Ethics challenges in public service co-creation.
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Abstract
The public sector is facing significant challenges regarding public services provision, including declination of users' trust and limited resources. One way of addressing such issues is by implementing co-creation, which, although extensively discussed in the literature, is more limited in public sector organisations and empirical research. The H2020 project (anonymous) addresses these issues by studying the implementation of co-creation pilots in 4 European countries. The project funder requires the conduct of research to follow ethical research guidelines, thus raising the issue of ethics challenges in public service creation, particularly when using digital tools. This ongoing research represents a first theoretical evaluation about ethics in co-creation. All in all, this paper contributes to the existing literature as it is an interdisciplinary conceptual approach in the ethical perceptions of co-creation, being presented by scientists with diverse backgrounds, including information systems, public administration, and philosophy.

Keywords
digital co-creation, phases of co-creation, ethics, research, common good

Acknowledgements
Supported by the H2020 Project inGOV funded by the European Union’s Horizon 2020 research and innovation programme under Grant Agreement 962563.

1. Introduction
The public sector is facing significant challenges regarding public services provision, including a decline of users’ trust in public sector organisations (PSOs) and PSOs’ limited resources. One way of addressing such issues is by implementing co-creation activities in PSOs that deliver services. The progress and use of co-creation in the public sector has been limited though, as PSOs adopt co-creation in discrete projects only, at the same time maintaining an administrative bureaucracy and an organisational culture that cannot support co-creation \cite{1}, and there is little empirical research on public service co-creation processes and outcomes \cite{2}. The H2020 project “Inclusive Governance Models and ICT Tools for Integrated Public Service Co-Creation and Provision” (inGOV) \cite{3} addresses this gap and focuses on the development and implementation of co-creation processes to create integrated public services, that are piloted and evaluated in four European countries (Austria, Croatia, Greece, Malta).

The literature on co-creation activities in the public sector tends to be optimistic \cite{4}, although there are certain limitations and barriers \cite{5}, there is not always a clear distinction between co-creation processes and outcomes \cite{6}, and, given its reliance on user participation, the role of ethics has not played a particularly prominent role. This conceptual paper presents an overview of the ethical dimensions that play a role when conducting research on co-creation in the public sector, taking into particular consideration the ethical framework for projects funded by the European Commission.

2. The potential of co-creation
There has been a concern for citizen involvement in public services and thus ‘co-production’ between users and providers since the 1960s [7]. The active engagement of public service users as co-creators promises to foster innovative solutions via joint experiences, resources, and skills [5, 8]. Moore argues that alternatives to traditional approaches to problems and ways of solving them are necessary, and that innovative public value strategies require the public’s engagement and interaction with public administrations [9]. Kitchener et al. [1] understand co-creation as a collaborative problem-solving process including formulation, delivery, and evaluation that enhances public value, supports participation among a wide range of governmental and non-government actors and recognises the potential for innovation in public policy processes.

Analog public services are still popular with the end-users and PSOs, and the co-creation literature has focused on the delivery of analog public services [8, 10], but in the e-government context too [2]. Several groups of users can be involved: state actors (public agencies, public agents, professionals, or service providers) and lay actors (citizens, clients, consumers, service users, community members, families, or neighbours) [8]. Whilst the literature often focuses on external users, co-creation stakeholders may also come from within the public administration [11], and can be involved during the different phases of co-creation, that is, in the design, implementation and delivery of public services. The collaborative efforts are expected to be used as an innovative process that can be a starting point for digital transformation and innovation in the public sector, to provide higher-quality, user-centric and inclusive services, and help deliver services that meet users’ needs. The digital transformation of public administrations provides an opportunity to rethink and re-organise public service development and delivery by involving different types of stakeholders [12]. Advances in digital technology are expected to offer PSOs cost savings, help them be more responsive, bridge the gap between service providers and service users, and provide better integrated and coordinated services [3].

