



Co-Production and Co-Governance: Strategic Management, Public Value and Co-Creation in the Renewal of Public Agencies across Europe

Deliverable 3.1: Survey Report

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Executive Summary

This report provides an analysis of the uses of co-creation - defined as the process whereby public sector organisations seek to solve and or define policy issues by working in partnership with actors outside their organisation - in five countries based on survey data collected in 2020. The report overviews co-creation in terms of the partners involved, the aimed activities and the achieved outcomes. The report finds that public sector organisations include various partners in co-creation most often to design existing services, projects and plans. *Other* public sector organisations are the most frequent partners in co-creation, while private firms are the least frequent partners. The report investigates the strategic management efforts, the preparedness of professionals, and the importance of collaborative leadership in co-creation. Based on linear regression analysis, the report finds that strategic management and skilled and equipped professionals positively affect the implementation of co-creation and its impacts. There is little evidence that collaborative leadership in organisations affects co-creation. Based on respondents' perceptions, findings show that co-creation helps organisations meeting their goals, increasing public satisfaction and trust. It is less effective in reducing financial and administrative cost. The report also discusses the limitations of the data taking stock of the effect of the coronavirus on the survey's response rate.

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1 Introduction

The aim of the COGOV project in Work Package 3 (WP3) is to measure the extent to which new forms of governance, specifically co-creation, are adopted in selected public sector organisations and territorial jurisdictions. Reference to new forms of governance means adopting ways of thinking and doing which challenge bureaucratic and market-based practices or practices that are commonly found in old public administration (OPA) and new public management (NPM). Co-creation is a particular manifestation of new forms of governance and a central focus in COGOV. Simply defined, co-creation is a process whereby public sector organisations seek to solve and or define policy issues by working in partnership with actors outside their organisation (Torfing, Sørensen, and Røiseland 2019, 803; see also Deliverable 2.3 Regal and Ferlie 2020).

The underlying assumption guiding WP3 is that public sector organisations will adopt co-creation, because it produces better outcomes, solves complex problems and reinvigorates the democratic process of policy design and implementation. However, functional and normative beliefs are insufficient to induce a change in practice at the strategic and operational level of organisations. Several barriers to the adoption of new forms of governance have been identified (e.g. Torfing, Sørensen, and Røiseland 2019; Baptista, Alves, and Matos 2020). These include: hierarchical leadership; an organisational environment unreceptive to innovation; people inertia, silos mentality; and lack of resources such as time, knowledge, data and funds.

In the work package, we explore the importance of these factors via a focus on three core questions:

- What are the strategic management efforts that public sector organisations engage in to implement co-creation (also addressed in COGOV WP2 by Regal and Ferlie (2020))?
- What is the preparedness of professionals - the people at the forefront of service delivery and implementation - to implement co-creation (also discussed in COGOV WP6 by Hendriks, Kuiper, and Gestel (2020))?
- To what extent are non-hierarchical collaborative types of leadership emerging and driving the implementation of co-creation?

To achieve this, WP3 is based on original cross-sectional data collected with a survey administered in five countries.

The present report provides an overview of this effort, including the research aims, survey design and implementation and results. Several additional documents complement this report (see Appendix):

- Survey questionnaire (in English; Appendix A)
- General guidelines for the selection of respondents (sampling guidelines, Appendix C)
- Descriptions of country samples (Appendix D)

The report proceeds as follows. The next section describes the design of the survey, including the operationalisation of concepts and variables. The section that follows presents results, including descriptive and regression analysis results. We conclude with a discussion of the findings.

2 Survey design

The survey design is the result of a collaborative effort of the consortium, which consisted of three rounds of consultation with partners. Consultations were conducted via email based on a draft proposal from University Northumbria at Newcastle (UN) - the lead partner for WP3.

The survey design was discussed at consortium meetings in Ljubljana (June 2019) and Utrecht (January 2020), where the final version was presented and agreed. Partner's input consisted of the identification of independent variables and controls and population selection. One of the project's Advisory Board members also reviewed the survey.

2.1 Co-creation

The main task lay in the definition and operationalisation of “downward facing strategic management models,” sometimes referred to as “participatory models of strategic management”, as defined in the initial research proposal. To do so, we have referred to the majority of substantive WPs, namely WP4, WP6 and WP7, which capture the importance of collaborative approaches based on co-creation. By focusing on co-creation as a model of new governance, WP3 makes direct links with the key theme dealt with in other COGOV WP's.

Several definitions of co-creation and similar terms exist. The literature emphasises at least three co-creation elements: collaboration, social innovation and public value (Ferlie et al. 2020). Given its multi-dimensionality, the measurement of co-creation and the construct's operationalisation will always be imperfect in some way. In this study, we draw upon the detailed definition of co-creation provided by Torfing, Sørensen, and Røiseland (2019, 803):

Co-creation is a process through which two or more actors in the public, private or voluntary sector attempt to solve a shared problem, challenge, or task through a constructive exchange of different kinds of knowledge, resources, competences, and ideas that enhance the production of public value in terms of visions, plans, policies, strategies, regulatory frameworks, or services, either through a continuous improvement of outputs or outcomes or through innovative step-changes that transform the understanding of the problem or task at hand and lead to new ways of solving it.

This definition allows for a measure of differentiation from definitions of co-production, in that collaboration within this latter approach does not usually encompass actors beyond service providers and users and is limited to the joint production of already existing services (Ferlie et al. 2020).

The three elements captured in the definition indicate different co-creation elements based on the *actors involved*, *the aimed activity* and *the achieved outcomes* and will guide us in the operationalisation of co-creation in this study. In the following section, we explore each one of them

in turn.

2.1.1 Actors

Collaboration between a series of different actors is a central element in co-creation. Public organisations can co-create with users, beneficiaries, clients and actors that do not gain directly from co-creation by obtaining private benefits (Torfing, Sørensen, and Røiseland 2019; Osborne and Strokosch 2013). Moreover, an actor can be an individual or a collective entity such as an organisation. Depending on the term used (e.g. co-creation, co-production or collaborative governance), the discipline or policy domain, the emphasis falls on different types of actors: service users, program beneficiaries, organisations in the private and the voluntary sectors, local communities and unorganised groups and citizens.

One form of collaborative governance discussed in the literature is co-production (see Ferlie et al. 2020). Ostrom (1996) (p. 1073), who was among the first to *systematically* write about the term, defined co-production as the “process through which inputs used to produce a good or service is contributed by *individuals who are not “in” the same organisation*” (emphasis our own). Writing on co-production, Nabatchi, Sancino, and Sicilia (2017) differentiated between state actors and lay actors. State actors are direct or indirect agents of government, including non-profit and civil society. Lay actors are people as individuals, part of groups or collectives. Writing on co-production, Osborne and Strokosch (2013) distinguished between service users as individuals (consumer co-production) and service users as a collective (participative co-production).

Another element that the survey was interested in uncovering was the type of actors that organisations co-create with most frequently (Survey Question 5, see Appendix A). To take into account the difference between co-creation and co-production, we asked respondents to what extent they co-create with service users, clients or programme beneficiaries as an indicator of co-production. To tap into the diversity of state actors, we probed into the extent organisations perform co-creation with other public organisations at the same level of government (e.g. inter-agency co-creation, inter-municipal co-creation, ministry-agency co-creation) or a different level of government (e.g. multilevel governance arrangement, ministry-municipality). Finally, we included options where respondents could select voluntary sector organisations; private sector organisations; citizens and individuals.

2.1.2 Activities

In addition to exploring the partners of public sector organisations in co-creation, we were interested in uncovering the most common purposes or activities that public sector organisations try to modify with co-creation. These can be *existing services*, where (individual or collective) users are invited to *customise* the services they take part (consumer and participative co-production, Osborne and Strokosch 2013; also Nabatchi, Sancino, and Sicilia 2017). Alterna-

tively, co-production can also be the process of *transformation*, where the main task is to identify *new services* (i.e. enhanced co-production; Osborne and Strokosch (2013); see also Voorberg, Bekkers, and Tummers (2015)).

However, co-creation does not need to be limited to the co-production of services. Co-creation can be applied to the formulation of policies or other type of outputs such as strategies, visions, agenda and other policy documents. As a result, co-creation is not only about *delivery* or *implementation*, but also about the *design, problem definition and testing solution*. This point is argued by Nambisan and Nambisan (2013), who point out that stakeholders are asked to play different co-creation roles.

- In the *explorer* role, actors or partners identify, discover and define existing and emerging problems.
- As *ideators*, they conceptualise solutions to well-defined problems in public services.
- In the role of *designers*, actors design or develop implementable solutions to well-defined problems.
- Finally, as *diffusers*, citizens directly support or facilitate the adoption and diffusion of an innovation among a targeted population.

There are, therefore, different outputs and ways that actors attempt to change or transform through co-creation. In the survey, we tapped into unravelling this variation by asking public authorities about the type of output or activities they change or transform based on co-creation (Survey Question 7 in the Appendix A).

2.1.3 Outcomes

Organisations initiate co-creation to achieve various outcomes or results. Organisations are incentivised to do so for different reasons. On the one hand, ‘push’ factors such as fiscal austerity and increasing complexity of problems lead organisations to seek solutions or identify issues via co-creation. On the other hand, ‘pull’ factors such as new technology make co-creation implementable. While push and pull factors are an important variable in determining the qualities of co-creation in organisations, the underlying question is one of measuring impacts independent of whether they are intended or not.

The literature is keen to emphasise that co-creation produces outcomes of public value (Kelly, Mulgan, and Muers 2002). Following this perspective, public value refers to the values that public managers create through public actions (Moore 1995). Research has identified several public value dimensions (Spano 2014; Cwiklicki 2016; Marcon 2014; Faulkner and Kaufman 2018). A recent study by Faulkner and Kaufman (2018) is useful because it reviews public value cross-sector and cross-territory. They identified four measurement dimensions of public value: outcome achievement, trust and legitimacy, service delivery quality and efficiency. Outcome achievement stands for the attainment of public value outcomes in a variety of areas depending

on the remit of an organisation - for example, for a health organisation this might be addiction reduction, drug use reductions, etc. Outcome achievement is usually measured based on the objectives set by specific organisations (Spano 2014). In the survey, we tapped into this dimension by asking respondents to what extent co-creation has helped them achieve their objectives. Efficiency refers to the extent an organisation is achieving maximum benefit with minimal resources and with unnecessary bureaucracy (Survey Question 7 in the Appendix A). In the survey, we used two items to measure respondents' perception of co-creation's impact on financial cost and red tape. Trust and legitimacy refer to issues of democracy, i.e. the extent an organisation is trusted and perceived to be legitimate by stakeholders (Faulkner and Kaufman 2018). In the survey, we measure the outcome of co-creation in terms of: goal attainment, improved legitimacy and trustworthiness, effectiveness in terms of achieving maximal benefit with minimal resources and with unnecessary bureaucracy and innovation (Survey Question 7 in the Appendix A).

2.2 Strategic Management

To deal with the several barriers facing co-creation - and to facilitate its adoption - authors point to the importance of strategic management and planning (Brown and Osborne 2012; Torfing, Sørensen, and Røiseland 2019). When strategic management is present, an organisation develops a “continuing commitment to the mission and vision of the organisation (both internally and in the authorising environment), nurtures a culture that identifies and supports the mission and vision, and maintains a clear focus on the organisation's strategic agenda throughout all its decision processes and activities” (Poister and Streib 1999, 3211–3312). Used comprehensively, strategic management gives organisations the ability to introduce innovation by planning and managing change systematically (Bryson 2011; Joyce 2015). This involves adopting basic practices and spending time deliberating an issue and analysing its contextual elements.

