

# **COGOV WP 4: Experiences and Practices of Co-creation and Co-production**

**The role of strategic management practices for co-creating public value outcomes**

Report on WP4 T4.1-T4.4 prepared by Jacob Torfing and Eva Sørensen

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## **1. Theoretical validation of conclusions from design experiments**

The previous report on T3 also contain a theoretical validation of the lessons drawn from the positive results gained through the design experiments. The theoretical validation will be expanded in a forthcoming publication. Eva Sørensen, Jacob Torfing and Mitja Dečman are contributing a jointly written article to a special issue of *Public Policy and Administration* that will discuss the lessons drawn from the design experiments about how to spur co-creation and reflect on the use of design experiments as a method of interactive research bringing together researchers and practitioners. The article will further dig into the theoretical support for the interventions that proved successful in overcoming problems and challenges to co-creation. This article is supplemented by an article for *Cities* that is currently under review. In this article Eva Sørensen and Jacob Torfing reflect on the use of design experiments in Gentofte municipality from 2015 to 2021 and further discuss the theoretical support for the interventions in the Gentofte case where the actors aimed to turn public libraries into cultural hubs.

Theories and practical experiences are often drawn up to motivate interventions in design experiments and the results of the interventions helps to confirm, falsify or revise the understanding of what works in a particular context and situation. To illustrate, it is well-known in research that knowledge sharing between participants in co-creation is important in order to facilitate effective participation in innovation processes (Markovic and Bagherzadeh, 2018). This insight supported the intervention in the Gentofte case where it was found that knowledge discrepancies prevented the participants to participate on an equal footing in developing the libraries into cultural hubs. Visits to the six public libraries were organized and helped to level the field of knowledge between the actors, but created an unintended negative effect as the librarians were highly defensive in the meeting with the participants in the Task Committee as they gave the impression that everything that was suggested by the participants was already in place or had already been tried, thus leaving the participants disempowered by the inability to contribute anything new. So, while the theoretical insights from existing research is confirmed, the result of the intervention leads to the recommendation that knowledge sharing is not organized as presentations followed by Q&A, but perhaps as a quiz where the participants in the task committee use Menti to vote for answers before they are presented with the right answer. This technique was tried in another Task Committee with much success as it contributed to knowledge sharing in a way that empowered the participants and created an informal and funny exchange when the participants were surprised about the result.

## **2. Development and dissemination of context specific recommendations**

The COGOV project decided to collect recommendations across all work packages and construct a Practices Sourcebook that overlapped so much with T2 in WP4 that we chose not to do a separate list of context specific recommendations based on the design experiments,

but instead spend the time and energy contributing to the said Practices Sourcebook. Here the context-specific problem is presented followed by the key mechanism producing an effect, the main positive effect achieved, the potential side effects and the contextual factors enabling the generation of a positive effect.

The contribution from WP2 to the Practices Sourcebook is show in table 1.

**Table 1: WP4 contribution to Practices Sourcebook**

<b>Problem addressed / Function Performed</b>	<b>Brief Description and <u>link</u> (Report and pages where practice described)</b>	<b>Key Mechanism(s) producing the effect</b>	<b>Main (positive) effect(s) expected of the practice</b>	<b>Side effects?</b>	<b>Key Context Factors (enabling the practice to work)</b>	<b>Practice Detected on the field or co-created? [D / Co-C]</b>
COVID-19 lockdown halted face-to-face interaction in co-creation project at heritage site	The co-creation project created outdoor excavation test pits in peoples back gardens that prompted discussions over the fence (p. 11)	Creative adaptation and prompt action helped keeping up momentum and create interaction	Positive impact as 36 families participated and kids worked with their parents, learned about heritage and talked with neighbors. The activity combined delivering public value and promoting heritage, won prizes	No side effects observed	Good connections to local citizens helped recruit participants in new type of activity	Practice was detected in the field [D]
A co-created playground at the heritage site was subject to anti-social behavior and vandalism that had the potential to attract negative media attention and undermined the idea that the neighborhood deserved good public facilities	The response involved a meeting with the park ranger, the local high school, citizens, the local councillors and local community police. They decided to speak to the young people involved to discover how they could collectively ensure that people would want to care for the communal space rather than wreck it (p. 11)	The standard inclination to call the police and press charges was defeated in favour of a constructive management of the conflict	Positive impact on the overall goals as the threat to the co-creation process ended up extending and strengthening it and today the Hillfort Heritage Center and the playground is used by many local community members. Being adjacent to the newly launched heritage/ community center, it means that the building itself is attracting local people and other visitors	No side effects observed	A growing feeling of a common ownership to and pride in the local community enabled local actors to take a constructive stance reaffirming community values	Practice was detected in the field [D]
The lack of open-access data regarding past projects prevents local actors from getting a comprehensive picture of what has been done so far under the Rijeka Local Partnership Program (RPLP)	The RPLP program has created a data repository, which is a part of the City of Rijeka e-Services portal. It has also built a GIS database that publish data on a web map (p. 12)	Transparency ensured through digital solutions enable local actors to see where past projects were conducted and where there was a need for new projects	Positive impact on the democratic legitimacy of future co-creation since the availability of project descriptions combined with GIS data tends to assure a more fair spatial distribution of the local projects funded by the City of Rijeka	No side effects observed	The solution required possession of relevant data and technical skills and collaboration with the Department of Local Self-Government and Administration and the IT Department	Practice was co-created [Co-C]

The RPLP project selection committee consisted of three representatives of non-governmental organizations and the media, but ordinary citizens had no say in the selection process, thus potentially undermining its democratic legitimacy	Two active citizens with previous experience from RPLP projects will be added to the selection committee starting with the year 2022 (p. 12)	The addition of citizens representatives enhances input legitimacy and the fact that they were active and experienced enhances output legitimacy	Positive impact on the democratic legitimacy of co-creation in the future as the democratic anchorage of the whole process of the RPLP is solidified	No side effects observed, but it is important that the citizen representatives enjoy popular support and a fairly appointed/ elected	The solution was predicated on the willingness of established organizations to share power with active citizens	Practice was co-created [Co-C]
The RPLP program lacked a formal evaluation procedure that assesses and compares the success and sustainability of the local projects	A broad range of participants were involved in developing, testing and refining a new framework for project evaluation in several stages (p. 12)	Collaboration with a broad range of actors both stimulated needs-based innovation and built ownership over the solutions	Positive impact on future co-creation projects in the RPLP program since there is now a simple and effective procedure for multi-stage project evaluation with a broad-based ownership	No side effects observed	Local organizational capacities were needed to drive the collaborative innovation process	Practice was co-created [Co-C]
Many participants in the Task Committee on turning libraries into cultural hubs had a preference for maintaining what you have got and avoiding new and uncertain future developments	The format of the next meeting was changed to allow people to articulate what they want to maintain and what new they may want to add (p. 12)	Bringing worries and hopes out in the open and ensure joint appreciation of both prevents the relation between traditional library function and new cultural events from being a zero-sum game	Positive impact on the participants' motivation to try something new and pursue innovation	No side effects observed	No particular conditions for the solution	Practice was co-created [Co-C]
Facilitators took up lots of space in highly structured meetings and they were the central turning point in the star-shaped debates, thus reducing the space of free and open-ended discussion	There was created a new type of open meetings with no fixed agenda, a more withdrawn facilitation and plenty of room for brainstorming and discussion (p. 12)	Open meetings helps to prevent oversteering and frees up time for free, open and unhurried discussions that stimulate innovation	Positive impact on the number of new innovative ideas formulated by the participants.	No side effects observed, but it is important to make precise minutes of discussions in order to retain new and innovative ideas	The solutions required willingness of political and administrative facilitators to lose control and give more room for the citizens	Practice was co-created [Co-C]
Highly asymmetrical distribution of knowledge about the libraries amongst the participants	Organized online site visits to all six public libraries where professional librarians provided information about the libraries and	Letting the libraries tell about the libraries and letting the citizens ask questions would create a massive knowledge transfer	Positive impact as both the citizens and the elected politicians learned a lot about the functioning and activities of the libraries, thus evening out the knowledge asymmetry	Negative side-effect as the librarians turned quite defensive and gave the impression that everything had or would	The solutions required extra meetings and local resources for planning of the site visits	Practice was co-created [Co-C]

