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**CO3 PROJECT – POLICY BRIEF**

# *The role of co-design in policy-making processes: lessons learnt from the CO3 project*

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## Abstract

The first policy brief released by the CO3 Project focuses on the participatory approach and the co-design method applied during the first phase of the project to tackle the challenge of **integrating a selection of disruptive technologies and test their impact on public service innovation.**

The document aims to highlight the growing relationship between participatory design methodologies and innovation in public services. In particular, it provides suggestions on how **to scale this design approach from a project-related application to a systematic practice at the service of public innovation.**

The document begins with a description of the CO3 field of action and gives general details of the project itself. Afterwards, the definition of co-design as a participatory methodology characterizing the service design process is provided, referring both to literature and works carried out in the public sector. The Policy Analysis, then selects and describes some relevant cases in which co-design is applied both in EU research projects and in local level public initiatives. Subsequently, the document outlines the activities carried out and results collected during the first year of the CO3 project, in order to derive key lessons on benefits and risks of applying the co-design method. Finally, the brief proposes selected policy implications that summarize the practices that would allow to best exploit the design-oriented innovation through a participatory approach.

## Introduction

Government bodies, public institutions and organisations such as city councils and non-governmental organisations (NGOs), are increasingly making use of websites, mobile applications and other digital resources to engage citizens in policy-making and public decision-making processes.

Unfortunately, it turns out that most of these public participation efforts are used for practical purposes only to a limited extent, and this is often related to the fact that the tools are designed using a top-down approach starting from the vision of the organisation rather than from the needs and requests of the citizens.

The goal of the CO3 project is to leverage the potential of **five disruptive technologies** to create a **novel platform** for the **interaction of citizens with the public administration.**



The project uses the co-design to engage all interested parties in defining, integrating and using a digital platform of co-creation, co-production and co-management of public services that meets the needs of both the citizens and the public or private organizations that use it.

## CO3 PROJECT OVERVIEW

CO3 is a European Research project that focuses on “*Digital Disruptive Technologies to Co-create, Co-produce and Co-manage Open Public Services along with Citizens*”. The project goal is to **assess the potential benefits and risks of using selected disruptive technologies** (Figure 1) **in public administrations**. Yet, the real potential influence of **Blockchain, Augmented Reality, Civic social Network, Liquid Democracy and Gamification**, and the ways in which they can disrupt the existing landscape of public services and legal procedures, and can replace present solutions and processes are largely unknown. The assessment will focus on political, socio-economic, legal and cultural **implications of disruptive technologies and their acceptance** on both public administrations and citizens.

The project has its starting point in the **collaborative definition (co-design) of service concepts to assess a new model of collaboration between PA and citizens through the CO3 technologies**. The successive **technology implementation effort** will support the pilot projects, that will be held in three European cities (Athens, Paris, Turin), which will allow the CO3 Consortium to assess the transformative capabilities of the developed platform to promote the co-creation, co-production and co-management of public services.