Strategic planning has two broad meanings. It is a means, intermediary or tool used towards an end and a way of knowing and acting (Joyce 2015; Bryson, Crosby, and Bryson 2009; Ferlie and Ongaro 2015). When studying strategic planning as a means, the emphasis is on the applied sequence of prescribed steps, which require information, power and authority to complete removed from processes, methods, and mechanisms of implementation (Bryson, Crosby, and Bryson 2009, 174). It involves the study of outputs arising from strategic planning and the analytical approaches that have been used to produce them. When strategic planning is defined as a way of knowing or a process, researchers seek to understand how strategic management is performed in an organisation (Bryson, Crosby, and Bryson 2009). This involves finding out how an organisation promotes strategic thinking, action, learning and knowing. It involves research on the circumstance where strategic management documents are adopted including attention on the actors involved, their cognitive styles and associations (George et al. 2018). In its focus on actors, strategic planning - as a process - links strategy-making to network theories and social theory. The emphasis is on strategic planning as a discursive practice, which calls for partic-

ipatory and qualitative observations. In this study, we limit ourselves to measuring strategic managements as a means. To do so in the survey, we look at the extent public authorities adopt co-creation in their strategic documents, whether they perform analyses before implementing co-creation and continually evaluate the process of co-creation (Survey Question 9 in the Appendix A). As an indicator of strategic management, we also asked respondents whether their organisation had achieved staff buy-in for co-creation.

2.2.1 Public value as strategic management

Based on its emphasis on collaboration, stakeholders' involvement, and addressing public concerns, co-creation is linked to public value as a management model and policy outcomes (Moore 1995; Bryson et al. 2017). As a management model, public value is a way of thinking about continuous improvement in public services and about what public value might be in a given situation. Moore (2013) developed the idea of the 'strategic triangle' to show that public value is created when:

1. Public service actions are democratically legitimate;
2. Public service actions have the support from the authorising environment (e.g. boards, managers, politicians, etc.);
3. Public authorities have the operational capacity to implement the action effectively. Since its conception, the strategic triangle' has been operationalised to aid its implementation.

For example, the UK's HM Treasury (2019, 13) developed a set of dimensions and questions that focus on how organisations pursue goals, manage resources, involve stakeholders, and what their system capacities are. Thinking of all these elements (e.g. what goals are to be achieved, using what tools and means) consists of a public value management approach to public policy. The survey looks into public value as a management model in Survey Question 9 (last item) and Survey Question 9.1 (see Appendix A)

2.3 Professionals

Co-creation is implemented by public managers or professionals, which we define as any public servants in local government as long as they are affected by, or involved in, developing and implementing public services and policies (following the definition proposed in WP6). In this way, we follow Lipsky's (2010) definition of professionals as those who actually 'make' policies through their crucial role in implementing public policies (Hendrikx, Kuiper, and Gestel 2020). Research has shown that co-creation and other collaborative approaches bring new requirements to the role of professionals (Aschhoff and Vogel 2019; O'Leary, Choi, and Gerard 2012; Steen and Tuurnas 2018; Hendrikx, Kuiper, and Gestel 2020). To be the enablers of co-creation, professionals require individual attributes, network skills, strategic leadership, resources and institutional support. In the survey, we probed into professionals' attitudes and

behaviour with five items in Survey Question 10 (Appendix A).

2.4 Collaborative Leadership

The type of leadership found in an organisation is what, in part, defines its workings (Van Wart 2013, 530). It has been acknowledged that to enable co-creation, leadership has to adopt an equitable model of ownership, control and decision-making (e.g. Crosby and Bryson 2005; Ansell and Gash 2008). In this sense leadership ‘is an emergent property of groups of networks of interacting individuals’ (Bennett 2003, 7). To be successful, leadership in multi-actor settings brings diverse actors, groups and organisations together and motivates them to solve complex public problems and create public value. Such leadership is known as collaborative leadership (Archer and Cameron 2009; Hart 2014, 91; Rosenthal 1998).¹ Three basic characteristics define collaborative leadership (Bennett 2003, 7):

1. Leadership is an emergent property of a group or network of interacting individuals;
2. There is an openness to the boundaries of leadership;
3. Varieties of expertise are distributed across the many, not the few.

A collaborative leadership style is not associated with a public sector organised as a legal authority in the Weberian sense (or OPA) or one emphasising market values (NPM). Collaborative leadership style is distinctive from top-down and hegemonic leadership (Ansell and Gash 2008; Wilson 2019). Therefore, long-established traditions such as OPA and the leadership types associated with them are barriers in the shift towards more collaborative approaches of leadership, and consequently, the adoption of co-creation (Wallmeier and Thaler 2018). This leads us to test the importance of collaborative leadership for the implementation of co-creation.

The measurement of leadership is a well-developed field, especially in business management literature (Rainey 2014; Van Wart 2013) (for a discussion on the public sector see Hart (2014) and Rainey (2014, 335–81). However, the bulk of the work is on the attributes of leaders as individual agents (for instance, leaders’ goal orientation, their motivation to deliver, engagement with others – groups and individuals, their need to be in control, their approach to recognition – punishment or rewards, and to what extent their value structure). The proposition that leadership is a property of the individual is not central to collaborative leadership, where leadership is a practice. When speaking about leadership as a practice, we acknowledge that leadership is the ensemble of ‘all the individuals who have a hand in leadership and management practices’ rather than just those in formally designated in ‘leadership’ roles (Spillane and Diamond 2007, 7).

While several measures for leadership exist, only a few studies measure collaborative leadership or closely associated terms such as network leadership (Silva and McGuire 2010, 265; Van

¹Different terms are in use in the literature: ‘distributed’ (Bolden 2011), ‘horizontal’ (Van Wart 2013) and ‘integrative’ (Crosby and Bryson 2010). There is no consensus whether these terms are used to study different phenomena or aspects of similar phenomena (for an overview see Bolden 2011, 256–58).

Wart 2013, 532).² The WP3 survey's purpose was to measure a general orientation in the organisations regarding leadership practice given individuals' subjective perception. The work of Gronn (2002) is useful here because it proposes a measurement that does not focus on individual characteristics (a similar framework is proposed by Spillane and Diamond (2007)). Following Gronn (2002), collaborative (or 'distributed') leadership has three components: *spontaneous collaboration, intuitive working relations and institutionalised practice*. Since Gronn (2002) conceptualisation has not been tested, we developed three items to capture the essence of collaborative leadership.³ These items are included in the Survey Question 12 (last three items, see Appendix A).

²Silva and McGuire (2010, 269) conducted a survey where integrative leadership was measured with 35 statements on behaviour drawn from the literature. Their study looked at how individuals involved in networks perceive leadership behaviour in their management department compared to the management of the networks they are members of. As part of a broader effort to measure public leadership, Tummers and Knies (2016) also measured network governance leadership with a survey. From a starting number of six items, they identify five items with a factor loading more than 0.80. The drawback of the measurements proposed by Silva and McGuire (2010) and Tummers and Knies (2016) is that they are too narrowly focused on network leadership. Moreover, they are focused on the individual as the unit of observation.

³Ideally, we would have three items per dimension. So, our measurement is at best imperfect.

3 Survey implementation

After the design phase, the survey was piloted. This was qualitative and tested the content of the questions and answer options by contacting respondents with expert knowledge on the population or representatives of the population. Ten respondents from three partner countries participated in the pilot.⁴ Pilot respondents were sent the survey and asked to evaluate it in terms of the relevance of the content for local government or national/devolved government; the ability to comprehend the instructions; the understanding of questionnaire items and the terms used; the length of the questionnaire; and any other comment. After the final adjustment were made, a technical pretesting checked the timing and logic of the survey.

The online survey was implemented through five country teams with coordination provided by NU. A set of common principles were set for the selection of the population and are included in Appendix C. Based on the guidelines (see Appendix C), the target population consisted of organisations at the central, regional and local level of government with policy competences in the domains of culture, environment and social affairs - policy domains that have been studied already in WP2. Following the above criteria, country teams were advised to map the population as thoroughly as possible to increase the sample's representativeness. Each country selected the sample, translated and managed the distribution of the survey. The common principles ruled out non-random methods of sampling. In some cases the whole identified population was surveyed. A common web platform hosted the survey.

The sample size per country was different, given the variation on multi-level governance and organisational complexity.⁵ The participation rate was 21 per cent and the completion rate - the number of respondents that answer all the survey questions - was 11 per cent.⁶

A key challenge was that the planned launch of the survey coincided with the start of coronavirus related lockdowns. The survey was launched in late March 2020 in the UK (before the lockdown due to the coronavirus pandemic). In all other countries, the survey was launched either in April 2020 (Croatia and Slovenia) or May 2020 (Denmark and France) after determining that the pandemic was likely to turn into a long-term situation. All surveys were open until the end of December 2020 to provide opportunities to increase the response rate.

To increase the response rate, a range of approaches were taken.⁷ In the UK, eleven umbrella associations were contacted and asked to endorse the survey and distribute it among its mem-

⁴The pilot included 4 UK respondents, 5 Slovenian respondents and one Danish respondents.

⁵The UK sample included 715 respondents, the Slovenian sample included 351 respondents, the Croatian sample included 804 respondents, the French sample included 793 respondents and the Danish sample included 107 respondents.

⁶The completion rate country: UK 5 per cent, Slovenia 28 per cent, Croatia 11 per cent, Denmark 32 per cent and France 4 per cent. The participation rate per country: UK 10 per cent, Slovenia 73 per cent, Croatia 16 per cent, Denmark 35 per cent and France 11 per cent.

⁷Additional efforts were made in all counties, except for Slovenia, where partners were able to achieve a satisfactory response rate through email reminders and personal appeals.

bers. The survey was distributed by the LARIA - the Local Research and Intelligence Association (London, East England and North East England groups), Town and Country Planning Association, Association of Local Government Ecologists (ALGE) and the Rural Services Network (RSP). A member of the COGOV advisory board helped distribute the survey among the Scottish national government, while Cardiff University partners provided contact emails in the Welsh national government. Respondents received three emails reminders. At the beginning of September, the UK team decided to send the survey by post. However, after the renewal of the lockdown, the postal survey could not be implemented, because the UK team did not have access to printing equipment or mail service. Simultaneously, it was assessed that the postal survey's success was uncertain as likely recipients were encouraged by the UK government to work from home - rather than in offices - where surveys would be sent to.

In Croatia, three reminders were sent. For increasing the response rate, a number of organisations were approached for assistance in the distribution. With help from partners in Croatia, the survey was advertised on the Association of Cities' website and the Croatian ICT city group workspace. The project lead at Northumbria sent a final reminder appealing for an increase of the response rate in English. In Denmark, respondents received three reminders in Danish. The project lead (at Northumbria University) also sent a final reminder appealing for an increase of the response rate in English. In France, four reminders were sent after the first invitation. To increase the response rate, new contacts in the organisations were sent the survey and respondents who partially completed the survey received a personal appeal asking them to complete the survey.

Coronavirus

COVID-19 has interfered substantially with the distribution of the survey. The design, piloting, translation and web design of the survey had all been completed before the start of the pandemic in Europe. COVID-19 has interfered with the distribution of the survey. At the start of the lockdowns in Europe, partners were uncertain to what extent COVID-19 would affect respondents' willingness and availability to participate in the study (discussed at the Consortium virtual meeting, 19 March 2020).⁸ Since the WP 3 survey is an online instrument, NU advised partners to launch the survey considering local conditions, for instance, Slovenia was relatively less affected by the coronavirus in spring 2020, the UK was relatively late implementing the lockdown with London taking in the highest share of infections in England at the start of the pandemic.

It soon became clear the COVID-19 would affect the way people work for the long-term, switching to teleworking with variable conditions for people, who faced child care obligations, increased stress and job uncertainty. Workload also changed for the WP3 studied population

⁸Northumbria University consulted the web resources of different survey companies. Based on a survey of consumer audience panelists, SurveyMonkey reported that respondents are as likely as before the pandemic to take surveys, and feel it is appropriate for companies to be sending surveys. Available at <https://www.surveymonkey.com/curiosity/should-you-send-surveys-during-the-coronavirus-crisis/>, accessed: April 2020)

engaged in social, cultural and environmental services. Thus, it was always a possibility that organisations were likely to prioritise COVID-19 related planning (e.g. adopting new strategies and their implementation, running risk assessments for possible reopening, delivering furlough schemes, closing facilities) rather than completing an externally requested survey.