	there was time of Q&A (p. 13)			be tried, thus reducing the space for innovation		
The meetings in the co-creation arena tended to be all talk and no action	It was decided to do practical testing of a co-created idea of cultural event with local authors in one of the libraries (p. 13)	The cure of talk-centrism is to act and show that co-created action is possible and has real effects	The co-created event was successful, but it had a limited impact on the innovation ambitions of the participants due to the unintended side-effect	Negative side-effect as the event was hijacked by one participant (a local author) and the Task Committee had limited interest in and ownership over the event	The solution required that the local library had organizational capacity to plan and host the co-created event	Practice was co-created [Co-C]
The common purpose of the employment policy board was unclear, meetings were uninspiring and there was a tension between central goals and local needs	Organized meeting so as to allow people to articulate what they wanted to maintain and what they wanted to change led to the formulation of a nine-point plan (p. 13)	Creating a space for deliberation about what is good and bad and what is needed can help to create a joint direction	Positive impact on participants' awareness of what can be achieved in and through collaborative governance	No side effects observed	The solution merely required facilitation of deliberation	Practice was co-created [Co-C]
Endless debates about the governance structure prevented the participants from discussing policy content	An open meeting was used to develop a new substantive policy agenda based on a well-prepared overview of past performance (p. 13)	Open meetings enable participants to talk about issue they find important and thus brings energy to the process	Limited positive effect as there was some good substantive policy discussions in smaller groups, but the external facilitator stood in the way of more positive outcomes	Unintended negative side effect as external facilitator took up to much time with redundant presentations and failed to ensure final decisionmaking	The solution merely required facilitation of deliberation	Practice was co-created [Co-C]
The participants expressed a need for a stronger and shared ownership to their joint policy agenda and projects	The solution was to form mixed thematic sub-groups to discuss goals and ideas based on a review of current projects and white spots (p. 13)	Getting the participants to talk about and agree upon new agendas would help to foster joint ownership	Positive impact on collaborative engagement and creativity of the participants ,	Negative side-effect as the add-on event created project ideas that were somewhat disconnected from the review of ongoing projects and white spots	The solution merely required facilitation of deliberation	Practice was co-created [Co-C]
There was a general and discouraging feeling that	Decided to hold board meetings focusing on practical	Forcing the board to discuss concrete actions would help to	Limited positive impact on the innovation ambition of the participants:	Negative side-effect occurred because	The solution merely required facilitation of deliberation	Practice was co-created [Co-C]

meetings were all talk and little action.	implementation and the planning of concrete activities and next steps (p. 13)	demonstrate the value added of policy co-creation	their mutual relations and aspirations were strengthened	action decisions were postponed		
Potential users were supposed to be involved in the co-creation process, but only in the ultimate stage of testing the prototype of the new e- Authorization platform	Probe the potential end-users' interest in participating in the co-creation of a new service system, gather their ideas and inputs and present them to the project team (p. 13)	An explorative approach to early user involvement would both help to identify interested user and test the value added of their inputs	Positive impact on furthering co-creation and the assessment of impacts and benefits as the end users demonstrated willingness to contribute to service improvement and the project team referred to their inputs as interesting and helpful	No side-effects observed	Some prior experience with end-user involvement in technology development is required	Practice was co-created [Co-C]
It was planned that end-users should test the prototype, but time pressure due to strict deadlines threatened to squeeze out the planned user involvement	Different testers were quickly recruited to test a mock-up of the new e- Authorization platform and they were subsequently interviewed (p. 13)	A quick-and-dirty user test of a mock-up would fulfil the purpose and perhaps encourage further user testing in the future	Large positive impact on goal attainment as the test showed that there were many problems with the prototype. This led to substantial changes and delay of the project delivery.	No side-effects observed	Some prior experience with end-user involvement in technology development is required	Practice was co-created [Co-C]
Initially, the project team and its leader had little sympathy for co-creation based on earlier negative experiences	A co-creation ambassador was recruited and supposed to help explaining the concept, eliciting positive experiences from team members and fostering a common language in the team	People often dismiss new ideas and practices because they are uncertain of what it entails and have difficulties seeing the benefits. A dedicated person could overcome these barriers	Positive impact on the furthering of co-creation as the team members came to collaborate better with each other and appreciate inputs from end users	No side-effects observed	Sufficient knowledge about co-creation and facilitator skills are needed to play the role of co-creation ambassador	Practice was co-created [Co-C]
In the 2019 and 2020 co-created holiday camps, it was discovered that hunger in holidays without school food was a real problem and that proper meals for the kids rather than just snacks and a limited amount of food packages were needed	In order to provide proper meals for the kids in the 2021 summer holiday camp, the project enhanced its reliance on donations from private companies, citizens, other churches and FareShare	Blended finance combining contributions from manifold public and private actors helps to mobilize resources for co-creation projects	Positive impact on the fulfillment of physical needs of the kids participating in the holiday camp due to blended financing of nutritious food	No side-effects observed	A local tradition for charity contributions is an important condition for this solution	Practice was detected in the field [D]
Relying on external public financing meant that food packages could only be given to	The project decided to enhance the reliance on volunteers and donations and	Scaling down public funding and enhancing private funding can free co-creation projects	Positive impact on the fulfillment of physical needs of local families and the kids participating in the holiday camp due to	No side-effects observed	A local tradition for charity contributions is an important condition for this solution	Practice was detected in the field [D]

<p>certain families and not to all families in need</p>	<p>only employ one seasonable employee in order to gain financial independence</p>	<p>from constraining rules and strings attached to public money</p>	<p>enhanced self-management and self-financing</p>			
<p>In 2020, an external, national organization was hired to do sports activities with the kids, but it was not a team player in the local collaboration and low trust between the partners developed</p>	<p>Gaining financial independence through voluntarism and donations meant that collaboration with the external, national-level actor was no longer needed</p>	<p>Collaboration between local partners who know each other well and is on an equal footing will generate trust</p>	<p>Positive impact on the fulfillment of social needs due to more effective planning, communication and execution based on trust-relations between local actors who know each other well</p>	<p>No side-effects observed</p>	<p>A local tradition for charity contributions is an important condition for this solution</p>	<p>Practice was detected in the field [D]</p>
<p>The city councilors and directors of cultural facilities in the cultural development project took up a defensive posture in the co-creation workshops and, more generally, there was confusion amongst the participants about their roles</p>	<p>Use of personas with different socioeconomic and cultural participation profiles provide a boundary object for the participants to jointly focus upon when interacting (thus downplaying their different individual roles and interests)</p>	<p>Externalization draws the attention away from the individual participants and let them focus on a common problem and challenge and that makes it easier to interact</p>	<p>Moderate positive impact on stimulating co-creation of cultural policy solutions as the actors gradually loosen up and participate in the discussions and end up finding solutions to lack of cultural participation</p>	<p>No side-effects observed</p>	<p>The solution presuppose knowledge of persona method and capacity to use it properly based on research and story telling</p>	<p>Practice was co-created [Co-C]</p>

### **3. Creation of learning game in both an online and board game version**

In order to disseminate insights generated in WP4 T1-T3 as well as in the rest of the COGOV project, we have created a learning game called the COGOV GAME. Gamification of research results and practical insights is on the rise and part of a new learning game trend. We play games from we are children and all the way through our upbringing and even in adult life. The use of all sorts of games is increasing, especially amongst young adults. Games used for learning purposes are often referred to as serious games as they tend to teach the participants a particular repertoire of actions. Serious learning games are an effective way of communication research results and transforming them into new actions. People often learn more and better from an active mind-body experience than from a passive reading of a text (book, article, report or brochure) or a passive viewing of a slides show or animated movie. The use of games creates an exciting, funny and playful situations where people are performing new actions and learning from the feedback. By placing the players in a fictional space in which they have to overcome obstacles and act in new ways, they gain confidence in their own ability to do new things. This empowerment effect helps people to try to act differently in real life situations. New research confirms the positive impact of the use of learning games in teaching of practitioners (Vlachopoulos and Makri, 2017).

The target group for the development of the new COGOV games was local public managers and employees in charge of orchestrating co-creation processes. The purpose of the game was to communicate learnings from the COGOV to practitioners, but we soon discovered that the insights from the COGOV project had to be supplemented by more general insights from the past decade of co-creation studies in order to develop a comprehensive learning game covering all the different phases and aspects of local co-creation processes.

The participants in WP4 began the development of the new learning game with a series of online meetings in 2000 where we discussed ideas for fictional cases and the kind of insights from different WPs that should be flagged in the game. It was also discussed whether to go through with the original plan of developing both a board game and an online game. Experiences with previous games such as the Danish games COCREATOR and POLICVYMAKER spoke against the online version since the pedagogical effect of playing the game in a group sitting around a table and playing a board game is huge and much bigger than the effect of sitting at home playing an online version. The board game becomes a boundary object that different actors focus upon and learn from playing. However, the disadvantage of the board game is the complicated distribution through the mail and package delivery service that acts as a barrier to its diffusion and usage. An innovative solution to this dilemma was found since we decided to make a board game that could be distributed online through the downloading of a print file that people can take to their local print facility to print out all the material to be used when playing the game (except for the box that contains the game). The print-and-play version of the COGOV game can be downloaded freely from the GOGO website. This solution ensures that the game can be played in all corners of Europe and indeed the entire



world with maximum pedagogical effect, but no transportation problems and no costs (except for the printing).