The views on co-creation and digital co-creation are mixed. The literature often highlights the benefits of co-creation, and there are growing expectations of co-creation, but PSOs are not (yet) convinced of the benefits [13]. Digital technologies can be used to help collect new insights from citizens [14], but neither co-creation nor digital co-creation efforts are a standard in public sector organisations, and there may be several barriers that lead to co-destruction instead [15]. At the same time, the failure to adopt co-creation will lead to criticisms of what is good public governance as well as a contravention of European public values.

Torfing, Ferlie, Jukić, and Ongaro [16] highlight that the transformation of the public sector sees co-creation as a core principle, calling for a coherent and unified theoretical framework that combines insights from different disciplines and fields of research. The inclusion and involvement of different groups of users, the focus on developing user-centric experiences, the role of mutual trust between the stakeholders [17], but also the use of ICTs, the potential for errors and destruction represent some of the reasons for considering the ethical dimensions in co-creation activities and outcomes achieved.

3. Ethical dimensions of co-creation

There is a "pressing delivery need for greater understanding of the ways that co-creation can be managed strategically as the primary mode of decision-making in PSOs" [1, p.3], and this highlights that co-creation involves people in different roles and functions. Authors theorise about agency in user-generated content, for example, Van Dijck, who argues that the "multifarious roles of users in a media environment where the boundaries between commerce, content and information are currently being redrawn" [18, p.42]. Although Kitchener et al. [1] consider how researchers, policy makers and practitioners can accommodate expectations of wider involvement, ethical principles and standards or legal frameworks are not often considered in the literature on co-creation in the public sector [19]. This issue is particularly relevant when using ICTs in the development and implementation of digital services, as it is seen as being able to outperform humans in planning and controlling tasks, beneficial for vulnerable people, supporting networking and participation. While Pemberton [20] suggests that ICTs per se do not introduce any new ethical questions in government, Lember [14] emphasizes that digital technologies do not have a neutral impact on society, rather, digital solutions always include values and norms. Bannister and Connolly [21] argue that ICTs affect existing norms, such as that
governance should be fair or deliver equality of access, or enable norms such as accountability, efficiency, and transparency.

### 3.1. The “Philosophical View” on ethics in co-creation

Based on the argument provided above, we provide here a synopsis of thoughts that are currently being developed, in order to present the syllogism of a person with a philosophical background on how co-creation is currently understood. Specifically, modern moral philosophy is increasingly revolving around claims-based or rights-based ethics, which are ethical theories based on the fundamental principles of human rights or other rights or claims of the individual [22]. An important characteristic of claims-based ethics is that it implies that people have claims against somebody, and that this somebody consequently has some obligations [22]. In other words, a person can only be said to have a meaningful claim to something, take for instance a service, if others have an obligation not to act in ways that undermine the welfare, freedom or rights of anybody (the negative obligation – not to hurt others), and if others have an obligation to act positively to secure that certain peoples’ rightful claims are met (the positive obligation – to provide what others can rightfully claim) [22].

Co-creation is any process that brings together multiple parties to jointly produce a mutually valued outcome, therefore businesses have already extensively used co-creative strategies to discover vast opportunities for joint value creation with customers [23]. Doubtlessly, collaboration between community members, researchers and policy makers drives efforts to solve complex problems, since community participation is essential to ensure the optimal design, implementation and evaluation of resulting initiatives [24]. The terms “co-creation”, “co-design” and “co-production” have been used interchangeably to describe the development of initiatives involving multiple stakeholders [24]. More specifically, co-design notion adds a different perspective on the "design scene", rejecting as paternalistic the fact that professional designers satisfy users' needs in the best possible way. Based on this new approach, an open and inclusive design process is being encouraged alternatively, welcoming active participation on behalf of the people affected by the design outcome. Stakeholders' participation throughout the design process is more than required for the maintenance of focus on users' needs, generating innovative ideas and building effective solutions [23].

A key consideration in exploring ethics relating to co-creation is its "true" versus "false" form – in other words, whether there is a "deep" co-creation that is distinguished against the notion of tokenistic co-creation [25]. Furthermore, what should be taken into serious consideration refers to the fact that "true" co-creation can be characterized by intense time investment, collective value creation, combining different types of knowledge, more obligations with regards to inclusiveness, focus on reciprocity and the presence of a preliminary process to arrive at a shared question [25].