Despite these conditions, the survey started in most of the partner countries. It is unclear to what extent COVID-19 conditions affected the response rate given that through the years have been witnessing a decline in the response rate in academic research (Baruch 1999; Anseel et al. 2010), but anecdotal evidence suggest that the pandemic was a deterrent.⁹

⁹A large number of respondents declined to participate claiming the lack of time due to the coronavirus pandemic.

4 Analysis

In the next section, we analyse the survey data. In the first part, we present descriptive statistics on each variable. The second part of the analysis builds on the descriptive statistics and build regression models to uncover the effect of strategic management, the preparedness of professionals and collaborative leadership on the uses of co-creation in term of involved actors, performed activities and reported impact.

4.1 Co-creation patterns

As a general guideline for the study, we wanted to determine how co-creation in public sector authorities changed over the years. To do so, we asked respondents to estimate how has the use of co-creation changed over the last five years (Survey Question 6, see the Appendix A).

Figure 1 presents the data collected on this question. Almost sixty per cent of all respondents reported that over the last five years the use of co-creation in their organisation has increased, with less than five per cent saying it has decreased. Over a third of respondents reported that the use of co-creation has neither increased nor decreased. Overall, there is a convincing pattern showing organisations are increasingly turning to co-creation.

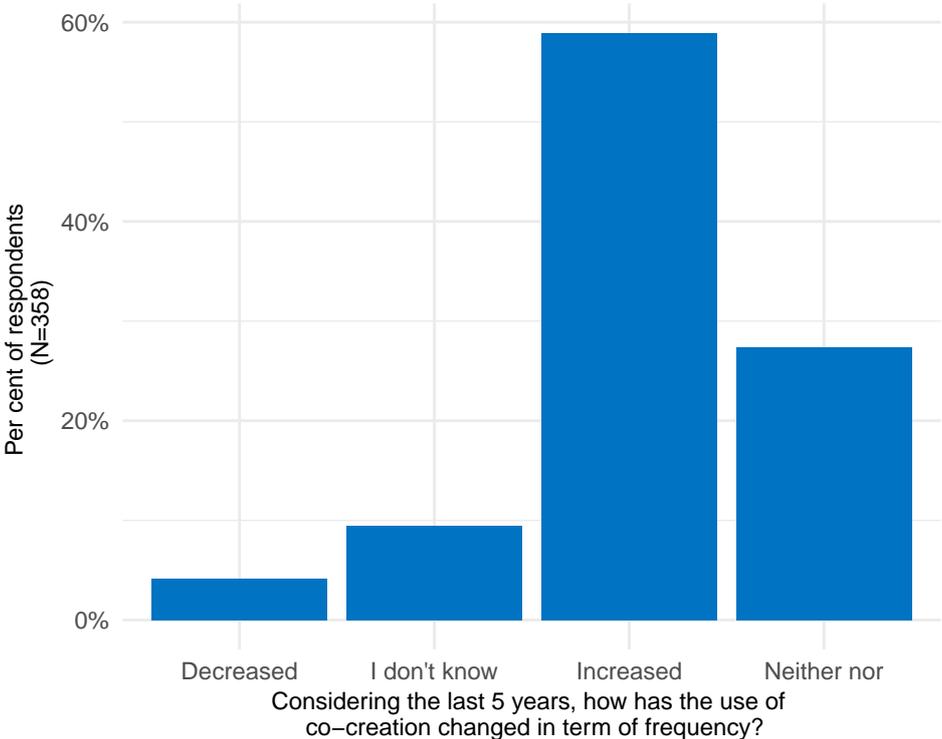


Figure 1: Change in the use of co-creation

4.1.1 Stakeholders

When looking at the involvement of stakeholders in Figure 2, data shows public authorities use co-creation extensively with *other public sector organisations* and *citizens in the capacity of service users or programme beneficiaries* (i.e. citizen co-production). On the other hand, co-creation with citizens who are not users or beneficiaries is the least common form of co-creation. Just a quarter of respondents engaged in co-creation with citizens in the role of volunteers, non-beneficiaries of programmes or non users of services. Co-creation with private sector organisations is less extensive than with public authorities and voluntary sector organisations shedding some insight on the extent of private-public partnership.

Respondents in organisations that co-created with other public sector organisations were asked what kind of public sector organisations they engaged with (Survey Question 5.1, see Appendix A). About half of the respondents reported that their organisation co-creates with public sector organisations across all government levels (national, regional and local public authorities).

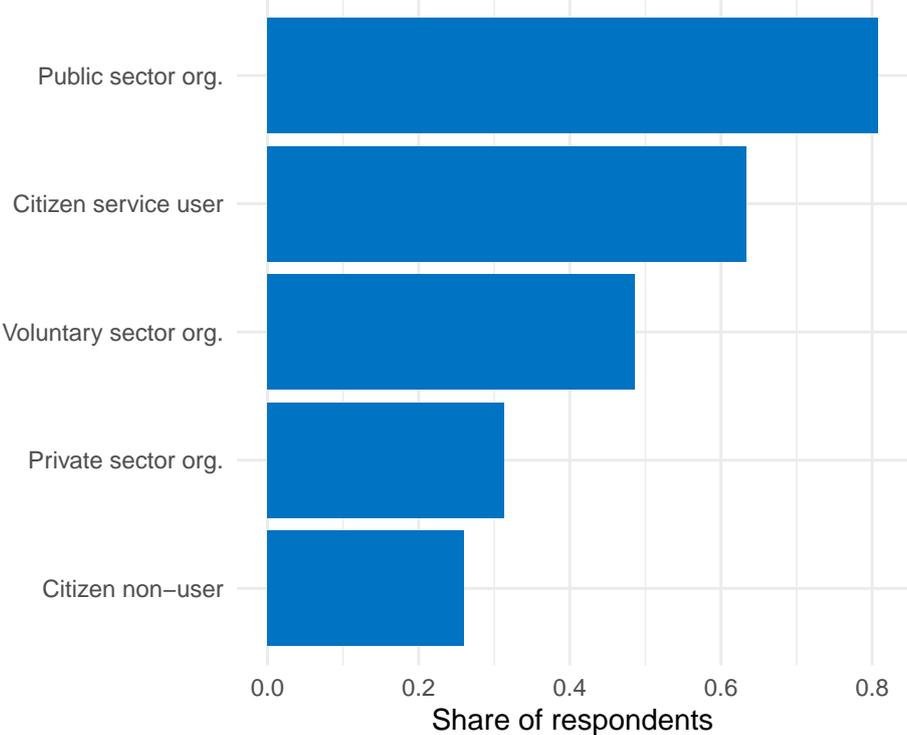


Figure 2: Stakeholders involved in co-creation¹⁰

¹⁰Based on the following question and number of observations :To what extent does your organisation engage in co-creation with the following stakeholders? 1) Citizens in the role of service users, programme beneficiaries, clients or customers (N = 347); 2) Citizens in the role of volunteers, non-beneficiaries of programmes or non-users of services (N = 334); 3) Public sector organisations (N = 342); 4) Voluntary sector organisations (N = 336); 5) Private sector organisations (N=335). Reported values: ‘To a great extent’ and ‘To a very great extent’ on a 5 point scale.

4.1.2 Activities

There are multiple purposes for which local authorities engage stakeholders in co-creation (Figure 3). Our data shows that stakeholders most often (in two-thirds of reported cases) take the role of ‘designers’ and ‘explorers’ (reference to classification defined earlier) . In the role of *designers*, stakeholders are asked to suggest and shape the content of existing services, projects, plans and policies (i.e. co-production) (Figure 3). In the role of *explorer* (or agenda setter), stakeholders are asked to identify, define and articulate issues to address. More than half of all the respondents reported that stakeholders (very) frequently become partners in implementing services, project, plans and policies. Less frequent are the roles of decision-makers (41 per cent of respondents) where stakeholders take decisions over services, projects, plans and policies, and the role of evaluators of services, projects, plans and policies (38 per cent of respondents).

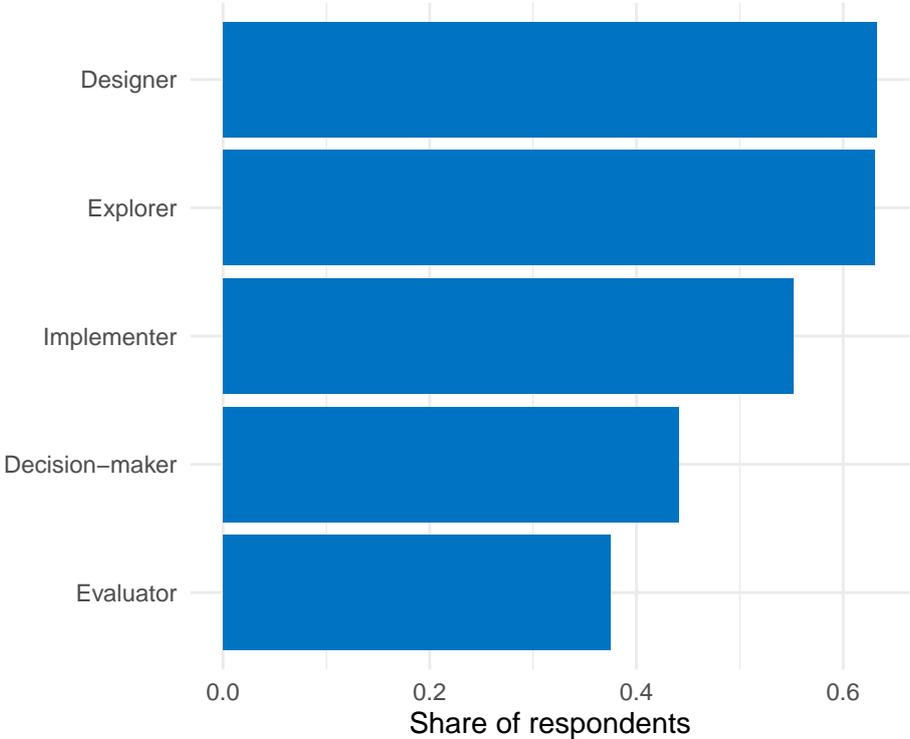


Figure 3: Stakeholders roles in the co-creation process¹¹

4.1.3 Impact

Since co-creation is associated with public value creation, we probed into respondent perceptions of co-creation’s public value impact. According to more than three-quarters of the respondents, co-creation has a considerable impact on public authorities’ ability to attain goals and improve

¹¹Based on the following question and number of observations: To what extent does your organisation engage in co-creation in the following activities? 1) To identify, define and articulate issues to address (N=316), 2) To suggest and shape the content of services, projects, plans and policies (N=322), 3) To make decisions over services, projects, plans and policies (N=319), 4) To implement services, projects, plans and policies (N=335), To evaluate services, projects, plans and policies (N=316). Reported values: ‘To a great extent’ and ‘To a very great extent’ on a 5 point scale.

public satisfaction (Figure 4). A similar share of respondents also believed that through co-creation, public sector organisations improve the *trust* of the public in their organisations. On the other hand, respondents were less convinced whether co-creation positively impacts financial and administrative effectiveness. Less than a third of respondents reported that co-creation reduced bureaucratic burden or financial cost. This leads us to the observations that co-creation achieves some public value benefits but that it has not met the conditions to achieve public value as set in Moore’s strategic triangle. One of the questions that arise is how can public authorities make co-creation more cost and bureaucratic effective?