Alongside the initial discussions of the storyline for the game, a suitable design company had to be found and a contract had to be signed. The Danish lead of WP4 contact several private companies and chose the one with the most experience with games in this areas and a competitive price. Hans Peter Hartsteen from the game company participated in several brainstorming meetings with the partners participating in WP 4 and had several bilateral meetings with the Danish lead of WP4. Close collaboration between researchers and game developers is essential for developing an insightful and exciting game that is worth playing. Researchers sometimes attempt to develop a learning game on their own and the result is often a game with many insights but a lousy game dynamic. Conversely, serious game developers sometimes try to develop game all by themselves with the result that the game dynamic is great, but the learning content is poor. In the development of the COGOV GAME, we worked together to design the storyline and the game dynamics. The researchers then wrote all the text into templates provided by the game developers and the prototype was then changes several times through joint evaluations and further as a result of more than 10 test games with different groups of players from different countries.

The COGOV GAME is meant to be played by a group of 2-6 people. The group play together against the game, thus allowing joint reflection and learning. The groups is first presented with a fictional situation. Lanice Municipality somewhere in Europe is experiencing an increasing frequency of torrential rain that causes the river to overflow, thus generating massive flooding problems that call for the co-creation of innovative climate adaptation solutions. At the same time, the central government requests that all municipalities develop local climate action plans for climate change mitigation. The Municipality of Lanice decides that the flooding problem should be solved as a part of a local climate action plan and establishes a new Climate Task Force that brings together a diversity of public and private actors who will work together to co-create a set of solutions that will eventually be discussed and endorse by the City Council. The City Council selects a group of public managers to lead the Climate Task Force. The players playing COGOV GAME is that group of public managers responsible for orchestrating the co-creation process.

The drama in the game is that the public leaders of the Climate Task Force AKA the group playing the game encounters a series of problems that are formulated as dilemmas. There are two dilemmas in each of the five phases: convening, facilitation, innovation, implementation and evaluation phases. When facing a dilemma the players have to choose between three solutions. To select a solution they must pay with resources that they get from the fictional participants of the Climate Task Force that they have selected at the beginning of the game. When they have selected and paid for a solution, they turn the game card to discover the impact of the chosen solution. The impact is described in words and translating into points achieved on four different success parameters:

1. **Innovative solutions:** The novelty of the co-created ideas and practices. Innovation is important because today's problems cannot be solved by yesterday's solutions.

2. **Joint ownership:** Support for the innovative solutions from key stakeholders and the general public. Joint ownership is important because it reduced implementation resistance.
3. **Sustainable Outcomes:** The solutions effectively solve the problem at hand. In the final instance co-creation is about making a difference by having a real impact on the world.
4. **Trust and network:** Improved relations between the involved actors. Trust-building and the formation of well-functioning networks pave the way for future collaboration.

The players win the game if their choices lead to a high and balanced score on the four parameters that is higher than the excellence level marked on the board. The players do well if they get points higher than the critical scope level. Playing the game again will yield new learnings and offer a chance to perform better and win the game with a high score.

At the final COGOV conference in Utrecht—28<sup>th</sup> and 29<sup>th</sup> of April 2022—an almost complete version of the COGOV GAME was tested by +30 researchers and practitioners. The test took place at the morning of the 29<sup>th</sup> of April and lasted around 2 hours.

Facilitated by a researcher from the Danish lead of WP4, a small group of four participants played the game online and reflected on the findings with the facilitator. Given the limitations of the online setting, the online test was remarkably successful in visualizing the considerable benefits and also some of the limits of learning through board games, such as identifying with the case focusing on issues pertaining to sustainability and climate change. The online players were highly satisfied with the game and congratulated COGOV for this achievement

The participants present at the conference played in small groups sitting together in a large conference room. After a brief 10-minutes introduction laying out the idea and structure of the game and instructions to note any problem encountered when playing the game, the players began playing the game. A researcher from the Danish team observed the game playing and noted how the different steps in the game functioned in practice.

At the end of the on-line and physical game testing sessions, we collected comments and recommendations and we conducted a brief oral evaluation. The game was a huge success and many participants wanted to know more about how to acquire the physical game and gain access to the online version. Following the comments and observations, we made a few corrections to the game in early May 2022 before we produced the final version that were then sent to all partners in the form of four physical board games and a link to where the print file can be downloaded. The link is: <https://participation.dk/>

The COGOV GAME can be used in many different ways. As a part of blended teaching at universities or in master programs, in connection with a public presentation about leading and managing co-creation or as a tool for self-learning by a group of employees in a public agency.

A major strength of the COGOV game is that it is self-facilitated. The players open the game box, set up the game as indicated on the enclosed drawing, pick up the game cards and start to play. There is no need for introduction or facilitation. The players must not spend time learning the rules or reading a manual. The COGOV GAME can be played right away. It is easy to play and the rules are few and explained along the way when they are necessary.

Each of the GOGO partners will use the games they have received in the coming years and slowly expand knowledge of the game. The partners in WP4 will advertise the game via LinkedIn and Twitter to ensure that people know about the game and start using it.

#### **4. Developing national and European beacons for inspiration and knowledge diffusion**

When planning the design experiments in WP4, we were looking for spectacular cases that had accomplished something extraordinary that could serve as potentially inspire others to advance their capacity and efforts to co-create solutions to complex and turbulent societal problems.

Although all the cases selected for the design experiments had something special and noteworthy to offer in that respect, COGOV identified three cases as beacons of best practices partly because that they had something significant to contribute within their particular context, but also because they came from different corners of Europe and produced similar findings to some of the other cases. The three selected beacon cases were the Local Partnership Program from Rijeka in Croatia, the Hidden Hillfort Heritage project from Cardiff in Wales and the Task Committees from Gentofte in Denmark.

The initial idea was to organize on site seminars with participants from other national and European municipalities, but when we started planning the beacon events in November 2021 the COVID-19 pandemic spoke against this format. We feared that we would eventually create super-spreading events. The alternative solution was to showcase the three beacon cases at the final COGOV conference held in Utrecht on April 28th and 29th, 2022. Representatives from the three cases took part in the workshop well-visited workshop. The representatives from Cardiff and Gentofte participated on-line while five people from the Rijeka case participated in person in the workshop.

The workshop was facilitated by Jacob Torfing from the Danish team leading WP4, who started out by explaining the what, why and how of co-creation and then introduced the rationale for conducting interactive research on co-creational leadership based in design experiments to the +20 on-site and online participants, and then moved on to interviewing the representatives from

the three beacon cases. The interviews focused on two of the most remarkable design interventions in each of the three cases.

First interview was with Josipa Cvelic from the City Government of Rijeka. The design experiment carried out in relation to the Local Partnership Program from Rijeka in Croatia had identified two problems: 1) The exclusion of citizen voices in the selection committee that consisted of organized stakeholders and media people; 2) The lack of formal procedures for evaluating the projects co-created by different actors and financed by the municipality. The first problem was solved by recruiting two ordinary citizens to the selection committee and the result was an enhance legitimacy of the selection committee's work. The second problems was solved by inviting citizens and relevant stakeholders to develop and test a framework for evaluation of local urban development project at different stages. This intervention was a huge success as it not only produced a new framework for project evaluation with a joint ownership that secured its usage, but also sparked a lot of additional collaborations and new ideas to projects involving public actors and citizens. In the wake of the intervention, the involved actors agreed that involving citizens in evaluating city development projects should be mainstreamed. Moreover, it was decided to involve university students in conducting evaluations since that would serve a valuable learning purpose and provide resources for evaluation.

The second interview was with Eva Elliott from Cardiff who was involved in the Hidden Hilfort heritage project that was a collaboration between a local NGO, community historians at Cardiff Business School and people from a deprived community with a long tradition for participation in co-creating public value. The researchers in GOGOV and the project participants decided to make two design interesting interventions. First, since COVID19 made it impossible to carry out the joint activities of the partners in the heritage project, an alternative solution was designed. Hence, 36 families were invited to make test pit excavations in their back garden in search for objects that said something interesting about the neighborhood. The participants were to film the work at their test pits. The films were shown all over the neighborhood and triggered much debate in the community about all the heritage related things people cherished and how to protect them. Second, in response to some incidents of vandalism against a playground that was created by the project, the researchers and project leaders decided to mobilize the local community and police to put pressure on those responsible and win their support for the heritage project. This turned out to be an effective strategy. The interventions highlighted that much can be achieved through local co-creation but also that strategic efforts by the local government to support such initiatives is extremely valuable.

The third interview was with Dorte McEwen who is a leading public manager in the city of Gentofte and responsible for a network of the municipal facilitators of co-creating policy-making committees consisting of local citizens and politicians that are known as Task Committees. Since 2015, the City Council in Gentofte has developed most of its new policies is Task Committees consisting of five elected politicians and ten citizens, and to improve the functioning of the Task

Committees, researchers from Roskilde University and the municipality decided to make a number of interventions in a new Task Committee aiming to transform the local public libraries into cultural hubs. The first design intervention aimed to overcome a certain present bias among some committee members who worried that efforts to innovate the libraries would come at the expense of all the things they liked about the existing libraries. Hence, addressing this concern by letting all the Task Committee members list what they wanted to keep and what they wanted to add helped reassuring the participants that there was no zero-sum game between the old and the new library functions. This recognition greatly improved the appetite for innovation through co-creation. The second design intervention addressed the tendency toward oversteering in the Task Committee. The highly skilled and knowledgeable facilitator often ended up talking too much and the formal agenda for each meeting was so packed with presentations that there was hardly any time for open and free deliberation through which new and innovative ideas could emerge. In response, the researchers and Task Committee chairs decided to add a meeting with no agenda where the participants could debate whatever came to their mind. The meeting was a great success, and the municipality has decided to include such meetings in future Task Committees to stimulate brainstorming of new and innovative ideas.

