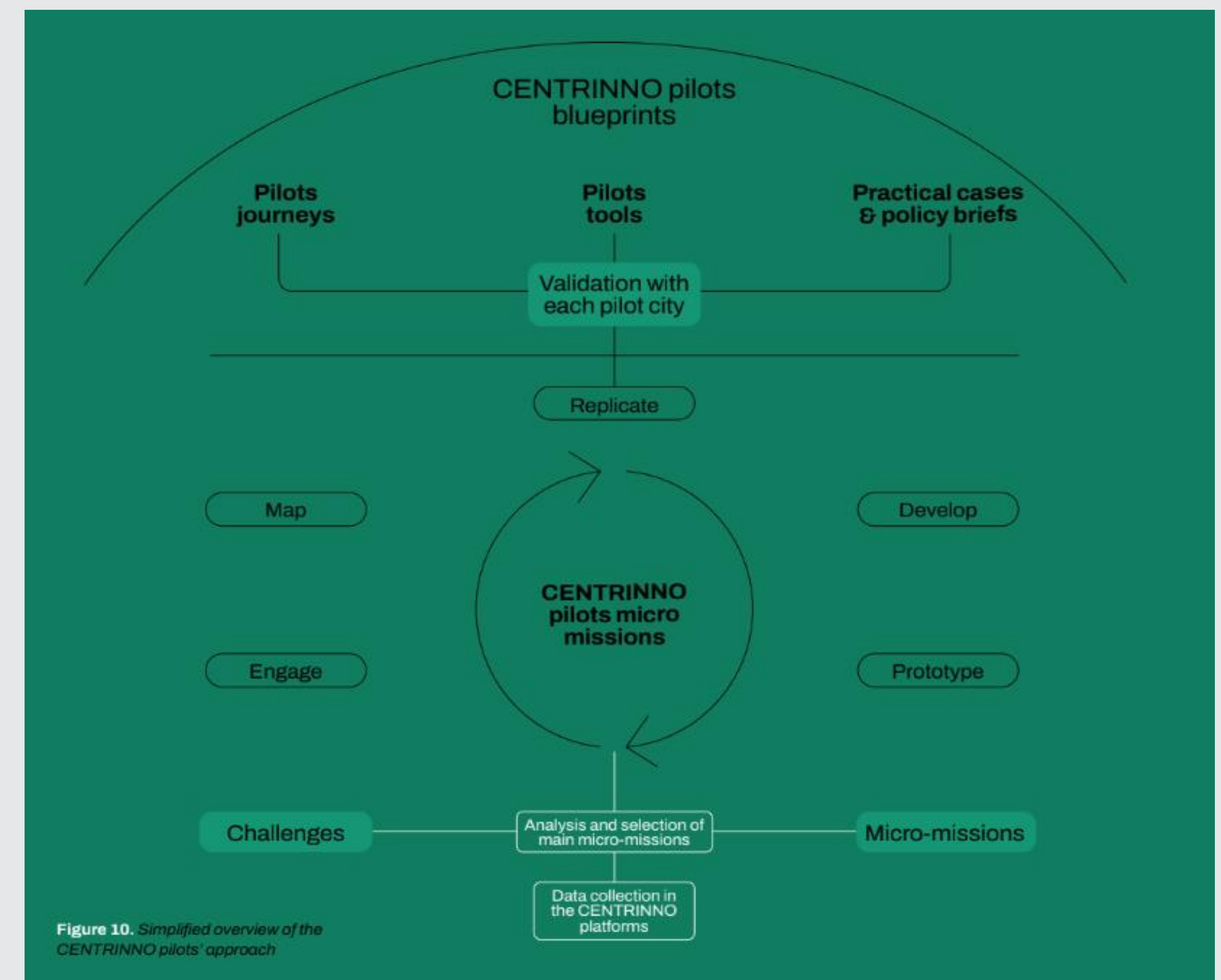
The resources in the Cartography are templates and suggestions. **Users are encouraged build on them, adapt them and improve them to suit their own needs.**






How the CENTRINNO Cartography interact with CENTRINNO's concepts?



WHAT ARE THE TRANSITION PATHWAYS FORESEEN BY CENTRINNO'S PILOTS IN THEIR LOCALITIES?

- An inspiration for the adoption of the CENTRINNO framework, platforms and tools by diverse European cities.
 - Journeys
 - Tools
 - Policy recommendations



	Map	Mapping activities, stakeholder mapping, stories collection, research and literature review.
	Engage	Engagement activities and events with local collaborators and stakeholders.
	Prototype	Prototyping of ideas for new methodologies, products creation, programs and services development.
	Develop	Development of methodologies, products, programs, services and other events.
	Replicate	The main results developed by each pilot that can be replicated by other cities, practitioners and organizations.

AMSTERDAM

Once renowned for its shipbuilding and repair activities, the Amsterdam Noord neighborhood is currently undergoing a swift and remarkable transformation into a focal point for circular initiatives and innovation. Despite its industrial origins, the area maintains a noteworthy 7.6% green space share, sustaining a population density of 1,778 individuals per square kilometer. This blend fosters a diverse community and accommodates various industries.