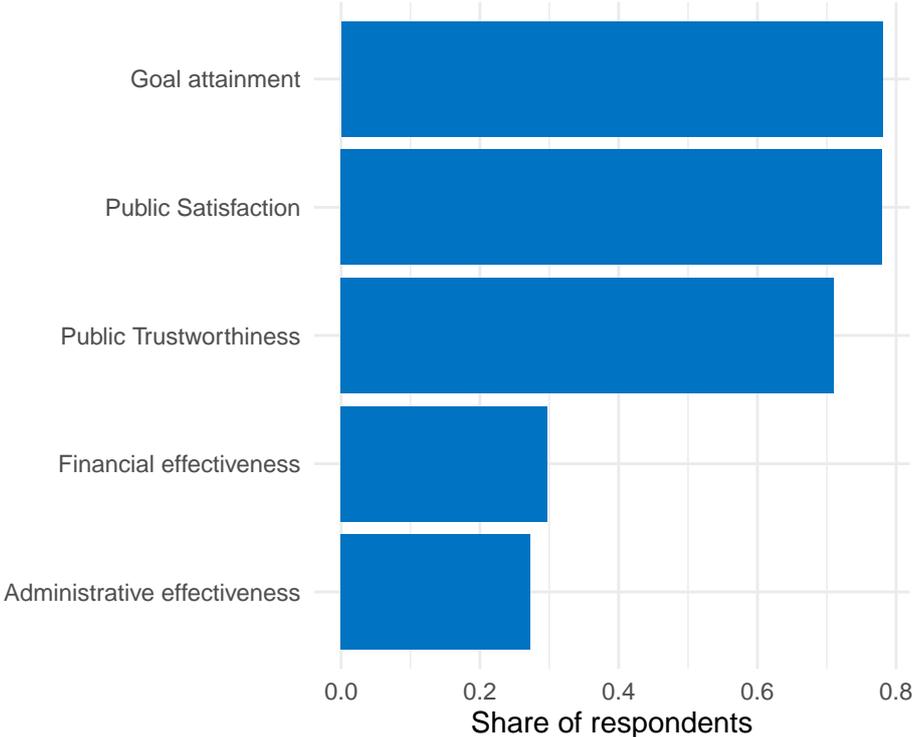


Figure 4: Public value impact of co-creation¹²

4.2 Institutional behaviour towards co-creation

In the next section, we look at respondent views on the strategic implementation of co-creation and professionals’ preparedness to implement co-creation and collaborative leadership. We call these the institutional behaviours’ on co-creation because they facilitate the implementation of co-creation.

¹²Based on the following question and number of observations: To what extent do you agree on the following statements on the impacts of co-creation in your organisation? 1) Co-creation has improved my organisations ability to meets its key strategic and policy objectives. (N= 299) 2) Co-creation has improved public satisfaction with my organisations services, projects, plans or policies. (N= 299) 3) Co-creation has improved public trust in my organisation. (N= 295) 4) Co-creation has reduced financial costs for my organisation. (N=278) 5) Co-creation has reduced the bureaucratic burden and red tape in my organisation (N = 292). Reported values: ‘Strongly agree’ and ‘Agree’ on a 5 point scale.

4.2.1 Managing co-creation strategically

Actions such as co-creation are strategised when organisations invest resources to deliberate the ends and means in the processes of an organisations. Figure 5 shows that more than two-thirds of all respondents (strongly) confirmed that co-creation is enshrined in their organisation’s strategic documents. A little bit less than two-thirds of respondents that their organisations have achieved staff buy-in for co-creation, indicating that co-creation has been debated among those affected. Undertaking analyses before the implementation of co-creation (e.g. assessment of external and internal threats and opportunities, stakeholder analyses and feasibility assessments) and the continued evaluation of co-creation appear - on the other hand - to be less frequent. Half of the respondents reported that their organisations perform such analyses.

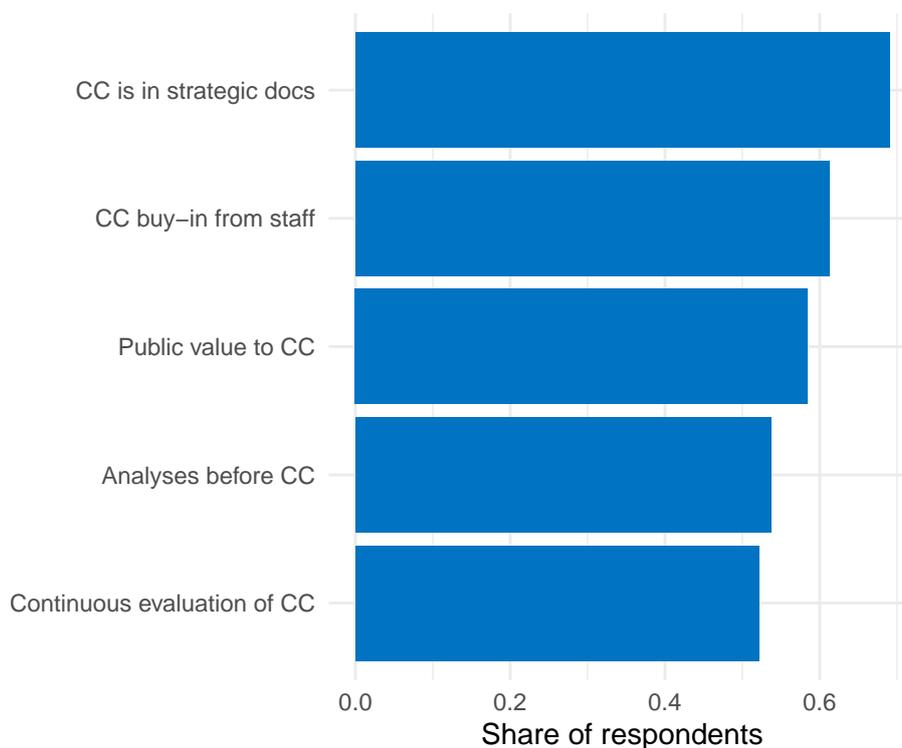


Figure 5: Strategic management approach to co-creation¹³

Public value management

In the survey, we asked respondents whether their organisations employ a public value strategic management approach to co-creation. Fifty-nine per cent of the respondents (strongly) agreed

¹³Based on the following survey question and number of observations: To what extent do you agree with the following statements on the strategic planning processes for implementing co-creation in your organisation? 1) Co-creation is enshrined in the strategic plans of my organisation (e.g. vision statements, organisational missions, action plans and strategies). (N= 291) 2) My organisation undertakes analyses before implementing co-creation (e.g. assessment of external and internal threats and opportunities, stakeholder analyses and feasibility assessments). (N= 283) 3) My organisation continuously evaluates, monitors, and updates its strategic plans involving co-creation as new information becomes available. (N= 288) 4) My organisation has effectively achieved staff buy-in for co-creation. (N=286) 5) My organisation explicitly uses the notion of public value when making decisions about co-creation. (N = 275). Reported values: 'Strongly agree' and 'Agree; on a 5 point scale.

that their organisations apply the notion of public value when making decisions about co-creation (Figure 5). Public value management is a complex phenomenon, which should be measured with several questions. To address the complexity of public value, we asked respondents to explain in an open-end question what it means to apply the notion of public value when making decisions. Overall, the responses varied greatly. Respondents in all the five countries where the survey was administered mentioned that public value means citizen engagement and working for the benefit of citizens or the public. In some countries, respondents also mentioned taking a strategic lens to organisational operations. Below, we summarise the responses per country.

In *Slovenia* and *Croatia* respondents specified that taking into account public value means engaging stakeholders to the widest extent possible. In contrast, for others, engagement meant public consultation. Many respondents in Croatia and Slovenia wrote that a public value management approach is about pursuing goals for better service performance, improved public service satisfaction, and the achievement of organisational outcomes fairly and equally for citizens. A long-term vision in the implementation of goals was also described. However, compared to engaging citizens, and the pursuit of goals, the management of resources and system capacity to deliver services were mentioned less frequently.¹⁴

Respondents from the *UK* explained that public value management is a practice with several dimensions, including analytical thinking about the desired outcomes and achieving objectives with wider social benefits. Engagement with stakeholders was considered by many an essential part of public value management. In *Denmark*, based on eight responses, public value was seen as setting clear organisational goals through parameters agreed at an organisational level defining societal benefits, communication or outreach to the wider public, including citizen engagement. One respondent also referred to the “public value framework set by New Public Governance”. Finally, in *France*, based on 17 responses, a public value approach meant, for many, taking into account, realising and defending the “general interest”. Public value was also understood as following a democratic process when making decisions and shared responsibility within the organisation to make decisions over strategy. Respondents mentioned working with stakeholders and citizens, while other answers pointed to the careful selection of partners.

4.2.2 Professionals in co-creation

Professionals are the employees who are involved in developing and implementing public services and policies. They are often the interface between an organisation and stakeholders. In the view of 73 per cent of respondents, professionals believe that co-creation improves their ability to solve problems (Figure 6). A similar share of respondents believes that professionals have the skills to co-create with stakeholders and 57 per cent of respondents report that professionals

¹⁴For instance, only three respondents mentioned that public value management is about managing work in the organisation, so projects are achieved more expediently and with better results. Three other respondents indicated that public value management is about conducting analyses of planned changes which consider the greatest extent for societal impact.

are motivated to co-create About half of the respondents are convinced that professionals benefit from the necessary support (staff support, financial support and training) and have a clear understanding what co-creation entails.

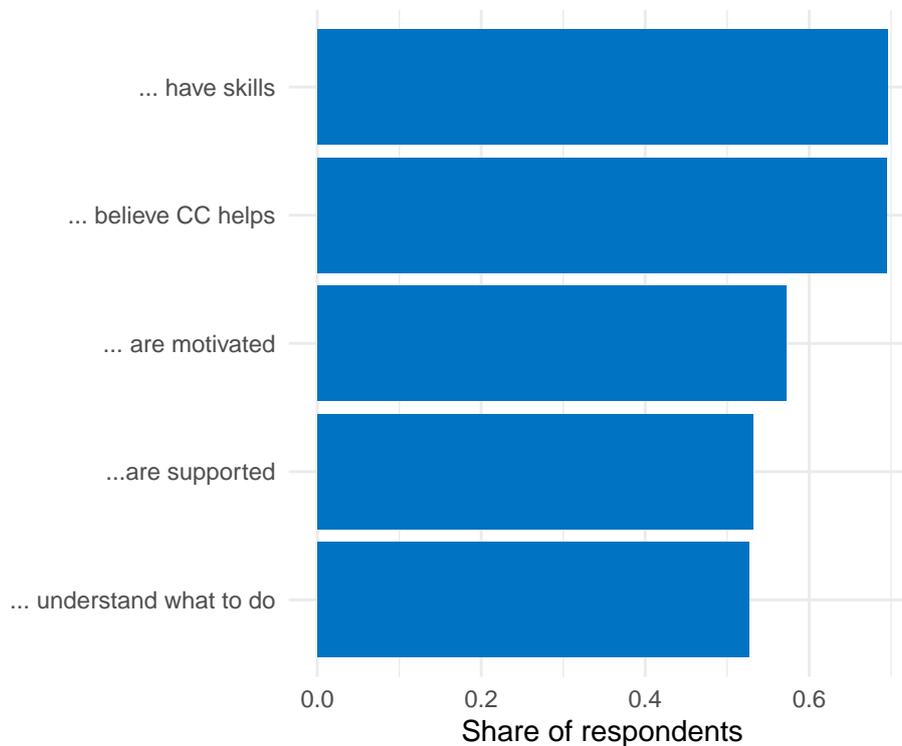


Figure 6: Professionals...¹⁵

In an open-ended question, respondents had the opportunity to express their opinion on any difficulty they thought professionals face in co-creation (Survey Question 11 in the Appendix A).

The most commented aspect in Slovenia and Croatia were professionals’ difficulties in managing users expectations, reconciling positions, and understanding why the decisions taken had been adopted. Several Croatian and Slovenian respondents mentioned that stakeholders are unable to see through their private interests. It was noted that professionals could become disillusioned if their inputs were not taken on board by the leadership, thus decreasing their co-creation motivation. The lack of different types of resources (time, funding and skills) were also mentioned. Respondents thought that professionals lack the skills to plan and implement co-creation. They also expressed unfavourable views on professionals’ ability to coordinate and communicate (“soft skills”). Several respondents said that sometimes professionals lack the understanding

¹⁵Based on the following question and number of observations: To what extent do you agree with the following statements on professionals? 1) Professionals in my organisation have the skills to co-create with stakeholders. (N = 291) 2) Professionals in my organisation benefit from staff support, financial resources and training that are needed to co-create with stakeholders. (N = 290) 3) Professionals in my organisation have a clear understanding of what they need to do in co-creation. (N = 291) 4) Professionals in my organisation believe that co-creation with stakeholders improves their ability to solve problems. (N = 290) 5) Professionals in my organisation are easily motivated to co-create with stakeholders. (N = 276). Reported values: ‘Agree’ and ‘Strongly agree’.

of administrative procedures. On the other hand, respondents thought the legislation was too complex and overly bureaucratised, which can be interpreted as indicating a lack-of support for professionals. There were also unfavourable comments on the organisational leadership's support (e.g. leadership turnover and lack of effective leadership). Respondents felt that political decisions undermine professional judgements.