Following the three interviews with people from the three beacon cases, came an interview with Professor Jean Hartley from the Business School at the Open University in London who commented on what she had heard from the three cases and had read in the case reports. She found that it was highly valuable studies with a strong potential for adding the comparative analyses of the dynamics in co-created governance processes. She also liked the design experiment approach and asked for further elaboration of the format of such experiments and how it differed from or overlapped with action research. She was also interested in hearing more about the role of leadership in co-creation processes. Is it possible to differentiate between different kinds of leadership and what are the roles of politicians and civic leaders? Also what is the role of joint sense-making and appeal to emotions etc.? She was also wondering how goals travel and are transformed in co-creation processes, and how design experiments can help to encourage people to participate and empower different types of actors to contribute to the collaborative process. She was also wondering if public value is sometimes destroyed through co-creation. She stressed that she saw a clear connection between co-creation and innovation that was brought out in the design experiments.

The workshop concluded with an open plenary discussion amongst all participants. A practitioner from Croatia noted that it was a limitation that they had not involved politicians in the project and found that the technical staff in the municipality was reluctant to collaborate with lay actors. A researcher who is not part of COGOV stressed that it is important not to treat politicians as one group as they differ in a number of respects. Also we should not forget to analyze the role of ideology that drives some politicians and makes it hard for them to co-create. Another public administrator from Croatia pointed out that city governments are rigid organizations, i.e. that the city is a big system with clearly demarcated silos. That makes co-creation difficult. Moreover, she

pointed out that citizens are often negative towards public employees and visa-versa, which makes co-creation difficult. Moreover, many citizens do not want to participate. The situation is that public actors and citizens do not know how to get together. She stated: “We want the same but we do not know how to make the conversation. I need tools to work together. She found that design experiments were a valuable means to search for ways to begin to work together. Another Croatian public administrator added: “We need to educate the employees to co-create with citizens”.

All in all, the workshop help to bring out key learnings from the design experiment and discuss their potential usage in other localities.

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**COGOV WP 4:**  
**Experiences and Practices of Co-creation and Co-production**

**The role of strategic management practices for co-creating public value outcomes**

Report on WP4 T3.1-T3.4 and T4.1 prepared by Jacob Torfing and Eva Sørensen

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## **1. Enhancing co-creation in practice**

It has long been argued that complex and wicked problems are best dealt with through collaborative governance where relevant and affected actors develop and test good enough solutions and revise them until they work and provide acceptable solutions (Head and Alford, 2015). Co-creation is a subspecies of collaborative governance that aims to involve lay-actors such as users, citizens, neighborhoods, community leaders and civil society associations in distributed innovation processes with a shared leadership (Ansell and Torfing, 2021). Hence, co-creation process will sometimes be co-initiated by public, private and third-sector actors who may also take part in the efforts to bring the collaborative processes to successful conclusion (Sørensen and Torfing, 2018).

Co-creation can be defined as a collaborative process through which relevant and affected actors define common problems and challenges and design and implement innovative solutions, which they may subsequently co-evaluate and revise (Ansell and Torfing, 2021). Co-creation is a new magic concept (Pollitt and Hupe, 2011) aiming to link political and administrative leaders and frontline staff with citizens and civic stakeholders and it has gained increasing foothold as a governance practice at the local level where the need for new and better public solutions becomes more and more evident. The current attraction of co-creation is that it helps to mobilize societal resources into a cash-strapped public sector; foster needs-based solutions by involving users in the creation of solutions that hit the target; enhance societal cohesion by bringing different and even polarized groups of public and private actors together in pragmatic problemsolving; create innovative solutions that break with common wisdom and established practices; build common ownership over joint solutions; and democratize public governance by stimulating participation at the output side of the political system.

As a tool of governance, co-creation is used at all levels and in most policy sectors (Torfing, Sørensen and Røiseland, 2018), but it is by no means a universal all-purpose tool since its practical relevance and feasibility appears to be low in crisis situations, highly contested policy areas and routinized public regulation and service production where there is little or no need for innovation. Nevertheless, co-creation seem to have a broad relevance in relation to policymaking, governance reforms, public planning, development of new forms of regulation and service delivery and the realization of new societal goals and missions (Brandsen, Steen and Verschuere, 2018).

Strategic management may help to make room for and prompt co-creation in the public sector (Ongaro et al., 2021). Co-creation may be a part of new vision for the development of the public sector, public leaders may design governance strategies based on co-creation, and they may also build platforms and arenas for co-creation that lowers the transaction costs of collaborating. Most importantly, however, public leaders and managers can spur co-creation by replacing command-and control-based management with a more trust-based management and thereby giving frontline personnel a 'license to innovation'. This would help to create a room for frontline staff to use their professional competences, methods and ambitions to co-create new and better public solutions with users, citizens and stakeholders.



Strategic management can be helpful in framing and facilitating co-creation, but it is not of much usage when it comes to designing, facilitating and improving actual co-creation processes further down in public organizations and in the golden triangle between state, market and civil society. Here, the responsibility for driving specific co-creation processes lies with local public managers and frontline staff who will sometimes be sharing the leadership responsibilities with the involved actors.

Although co-creation processes are characterized by a horizontal and ideally egalitarian relationship between the different participants who are bound by resources interdependencies and common aspirations to solve problems and reach some overall goals, leadership is essential to ensuring constructive and trust-based interaction and progression towards the attainment of common goals. As pointed out by Hofstad et al. (2021), the exercise of leadership in local co-creation arenas must take the distinctive features of co-creation into account, not least the self-managing character of co-creation processes. As long as this is done, there is no contradiction between co-creation and leadership.

Reaping the above-mentioned fruits of co-creation depends, to a large extent, on the attempt of local leaders to overcome emerging problems and obstacles to co-creation. Many things can go wrong when aiming to co-create innovative public value outcomes: the group of participating actors may be wrong for the specific purpose, interdependence and trust may be too weak to prevent destructive conflicts, the actors may suffer from tunnel vision that prevents creativity, it may be all talk and little action, politicians may be risk-averse and block the implementation of innovative solutions etc. These and other problems and obstacles need to be removed, circumvented or mitigated through the exercise of co-creational leadership (Hofstad et al., 2021). Since there are limited experiences and little knowledge about how this is done in practice, public administration researchers must team up with local leaders of co-creation in order to jointly test different ways of improving the processes and results of co-creation.

Hence, we need an interactive research strategy to improve local co-creation processes. Such a practical engagement of scholars in processes of public governance flies in the face of the traditional image of researchers as detached spectators sitting in their ivory tower and making neutral and disengaged observations that they analyse, write up and disseminate to a strictly scientific audience. However, if researchers want to be relevant to society while improving the quality of their research, they need to climb down from their ivory tower, actively engage with their object of research, recognize the validity of lay actor knowledge and deliver practical knowledge that is directly applicable in the public sector. This achievement may come at the expense of producing generalizable results as insights produced through practical engagement tend to be highly context dependent. However, when over time, the number of context-dependent insights increases, researchers will be able to identify more general patterns and formulate hypotheses for further testing, perhaps through Qualitative Comparative Analysis that allows us to identify the successful impact of competing constellations of leadership and design factors.

## 2. Design experiments as a method for improving processes and results of co-creation

There is a growing interest in the use of experiments within the social sciences. This trend is evidenced by the growing number of journal articles using field experiments (Baldassarri and Abascal, 2017) or survey experiments (Hainmueller, Hangartner and Yamamoto, 2015). The main reason for the increasing use of experimentation is the problem with establishing causal inference in traditional studies based on comparative case analysis, correlation studies and regression analysis. Apparently, the dream of many social scientists is that experimental research designs will allow them to make a hard-science causal interpretation of the impact of particular social, political and economic interventions.

In the social sciences, there are several types of experimental strategies available to the researchers (Ansell and Bartenberger, 2016). The first experimental strategy is *controlled experimentation* that takes place in lab-like contexts here it is possible to control for everything except for a particular intervention. This type of experimentation is the one that comes closest to the common understanding of scientific experimentation. Controlled experimentation emphasizes the use of experiments to test a causal hypothesis about how X affects Y. Randomized controlled trial randomly assigns subjects to control and treatment groups to measure the impact of the treatment dispensed to the treatment group. Controlled experimentation demands strong separation between the attitudes of the researcher and the conduct of the experiment, since the goals and expectations of the researcher can themselves become a confounding factor.