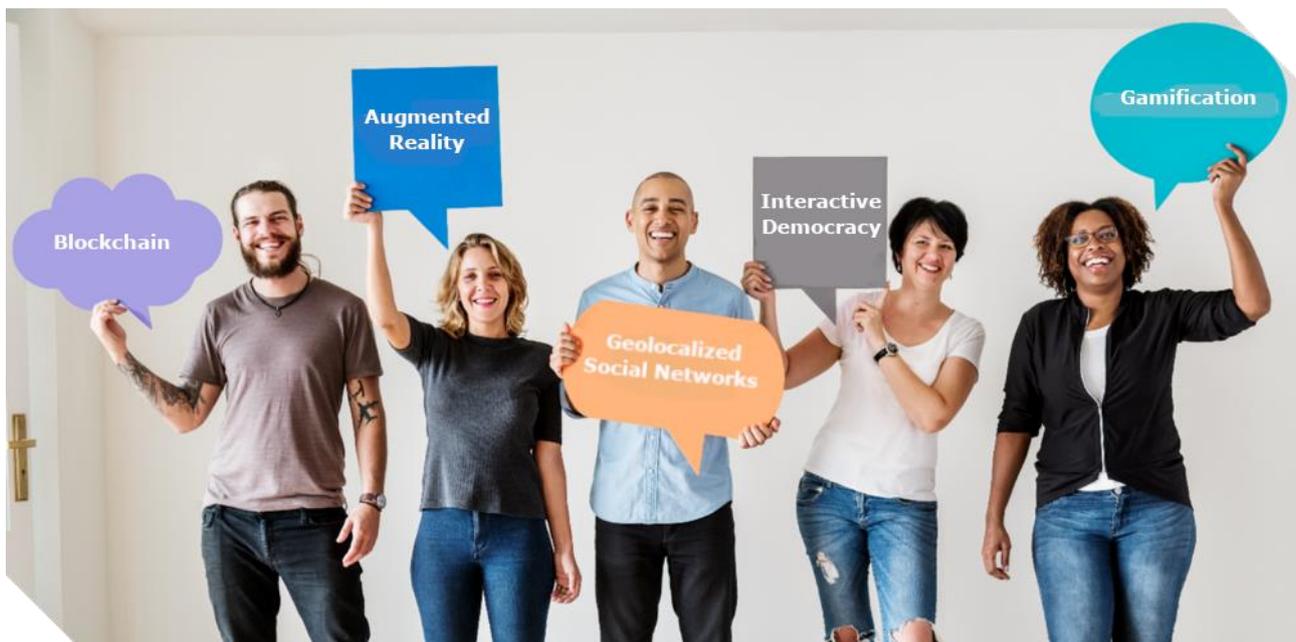
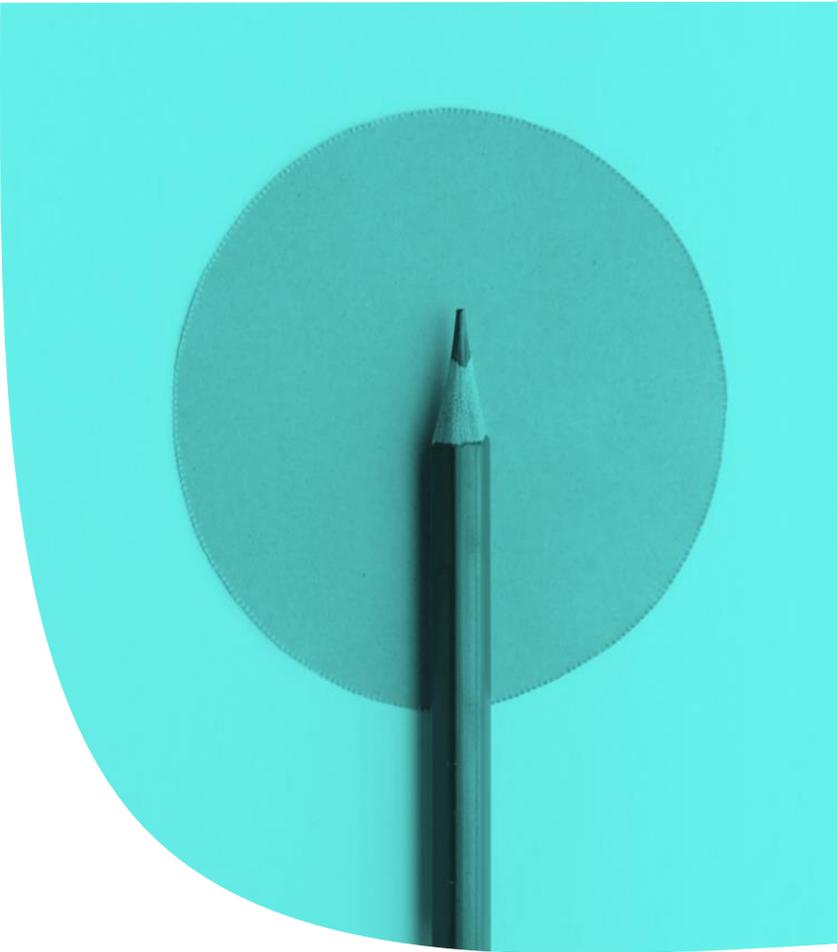