From a practical point of view, co-design is a movement, a mindset about challenging the imbalance of power held by individuals who make decisions about others [26]. In an effort to delve into this novel perspective, co-design includes a re-balancing of power between designers and stakeholders, meaning that both categories are viewed as partners under the spectrum of equality, contributing either with their live experience or their professional expertise. After all, co-creation has allowed businesses to build innovative services and revolutionize the process of value co-creation as a strategic tool.

The landscape of design and participation can feel like the wild west [26] so activities should be aligned to the principles of co-design. Therefore, shared power constitutes the first principle which takes place so as to alter the previous scene, when differences in power were unacknowledged and unaddressed, then the people with the most power had the most influence over decisions, regardless of the quality of their knowledge or ideas [26]. As McKercher states, in order to develop a more holistic understanding of users’ needs, “we must share power in research, decision-making, design, delivery and evaluation. Without this, there is no co-design” [26, p. 14]. Another principle refers to prioritisation of relationships, since trust among stakeholders paves the way for improvements in the whole process and the outputs due to constructive discussions and social connection.
What is more, another principle is found on the use of participatory means, by the time that participatory approach is not viewed as an issue of relaying information, but the point is to transform people from "participants only" to "active partners", and this is only feasible through facilitating self-discovery. A final principle refers to building capability, which is mainly focused on the need of support and encouragement to people who deal with difficulties in adopting new ways of learning and do practicing, so as to have their voices heard. To make this real, designers should undertake the duty of coaching others instead of presenting themselves as experts and take into account that all people are capable to teach others and learn from others simultaneously.

To this direction, some benefits of co-creation follow: First of all, co-creation allows stakeholders to fully utilize their ethical capabilities, since governance improves, when everyone participates. On top of that, co-designing process along with users leads to pioneer and effective outcome due to reflecting users' needs which are context-adapted. What is more, co-creation enhances users' engagement, since they make it on their own. As research on procedural justice has shown, people are more supportive of outcomes when they feel their voice was heard and the process was fair and transparent [23].

Furthermore, co-creation promotes learning, since users through active participation get themselves familiar with the tools provided. In practice, that means that as they take active role in the production and maintenance of ethical values, they come to appreciate their own role in governance. As a consequence, we train ourselves to be ethical via practising ethical actions. In addition to all the above mentioned, through co-creation all engaged stakeholders facilitate themselves with the opportunity to build on their social networks, cooperate and deepen trust with each other as a valuable pillar contributing to the strengthening of the bond among them. Last but not least, co-creation promotes diversity and inclusion, since all stakeholders in a "co-design experience" come along with diverse backgrounds and approaches as part of innovation in terms of joint problem-solving.

Additional to all the previous mentioned, it is of utmost significance to highlight the importance of social movements as a requirement to make co-design a norm for society. Based on that, systems, organisations and communities need to adapt their mindset according to people with lived experience and embrace their leadership and their contributions. To make this happen, it is necessary to value professional and lived experience equally, to treat marginalised people as resilient, creative and capable, to create compassionate systems in order to satisfy dimensions of difference and slowing down so as to listen, connect and learn [26].

All in all, from a philosophical point of view co-creation often requires jointly rethinking of questions regarding the service defining actors, their roles and relationships in service improvement or innovations and implies a major "moral reordering" [27]. Terms as "equal partnership", "openness to all perspectives and skills", "respect and value knowledge", "empathy", "reciprocity", "continual dialogue among stakeholders", "liberate creativity", "collective action", "shared decisionmaking", "trust", "diversity", "inclusion", "rebalancing" indicate that co-creation, which comes along with the power of conversation [28], promotes the concept of common good in terms of active citizenship, valued social roles and well-being, placing well-being for all and social justice at the forefront of public value co-creation [29].