The second experimental strategy is *Darwinian experimentation* that is inspired by the processes of chance variation, differential reproduction and heredity described by Darwin. This evolutionary logic regards variation over time or at the population level as a key mechanism for achieving successful outcomes. Darwinian experimentation claims that the best chance of finding new and promising solutions to a societal problem is by initiating a large number of experiments and the look for successful solutions amongst the long term survivors. By contrast with controlled experimentation, Darwinian experimentation is more inductive than deductive, relying on trial-and-error learning. Let a thousand flowers blossom and see which ones survive in the long run and which are eliminated by their failure to solve the problem at hand in a particular societal context.

The third experimental strategy is *design experiments* that aim to improve the design of a process or solution by iteratively diagnosing problems and obstacles to goal attainment, creatively developing and testing prototypical solutions through targeted interventions and then measuring their impact vis-à-vis the stated goals and reflecting on the lessons learned. Design experiments are less interested in establishing causal inference and more focused on identifying what works in a particular situation and context.

Design experiments have gained increasing popularity in the social sciences because they allow researchers to test the impact of particular interventions in unique real-life settings through an

iterative refinement of a prototypical design that aims to solve some context-related problems and to generate desirable results measured against a predefined goal (John and Stoker, 2009). In contrast to *Darwinian experiments* based on chance variation in numerous projects and natural selection of those that survives in the long run, design experiments have a clear focus on the impact of theory-driven strategic interventions. In contrast to *controlled experiments*, design experiments do not seek to abstract from the complexities of the real world by creating a closed system in which everything but the intervention is controlled for (Ansell and Bartenberger, 2016). The backside is that while design experiments seek to identify the causal impact of particular context-bound interventions, it cannot generalize the results to other contexts without thorough translation work based on arguments about similarities and dissimilarities between situations and contexts. Design experiments also tend to give up the idea of a clear separation between the researcher and the real life processes that are studied. Hence, the goal of design experiments is found through negotiation between researchers and practitioners and the advantage of this is that it allows both parties to get answers to pertinent questions.

The procedure for conducting design experiments is relatively simple (see John and Stoker, 2009). The *first step* in the design experiments involves selecting a suitable testing ground. For ethical reasons, written consent from the responsible actors concerning their willingness to participate in the design experiment must be ensured. In the process of securing written consent, it is important to make it clear that all interventions will be negotiated with and endorsed by the responsible actors in the case. In the final instance, it will be the practitioners who will be responsible for making the agreed upon interventions, although in close collaboration with the research team.

The *second step* is to discuss and agree on the goal of the design experiment. What should be attained in and through the iterative design and redesign of the process or solution? When selecting the goal of a design experiment, it is important that it is something that can be measured relatively rigorously in order to determine the impact of one or more interventions.

The *third step* is to carefully diagnose the actual and emerging problems in terms of the challenges and obstacles to goal attainment and to design an intervention aiming to mitigate or remove these challenges and obstacles. This step requires the construction of a precise diagnosis of the challenges and obstacles based on available data including observations, interviews and document studies. Based on this diagnosis and a combination of theoretical insights and practical reasoning, a hypothesis must be formulated about what can be changed, removed, or added (the intervention) in order to solve problems and remove obstacles. Guided by this hypothesis, a suitable intervention is designed, discussed and agreed upon.

The *fourth step* is to actually apply the intervention in close collaboration with field actors and then rigorously measure its impact on the process and/or solution in order to see whether the intervention actually helped to remove the identified problems and challenges and bring the actors involved in the process closer to goal attainment.

The *final step* consists in establishing causal inference between the intervention and its impact on

the process, outputs and outcomes, by means of identifying and reflecting on the case-, sector- and country-specific scope conditions for the causal effects. The whole procedure of diagnosing problems, designing a solution, making an intervention and measuring its impact on goal attainment may have to be iterated a few times in order to obtain the pre-specified goal of the co-creation process.

One thing is the ideal procedure for carrying out design experiments and another is the complex and messy reality where the steps in the process are less clear cut, the measurement of the impact of interventions are less rigorous and the responsibility for diagnosing problems and making interventions varies. Hence, in some cases, the researchers play a key role in suggesting appropriate interventions, while in other cases the researchers are either part of the project or merely observing practitioners developing and testing new formats.

In some cases, interventions may end up being made simultaneously rather than sequentially, thus making it more difficult to ascertain their respective impacts. Nevertheless, it may still be possible to see how they contributed to solve key problems.

Design experiments are often lasting from two or three months to more than a year and their long endurance means that they will be subject to all kinds of disturbances. Therefore, reporting a design experiment is not an easy task and requires a careful reconstruction of events and results. To assist this reconstruction, we have used logbooks to simultaneously record events, impressions and results.

Now, given the contingencies that real life design experiments are subjected to, it is necessary to have firm criteria for what counts as a design experiment. In this report the minimal requirement is that it is possible to identify a goal and a corresponding problem, intervention and impact.

### **3. The seven cases**

In order to investigate the potential of using experimentation as a means to study and improve processes and results of co-creation, GOGOV has conducted seven design experiments in different corners of Europe including Croatia, Denmark, England, France, The Netherlands, Slovenia and Wales. Each case study stretched over a number of months to allow time to plan interventions with practitioners, to carry them out and to study and evaluate their impact. The studies all took place between May 2020 and December 2021. The precise duration and time of each case study varied depending on the co-creation process in focus.

As a first step in the case selection, each of the nine partner countries participating in WP4 put together a panel of 3-4 recognized researchers and 3-4 well-informed practitioners and asked them to nominate local governments, public agencies or partnership arrangements with public participation that were making a notable strategic effort to promote co-creation of public solutions. The panels proved to be highly valuable for developing a catalogue of relevant cases that each

research crew took into consideration in addition to suitable cases from WP1 and WP2. Next step was to select one case in each partner country based on the five selection criteria listed below.

1. A strong strategic intention to co-create solutions with relevant and affected stakeholders.
2. A concrete and clearly discernible ongoing co-creation project available for observation and experimentation over the course of 2020.
3. A strong commitment among leading practitioners to participate in planning the interventions.
4. No extraordinary circumstances that would render research results irrelevant for other cases.
5. A co-creation process that appeared accessible and feasible to follow over some time span for the involved researchers.

Despite a focussed effort to select cases that were not only suitable for collecting relevant data but also assessable and feasible as subject of study, it proved difficult for two partners to find the right match. One partner (Open University, UK) realized that they did not have sufficient work months to carry out a design experiment with all that this entails, and the initial co-creation process selected by Kings College London (UK) and Cardiff University (UK) stopped in the early phases of the study due to corona. Although the remaining seven partners managed to carry out a design experiment (including a replacement case selected by Cardiff), the pandemic affected the case selection, research plans, co-creation processes and deadlines. Prior agreements to follow specific cases were terminated, and new cases had to be found, most of the co-creation process was shifted from personal interaction to online meetings, activities were scaled down, and the some co-creation processes became engaged in solving COVID-19 related problems.

As mentioned above, the seven cases of co-creation are from different corners of Europe such as Croatia, Denmark, England, France, Netherlands, Slovenia, and Wales. Moreover, the cases vary with regard to levels of governance involves, policy area and ambition. One case is a national public agency, one is situated within a borough, one is a network of municipalities and four are municipal projects. A number of co-creation processes focus on public service delivery, but there are also cases of public regulation and policy-making. Moreover, there is considerable variation in the composition of actors, i.e. the degree to which the co-creation process involves public actors such as politicians, administrators and professionals as well as organized private interests, citizens, service users, affected community groups and private businesses. Despite these differences, all cases involve both public and private actors in a collaborative process aiming to solve problems through innovation and meet a shared goal. In unison, the case studies provide a multi-faceted patchwork of insight into the many faces of co-creation in contemporary European governance processes,, and into the many forms that design experiments may take. As we shall see, this patchwork is helpful for gaining insights about what co-creation entails in practice, for theory development and for evaluating the feasibility of design experiments as context-sensitive and dynamic tool for improving new forms of

governance such as the use of co-creation. The design experiments have all involved the collection of a variety of data including interviews, observations, documents and mini-surveys.

Table 1 provides an overview of the seven cases with regard to host characteristics, background for and purpose of the co-creation, composition of participants, researcher involvement and process description.