Figure 1 – CO3 Disruptive technologies

## Co-Design as a Background

The traditional chain of the design - *ideate, design, implement* - based on an informed (top-down) vision is no longer effective in promoting, launching and facilitating the introduction of innovation and its adoption by the public. The design process, especially when applied to innovation, should involve since the beginning **the end-users as core reference**, according to the User Centred Design approach [1]. This methodology sees the end-users, or better the citizens, customers, individuals, not as passive



entities, but seeks to engage them as active participants, **collaborating in the value creation process**, acting as experts of the context of use besides the domain experts, consultants, designer's decision makers.

Over the history of the design, the User-Centred Approach has progressively become a standardized methodology [2]. Among the participatory approaches, co-design is finding a growing application in several fields, also in consideration of the fact that most of the innovations that have been most impactful in recent years, are **intertwined with social aspects**, creating the opportunities to define and experiment new ways to interact, socialize, aggregate plurality of actors, contexts, technologies. SMEs, multinational corporations, and more recently the Public Administrations and citizens, have discovered the potential of a new form of **socialized innovation**.

When a project focuses on civic engagement and government, a paradigm shift that **moves people to an active "posture"** is especially needed. In order to commit and involve people as co-designers, it is required to hack the group-thinking and start a "building with and not for" [3] path.

In other words: value creation cannot happen separately from the "place" (market, society) where value will be exchanged [4].

### **WHICH ADVANTAGES DO THE PARTICIPATORY APPROACHES AND THE CO-DESIGN OFFER?**

Through dedicated techniques, the co-design method allows non-designers to conceive and define solutions for complex challenges by:

- **widening the project team's vision** and develop a situated knowledge of complex domains;
- **eliciting the skills and tacit knowledge**, to express creativity and solve problems;
- **collecting rich information, related to the real context**, fostering the further design, implementation and policies;
- **producing tangible solutions**, as low-fidelity prototypes, already negotiated by a plurality of stakeholders and aware of the target and context they are addressed for;
- offering a "**protected environment**" where to experiments, discover and fail, enabling a learning process needed to deal with complex, disruptive, often unknown issues.

**“ Design offers a highly effective methodology for squaring this circle and connecting with citizens – at all levels of the public sector, from services to policy” [5]**

In the domain of Public Services, Open Innovation, Civic Technologies, the conversational and rapid prototyping practices distinctive of the participatory approaches are fundamental, not only to design **human-centric solutions**, but also **to engage stakeholders from the beginning. Co-design is a process that sets the ground to scale up to a wider audience** [5].



## Policy Analysis

Participatory design methods are changing the local, national and transnational practices addressing the **service design and innovation, including in the public sector**, where the interaction with citizens and stakeholders is evolving towards closer and more informed focused activities.

Nowadays, **participation assumes different forms** fosters design thanks to rising socio-technical systems that, taking advantage of the larger and growing access to Internet and technological progress, are radically modifying the way in which people get in touch and act in the “arena”. Technology exploits the natural attitude of people to participate in common causes, such as the extreme weather events [6], mobility [7], politics [8]. The Web 2.0, peer-to-peer technologies, and social networks support mediated social interactions that can be used to build creative communities and engage people towards specific challenges. Beside the digital sphere, face-to-face activities, structured as **participatory design workshops** open up dedicated channels of conversation, problem solving and empowerment that can be scaled at different levels (local, regional, national).