The main issues expressed by UK respondents were professionals 'outdated' roles and rules, which were also mentioned in terms of professionals aversion to taking risks and engaging with co-creation. The lack of resources (financial means, time and knowledge) was also mentioned by many. Other barriers mentioned included: the absence of clear organisational prioritisation of co-creation, professionals' ability to identify and engage the most vulnerable population and end-users and difficulties in identifying co-creation partners trusted by the public. As in Slovenia and Croatia, respondents mentioned the challenges professionals face to manage expectations.

Danish respondents highlighted four issues facing professionals in co-creation. Many mentioned the management of stakeholders (e.g. diversity and various stakeholders, conflicting demands and goals and different level of stakeholders abilities) in the co-creation process as a challenge for professionals. As in other countries, Danish respondents wrote that professionals lack resources of a different kind: time, competences, networking skills and trust-building skills. A 'fixed' mindset following strict professional conventions and the 'outdated' practice to solve problems without involving stakeholders were mentioned. One respondent highlighted the issue of professionals giving co-creation authenticity so that the process has consequential impacts.

Finally, the French respondents brought up five different challenges. The most commented on were difficulties in the management and mobilisation of diverse interests, making the right calls on "general" versus "particular" interests. Resources (time and competences) were the second most commented on issue. Respondents also mentioned professionals roles and rules, which are difficult to change and innovate. In this respect, one respondent mentioned unions involvement, which resist any change to professionals' roles. Two other issues were mentioned: maintaining a fair process for all partners and the absence of political support including centralised decision-making.

4.2.3 Collaborative leadership

Figure 7 presents the opinions of respondents were given three statements tapping into collaborative leadership. Seventy per cent of respondents believe that individuals with different skills and knowledge come together to complete a particular task in their respective organisations. A similar percentage of respondents believe that individuals in their organisations balance each other's skill gaps. Sixty per cent of respondents believe that leadership is less about 'heroic' leaders and more about a collaborative team ethic in their organisation.

¹⁶Based on the following question and number of observations: To what extent do you agree with the following statements? 1) In my organisation, it is common that individuals with different skills and knowledge come together

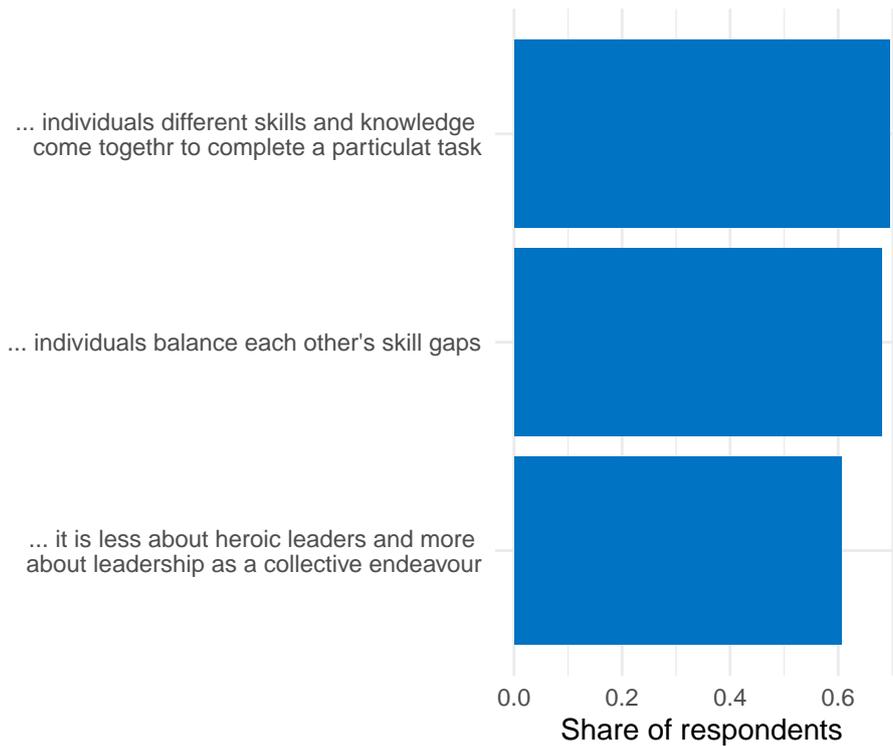


Figure 7: Collaborative leadership¹⁶

4.3 Determinants of co-creation

In the following, we explore the determinant of co-creation based on the survey items presented in the previous sections. We measure co-creation in terms of the breadth of partners involved, how organisations use co-creation for different activities and the impacts that co-creation produces (Table 1).

We are interested in whether employing a strategic management approach to co-creation, the readiness of professionals and the existence of collaborative leadership increase the use of co-creation in terms of stakeholders and activities, and whether it makes a change to the perceived impacts.

4.3.1 Model

Dependent variables

Variable *range of stakeholders* measures co-creation given the extent of partners that an organisation involves in co-creation. It is based on items presented in Figure 2 (Cronbach's $\alpha = 0.70$). The higher the score on the variable, the larger the range and variety of stakeholders involved in co-creation. Variable *range of co-creation activities* measures the extent organisations use co-creation for different activities based on items in Figure 3 (Cronbach's $\alpha = 0.85$). The higher

to complete a particular task. (N = 275) 2) In my organisation, individuals balance each other's skill gaps. (N = 275) 3) In my organisation, it is less about heroic leaders and more about leadership as a collaborative endeavour. (N = 275). Reported values: 'Agree' and 'Strongly agree'.

the score, the greater and more extensive is the use of co-creation. Finally, *public value impact* measures co-creation based on its public value impacts. It is based on items presented in Figure 4 (Cronbach's $\alpha = 0.83$). Ideally, each item of public value would be measured with at least three or more items to increase measurement validity. However, due to space constraints in the survey questionnaire, we have opted for a less exact public value measure.

Independent and control variables

Strategic management is measured with two variables: with a composite index measuring the means approach to co-creation (*Str mngmt*) (Cronbach's $\alpha = 0.82$) and with an ordinal level variable measuring a public value approach to co-creation (*PV mngmt*) as seen in Figure 5. The readiness of professionals is measured with five items, as seen in Figure 6. These items are aggregated in the composite measure *Professionals* (Cronbach's $\alpha = 0.81$). Collaborative leadership, *Collab lead* is measured with a scale composed of three items as seen in Figure 7 (Cronbach's $\alpha = 0.83$). A set of control variables were included in the model: *Country*, *Policy domain* (cultural, environmental and social policy domains, based on Survey Question 2), *Type of organisation* (based on Survey Question 1 in Appendix A, standardised into organisations at the local, regional and central level of government), *organisation size* (continuous variables, based on Survey Question 4 in the Appendix A). Table 2 provides an overview with descriptive statistics. The results of models with control variables are reported in Appendix C. All the estimates are based on fixed effect linear regression analysis. We report robust standard errors.

Table 1: Dependent variables

Variable	Definition and Operationalisation	Descriptive statistics
Range of stakeholders	The range and extent of stakeholders involved in co-creation; Five item scale variable ranging from 1 to 5, Cronbach's alpha = 0.7, based on Survey Question 5	mean = 3.5 min = 1.4 max = 5.0 median = 3.4 N = 322
Range of cocreation activities	The extent of involvement in co-creation in terms of activities; Five item scale variable ranging from 1 to 5, Cronbach's alpha = 0.85, based on survey question 7.	mean = 3.5 min = 1.0 max = 5.0 median = 3.4 N = 317
Public value impact	The public value impact of co-creation; Five item scale variable ranging from 1 to 5, Cronbach's alpha = 0.83, based on survey question 8.	mean = 3.6 min = 1.0 max = 5.0 median = 3.6 N = 276

Table 2: Independent and control variables

Variable	Definition and Operationalisation	Descriptive statistics
Str mngmt	Strategic management; Four item scale based on Survey Question 9 (items 1-4); Cronbach's alpha = 0.82	mean = 3.53, min = 1.0, max = 5.0, median = 3.75, N = 270
PV mngmt	Public value management; Based on Survey Question 9, items 5	mean = 3.54, min = 1.0, max = 5.0, median = 4.00, N = 284
Professionals	Preparedness of professionals; Five item scale based on Survey Question 10 (items 1-4) and Survey Question 12 (item 3); Cronbach's alpha = 0.81	mean = 3.51, min = 1.0, max = 5.0, median = 3.60, N = 275
Collab lead	Collaborative leadership; Three item scale based on Survey Question 13 (items 3-5); Cronbach's alpha = 0.83	mean = 3.64, min = 1.0, max = 5.0, median = 3.67, N = 276
Country	NA	Croatia N = 136, Denmark N = 37, France N = 89, Slovenia N = 285, UK N = 70
Policy domain	Survey Question 2 (Cultural policy, environmental policy and social policy)	Culture N = 164, Environment N = 71, Social N = 72
Type of organisation	Survey Question 1 (Central level of government, local authorities and regional authorities)	Central N = 177, Local N = 228, Regional N = 16
Organisation size (org size)	Survey Question 4	mean = 592, min = 0, max = 3000, median = 70, N = 365

Results

Liner regressions results show that a strategic management approach to co-creation has a consistent and statistically significant effect on the range of stakeholders that organisations involve in co-creation (Models 1, 5, and 6 in Table 3). This means that organisations which adopt a strategically managed approach to co-creation engage more frequently in co-creation with a diverse set of stakeholders. Professionals' readiness (or the extent professionals feel skilled and ready to engage in co-creation) has a similar effect, but at a lower significance level (Model 6 in Table 3). There is also some evidence that a public value management approach increases the range of stakeholders an organisation involves in co-creation (Models 2, 5, and 6 in Table 3). Caution is needed here, as the measure for public value management is not the most precise measurement and shows low statistical significance. On the other hand, collaborative leadership does not affect who and how frequently organisations engage in co-creation. These results are consistent when applying control variables (Table B1).

Table 3: Range of stakeholders involved in co-creation (robust std errors)

	Range of stakeholders (scale)					
	(1)	(2)	(3)	(4)	(5)	(6)
Str mngmt	0.443*** (0.050)				0.302*** (0.070)	0.284*** (0.071)
PV mngmt		0.275*** (0.042)			0.115** (0.056)	0.104* (0.055)
Professionals			0.439*** (0.065)		0.276*** (0.086)	0.181** (0.081)
Collab lead				0.155*** (0.057)	-0.118* (0.061)	
Constant	1.925*** (0.180)	2.499*** (0.156)	1.935*** (0.237)	2.920*** (0.216)	1.466*** (0.261)	1.476*** (0.246)
Observations	251	261	250	253	228	232
R ²	0.235	0.151	0.155	0.032	0.295	0.282
Adjusted R ²	0.232	0.148	0.151	0.028	0.282	0.273

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 4 looks at how strategic management, public value management, professionals' readiness, and collaborative leadership affect the range of activities where co-creation is applied. Similar to the result in Table 3, strategic management and professionals' readiness increases the range of activities where co-creation is implemented. In other words, organisations where a strategic

management approach to co-creation is implemented and where professionals feel they are well-prepared will apply co-creation in various activities (e.g. implementation, design and control). Neither a public value management approach nor collaborative leadership affects the range of activities. These results are robust when control variables are included (Table B2).

Table 4: Co-creation activities (robust std errors)

	Range of activities (scale)					
	(1)	(2)	(3)	(4)	(5)	(6)
Str mngmt	0.514*** (0.052)				0.316*** (0.070)	0.348*** (0.063)
PV mngmt		0.300*** (0.042)			0.058 (0.052)	
Professionals			0.576*** (0.063)		0.302*** (0.091)	0.336*** (0.075)
Collab lead				0.304*** (0.052)	-0.006 (0.066)	
Constant	1.686*** (0.189)	2.429*** (0.156)	1.472*** (0.224)	2.384*** (0.194)	1.123*** (0.243)	1.080*** (0.228)
Observations	257	269	259	260	233	239
R ²	0.275	0.158	0.247	0.117	0.322	0.341
Adjusted R ²	0.272	0.155	0.244	0.113	0.310	0.335

Note:

*p<0.1; **p<0.05; ***p<0.01

In Table 5 we report how the independent variables affect the perceptions on the impact of co-creation. Similar to result in Tables 3 and 4, strategic management and professionals' readiness increase perceptions of public value impact. Neither strategic management nor the preparedness of professionals appears to affect the public value impact that co-creation produces. These results are robust when including control variables (Table B3).