*Table 1: Case descriptions*

<b>Case</b>	<b>Case summary</b>
<b>City of Cardiff, Wales</b>	<p>Located at the Western fringe of Cardiff, 11 neighborhoods in the Careau Ely area are home for around 27,000 people. Once, it was once a thriving post-war garden suburb. In the 1980s, when a number of local industrial employers including a paper mill and brewery closed down, it declined. Today, it is in the top 10% of most deprived neighborhoods in Wales. Formed in 2011, CAER is a collaboration between archaeological and historical researchers from Cardiff University, and community development specialists from the non-profit organization Action Careau Ely (ACE). In 2016, the core team composed of two researchers and development specialist from ACE started the Hidden Hillfort Project that aimed to reconstruct a derelict religious building for community and heritage activities, alongside a playground for local children and trails around a local heritage site. CAER involved a broad variety of local actors in a four years long co-creation of an “Activity Plan”. The actors included representatives from the Hidden Hillfort project team, heritage organizations, universities, primary and secondary schools, volunteers, and residents (including young people). Given that design experiment was a method that appeared to be a part of how CAER operated, the COGOV partner decided to follow rather than engage directly in designing of the experiments and studied the co-creation process over a number of months in 2021. The co-creation activities unfolded in a number of ways e.g. in 5 working groups, 7 open days and participatory activity-based consultations. The core group also conducted a community survey, a school survey and a number of semi-structured interviews with non-users to collect important input to the process. There was a separate series of meetings designated to negotiate land ownership issues with a farmer, and two divisions of the local authority.</p>
<b>City of Rijeka, Croatia</b>	<p>Rijeka Local Partnership Program (RPLP) initiated by the City of Rijeka has since 2005 supported more than 100 community initiatives of which many are products of co-creation between a variety of public and private actors. The projects have included playgrounds/parks for children, green areas, and improvements in local schools, for example. From 2005 to 2020, the total value of projects implemented is 6.2 million HRK, with 2.6 million from the City budget and 3.6 million as the contribution of the local community through donations and volunteer work in these projects. In 2020, when the local COGOV partners expressed interest in conducting design experiments to promote co-creation in the projects, RPLP formed an expert panel composed of two COGOV researchers, a local government manager, an external expert consultant, and an NGO consultant with prior involvement in RPLP development and insight in participatory governance. The case under scrutiny was the expert panel, and the purpose of the interventions was to create a detailed,</p>

	<p>contextual knowledge of what works when it comes to the strategic efforts of public actors to spur co-creation. Over the next year, the panel met regularly to identify current obstacles to co-creation and to discuss and test ways to further improve RPLP program.</p>
<p><b>Gentofte Municipality, Denmark</b></p>	<p>Gentofte municipality with its 75.000 inhabitants is located in the wealthy northern part of the capital city of Denmark, Copenhagen. In 2015, the City Council headed by its highly entrepreneurial and committed mayor and municipal CEO, decided to change the way the politicians prepared and developed new policies. The City Council experienced that they spent too much time doing casework in political committees rather than developing policies and that they needed input to policy development from the citizens and other local actors. They decided to introduce a new type of political task committees where politicians prepare a policy proposal in dialogue with a group of local actors. Evaluations of the by now 39 Task Committees declare them a success but also conclude that problems do tend to occur along the way. The Danish research team and the local leadership agreed to carry out a design experiment aiming to try out ways to overcome some of these problems and selected the task committee for developing the local libraries into cultural hubs for the purpose. The task force that was in session from November 2020 to October 2021 was composed of five politicians and 10 carefully selected citizens. There were eight ordinary meetings, one open meeting and three site visit meetings, and a number of meetings in three work groups. Most meetings were online. The Task Committee presented its policy proposal to the City Council in November 2021. The proposal was formally endorsed shortly thereafter.</p>
<p><b>Flevoland Region, The Netherlands</b></p>	<p>In 2013, the national government and the social partners (employer organizations and trade unions) took a series of new initiatives aiming to create more jobs for disadvantages citizens laid down in a Social Agreement in the Netherlands. A national Work Chamber with 35 regional counterparts were set up as coordinating platforms to implement the Social Agreement. Each Chamber includes the national and local public agencies for social benefits, social assistance and public employment services, and the social partners. The design experiment focused on the Regional Work Chamber of Flevoland (RWF). Some of the lead actors were worried about the level of collaboration in the Chamber, and contacted the local COGOV partner. In November 2020, the researchers and the lead organization decided to carry out a design experiment to promote co-creation between the members of the Chamber.</p>
<p><b>Ministry of Public Administration, Slovenia</b></p>	<p>The Ministry of Public Administration (MPA) in Slovenia is responsible for a large variety of public services via administrative units located all over Slovenia, and plays a key role in creating a digital infrastructure for service provision. MPA has already some experience with co-creating new services. In May 2020, MPA and the local COGOV partner agreed to carry out a design experiment aiming to promote the co-creation around the development a centralized digital platform for e-Authorization/eMandate registry (SI-CeP). The purpose of the platform is to enable service-users to authorize others to execute online and offline public services on their behalf. For that purpose a project team was formed composed of public administrators form different ministries, a private consultant, an outsourcing company and other users and a researcher. There has been regular weekly meetings in the project team as well as other forms of ongoing communication.</p>

<p><b>Newcastle upon Tyne, England</b></p>	<p>The parish system in the Church of England makes it difficult for churches to carry out some activities. Each parish has its own full time minister. Despite frequent initiatives designed to encourage cross-parish working, parish boundaries remain difficult to break down, with many church members seeing their parish church as working quite separately from others. In 2021, the Parish Church of Thyme organized a holiday camp with leisure activities for local kids. It involved two parishes, a Christian organization called Scripture Union and Fare Share that provided food at low cost. Moreover, a private firm gave bread free of charge, and a local school loaned a minibus free of charge to transport children to and from the club. In addition, a number of individuals donated food. The co-creation of the holiday camp itself lasted a week in August but securing funding started months earlier and the practical preparation lasted several weeks.</p>
<p><b>Territory of Vitrolles, France</b></p>	<p>In the 1970s, a rapid and forced growth from 5.000 to 35.000 inhabitants in the town of Vitrolles in Southern France produced a fragmented community with a weak local identity, intense social and political conflicts and deep social divisions that from 1997-2002 brought the right wing populist party 'Front National ' to power. Since 2002, when a left wing government took over, efforts have been made to develop a more positive image of the city and to build social cohesion and a sense of belonging among the inhabitants by involving them in co-creating cultural activities. The municipality did already have some experience with involving citizens in co-creation processes, but wanted to find a way to involve more young people and those who had recently moved to Vitrolles. For that purpose, the municipality and the research team decided to work together to find ways to involve these actors in co-creation processes and to overcome the problems that occurred along the way.</p>

**4. Problems, interventions and impacts**

Design experiments aim to produce *in situ* knowledge about what works in terms of overcoming problems, barriers and obstacles to goal achievement. The goal can be to design a process with a particular set of qualities or to produce a solution to an administrative or societal problem. Selecting and defining a goal for a design experiment is immensely important since the problems, barriers and obstacles are identified in relation to the efforts to obtain the goal and the impact of the intervention is measured in terms of its contribution to goal attainment.

In all seven cases, the goal of the design experiment was discussed in meetings between researchers and practitioners to make sure that everybody were on the same page. Table 2 provides an overview of the goals of the seven design experiments that all aim to promote to the creation of public value through enhanced participation, improved quality, enhanced effectiveness, and the pursuit of innovation.

*Table 2. Overview of the goals to be attained in and through the seven design experiments*



Case	Goal to be attained in and through the design experiment
City of Cardiff, Wales	The public value goal is to enhance community well-being through reduced stigma, improved confidence, lowered education barriers, and stronger interpersonal relationships.
City of Rijeka, Croatia	The goal is to improve the quality of public services and utilities in the City of Rijeka by means of increasing the co-creation aspect of Rijeka Local Partnership Program (RPLP).
Gentofte Municipality, Denmark	The goal is facilitate the creation of an innovative solution (turning libraries in to cultural hubs based on co-creation) that respects and retains the traditional functions of the extremely well-functioning libraries.
Flevoland Region, the Netherlands	The goal is to help the participants of the Regional Work Chamber Flevoland (RWF) to foster innovative solutions to social and employment problems that respect the functions and responsibilities of the participating organizations.
Ministry of Public Administration, Slovenia	The overall goal is to develop a digital platform for e-Authorization/e-Mandate registry that enables service users to authorize other legal and private persons to execute services on their behalf. Co-creation should help to test impacts and assess benefits.
Newcastle upon Tyne, England	The goal is to enhance the effectiveness of the summer holiday camp organized by a local church parish in meeting the physical, entertainment and emotional needs of children who in many case come from disadvantaged backgrounds.
Territory of Vitrolles, France	The goal is to enhance citizen participation in cultural policy and activities to build a new territorial identity and enhance social cohesion against a background of polarization and fragmentation caused by rapid and forced development.

With the different goals in hand researchers and practitioners diagnosed problems and challenges, designed and made interventions aiming to overcome or mitigate the problems and challenges, and finally measured whether the interventions improved goal attainment. The results of these crucial steps in the design experiments are displayed in table 3. A more detailed account of the seven design experiments is found in appendices 1-7.