Co-design offers an additional structured interaction channel that, facilitating the encounter between administrations, scholars and citizens, allows to introduce technology and service innovations at an early stage, facilitating further audience engagement activities [9][10].

It is relevant to highlight that a growing number of cities<sup>1</sup> have established departments dedicated to service design, in charge of improving and innovating public services in a participative logic. In the same vein, the **OECD suggests that Governments embrace this methodological innovation** in order to find novel solutions to present challenges [11].

In Table 1 and Table 2 we present a selection of relevant initiatives that are considered as reference by the CO3 Consortium for the application of participatory approaches to public services innovation.

<sup>1</sup> New York City has launched the Service Design Studio at the Mayor’s Office to spread valuable methodologies, such as co-design, that are often underused inside governments: <https://www1.nyc.gov/site/opportunity/portfolio/service-design-studio.page>

**Table 1 –Participatory approach to service design and innovation in Research Projects**

RESEARCH PROJECTS
<p><b>Co-VAL</b> EU Research project that collects strategies to innovate the public administration. Among the available methodologies, co-design is recommended to detect needs and solutions in a wider co-creation strategy [12].</p> <p style="text-align: center;"> </p>
<p><b>Sonnets</b> EU Research project that provides an innovative framework, based on social needs analysis, for public sector organizations in order to accelerate their transformation processes [13].</p> <p style="text-align: center;"> </p>
<p><b>WeGovNow</b> EU Research project that focuses on the design and implementation of a technology platform facilitating the participation and the cooperation among citizens and public administrations [14].</p> <p style="text-align: center;"> </p>
<p><b>Co-Cities</b> Research project that aims to facilitate the transition from Urban Commons to “City as a Commons”, involving a network of projects and cities. As a result, a protocol called Policy cycle is proposed to integrate the Co-design method to reinterpret the participatory process, emphasizing the relevance of producing tangible artefacts addressing the co-governance setting [15].</p> <p style="text-align: center;">  </p>

**Table 2 –Participatory approach to service design and innovation in public initiatives**

PUBLIC INITIATIVES
<p><b>Horizon Europe Co-design 2021-2024</b> European Union programme that funds collaborative multinational research and innovation projects, in which the co-design is indicated as method to focus on the priorities and relevant issues. Participatory practices are required to increase the impact the quality of life, the sustainability and the climate emergency.</p> <p style="text-align: center;"> </p>
<p><b>Services Week, Policy Lab, and UK.gov</b> Annual event launched by the UK government involving thousands of user-centred design specialists to work on digital services, policy, and operations to make them less complex, easier to understand, and simpler to use. The UK Government has adopted the co-design and the service design methods to <a href="#">innovate policies</a> and <a href="#">digital services</a>.</p> <p style="text-align: center;">  </p>
<p><b>Helsinki City lab</b> Experimental collaboration platform focused on designing know-how, digitality and dialogue an integral part of the development of the City of Helsinki. Lab engages local organizations and partners in participative projects and user-centred service design activities.</p> <p style="text-align: center;"> </p>
<p><b>Project IO</b> Project of the Italian Government (Italia Login) that involves local administrations and citizens in a co-design process aiming at building the core blocks of the digital citizenship [16].</p> <p style="text-align: center;">  </p>
<p><b>Torino City lab</b> Open innovation laboratory of the city of Turin that supports the local actors in the development and test of innovative solutions dedicated to the urban context. The initiative includes local administrators, entrepreneurs and citizens as active players.</p> <p style="text-align: center;">  </p>