### 3.2. Ethics in the context of the public service

According to Merriam-Webster [30], there is a distinction between ethics and morals, since “Morals usually connotes an element of subjective preference, while ethics tends to suggest aspects of universal fairness and the question of whether or not an action is responsible”. Taken together, these definitions illustrate what ethics means in the context of public service, being based on morals or values judged to be universal in terms of fairness and serving the public interest [30]. Ethical standards are intended to guide public service organizations and the individuals who run them as to behavior, decision-making and overall function [30].

On top of the previous mentioned, public service is based on ethical conduct, aiming to serve public good, assist people and their communities and contribute to the improvement of society. While ethics' orientation satisfies these essentials, they can be viewed via the spectrum of differentiation, since
relevant actions might reflect variant interpretations. Indeed, the main problem focuses on the fact that although people in public service work to improve the lives of the public, their behavior in public service is based on subjective morals and belief systems as opposed to universal, ethical principles [30]. Therefore, the purpose of ethics is to bridge the gap between these varying moral systems, ensuring that public service represents all of the public [30].

4. Ethics in co-creation research

Von Heimburg et al. [31] point out that co-creation (and co-production) are necessary approaches to reach public values such as citizenship, social justice, and well-being, but this requires “who participates in co-creation, how they participate, and how participation affects outcomes. Inclusive participation in everyday life, public services, and democracy is crucial to achieve active citizenship and well-being for all” (p. 20). The responsibility for participatory processes in the public sector lies with public administrations and political leaders, but can also be initiated by companies, non-governmental organizations and social entrepreneurs who enable co-creation processes, even in settings in which there are no participatory traditions [31].

Von Heimburg et al.’s work focuses on co-creation for achieving social justice for all, empowering citizens, and developing solutions for achieving well-being, citizenship and good decision-making processes and, in particular, how “voices of citizens in marginalized and vulnerable life situations need[s] to be included and recognized in democracy and public sector practices as well as in decision-making processes” (p.20).

In research on co-creation in nursing, for example, a caring manner or “ethical sensitivity” can be used in order to increase patient’s quality of life, and represents an ethical cornerstone and goal of care [32]. In other words, for “ethical sensitivity is integral to the deliverance of high-quality care” [32, p. 449]. Hemberg and Bergdahl [32] describe this ethical sensitivity as a capacity for decision-making in uncertain professional practice, Weaver et al. see it as a type of “practical wisdom” [33, p. 615] a sense of obligation or responsibility toward the other, Pedersen [34] as a part of the ethical problem-solving process and learning cycle of moral competence, ethical reflection, moral judgment and moral behavior. Vetlesen [35] argues that when ethical sensitivity is necessary, an ethical issue becomes a requirement and Dellaportas et al. [36] found that ethical sensitivity prevents unethical behavior Poikkeus et al. [37] investigated ethical competence in nursing and found that it includes ethical sensitivity, ethical decision-making, ethical knowledge and ethical reflection. Hemberg and Bergdahl [32] conclude that ethical sensitivity can be considered as a fundamental component of ethical action and that ethical sensitivity is integral to the deliverance of high-quality care services.

Ethics is important in other disciplines that focus on co-creation too. Transformative Services Research (TSR) focuses on “the potential of services to improve the lives and well-being of individuals” [38, p. 794] to enhance users’ life circumstances, well-being and quality of life [39]. Parsons et al. argue that service provider and service user must actively and mutually participate in the interaction. However, Parsons et al. [38] add that the ethical context in which service providers operate is often not considered, but that omitting “the ethical context is a serious oversight as it is this ethical context that shapes and directs the practices of service providers on the ground. The ethical context is what gives them motivation, purpose, and intentionality, and thus ultimately impacts their potential to genuinely foster well-being.” (p.793). Service users can be neglected, even harmed and services may have “spill over” effects beyond those intended or affect a wider audience than originally envisaged [39]. Ethical values provide a foundation for making judgments about fairness, action, and practice [39] but also “tie participants to a project, motivate them to keep supplying their productive input, and give a sense of meaning and purpose to their participation” [40, p. 270].