Certain sections of the neighborhood, such as Buiksloterham and the NDSM-werf, carry a heritage status that effectively bridges the gap between its industrial history and aspirations for a sustainable future. Buiksloterham, positioned as one of the last industrially utilized zones in Noord, serves not only as an inner-city production center but also plays a pivotal role in closing the loop on urban waste streams through remanufacturing, recovery, and recycling practices.

However, the increasing demand for housing in the broader Amsterdam region has prompted the conversion of the remaining industrial land into residential use. This transition presents the neighborhood with significant challenges, including the termination of rental contracts for small businesses and artisans in the area.

City Population size	M	Productive focus	Woodwork, digital technology
Population density	Amsterdam Noord: 1,777.8 people/km ²	Partners	Hout-en Meubileringscollege (HMC), Waag, Pakhuis de Zwijger
Pilot scale	City	Website	Cartography web: https://www.CENTRINNO-cartography.org/amsterdam



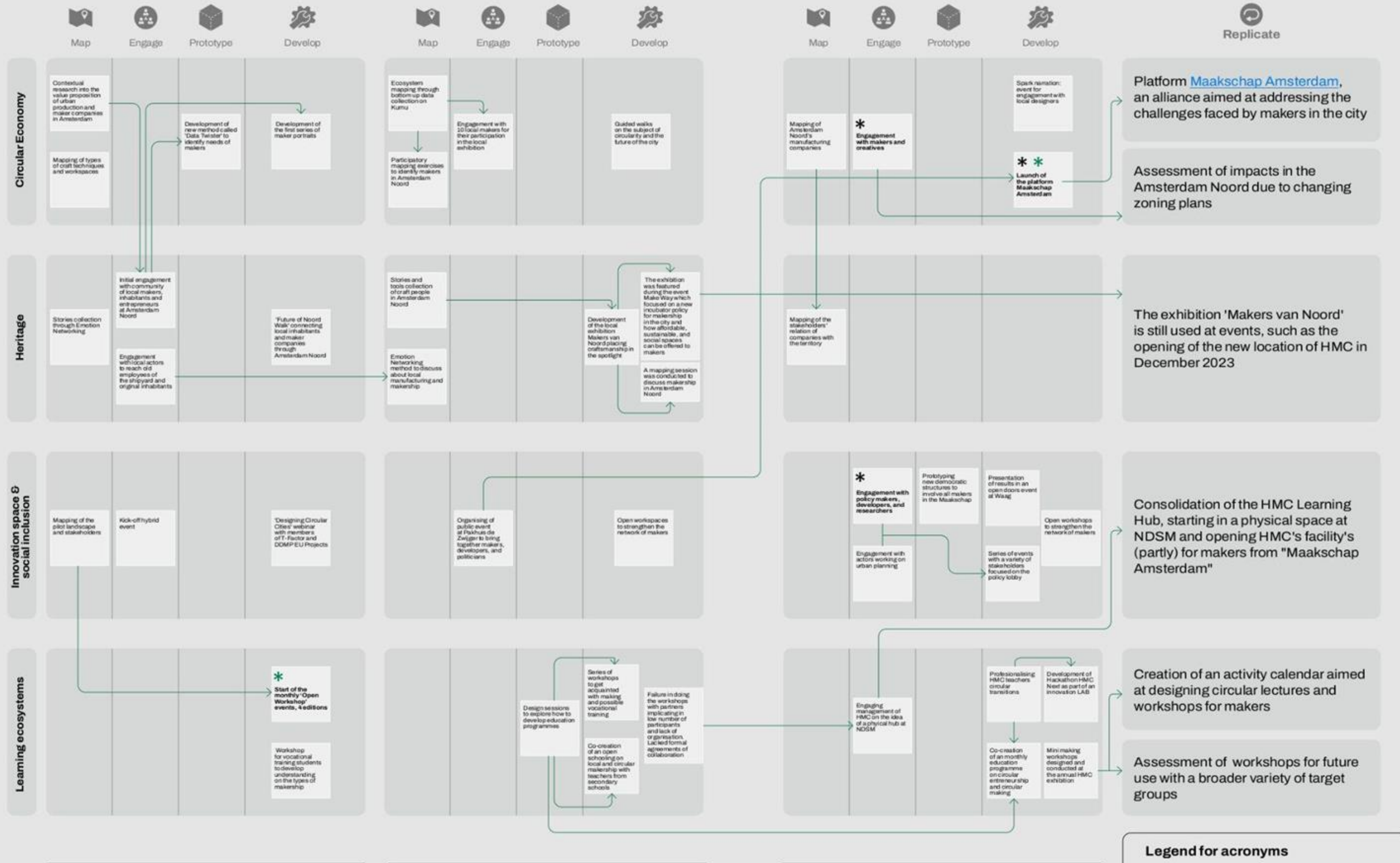
Figure 11. Map of the Amsterdam pilot area by Metabolic Institute.