**Legend:**

Type of Action:  European  National/local

Output:  Policies  Technology  Best practice/Method  Funding program

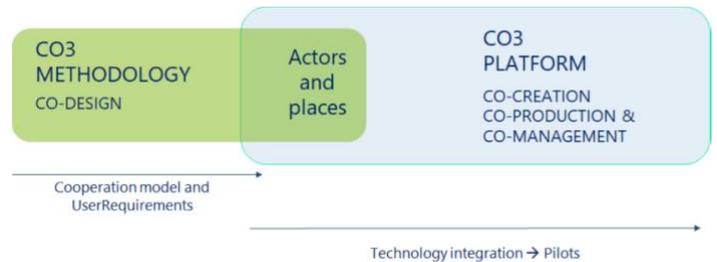
## CO3 CODESIGN IMPLEMENTATION

Within the CO3 project, co-design has been chosen as a methodological framework to collaboratively identify the services that will enable the co-creation, co-production and co-management processes on the base of the needs and ambitions of the cities involved.

Co-design has been identified as one piece of a **wider strategy**, aiming at enabling active participation (co-creation, co-production, co-management) as shown in Figure 2.

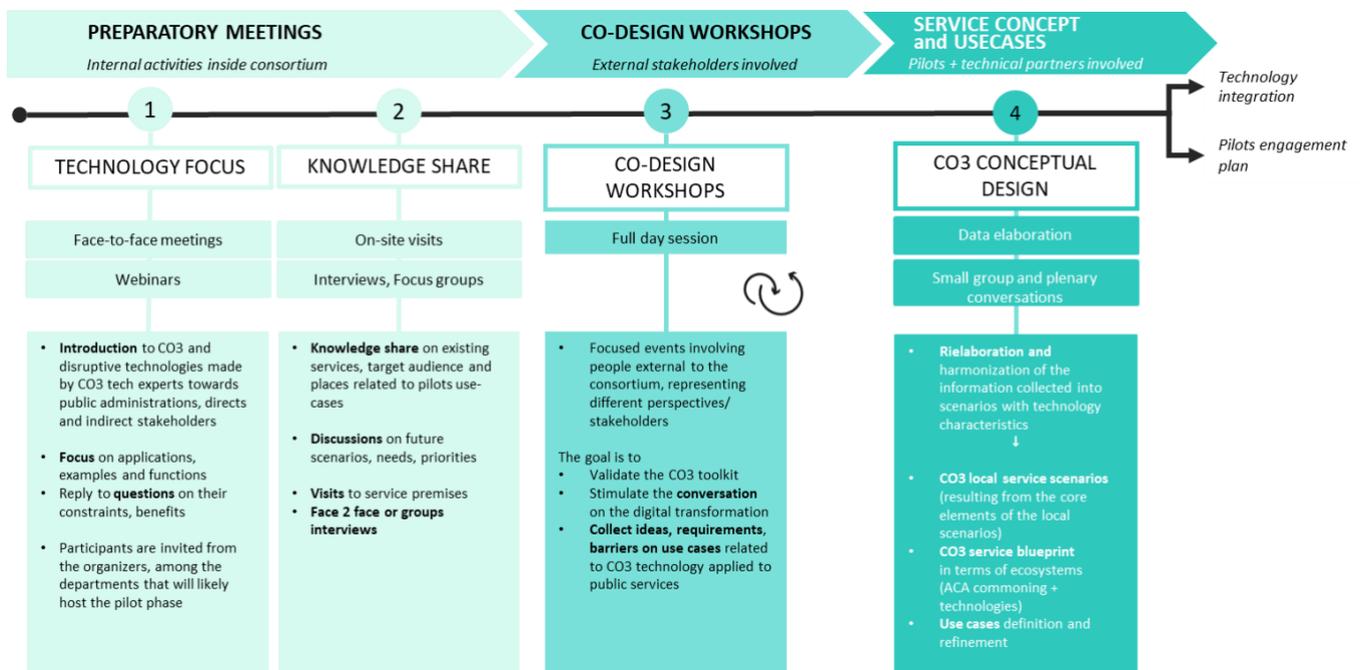
The CO3 co-design approach refers to four core pillars:

- **PARTICIPATORY APPROACH:** the early engagement of heterogeneous stakeholders is the base to enter in conversation and collaborate to the problem solution since the early phase of the project. Participation raise awareness and interest in the project challenge and domain, and it is fundamental to get to a result coherent with the project vision and real contexts of application.