Von Heimburg et al. [29] argue that in co-creation, questions need to be raised, such as: Who should participate? How? Where? And with what purpose and consequence? Not only is this important for designing co-creation initiatives [41], but we argue that the ethical dimensions and questions typical in research can be applied co-creation initiatives so that citizens are treated as a respected resource and active contributor.

4.1. The European Commission’s View on Ethics
The European Union, for many years, considers ethics to be a significant cornerstone of its research funding policy. Identifying and studying ethics categories was an important aspect of the EU ethics evaluation process. Since the beginning of the 7th Framework Programme (FP7) for funding research (which spanned from 2007 to 2013), the European Union decided to "get tough on ethics" by suggesting that all funded research must be carried out in compliance with fundamental ethical principles [31, 42]. As a result, all successful research proposals from FP7, Horizon 2020 (from 2014 to 2020, [43]) and, currently, Horizon Europe (from 2021 to 2027, European Commission, [43]) have to undergo a rigorous ethics review process before they are funded. Those proposals that pass the scientific evaluation are submitted to a stringent ethical review by a multidisciplinary team of ethical experts from different Member States. The ethical review panel will provide a written report to the Commission services on requirements and recommendations necessary to ensure that the reviewed projects will be conducted according to fundamental ethical principles. EU research programmes never fund in a Member State under any circumstances anything that is forbidden in that Member State.

FP7 initially determined the ethics categories, but some notable changes were made. Thus, in the current funding programme (i.e., Horizon Europe) ethics issues are identified and addressed according to the following categories: Humans; Human cells or tissues; Personal data; Animals; Non-EU countries; Environment, health and safety; Artificial Intelligence; and other ethics issues. Ethics issues related to the participation of humans are flagged in projects with activities involving work with human beings that are not part of the staff of the participants regardless of the nature of participation or topic. The main relevant ethics issues concern (a) the respect for persons and for human dignity (b) fair distribution of benefits and burden (c) the rights and interests of the participants, and (d) the need to ensure participants' free informed consent (with particular attention to vulnerable categories of individuals such as children, patients, discriminated people, minorities, persons unable to give consent, etc.). Important activities to address these issues include obtaining necessary ethics approvals if required and obtaining fully informed consent of the participants [43] as a choice under free will.

Ethics issues related to personal data concerns projects with research activities that involve processing of personal data, regardless of the method used (e.g., interviews, surveys, questionnaires, direct online retrieval etc.). In the case of the European Union, personal data refer to information relating to an identified or identifiable natural person, e.g., name, address, email, IP address, cookie ID, phone number etc. The EU General Data Protection Regulation 2016/679 (GDPR) identifies special categories of personal data, (e.g., data revealing racial or ethnic origin, religious or philosophical beliefs, health data etc.), which should be handled with stringent safeguards. Completely anonymised data are not considered as personal data from the moment of anonymisation hence the relevant provision does not apply. A number of relevant safeguards must be put in place to safeguard proper processing of personal data [31].

4.2. Ethics in the H2020 inGOV project

The H2020 inGOV project addresses the development and implementation of co-creation processes to create integrated public services in four European countries (Austria, Croatia, Greece, Malta). Its research methodology capitalizes on four pilot cases that employ co-creation activities in public service design and development. Each co-creation pilot is context-significant, that is they differ in terms of country they are conducted in, but also the public service area, level of governance, co-creation tools and methods used, as well as the outcome to be achieved. Nonetheless, they all aim to develop sustainable co-creation outcomes and support an organisational culture in public administrations that will continue to use co-creation processes. The research approach is a ‘theoretical elaboration’ [44] based on an exploration of a specific phenomenon (co-creation in PSOs) in specific contexts (4 different countries), where the goal is not theory testing in a deductive, positivistic sense, but an elaboration through case analyses of the same phenomenon. Theory, in this project refers to mid-range theoretical tools (models, concepts, frameworks), rather than a set of interrelated propositions that are used and tested in order to explain the phenomenon. In this case, the elaboration is the process of refining and updating theoretical and empirical knowledge through qualitative data analysis. The theoretical ideas are then assessed in the light of the results, so that previously unseen inadequacies in the theoretical
notions guiding research may arise, but also lead to the creation of new hypotheses or details to the theory.