Table 3: Overview of the diagnoses, problems and impacts in the seven design experiments

	Problem diagnosis	Content of intervention	Impact of intervention
<b>City of Cardiff, Wales</b>			
<b>Intervention #1</b>	<u>COVID-19 lockdown:</u> The lockdown halted face-to-face co-creation activities at the Hillfort heritage site, demotivated school children and enhanced social isolation.	CAER organized self-managed 'test pit' excavations of people's back gardens with the help of an online film and an illustrated guide. They also created activity packs for school children.	<i>Positive impact</i> on the overall goals as 36 families participated and kids worked with their parents, learned about heritage and communicated with neighbors. The activity combined delivering public value and promoting heritage, won prizes and generated positive media attention.
<b>Intervention #2</b>	<u>Anti-social behavior:</u> A co-created playground at the heritage site was subject to anti-social behavior and	A co-created response involved a meeting with the park ranger, the local high school, citizens, the local	<i>Positive impact</i> on the overall goals as the threat to the co-creation process ended up extending and strengthening

	vandalism that had the potential to attract negative media attention and undermined the idea that the neighborhood deserved good public facilities.	councillors and local community police. They decided to speak to the young people involved to discover how they could collectively ensure that people would want to care for the communal space rather than wreck it.	it and today the Hillfort Heritage Center and the playground is used by many local community members. Being adjacent to the newly launched heritage/ community center, it means that the building itself is attracting local people and other visitors.
<b>City of Rijeka, Croatia</b>			
<b>Intervention #1</b>	<u>Knowledge deficit:</u> The lack of open-access data regarding past projects prevents local actors from getting a comprehensive picture of what has been done so far under the RPLP program.	The RPLP program has created a data repository, which is a part of the City of Rijeka e-Services portal. It has also built a GIS database that publish data on a web map.	<i>Positive impact</i> on the democratic legitimacy of future co-creation since the availability of project descriptions combined with GIS data tends to assure a more fair spatial distribution of the local projects funded by the City of Rijeka.
<b>Intervention #2</b>	<u>Exclusion of citizen voices:</u> The RPLP project selection committee consisted of three representatives of non-governmental organizations and the media, but ordinary citizens had no say in the selection process, thus potentially undermining its democratic legitimacy.	Two active citizens with previous experience from RPLP projects will be added to the selection committee starting with the year 2022.	<i>Positive impact</i> on the democratic legitimacy of co-creation in the future as the democratic anchorage of the whole process of the RPLP is solidified.
<b>Intervention #3</b>	<u>Lack of formal evaluation:</u> The RPLP program lacks a formal evaluation procedure that assesses and compares the success and sustainability of the projects.	A broad range of participants were involved in developing, testing, evaluating and refining a new framework for project evaluation in several stages and training people in its usage.	<i>Positive impact</i> on future co-creation projects in the RPLP program since there is now a simple and effective procedure for project evaluation with a broad-based ownership.
<b>Gentofte Municipality, Denmark</b>			
<b>Intervention #1</b>	<u>Present bias:</u> Many participants had a preference for maintaining what you have got and avoiding new and uncertain future developments.	Change the format of a meeting to allow people to articulate what they want to maintain and what new they may want to add.	<i>Positive impact</i> on the participants' motivation to try something new and pursue innovation.
<b>Intervention #2</b>	<u>Over-steering:</u> Facilitators took up a lot of space in highly structured meetings and they were the central turning point in the star-shaped debates, thus reducing the space of free and open-ended discussion.	Create a new type of open meetings with no fixed agenda, a more withdrawn facilitation and plenty of room for brainstorming and discussion.	<i>Positive impact</i> on the number of new innovative ideas formulated by the participants.
<b>Intervention #3</b>	<u>Knowledge gap:</u>	Organize site visits to all six libraries where professional	<i>Unintended negative impact</i> on the participants' believe in

	Highly asymmetrical distribution of knowledge about the libraries amongst the participants.	librarians provide information about the libraries.	their ability to propose new ideas and activities, despite massive knowledge transfer.
<b>Intervention #4</b>	<u>Talk-centrism:</u> The meetings in the co-creation arena tend to be all talk and no action.	Practical testing of a co-created idea of cultural event with local authors in one of the libraries.	<i>No discernable impact</i> on the innovation ambition of the participants, in part due to failed implementation.
<b>Flevoland Region, the Netherlands</b>			
<b>Intervention #1</b>	<u>Criticisms of collaboration:</u> The common purpose was unclear, meetings were uninspiring and there was a tension between central goals and local needs.	Allowing people to articulate what they want to maintain and what they want to change, eventually leading to the formulation of a nine-point plan.	<i>Positive impact</i> on participants' awareness of what can be achieved by engaging in collaborative governance innovation.
<b>Intervention #2</b>	<u>Overemphasis on structure:</u> Endless debates about the governance structure prevented the participants from discussing policy content.	Open meeting used to develop a new substantive agenda based on a well-prepared overview of past performance.	<i>Mixed/negative impact</i> on the engagement of the participants, in part due to failed implementation of the intervention by an external bureau.
<b>Intervention #3</b>	<u>Limited ownership to agenda:</u> The participants expressed a need for a stronger and shared ownership to their joint policy agenda and projects.	Form mixed thematic sub-groups to discuss goals and ideas based on a review of current projects and white spots.	<i>Positive impact</i> on collaborative engagement and creativity, but disconnected from the review of ongoing projects and white spots.
<b>Intervention #4</b>	<u>Talk-centrism:</u> There was a general and discouraging feeling that meetings were all talk and little action.	Hold board meetings focusing on practical implementation and the planning of concrete activities and next steps.	<i>Limited positive impact</i> on the innovation ambition of the participants: mutual relations were strengthened but action decisions were postponed.
<b>Ministry of Public Administration, Slovenia</b>			
<b>Intervention #1</b>	<u>Late user involvement:</u> Potential users were supposed to be involved in the co-creation process, but only in the ultimate stage of testing the prototype of the e-Authorization platform.	Probe the potential end users' interest in participating in the co-creation of a new service system and gather their ideas and inputs and present them to the project team.	<i>Positive impact</i> on furthering co-creation and the assessment of impacts and benefits as the end users demonstrated willingness to contribute to service improvement and the project team referred to their inputs as interesting and helpful.
<b>Intervention #2</b>	<u>Deadlines limits co-creation:</u> It was planned that end users should test the prototype, but time pressure due to strict deadlines threatened to squeeze out the planned user involvement.	Recruit different testers and get them to test a mock-up of the new e-Authorization platform and interview them about the experience.	<i>Large positive impact</i> on goal attainment as the test showed that there were many problems with the prototype. This led to substantial changes and delay of the project delivery.
<b>Intervention #3</b>	<u>Little support for co-creation:</u> The project team and its leader had little sympathy for	Researcher play the role of a co-creation ambassador explaining the concept, eliciting positive experiences	<i>Positive impact</i> on the furthering of co-creation as the team members came to collaborate better with each

	co-creation based on earlier negative experiences.	from team members and helping to foster a common language in the team.	other and appreciate inputs from end users.
<b>Newcastle upon Tyne, England</b>			
<b>Intervention #1</b>	<u>Food poverty as key problem:</u> In the 2019 and 2020 holiday camps, it was discovered that hunger in holidays without school food was a real problem and that proper meals for the kids rather than just snacks and a limited amount of food packages were needed.	In order to provide proper meals for the kids in the 2021 summer holiday camp, the project enhanced its reliance on donations from private companies, citizens, other churches and FareShare.	<i>Positive impact</i> on the fulfillment of physical needs of the kids participating in the holiday camp.
<b>Intervention #2</b>	<u>Restricted food distribution:</u> Relying on external public financing meant that food packages could only be given to certain families and not to all families in need.	The project decided to enhance the reliance on volunteers and donations and only employ one seasonable employee to gain financial independence.	<i>Positive impact</i> on the fulfillment of physical needs of local families and the kids participating in the holiday camp due to enhanced self-management.
<b>Intervention #3</b>	<u>Low trust in external actor:</u> In 2020, an external, national organizations was hired to do sports activities with the kids, but it was not a team player in the local collaboration and low trust developed.	Gaining financial independence through voluntarism and donations meant that collaboration of the external, national-level actor was no longer needed.	<i>Positive impact</i> on the fulfillment of needs due to more effective planning, communication and execution based on trust-relations between local actors who know each other well.
<b>Territory of Vitrolles, France</b>			
<b>Intervention #1</b>	<u>Defensive public actors:</u> The city councilors and directors of cultural facilities took up a defensive posture in the co-creation workshops and, more generally, there was some confusion amongst the participants about their roles.	Use of personas with different socioeconomic and cultural participation profiles provide a boundary object for the participants to jointly focus upon when interacting (thus downplaying their different individual roles and interests)	<i>Moderate positive impact</i> on stimulating co-creation of cultural policy solutions as the actors gradually loosen up and participate in the discussions and end up finding solutions to lack of cultural participation.

## 5. Cross-case comparison and theoretical validation

Comparing the *problems and challenges* encountered in the different cases, it is striking that the problems are highly contextual and reflect different political and administrative attitudes toward co-creation as well as different local conditions. Hence, in the Ministry of Public Administration and the Territory of Vitrolles, the problems reflect a deep administrative reluctance to embrace co-creation as a governance tool, whereas in many of the other cases such as Gentofte Municipality and the Flevoland Region the problems are about how to improve the quality of the co-creation process and spur collaborative innovation.

The kind of problems and challenges that are encountered vary considerably, but can be divided into four broad categories. First, a number of problems relate to participation broadly defined. Relevant and affected actors may be excluded or only involved late in the process. Some participants may be reluctant to participate and engage in discussions with other actors. Participants may also feel that there is a lack of common purpose that reduces their commitment or feel that trust between the involved actors is low. In some cases, the support for the co-creation process as a whole also tend to be low (Ministry of Public Administration and Territory of Vitrolles).