Table 5: Public value impact (robust std errors)

	Public value impact (scale)					
	(1)	(2)	(3)	(4)	(5)	(6)
Str mngmt	0.382*** (0.053)				0.271*** (0.073)	0.292*** (0.067)
PV mngmt		0.202*** (0.043)			0.036 (0.054)	
Professionals			0.385*** (0.065)		0.164* (0.093)	0.168** (0.078)
Collab lead				0.149*** (0.054)	-0.060 (0.068)	
Constant	2.171*** (0.194)	2.797*** (0.162)	2.162*** (0.234)	2.987*** (0.203)	2.068*** (0.259)	1.879*** (0.243)
Observations	247	252	243	241	224	229
R ²	0.173	0.081	0.127	0.031	0.160	0.185
Adjusted R ²	0.170	0.077	0.124	0.027	0.144	0.178

Note:

*p<0.1; **p<0.05; ***p<0.01

5 Conclusion

This report summarises the work undertaken in COGOV work package 3, which consisted of designing a survey, its implementation and the analysis of survey data. The main aim was to establish existing patterns of co-creation in five different countries. Co-creation was measured in terms of the partners involved, performed activities and achieved impact. Our findings show:

- The use of co-creation is on the rise across our partner countries.
- Strategic management (e. g. the inclusion of co-creation in the strategic organisational documents, acquiring staff buy-in, performing analysis and evaluation when implementing co-creation) is positively associated with the adoption of co-creation. The preparedness of professionals is equally critical for the implementation of co-creation. There is little evidence that non-hierarchical leadership styles, such as collaborative leadership affect co-creation as measured in this study.
- Public sector organisations include a variety of stakeholders and partners in co-creation. We observed the following patterns:
 - Public sector organisations report (very) frequent uses of co-creation with *other* public sector organisations. Moreover, public sector organisations collaborate across *all* government levels, indicating the “scalability” of co-creation.
 - Co-creation with private sector organisations is less frequent. This mirrors some of the concerns expressed in the survey’s open-ended questions, where respondents wrote that finding organisations with a shared sense of the ‘public interest’ to the same extent as public sector organisations can be challenging.
 - Co-creation with citizens in the role of services users and programme beneficiaries is more frequent than co-creation with citizens with no direct stake in public services or programmes (for example, as volunteers).
- Co-creation is used for a variety of activities. It is more common for the design of existing services, projects, plans and policies, and the exploration of needs to address. It used less often to evaluate and make decisions over public services and programmes.
- Co-creation has positive public value impact when it comes to increasing public satisfaction and trustworthiness. However, it is less successful in delivering solutions that are cost-effective and that minimise red tape. One of the questions to research in the future is how can public authorities make co-creation more cost effective and contribute to reducing bureaucracy.

In interpreting our results, we need to add some notes of caution.

First, some of our concepts (for instance, collaborative leadership and public value impact) have

been measured less than perfectly. We compromised on the measurement of some concepts to benefit from a shorter survey, which many respondents could answer. Since our study is among the first to undertake the measurement of co-creation adoption, we believe that it provides a good starting point for further analysis, such as a guide in selecting variables to study. Future studies would benefit from a more targeted study of the relationships we have touched upon in this study. For example, a more detail lens needs to be applied to understand the relationship between public value impact and co-creation or co-creation and leadership. Specifically, in the case of leadership, future studies would be advised to expand the measurement of collaborative leadership and include variables that measure other leadership types as a counter effect to collaborative leadership.

Second, a higher response rate in some countries would increase the tenability of the findings. Surveys, which target individual organisations in a quasi-experimental setting might provide a viable way for survey research on co-creation in the future. Having said that, our regression results appear to be consistent and robust, which demonstrates the soundness of the survey design.

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A Questionnaire



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Co-creation in the Public Sector

Hello,

the survey you are about to start deals with co-creation in the public sector.

Co-creation is a process through which public sector organisations attempt to solve problems collaboratively by working with one or more stakeholders in the private sector, public sector, voluntary sector and citizens. The core objective of co-creation is to move from consulting with stakeholders to co-creating services and policies with them. This can include co-creation in terms of the design, production, planning, implementation, delivery, and evaluation of services and policies. You might be familiar with co-creation under the labels of co-production, co-design, co-delivery and co-evaluation. In this study, these are understood to be forms of co-creation.

Co-creation is one of the cornerstones of public policy reform across Europe. Scholars have found that co-creation is a route to improve and innovate public services with the potential to stimulate active citizenship. The survey will help us understand the extent co-creation is in use among public sector organisations across different levels of government. Six European countries are included in the study: Croatia, Denmark, France, Netherlands, Slovenia and the United Kingdom.

With your participation, you will make a substantial contribution to our understanding of how the use of co-creation can enhance service delivery and policy formulation across Europe and, in turn, the results will be made available to your organisation to inform both the enhancement of strategy-design and improvements in service delivery. A learning game and toolkit will be made available to you with the aim to assist you in the management of challenges arising from the implementation of co-creation. These tools will be available on our [website](#) by the end of the project (autumn 2021). To receive information, you can subscribe to our [newsletter](#).

The survey should not take more than 15 minutes to complete. The survey is voluntary and anonymous. There is no way to connect your email or any other personal information to the responses you will provide. All responses will be compiled together and analysed as a group. A full participant information sheet is available [here](#).

Any queries on the survey can be directed to Andreja Pegan: andreja.pegan@northumbria.ac.uk

You can also contact directly the coordinator of the project Professor Keith

Shaw: keith.shaw@northumbria.ac.uk

Thank you for accepting our invitation.

COGOV Research team

GENERAL INFORMATION

This section seeks general information about your organisation. Please answer to the best of your knowledge.

1. Please select the type of organisation you work for:

- UK Government department
- Devolved government department
- Agency or government body
- Local Authority
- Other, please specify:

1.1 Please select the territorial location of your local authority:*

- England
- Northern Ireland
- Scotland
- Wales

1.2 Please select the area type of your local authority:*

Predominantly urban areas: More than 80 % of the population live in urban clusters.

In-between rural and urban area: More than 50 % and up to 80 % of the population live in urban clusters.

Rural areas: Generally small settlements, where at least 50 % of the population live in rural grid cells.

- Predominantly urban area
- In-between rural and urban area
- Predominantly rural area

1.3 Please select the territorial remit of your organisation:*

You can select more options.

- England
- Northern Ireland
- Scotland
- Wales
- UK wide

1.4 What is the main task of your organisation?*

You can select more options.

- Policy design, formulation and advice
- Service delivery and other policy implementation activities
- Funding, financing and transfers
- Audit and inspection, regulation and supervision
- Other, please specify:

2. Which of these options best describes the policy focus of your work?

You can select more than one option.

- | | |
|---|---|
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Housing |
| <input type="checkbox"/> Business and SMEs | <input type="checkbox"/> Infrastructure |
| <input type="checkbox"/> Culture | <input type="checkbox"/> Justice, public order and safety |
| <input type="checkbox"/> Defence | <input type="checkbox"/> Planning |
| <input type="checkbox"/> Economic affairs and development | <input type="checkbox"/> Religion and faith |

CO-CREATION AND STRATEGY

In the following question, we will ask you about the extent co-creation is a strategically planned activity in your organisation.

As a reminder, this study defines co-creation in the following way:

Co-creation is a collaborative process through which public sector organisations attempt to transform how complex problems, challenges or tasks are met by working together with one or more stakeholders in the private, public or voluntary sector and citizens. The core objective of co-creation is to move from consulting with stakeholders to co-creating services and policies with them. This can include co-creation in terms of the design, production, planning, implementation, delivery, and evaluation of services and policies. You might be familiar with co-creation under the labels of co-production, co-design, co-delivery and co-evaluation. In this study, these are understood to be forms of co-creation.

Please base your answers on the above definition of co-creation and your knowledge.

9. To what extent do you agree with the following statements on the strategic planning processes for implementing co-creation in your organisation?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	I don't know
Co-creation is enshrined in the strategic plans of my organisation (e.g. vision statements, organisational missions, action plans and strategies).	<input type="checkbox"/>					
My organisation undertakes analyses before implementing co-creation (e.g. assessment of external and internal threats and opportunities, stakeholder analyses and feasibility assessments).	<input type="checkbox"/>					
My organisation continuously evaluates, monitors, and updates its strategic plans involving co-creation as new information becomes available.	<input type="checkbox"/>					
My organisation has effectively achieved staff buy-in for co-creation.	<input type="checkbox"/>					
My organisation explicitly uses the notion of public value when making decisions about co-creation.	<input type="checkbox"/>					

9.1 You answered that your organisation uses the notion of public value when making decisions about co-creation. Can you please tell us what does that mean for you?*

CO-CREATION AND PROFESSIONALS

In the following section, we ask you about the professionals who are involved in co-creation in your organisation.

This study adopts a broad definition of professionals:

Professionals in the public sector are public servants in ministries or local and regional government, as well as employees in government agencies, as long as they are affected by, or involved in developing and implementing public services and policies.

As a reminder, this study defines co-creation in the following way:

Co-creation is a collaborative process through which public sector organisations attempt to transform how complex problems, challenges or tasks are met by working together with one or more stakeholders in the private, public or voluntary sector and citizens. The core objective of co-creation is to move from consulting with stakeholders to co-creating services and policies with them. This can include co-creation in terms of the design, production, planning, implementation, delivery, and evaluation of services and policies. You might be familiar with co-creation under the labels of co-production, co-design, co-delivery and co-evaluation. In this study, these are understood to be forms of co-creation.

Please base your answers on the above definition of professionals and co-creation, and your knowledge.

10. To what extent do you agree with the following statements on professionals?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	I don't know.
Professionals in my organisation have the skills to co-create with stakeholders.	<input type="checkbox"/>					
Professionals in my organisation benefit from staff support, financial resources and training that are needed to co-create with stakeholders.	<input type="checkbox"/>					
Professionals in my organisation have a clear understanding of what they need to do in co-creation.	<input type="checkbox"/>					
Professionals in my organisation believe that co-creation with stakeholders improves their ability to solve problems.	<input type="checkbox"/>					

11. What are the difficulties that professionals face in the co-creation of solutions with stakeholders?

FINAL QUESTIONS

14. Please select your career level:

- Top hierarchical level in my organisation
- Middle hierarchical level in my organisation
- Junior hierarchical level in my organisation
- Other, please specify:

15. Please select your gender:

- Female
- Male
- Other
- I do not want to disclose

16. Please select your age group:

- Under 18
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- Above 64

17. Is there anything you would like to add (e.g. relevant issues not covered in the survey and relevant examples of co-creation)?