Vision

The vision of the Fab City Hub in Amsterdam Noord was centered around furthering circularity for local makers. The goal was to integrate the area's industrial heritage into urban renewal by establishing affordable workshops with a long-term perspective.



Figure 12. Amsterdam Pilot Key Performance Indicators



SPRINT 1: M8-M14

'Making acquaintance': Getting to know the pilot area, its dynamics and its old and new residents.

SPRINT 2: M19-M25

"Pop-up": Focusing on getting together the practical elements needed to prototype and try out the first ideas of the maker collective.

SPRINT 3: M30-M36

Sprint 3: "Take Root": Launching Maakschap Amsterdam - A maker collective focusing on the organisational sustainability of the hub.

Legend for acronyms

NDSM: Nederlandsche Dok en Scheepsbouw Maatschappij, a former shipyard and neighbourhood in the Amsterdam-Noord area

* Trigger moment for policy recommendation

* Tool development and application

OPEN WORKSHOP

An event format to connect makers and places



Photo by Amsterdam pilot

Offline
Setting

Makerspaces
Target

Event
Format

What is it about?

The open workshop is an event format that has been designed and implemented by the CENTRINNO Pilot team in Amsterdam. It consists of organising a series of monthly events, each hosted at a different makerspace location. In addition to supporting the identification of better design for local hubs, it can also be used as a tool to reach out and involve new communities. If repeated regularly, it helps to better know and understand local communities' needs and the type of productive and creative spaces that are available in different neighbourhoods.

Story behind

The workshops' goal is to give voice to pressing issues regarding maker communities, enabling partnerships among makers and fostering stronger connection and knowledge sharing. Through the different editions, a better understanding of makerspaces' conditions and needs were identified in order to design a local model of Fab City Hub (FCH).

Key steps

- Finding a makerspace
- Choosing a topic of interests for the maker community
- Sending invitations to the target audience
- Making good communication assets and sharing it online and offline
- Bringing food and drinks and supporting the maker to prepare the space
- Thanking everyone for coming, and opening the invitation for the next to host.

Recommendations for future applications

- Assuring a constant physical presence of the local team in the neighbourhood can help to give visibility to their works and actions
- Better understanding makers' and makerspaces' conditions and needs allows to design a local model of FCH that will respond to this need
- Monthly events of the maker community, where is given voice to pressing issues regarding maker communities are voiced, help to enable partnerships among makers, foster stronger connections and knowledge sharing among them

MAAKSCHAP AMSTERDAM PLATFORM AND ONLINE MANIFESTO

Empowering makers through community engagement and policy advocacy



Photo by Amsterdam pilot

Hybrid
Setting

Makerspaces
Target

Platform
Format

What is it about?

Maakschap Amsterdam is an alliance of makers aimed at sharing knowledge and collectively advocating for better maker policies. It organises events such as the Open Workshop (informal gatherings at various workshops in Amsterdam), roundtable discussions, and focuses on circular craftsmanship.

Key steps

- Affordable and reliable workspaces: by securing lease agreements and ensuring makers have the opportunity to buy
- Participation: involving makers in participation processes for urban planning.
- Education: promoting and maintaining vocational education programs in the city and creating more access to circular manufacturing for all learners in Amsterdam. Check out the platform [here](#).

Story behind

The Amsterdam pilot launched a website with a manifesto to advocate for makership in the city. To ensure this tool met the needs of makers, the Amsterdam pilot prioritised getting to know the community as well as possible and finding out what drives it and to determine common needs, which were later illustrated within the manifesto.

The manifesto, developed in collaboration with local partners, is used by the makers as a centering point from which to discuss and address the needs, challenges, and opportunities of the maker community. This tool gave makers in the city more visibility.

Recommendations for future applications

- Creating a Manifesto gives more visibility for makers in the city to both the general public and policy makers
- Possibility of engaging the local policy makers can keep the topic of makership and makerspaces on the local agenda
- Creating alliances with diverse stakeholders can help to improve knowledge sharing, explore lobby activities, and create educational programmes
- The alliance needs to follow a bottom-down approach and be led by makers themselves, so the strategy becomes more effective and inclusive and consistent.
- Create spaces for sharing of knowledge and tools can lead to a higher support between makers

VOICES FOR THE FUTURE(S) OF REGENERATIVE NEIGHBORHOODS

POLICY ADVOCACY FOR EU, LOCAL POLICYMAKERS, AND FAB CITY HUBS

Drawing upon statements provided by the CENTRINNO pilot teams, we present a collection of policy recommendations **advocating for a transformative shift towards regenerative urban landscapes**

- **European Union**
 - Funding Support
 - Research & Education
 - Circular Economy & Sustainable Urban Development
- **Local policy makers**
 - Infrastructure & heritage preservation
 - Stakeholder engagement & networking
 - Circular Economy Planning and coherent long-term strategy
- **Fab City Hubs**
 - Ecosystem Facilitation & Synergy Identification
 - Emphasis on Local Strengths & Networking
 - Promotion of Circular Economy & Multidisciplinary Approach



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