A second group of problems concerns the collaborative process itself. In two cases, the participants lack knowledge about the subject matter and what is going on (City of Rijeka and Gentoftte Municipality). There are also problems with oversteering and predominance of discussions about structure over discussions of content. Two cases also bear witness to the risk of talk-centrism where co-creation becomes all talk and little action (Gentoftte Municipality and Flevoland Region).

A third group of problems relates to the generation of result that is troubled by the lack of financial autonomy (Newcastle), overly tight deadlines (Ministry of Public Administration) and lack of joint procedures for evaluation (City of Rijeka).

Finally, the case in the City of Cardiff shows how external events such as the COVID-19 lockdown and the anti-social behaviors may jeopardize the production of tangible results of co-creation. In fact, most cases struggled with producing results during the COVID-19 pandemic.

Generally, the problems emerging in relation to the attempt to co-create innovative public value solutions seem to be manageable. They do not completely block or undermine the co-creation process and the leaders of the co-creation projects are able to come up with countermeasures, often with active help from engaged researchers.

Comparing the *content of the interventions* aiming to provide solutions to the emerging problems, it is remarkable that, for the most part, the interventions are incremental in the sense that they make small-scale changes to the *modus operandi* of the co-creation projects. Only the interventions in the City of Cardiff deviate from this pattern as we are here witnessing how problems are solved through a clever reinvention of parts of the project. Otherwise, the content of the interventions tends to fall into three different groups. One group of interventions aims to enhance participation by including a group of young people in the co-creation process (City of Cardiff), adding to ordinary citizens to the selection committee (City of Rijeka) and recruiting end users for testing of digital solutions and researchers as co-creation ambassador (Ministry of Public Administration). A second group of interventions aims to tinker with the process design. This is particular clear in Gentoftte Municipality, Flevoland Region and the Ministry Public administration. Also the decision to use the persona method in the Territory of Vitrolles brings into use a process tool to solve emerging problems. Finally, some interventions aim to develop new governance tools in response to emerging problems. Examples of this strategy is found in the City of Rijeka (data repository and evaluation tool) and Newcastle (donations and voluntarism as funding source).

None of the interventions seem to have been very demanding on the part of the researchers and practitioners and they all find theoretical support in the literature on network management (Kickert, Klijn and Koppenjan, 1997), metagovernance (Sørensen and Torfing, 2009) and collaborative innovation (Torfing, 2016) that highlight the importance of involving and motivating the right group of actors, improving process design and developing appropriate governance tools to support collaboration and drive the processes to successful conclusion. There is a tendency to leave out affected actors and thus deprive the co-creation process of key inputs in terms of experiences, commitment, ideas and resources (Bryson, Cunningham and Lokkesmoe, 2002) and this tendency must be countered by proactive inclusion strategies (Torfing, Sørensen and Røiseland, 2019). Moreover, process design is crucial for stimulating participation, deliberation and innovation (Fung, 2003; Torfing, 2016) and design thinking points to numerous ways of supporting co-creation processes with designs that promotes collaborative innovation (Stickdorn and Schneider, 2011). Finally, using different governance tools such as institutional platforms, blended financing, developmental evaluation and social accountability to support co-creation is well-describe in new research on the use of co-creation of the UN's Sustainable Development Goals (Ansell, Sørensen and Torfing, 2022).

Finally, comparing the impacts of the various interventions is noteworthy that a large majority of the interventions have a positive impact and help to solve the problem or challenge encountered, or at least mitigate its negative effect on the co-creation process. Only three interventions out of a total of 20 had no impact or negative impacts. In two of these three intervention, the problem was failed implementation of the intervention, and in the third intervention, the negative impact was unintended and caused by the failure to anticipate what would happen.

Looking at the nature and character of the various impacts, the typical impact of the interventions seems to be an enhance support for and legitimacy of the co-creation process. There are also examples of enhanced process effectiveness (Ministry of Public Administration), service improvement (Newcastle) and even innovation (Municipality of Gentofte). In two cases, the result was better policy solutions (Flevoland Region and Territory of Vitrolles) and in several cases the fulfillment of citizens' needs for services and public solutions (The City of Cardiff, City of Rijeka, Gentofte Municipality, Ministry of Public Administration and Newcastle).

Design experiments aim to produce new knowledge of what works in practice and that begs the question of what we have learned from the seven design experiments, beyond the general but important point that the problems encountered in co-creation processes are relatively minor and perfectly manageable. Looking through the seven design experiments, the following concrete lessons stand out:

- Faced with severe externally imposed constraints, co-creation projects may reinvent themselves and robustly deliver on key goals by producing innovative solutions (City of Cardiff)

- Countering the lack of formal evaluation, actors may co-create a simple and effective procedure for evaluating urban regeneration projects at all stages of development (City of Rijeka)
- The common risk of oversteering of co-creation processes can be significantly reduced by the introduction of an open meeting format with no fixed agenda, a more withdrawn facilitation and plenty of room for brainstorming and discussion amongst the participants (Gentofte Municipality)
- The lack of a common purpose in co-creation processes can be countered by a new meeting structure that allows the participants to articulate what they want to maintain and what they want to change and the input generated in this way may be used to develop a joint plan (Flevoland Region)
- Recruiting ends users as testers of new digital platform helps to create user-friendly and needs-based solutions (Ministry of Public Administration)
- Fiscal autonomy obtained through enhanced reliance on donations and voluntarism can enhance the flexibility of co-creation projects and help them to better meet local needs (Newcastle)
- The use of personas as a boundary object can help to get participants engage in joint discussion of new and better solutions (Territory of Vitrolles)

When considering these learnings, we should bear in mind that design experiments merely produce context-dependent knowledge of what works in particular real-life settings. What works in our seven design experiments may not work in other contexts. That said, there is nothing to prevent learning obtained in one particular design experiment from being included in a 'leading and managing co-creation toolbox' as long as the context-dependence of the new learnings is clearly specified, thus allowing leaders and managers in other contexts to reflect on the similarities and differences between their own context and situation and that from which the learning was drawn.

## **6. What have we learned about the use of design experiment to improve co-creation?**

In this final section, we shall like to offer some reflections on the use of design experiments as a social science method, as a tool for producing new insights about co-creation, and as a lever for raising the level of self-critical reflectiveness on the part of public sector practitioners.

One important reflection concerns what we have learned from using design experiments as a social science method. Thus far, design experiments have mostly been used in educational research, where classroom environments are transformed to test the impact on learning abilities (see Brown, 1992; Oshima et al., 2004). The studies summarized and discussed in this report show that design experiments also work well as a research method in public governance studies focusing on co-creation. Diagnosing problems and barriers for achieving a particular goal in and through co-creation has allowed researchers and practitioners to formulate hypotheses about the kind of solution that could possibly alleviate the problem. Testing the hypotheses in practice by implementing the various interventions and assessing their impact has not only

helped us to see what works in practice, but also to understand the importance of thinking the interventions through to avoid unintended negative effects and to ensure proper implementation. In short, our study demonstrates that design experiments offer a near-perfect tool for advancing a positive public administration research aiming to find and enlarge solutions to pressing governance problems (Douglas et al., 2021).

That said, the experiences of the researchers engaged in the seven design experiments reported here point to some important preconditions for using design experiments in the public governance research. Hence, at various points, we have struggled with fulfilling four crucial demands. First, researchers must have proper access and be actively involved in formulating ideas for how to intervene to solve the diagnosed problems in order to secure that the interventions have solid theoretical backing and that testing them will contribute to testing or building theory. Second, co-creation process must not be constrained by external events and regulations such as we have seen during the COVID-19 pandemic that in some cases ruled out the use of optimal experimental designs. Third, researchers must be able to influence the implementation of the interventions in order to enhance the chance of producing desired outcomes. Finally, researchers should be able to rigorously measure the impact of the interventions in a valid and reliable way. Failure to fully meet these demands have to some extent undermined the validity of the results obtained in our studies, although our findings seem to be pretty robust.

Another important reflection concerns the use of design experiments to enhance research on co-creation. On the negative side, we should not be blind to the high costs in terms of time and resources that are inherent to the use of design experiments as a research method. On the positive side, design experiments may help to identify real life problems and obstacles that are not captured and described by existing research and contribute to expanding the stock of knowledge about how the identified problems can be overcome through concrete interventions. Accumulating knowledge about what works in particular contexts and situations may in the long run facilitate the identification of emerging patterns and development of some generic tools that can be used in particular contexts and situations.

Finally, yet importantly, our evaluation of design experiments as a strategy for improving public governance in general and co-creation processes in particular is positive. Focusing on emerging problems and challenges, ways of removing, circumventing or mitigating the problems, and the impact of these interventions seems to appeal to the practitioners who in most cases are concerned with improving processes and getting results. Hence, the interactive research strategy where researchers work closely together with practitioners in conducting design experiments may slowly but steadily stimulate a self-critical reflexivity that engage practitioners in continuous attempts to improve public governance.