Questions with an * applied the following conditions:

Question	Condition
1.1 Please select the territorial location of your local authority 1.2 Please select the area type of your local authority	If "Please select the type of organisation you work for" is a local authority.
1.3 Please select the territorial remit of your organisation 1.4 What is the main task of your organisation?	If "Please select the type of organisation you work for" is not a local authority
5. 1 You have answered that your organisation engages in co-creation with public sector organisations. What kind of public sector organisations does your organisation engage with in co-creation?	If "To what extent does your organisation engage in co-creation with the following stakeholders?" is "Public sector organisations", "To a little extent", "To a moderate extent" or "To a great extent"
9.1 You answered that your organisation uses the notion of public value when making decisions about co-creation. Can you please tell us what does that mean for you?	If "To what extent do you agree with the following statements on the strategic planning processes for implementing co-creation in your organisation?" is "My organisation explicitly uses the notion of public value when making decisions about co-creation." is "Agree" or "Strongly Agree"

B Regression models with controls

Table B1: Models with control variables: Stakeholders (robust std errors)

	Range of stakeholders (scale)		
	(1)	(2)	(3)
Str mngmt	0.295*** (0.087)	0.211** (0.083)	0.242*** (0.081)
PV mngmt	0.126* (0.074)	0.144** (0.070)	0.104 (0.069)
Professionals	0.134 (0.090)	0.241*** (0.088)	0.221** (0.088)
Clb lead	0.050 (0.074)		
Denmark (base Croatia)	-0.588** (0.234)	-0.403* (0.214)	-0.265* (0.143)
France (base Croatia)	0.101 (0.117)	0.058 (0.105)	0.066 (0.100)
Slovenia (base Croatia)	-0.131 (0.138)	0.012 (0.113)	0.053 (0.116)
UK (base Croatia)	0.374*** (0.132)	0.397*** (0.097)	0.383*** (0.088)
Loc auth (base cent auth)	0.617** (0.308)	0.491* (0.273)	0.321 (0.268)
Reg auth (base cent auth)	-0.040 (0.147)		
Envi policy (base social)	-0.132 (0.117)		
Cult policy (base social)	0.0001** (0.0001)	0.0001 (0.0001)	
Org size	1.202*** (0.334)	1.138*** (0.296)	1.261*** (0.291)
Observations	142	189	204
R ²	0.457	0.367	0.353
Adjusted R ²	0.406	0.335	0.326

Note: *p<0.1; **p<0.05; ***p<0.01

Table B2: Models with control variables: Activities (robust std errors)

	Range of activities (scale)		
	(1)	(2)	(3)
Str mngmt	0.316*** (0.100)	0.366*** (0.088)	0.326*** (0.068)
PV mngmt	0.085 (0.084)		
Professionals	0.151 (0.127)	0.261** (0.109)	0.385*** (0.081)
Clb lead	0.088 (0.103)		
Denmark (base Croatia)	-0.395 (0.273)	-0.192 (0.262)	
France (base Croatia)	0.195 (0.137)	0.215 (0.134)	
Slovenia (base Croatia)	-0.059 (0.216)	0.016 (0.198)	
UK (base Croatia)	0.151 (0.141)	0.092 (0.141)	0.009 (0.091)
Loc auth (base cent auth)	0.737** (0.320)	0.576* (0.313)	0.062 (0.203)
Reg auth (base cent auth)	-0.192 (0.163)	-0.187 (0.162)	
Envi policy (base social)	-0.206 (0.134)	-0.216 (0.133)	
Cult policy (base social)	0.00002 (0.0001)	-0.00001 (0.0001)	
Org size	1.195*** (0.357)	1.283*** (0.360)	0.978*** (0.246)
Observations	144	146	210
R ²	0.380	0.341	0.355
Adjusted R ²	0.323	0.292	0.343

Note: *p<0.1; **p<0.05; ***p<0.01

Table B3: Models with control variables: Public value impact (robust std errors)

	Public value impact (scale)		
	(1)	(2)	(3)
Str mngmt	0.091 (0.107)	0.091 (0.106)	0.262*** (0.082)
PV mngmt	0.133 (0.087)	0.120 (0.084)	0.035 (0.063)
Professionals	0.241* (0.131)	0.203* (0.113)	0.172** (0.085)
Clb lead	-0.059 (0.105)		
Denmark (base Croatia)	0.532* (0.282)	0.465* (0.263)	-0.003 (0.182)
France (base Croatia)	-0.023 (0.144)	-0.041 (0.137)	0.049 (0.114)
Slovenia (base Croatia)	0.392* (0.219)	0.350* (0.205)	0.095 (0.159)
UK (base Croatia)	0.378** (0.149)	0.380** (0.147)	0.098 (0.103)
Loc auth (base cent auth)	0.096 (0.330)	0.092 (0.318)	0.394 (0.247)
Reg auth (base cent auth)	0.264 (0.177)	0.267 (0.176)	
Envi policy (base social)	0.117 (0.140)	0.110 (0.139)	
Cult policy (base social)	-0.0001 (0.0001)	-0.0001 (0.0001)	
Org size	1.632*** (0.386)	1.613*** (0.382)	1.751*** (0.273)
Observations	136	137	204
R ²	0.228	0.225	0.212
Adjusted R ²	0.153	0.156	0.180
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01		

C Guidelines for the selection of respondents

Northumbria University prepared the guideline to guide the identification of the population and the selection of the sample.

What is the aim of the survey?

When compiling the list of respondents, please keep in mind that the survey should enable us to collect data to perform analysis at two levels:

- Territorial remit: national, regional (where applicable) and local level of government
- Policy domain: environmental policy, social policy (including employment and health) and cultural policy

Which organisations should you survey?

Respondents should work for public sector organisations at the local, regional and national level. You should focus on organisations with competences in environmental policy, cultural policy, social protection (including health and employment).

You are free to select the organisations to survey. The important thing to remember is that to select local authorities, you should not limit yourself to the biggest cities or only urban municipalities. We are interested in the diffusion of co-creation across local authorities in both urban and rural environments as a significant societal cleavage. If you have data on how municipalities are divided between rural and urban environments, you can first use stratified sampling. This means that you divided the population of municipalities into two subpopulations: one subpopulation are urban local authorities, and the other subpopulation are rural local authorities. You can then randomly select the local authorities, where people will be surveyed. You might probably need to include more urban municipalities than rural ones because these tend to be more staffed and have a bigger administration (so you are more likely to find respondents). The important thing is to ensure a certain representation of rural local authorities even if this might not be the perfect representation of the population.

Who should you survey in the organisation?

Senior managers working in public sector organisations at the local, regional and national level (e.g. chief executives and directors of services and departments). When you cannot find a sufficient number of senior managers, you can survey also middle managers (e.g. heads of departments).

For organisations at the local level of government, you can survey the following people (where possible): the head of the municipal administration (also known as chief executives or directors) or their deputies, the head of cultural services, environmental services, and social security services (these can include employment and health services).

For organisations at the national level of government, we recommend that you survey people which you are able to identify and seem the most appropriate to you. In cases where you cannot identify appropriate respondents, we recommend that you send the survey to the general email of the organisation asking them to forward the survey to the directors/heads of appropriate services (it is likely that these emails will be answered even if it will take more time).

What should be the size of your sample?

You should determine the size of the sample based on the resources available to you. You need to cover environmental policy, cultural policy and social policy across the national, regional and local levels of governments. If you would like to consult us on the size of your sample, we are happy to have a discussion with you.

What do policy domains mean?

Policy domains are shaped intensely by national cultural patterns. Therefore, the way they are defined is likely to differ per country. Policy competences at the local level of government differ per country, so you might not be able to cover all policy domains. Below we provide a broad definition of policy domains which might help you to select survey respondents.

Social policy including employment and health includes any government measure as the national, regional or local level that deals with people's welfare from childhood to old age. Narrowly defined, social policy covers social services in income security, family and community welfare. We will use a broader definition of social policy which includes also social services in health and education. If unable to find sufficient respondents in these fields of social services, you can look also at social services in housing and neighbourhood renewal. Examples: Unemployment support and training, social care, poverty reduction, income support, child and family support. At the national level of government, social policy can be the responsibility of a ministry for social affairs. Often, social policy is split between ministries dealing with health or employment. Different agencies will have competences in regulating, funding or supervising social services. In many countries, social services are organized at the local or regional level.

Environmental policy includes any government measure as the national, regional or local level that deals with the management of environmental capital (land, freshwater, atmosphere and air, marine) and environmental services to protect it. It also includes measures aimed at sustainable development. Examples: Waste management, water management, clean water, clean air, biodiversity (the protection of plants and wildlife), climate change, disaster management, using resources from nature more sustainably and efficiently (clean energy and energy savings, clean means of transport). Environmental policy is a multidimensional issue. It is the responsibility of environmental ministries as well as ministerial departments in ministries of energy, agriculture, health, spatial planning, industry and transport, trade and foreign affairs. A series of agencies usually have a responsibility to protect the environment or have a role of regulators.

Matters regarding the environments (e.g. recycling, waste collection and water supply) are also competences at the local and regional level of government.

Cultural policy includes any measure at the national, regional and local level of government that deals with cultural activities such as cultural heritage, publishing, visual arts, performing arts, audio-visual and multimedia (film, radio, television), archives, libraries, architecture, art crafts (original cultural products). It can also include any measure to safeguard national heritage as well as activities around language. Cultural policy does not include sports, leisure and recreation activities. Yet, at the local level culture tends to be managed alongside these areas (please, exercise some caution when selecting respondents at the local level). Cultural policy is usually managed in a dedicated ministry. Several agencies have competences in cultural policy including funding agencies.

D Sampling Strategies

Sampling strategy: UK (Northumbria University)

Author: Andreja Pegan (Northumbria University, UK)

The target population consisted of organisation at the central, regional and local level of government with policy competences in the domains of culture, environment and social affairs. The first step of the sampling strategy consisted of the identification of all relevant organisations, which fall under the above-mentioned criteria (level of government and policy domain). The UK team did this separately for national level of government local level of government.

National level of government

A population list of all the government departments and agencies were collected from official sources:

- <https://www.gov.uk/government/organisations>;
- <https://www.northernireland.gov.uk/topics/your-executive/government-departments>;
- <https://www.gov.scot/about/how-government-is-run/directorates>
- <https://gov.wales/organisations>
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/786952/6.5040_CO_PublicBodies2018-19.PDF

Since culture, environment and social policy are devolved powers, we made the decision to classify government authorities in the devolved nations as authorities at the national level of government alongside the UK central government.¹ Two researchers (the PI and postdoc) selected the relevant government departments and agencies by discussing the responsibilities and competences of each organisation in the population list. The criteria was that a government department and agency carried out competences in the environment, culture or social policy. When selecting agencies, we looked to find equivalents across England, Wales, Northern Ireland and Scotland.

Based on the population of organisations (see tables below) we then draw our sample of respondents. To find respondents we consulted the website of each organisation in the population and searched for organisation charts, directories or documents explaining the governance structure. These types of documents reveal names of people at the highest management structure (e.g. chief executive, director general, directors and deputy directors). When the names were not revealed, we searched LinkedIn and Google. We also sent an email to government departments requesting contact addresses in the areas of our research interest.

In the case of Wales, we in part based our list based on a list of respondents through personal contacts, which are available to the University of Cardiff (project partner). However, this does not deviate from random sampling technique, because we only included people working in the higher management structures in specific policy domains. Finally, when we could not find any individual at the senior level of management, we decided to send the survey to the general email of the organisation. While the names of senior managers are usually available, their emails are not. When this was the case, we combined the name and surname of a person followed by the at sign (@) and the organisation domain.

Local level of government

The population of local government in the UK consists of 419 units known as local authorities. There are unitary and two-tier types of local authorities. All the local authorities in Wales (22 total),

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770709/DevolutionFactsheet.pdf

Scotland (32 total) and Northern Ireland (11 total) are unitary. In England, there are 26 County Councils (upper tier), 192 District Councils (lower tier), 32 London Boroughs (unitary), 36 Metropolitan Boroughs (unitary), 55 Unitary Authorities (unitary) and 2 sui generis authorities (City of London Corporation and Isles of Scilly; unitary). In England, there are also nine combined authorities. Combined authorities consist of two or more English councils and are set up on a voluntary basis.

For our sample of organisations, we selected all unitary local authorities and the upper tier authorities in Wales, Scotland, Northern Ireland and England, because they have competences of both counties and districts. This led to the identifications of 216 units (sample). To draw a list of respondents we consulted the Municipal Year Book (edition 2017, published by Hemming Group Ltd) which details the names and contact emails for all the local authorities in the UK. Our respondent lists consists of chief executives and individual director, deputy directors or heads of services in environment (waster, recycling, sustainability, green spaces and parks) cultural services (including library and leisure, since these are rarely separates) and social services (adult social services).