The ethical category for projects that focus on public service co-creation is the “Humans and Personal data”. The H2020 inGOV project is supervised and advised by an ethics manager to ensure that the empirical research conducted followed ethical principles dictated by the European Commission and the H2020 funding programme. Research conducted within each pilot is supported by university ethical review board reviews (in three countries) or an ethical board set up specifically for one pilot. All the ethical commissions reviewed the research activities conducted by the partners within their country to ensure adherence to ethical guidelines for research with human participants over the age of 18 years in their country and address in particular 1. Informed consent and 2. Data collection processes.

4.2.1. Informed Consent

Informed consent is meant to guarantee the voluntary participation in research and is probably the most important procedure to address privacy issues in research funded by the European Commission’s funding programmes. Informed consent consists of three components: 1. adequate information, 2. voluntariness and 3. competence. This implies that, prior to consenting to participation, participants should be clearly informed of the research goals, possible adverse events, possibilities to refuse participation or withdraw from the research, at any time, and without consequences. In addition, research participants must also be competent to understand the information and should be fully aware of the consequences of their consent. In the H2020 inGOV project all activities conducted in the pilots with any participants outside the project consortium had to conform to the ethical research principles regarding informed consent. The informed consent provides details about the project purpose and is to help the participant decide about whether to participate or not. It also contains details about duration, risks, benefits, renumeration, confidentiality participants’ rights to terminate the study, and any publications based on the data collected.

4.2.2. Data Collection Processes

The informed consent also includes about how data will be collected in the specific case:

- Who is responsible for the data collection process and processing of data
- How data will be stored and transferred during the project
- How data will be preserved and shared once the research project is completed
- How data will be maintained and disposed of
- How data will be published.

5. Conclusion and future research

Key ethical dimensions in research are the researchers’ ethical behaviour, participants’ informed consent, and data collection process, particularly when the research involves the participation of human beings, when the research uses human genetic material or biological samples and when the research involves personal data collection. Although informed consent is often seen in the context of clinical research, this principle is important for all types of research, including the social sciences, and a key aspect of funding programmes. Another important aspect of research is data management and storage.

These dimensions are important in the public sector initiatives that focus on stakeholder engagement. Whilst Torfing et al. [5] argue that co-creation offers a viable path for the public sector although there is a need to be aware of the risks and benefits of co-creation as well as the drivers and barriers that may stimulate or hamper the expansion of co-creation. Whilst they focus on aspects such as institutional design, public leadership, systemic change, we argue that, as co-creation relies on human participation and the collection of data in order to develop new policies and services, ethics is an important dimension that has until now been neglected in research and practice. This raises questions such as how to ensure ethical standards are maintained in co-creation activities in research and practice. The General Data Protection Regulation (GDPR) [45] cements natural persons fundamental right in relation to the
processing of personal data (1), and contributes to the “accomplishment of an area of freedom, security and justice and of an economic union, to economic and social progress, to the strengthening and the convergence of the economies within the internal market, and to the well-being of natural persons” (2). It also recognizes that “technological developments and globalisation have brought new challenges for the protection of personal data” (6) but in the online context, there are several risks and the EU is fragmented regarding the processing of personal data (9). Whilst the GDPR offers a legal framework, and there are many ways of addressing ethics in co-creation, we argue that using the ethical approach used in research and demanded by research organisations and funding organisations may provide a universal and feasible way of conducting co-creation activities such as data collection and storage in the public sector. This paper represents a conceptual approach, so in future, an empirical investigation will be conducted with the H2020 inGOV pilots to consider investigate the legal and ethical dimensions of co-creation activities in the public sector.

6. Acknowledgements

This project has received funding from the H2020 Project inGOV funded by the European Union’s Horizon 2020 research and innovation programme under Grant Agreement 962563.

7. References

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