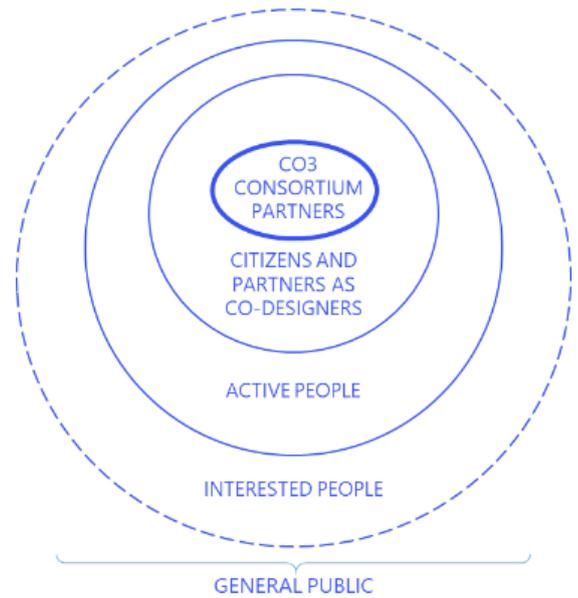
**Figure 2 - The role of the Co-design in the CO3 project**

- **DESIGN ORIENTED METHODOLOGY:** the stakeholders' participation is addressed towards a problem-solving goal, through a design process that is a path including exploratory, ideation/conceptualization and prototyping activities (Figure 3). In all phases, the participants are involved to cooperatively propose innovative solutions to be envisioned, modelled and rapidly prototyped. The CO3 methodology has been systematized in a **toolkit** that combines qualitative research techniques, enabling a deep understanding of needs, barriers [17] and Design Thinking techniques to address the active participation of people in solving complex challenges through visual tools and practices that exploit individual skills and knowledge sharing within the group [18].



**Figure 3 – CO3 participatory design strategy**

- **QUALITATIVE DATA DRIVEN APPROACH:** the visual canvases used to stimulate the collaborative work of participants; work have been also used as data collection tools. The data collected are qualitative and include all the materials documenting the process and the solutions (low-fidelity prototypes) produced by participants (filled canvases, text, video, recording). Their systematization enables qualitative analysis and insights for further actions and decisions.
- **MODULAR IMPLEMENTATION:** the CO3 methodology has been defined since the beginning to support the direct engagement and collaboration of co-design teams of different size and distributed in different settings. The methodology **kicks-off the participatory process from a small scale** and can be progressively scaled up to a wider and larger range of stakeholders, setting up the bi-directional dialogue needed to pilot and asses the co-creation and co-management of open public services (Figure 4).



**Figure 4 – Multi-stakeholder and progressive engagement process**

## OUTPUTS

The implementation of the CO3 Methodology resulted in the creation of a **co-design toolkit** that includes ad-hoc documentation about the group moderation, the path and tools to analyse elements for the service scenarios, and an introduction to the selected disruptive technologies. The co-design toolkit includes specific **visual canvases, customized for CO3** on the basis of selected models provided by the literature. All materials are available on the [CO3 website](#), translated in English and in the languages of the pilot cities.

The **CO3 co-design toolkit** has been designed through an iterative and progressive definition process, in which the theoretical premises and tools have been discussed and integrated with partners feedbacks and contributions.

CO3 co-design activities have been conducted in the 3 cities partners of the project: Athens, Paris and Turin and have allowed us to collect local needs and knowledge, which are integrated in a **meta-scenario representing the CO3 concept**.