Table: Population of government departments (central and devolved government)

Culture	Environment	Social policy
UK Government		
Department for Digital, Culture, Media and Sport	Department for Environment, Food and Rural Affairs, Department of Transport (e.g. air quality, environmental strategy)	Department of Health and Social Care, Department for Work & Pensions, Ministry of Housing, Communities & Local Government, Her Majesty's Revenue and Customs
Northern Ireland Executive		
Department for Communities (Engaged communities group, Historic environment division, Culture division, Museums and Library division)	Department of Agriculture, Environment & Rural Affairs (Environment, Marine and Fisheries Group, Rural Affairs, Forest Service and Estate Transformation Group), Department of Infrastructure (Rivers, Sustainable travel directorates)	Department for Communities (Housing Group, Work and Health Group, Supporting People Group)
Government of Scotland		
DG Economy (Directorate for Culture, Tourism and Major Events)	DG Economy (Directorate for Energy and Climate Change, Directorate for Environment and Forestry, Directorate for Marine Scotland)	DG Economy (Directorate for fair work, employability and skills), DG Health and Social Care (Directorate for Health and Social Care Integration), DG Education (Directorate for Children and Families, Directorate for Housing and Social Justice), DG Organisational Development and Operations (Directorate for Social Security)

Welsh government		
DG Economy, Skills, Natural Resources Group (Directorate for Culture, Sport & Tourism)	DG Economy, Skills, Natural Resources Group (Directorate Land, Nature and Food, Directorate Environment and Marine)	DG Education and Public Services Group (Directorate Housing and Regeneration), DG Health and Social Services (Directorate Social Services and Integration)

Table: Population of government bodies or agencies

Culture	Environment	Social policy
Arts Council England, Arts Council Wales, Creative Scotland, Historic Environment Scotland, Historic England, Cadw, British Council, The National Archive, Film Institute, British Library, Big Lottery Fund, The National Lottery Heritage Fund, Northern Ireland Museums Council	Environment agency (England), Northern Ireland Environment Agency, The Scottish Environment Protection Agency, Natural Resources Wales, Forestry England, Forestry and Land Scotland, Natural England, Natural Scotland, Natural Resources Wales, Research Agency of the Forestry Commission, Centre for Environment, Fisheries and Aquaculture Science, Forestry Commission, Forest Research, Marine Management Organisation, Owfat, Water Industry Commission for Scotland, Met office National parks (Broads, Dartmoor, Exmoor, Lake District, New Forest, Northumberland, North York Moors, Peak District, Yorkshire Dales, and South Downs, Brecon Beacons, Pembrokeshire Coast, and Snowdonia, Cairngorms and Loch Lomond & the Trossachs)	Care quality commission (England), Care inspectorate Scotland, Care inspectorate Wales, Regulation and Quality Improvement Authority for Northern Ireland, Social care council for Northern Ireland, Social Work England, Social Work Wales, Commissioner for Older People NI, Older People's Commissioner for Wales, Care inspectorate Scotland, Care inspectorate Wales, Care quality commission England, Homes England, Housing Ombudsman, Scottish Children's Reporter Administration, Scottish Housing Regulator, The Pensions Regulator (UK), Regulator of Social Housing, Social Care Ombudsman (UK), Social Mobility Commission,

Sampling strategy: SLOVENIA

Author: Jože Benčina (University of Ljubljana)

Population are public sector organisations at the national, regional and local level in the following policy areas: Cultural policy, Environmental policy, Social protection (including employment and health). Slovenia is a unitary state, where the regional level of governance does not exist. However, some bodies within ministries implement their policies territorially at the regional (employment offices, social work centres, inspectorates territorial unites) and at local level (with local branches or units) and some these are included in the survey population (explained below).

The policies of the Ministry of the Interior, Infrastructure Ministry, Ministry of the Environment and Spatial Planning, Ministry of Labour, Family, Social Affairs and Equal Opportunities, and Ministry of Agriculture, Forestry and Food are implemented at local level by 58 state local-administrative (“upravna enota”) units. As the state local -administrative units implement policies governed at national level we have decided to consider as the local level units of the observation local governments only. Moreover, the implementing powers of local-administrative units is mostly restricted to environmental policies and do not include social or cultural policy. So, we have decided to restrict the population at local level to 212 Municipalities.

The local level of governance is covered by municipalities where people enforce the right to make decisions and regulate their life at local level. They develop and implement policies for all important segments of the life of citizens.

According to the definition of policies that are covered by the survey, we have defined the population at the national level as follows:

Cultural policy

1. Ministry of Culture
2. Culture and Media Inspectorate of the Republic of Slovenia
3. Republic of Slovenia Public Fund for Cultural Activities

Environmental policy

4. Ministry of the Environment and Spatial Planning
5. Slovenian Environment Agency
6. Inspectorate of the Republic of Slovenia for the Environment and Spatial Planning
 - Territorial units (8)
7. Slovenian Water Agency
8. Ministry of Infrastructure
9. Slovenian Infrastructure Agency
10. Infrastructure Inspectorate of the Republic of Slovenia
11. Ministry of Agriculture, Forestry and Food
12. Inspectorate of the Republic of Slovenia for Agriculture, Forestry, Hunting and Fisheries
 - Territorial units (8)
13. Agency of the Republic of Slovenia for Agricultural Markets and Rural Development

Social protection

14. Ministry of Labour, Family, Social Affairs and Equal Opportunities
15. Labour Inspectorate of the Republic of Slovenia
 - Territorial units (7)
16. Social work centres

- Territorial units (16)
- 17. Employment Service of Slovenia
 - Regional offices (12)
- 18. Ministry of Health
- 19. Health Inspectorate of the Republic of Slovenia
 - Territorial units (7)
- 20. National institute of Public Health - NIJZ
- 21. National Institute of Mental Health

Sampling strategy: CROATIA

Author: Andreja Pegan (Northumbria University)

The following organisations were included in the sample of national organisations in the cultural, social and environmental policy domains:

Ministarstvo kulture

Ministarstvo zaštite okoliša i energetike

Ministarstvo rada i mirovinskoga sustava

Ministarstvo za demografiju, obitelj, mlade i socijalnu politiku

Ministarstvo mora, prometa i infrastrukture

Hrvatski zavod za zapošljavanje

Zavod za vještačenje, profesionalnu rehabilitaciju i zapošljavanje osoba s invaliditetom

Fond za zaštitu okoliša i energetske učinkovitost

Hrvatska agencija za okoliš i prirodu

Javna ustanova Nacionalni park Kornati

Javna ustanova Nacionalni park Krka

Javna ustanova Nacionalni park Mljet

Javna ustanova Nacionalni park Paklenica

Javna ustanova Nacionalni park Plitvička jezera

Javna ustanova Nacionalni park Risnjak

Javna ustanova Nacionalni park Sjeverni Velebit

Javna ustanova Nacionalni park Brijuni

Javna ustanova Park prirode Lonjsko polje

Javna ustanova Park prirode Papuk

Javna ustanova Park prirode Velebit

Javna ustanova Park prirode Vransko jezero

Javna ustanova Park prirode Žumberak-Samoborsko gorje

Javna ustanova Park prirode Biokovo

Javna ustanova Park prirode Lastovsko otočje

Javna ustanova Park prirode Učka

Javna ustanova Park prirode Medvednica

Javna ustanova Park prirode Kopački rit

Ministarstvo uprave Republike Hrvatske

Ninety-six senior managers were sent the survey at the national level of government. Their contact addresses were retrieved from the website of the organisations.

The Croatian local government is composed of 428 municipalities and 127 towns and cities. At the regional level there are 21 counties. We surveyed the whole population. The City of Rijeka provided a list of municipalities, towns and cities. A list of senior managers and their contacts was composed by visiting individual websites. The sample of local authorities consisted of 485 respondents at the municipality level and 171 respondents at the city level. At the regional level, we contacted 30 respondents.

Sampling strategy: DENMARK

Authors: Karsten Bruun Hansen and Line Nygaard (Roskilde University)

The respondents are leaders on the local, regional or national government level in Denmark, working within one of the following three sectors: environment, culture, and social services. Furthermore, the goal was to find 40 leaders within each level.

On the local level, we found 44 respondents from 17 different municipalities: Roskilde, Gentofte, Slagelse, Vordingborg, Aarhus, Hjørring, Morsø, Guldborgsund, Varde, Esbjerg, Vallensbæk, Hedensted, Holbæk, Faaborg-Midtfyn, Skanderborg, Kolding, and Ringkøbing-Skjern. Within this group of municipalities, there are both rural and urban municipalities and the population-sizes varies.

On the regional level we found 25 respondents from all five regions in Denmark: Region Hovedstaden, Region Sjælland, Region Nordjylland, Region Midtjylland, and Region Syddanmark. Unfortunately, it wasn't possible to find more than 25 respondents, because the email-addresses of a lot of the relevant actors weren't publicly displayed on the respective homepages.

On the national level, we found 38 respondents from nine Ministries/government agencies: Ministry of Environment and Food, Ministry of Climate, Energy and Utilities, Ministry of Social Affairs and the Interior, Ministry of Culture, the National Board of Social Services, the Agency for Culture and Palaces, the Nature Agency, the Environmental Protection Agency, and Rigsarkivet.

Sampling strategy: FRANCE

Author : Christophe Alaux (Aix-Marseille University)

Following recommendations to collect data at different territorial level and different policy domains (cultural, environmental and social), the French team elaborated a list of contacts to be surveyed with an adaptation to the French context.

Criteria for selecting the sample

The selected organizations operate at different territorial level and they have competencies in the domains expected by the survey:

- **National level: Ministries and Agencies:**
 - o Ministries operate in different policy domains at the national level: ecologic transition and solidarity, Ministry of labour, Ministry of solidarities and health, Ministry of culture. To increase the number of respondents we have selected 2 respondents from each Ministry and deputy ministry.
- **Regional and departmental level:**
 - o Regional local authorities have competencies in economic, social, health and cultural policies. To increase the number of respondents we have sometimes selected respondents from different services within the same regional authority.
 - o Departments are specific local authorities in France (between regional and local authorities) that have mainly competencies for social (unemployment support, childhood) and health policy

We decided to include departments in the sample as they are similar to a regional area with a specific competency on social/health issues related to policy domains of the survey.

- **Local level:** we have around 35 000 local authorities in France with a large majority of small size cities (78,5 % of French population in cities under 55 000 residents)
 - o 26,5% cities with less than 1000 residents
 - o 34,5% cities between 1 000 & 10 000 residents
 - o 8,5% cities between 10 000 & 25 000 residents
 - o 5,5% cities between 25 000 & 55 000 residents
 - o 25% cities above 55 000 residents

We decided to include cities in the sample according to the shares of these cities in the French population. Nearly $\frac{3}{4}$ of the population live in cities under 55 000 residents. We have a sample with 200 cities according to the share of their size among all French local authorities. For instance, we have selected 53 cities under 1 000 residents.

Nature of the contacts: all policy domains at all territorial levels

We found contacts for senior managers from top or middle management and we will indicate for generic email who is targeted by the survey and which appropriate service it should be transferred: general top administration, health, social, culture or environment.

Size of French sample:

We defined the size of our sample according to the global population of French public organizations. Local authorities are limited to 200 with a representative share according to their sizes. We have difficulties to identify all 1200 French agencies and limited our sample to 126 related to public policy domains of the survey (social housing, health and environmental agencies).

With our sample, we cover all policy domains with the different territorial levels: national, regional/departemental and local. In the global table, we have the sample size objectives following

our discussions on the criteria and the executed sample according to the information we gave in this document.

Table: French sample for WP3

	Local Gov	Department	Regional Gov	National Gov (Ministries)	Agencies	Cultural Gov	Cult Org	TOTAL
Global	34 970	101	13	21	1200	102	267 000	303407
Sample Objective	200	20	13	21	200	80	100	614
Sample executed	200	21	34 + 20 (culture)	70	126	46 (Regional agency)+ 155 (public bodies) = 201	131	803
Criteria for size	Size of cities (75 % have less than 55 000 residents)	95 + overseas departments	All (13 + oversea regions)	21 Ministries et 12 Deputy Ministries		Ministry, 21 regional cultural agencies, 81 public bodies at the national and local level		
Competencies	Environment, culture,	Social, health, employment	Economic development, employment, health, environment, culture	All public policies	Health, environment, social	Culture		