### ***The CO3 meta-scenario: The Augmented Commoning***

Based on the Augmented Commoning Area, the Augmented Commoning, is a physical-digital blended space in which relationships and exchanges are enhanced by Co3 Technologies to **promote the mutual exchange of tangible and intangible resources among all participants. Creativity, solidarity and novel forms of socio-economical interactions** are enabled by CO3 technologies, bridging digital services with real places.

The CO3 concept has been contextualized in local service scenarios, addressing in particular three areas of application, described in Table 3.

Table 3 – CO3 local services defined with the pilot-cities

	Social care and solidarity	Economic commoning	Digital urbanism
	The augmented commoning is the grounds where to reply to real needs of different target audiences. Mixing on-site and remote interactions, people are able to donate, exchange, receive resources through <b>blockchain</b> .	The commoning as described by Ostrom [19], is empowered by economic technologies such as the <b>blockchain</b> and <b>augmented reality</b> , empowering new forms of collaborative decision making and innovative services co-management, made more friendly by <b>gamification</b> .	The urban areas that are empty, residual or in transformation, are a good opportunity to engage and stimulate the dialogue and the creativity of citizens, as test of novel forms of interaction with local administration, facilitated by <b>civic social network</b> and <b>liquid democracy</b> .
<b>PARIS</b> 	<b>Contributory Clinic:</b> groups of parents dealing with the educational challenges of their new-born, thanks CO3, can share knowledge, best practices and support, with a specific focus on digital sphere and wellbeing.	<b>The Blockchain Knowledge Registry:</b> Public Administration aim is to partially automatize the administrative and bureaucratic processes of contributory income allowances assignment by counting and certifying the hours worked in contributory labelled activities on the territory through CO3.	<b>Augmented schools:</b> The school of Ile de Saint Denis will be engaged to contribute to redesign the future Olympic Village. Students will explore and know better the neighbourhood and express their creativity through CO3 to generate idea for the Local Administration.
<b>ATHENS</b> 	<b>Grocery on-hold:</b> an urban flea market becomes the place where people using CO3 can exchange digital tokens with fresh food and improve their daily nutrition habits.		<b>Community mapping of Empty Buildings:</b> The local administration engage citizen to raise ideas about novel future use for unused buildings and spaces, able to reply to inhabitants needs and desires.
<b>TURIN</b> 		<b>The augmented Neighbourhood houses:</b> The Neighbourhood Houses are very vital commons that enhance and innovate the interaction with and among citizens. The AR is the gate to an augmented socio-economic networking where voluntary and collaborative validations are forms of innovative service co-co-management.	

# Lessons learnt

CO3 project has started from a **hard challenge: to combine an innovative vision of the future public services** as an open infrastructure of socio-economical relationships facilitated by disruptive technologies, **with the complexity of the local contexts** in which such digital transformation would be experienced and assessed. When a plethora of different actors are called to cooperate to a common goal, the participatory methods are especially effective to explore and define solutions shaped by the multiple perspectives of the interested context.

Co-design represents one of the recommended methodologies to engage citizens, private organizations and Public Administration, on a common goal, and allow them to **investigate and concretize their perspectives through an active path that works as an experience**: a wide and growing variety of design techniques drives individuals and groups to directly know the innovation proposed, learn about it and shape it, in consideration of their skills and familiarity with the local context. As a result, the co-design activities produce a negotiated view or better, a socialized proposal, and **empower participants** to translate it into **tangible artefacts** (narrative, visual, technical descriptions or prototypes), **made to be shared, discussed, tested, further refined**.

Nevertheless, participatory poses several difficulties:

- if from one side the participatory approach offers people **intuitive and pragmatical tools** to enter in touch with a new topic, such as disruptive technologies; on the other side it requires that the **moderators and participants comply** with it, to be able to profitably proceed to a progressive and constructive path;
- the co-design results are **dense of meaning**: they come from the direct experience and collaborative reworking of target users. The output of co-design sessions is a sort of raw-material that needs to be furtherly elaborated to foster the public conversation, the service innovation, the policy making. Relevant outcomes concern the **participants empowerment** related to an expanded knowledge of the domain, the direct interaction with a plurality of perspectives and the design-oriented approach to problem setting and solving through creative, dialogic and systematic techniques;
- participatory design is a good way to involve citizens around a common challenge. Nonetheless the engagement is very difficult: **it requires a strong commitment on behalf of decision and policy makers**. This is crucial to engage people in an ambitious project, to cope with. This premise set the co-design not as creative or speculative laboratory but as an impactful work. On the other hand, enter in dialogue with the local actors can be risky: opening a listening channel is not enough. Once the dialogue with the local actors is started, it has to be careful maintained, keeping on actively involving all stakeholders as problem solvers, or better, co-designers. In that way, the raised interest can support the change over the territory.

## POLICY IMPLICATIONS

The participatory approach and the co-design method can improve the innovation of public services in terms of **better adherence to the real context, sustainability, and compliance of citizens**. Even at early stages of the process, when small groups are involved, these methods can produce relevant value for all participants and in particular for the Public Administrations. The analysis of relevant policies of these topics and the CO3 experience highlight the growing relationship between the participatory design-oriented methodology and the innovation in public services. In particular, the use of such a methodology appears strategic **to scale the design approach from project-related applications to a systematic practice** at the service of public innovation.

In order to promote a wider application of design-oriented initiatives in civic innovation, some recommendations come from the present policy analysis and our experience within CO3:

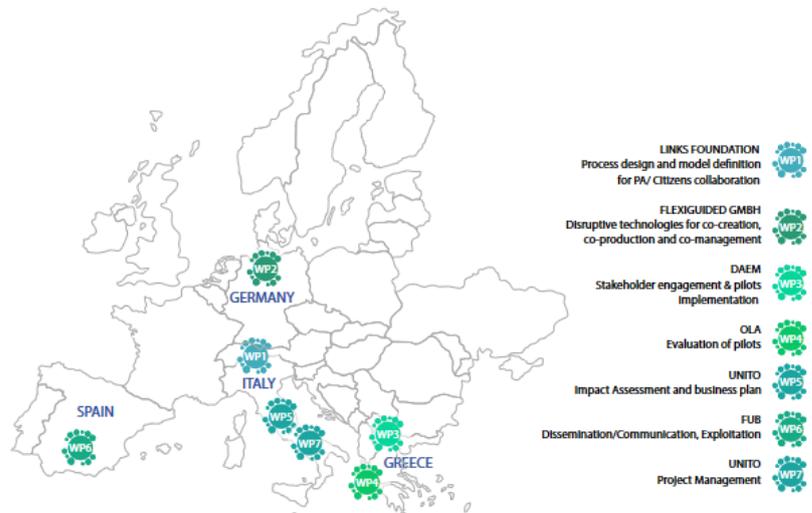
- **CREATE A DEDICATED GROUP**, with dedicated human resources, possibly including professional designers, will allow to set up and support participatory strategy, aware of the real contexts and the plurality of stakeholders, guaranteeing the scientific and consistent methodology application. This is a path already started by a growing number of cities, in Europe and in the world.
- **ITERATE THE ACTIVITY** and set a plan of co-design sessions to listen and co-create with citizens will allow to build a solid base of citizens and stakeholders, actively engaged as co-designers. In addition, it will contribute to consolidate an extensive and deep knowledge of the territory and the relation with it, aside from refining the local participatory processes and solutions.
- **DEVELOP DESIGN SKILLS FOR ALL**, training not only citizens, also public servants and policy makers, participating to co-design sessions, and build a service design background to apply in policy design and implementation.
- **IMPLEMENT A CO-CREATION PLATFORM**, including both online and offline assets, as connected experience dimensions. Accessible, dialogic, transparent and empowering digital platforms can enhance the connection with administrations and citizens and enhance their active participation into the society.

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