NEXT GENERATION INTERNET

NGI COMMONS WORKSHOP 2024

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Abstract	The workshop was rich and busy, providing us a useful foundation of inputs from the community which will hopefully lead the way in creating a Digital Commons environment that serves the interests of all its citizens and contributes positively to global progress. During our brainstorming sessions, participants broadly agreed that the future of the Digital Commons landscape in Europe should capitalise on its strengths, address weaknesses, mitigate threats, and seize opportunities to flourish – even if they differed in their understanding of Digital Commons and how to achieve that. Through the workshop, the Digital Commons agenda has stirred useful conversations about how to create public alternatives to Big Tech solutions as part of our use of technology across the whole of society. While the Digital Commons landscape in Europe is still young, there are some strong foundations and even stronger opportunities for us to seize on as NGI Commons.

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DATA: Data sets, microdata, etc.
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EXECUTIVE SUMMARY

What are Digital Commons? How could we possibly co-create Europe's digital future by developing shared, public interest digital resources and infrastructures? What role can or should the public sector play in funding the Digital Commons, and how can we measure the leverage effect of funding on the prosperity of the Digital Commons in Europe and beyond?

These were some of the many questions put forth by a recent workshop held by the Next Generation Internet (NGI) Commons[1] consortium. The NGI Commons Workshop 2024: Co-Creating Digital Commons Priorities for Europe's Digital Decade[2] was a unique engagement workshop held on 5 June 2024, located at the Tolhuistuin venue in Amsterdam's Noord neighbourhood.

The aim of the workshop was to gather representatives from the European Digital Commons ecosystem, including experts members of NGI Commons' advisory bodies (the Digital Commons Task Force (DCTF) and Strategic Advisory Panel (SAP)), with the goal of triangulating Digital Commons priorities and topics perceived by commoners, experts, and policymakers as being relevant to those ambitions being expressed by NGI Commons and related policy initiatives in the EU. (In this case, related initiatives include, for example, the European Digital Infrastructure Consortium (EDIC)[3] for Digital Commons, which is currently being scoped as an initiative of France, Netherlands, Germany, and Estonia.)

The event gathered over 40 commoners and experts together, with 10 more participants joining online throughout various points of the day. Across six sessions, members of the NGI Commons consortium shared more details and context about the activities of the NGI Commons project, as well as situated their work in a broader context of the Next Generation Internet (NGI) and policy landscape. Two of these sessions were facilitated as interactive workshops, wherein participants shared their insights and experiences in relation to active work being done by the NGI Commons. The day concluded with an in-depth brainstorming and ideation workshop, where participants were invited to share their perspectives and experiences on the past and future of Digital Commons in Europe and discuss what the future priorities for the Digital Commons should be.

The workshop was rich and busy, providing us a useful foundation of inputs from the community which will hopefully lead the way in creating a Digital Commons environment that serves the interests of all its citizens and contributes positively to global progress. During our brainstorming sessions, participants broadly agreed that the future of the Digital Commons landscape in Europe should capitalise on its strengths, address weaknesses, mitigate threats, and seize opportunities to flourish – even if they differed in their understanding of Digital Commons and how to achieve that.

In particular, four key considerations were identified:

- **Consideration #1 – Be aware of and respond to the potential for concept drift:** While there have been many attempts at defining and providing more substantiation to the idea of Digital Commons, there is a risk that people do not connect with the definition and it loses its currency amongst policymakers. This could happen as a result of any number of factors, whether it be the failure of specific policy initiatives or simply the inability to properly socialise and raise awareness of the concept.
- **Consideration #2 – More actively market and raise awareness around the term Digital Commons:** As a result of some of the considerations highlighted above, it will be important

[1] https://commons.ngi.eu/
[2] https://commons.ngi.eu/event/ngi-commons-workshop-2024/
[3] https://digital-strategy.ec.europa.eu/en/policies/edic

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to build a narrative for Digital Commons which extends beyond NGI Commons. Many suggested more active 'marketing' of the term, trying to get it part of more regular policy debates by collaborating more with the media. In this way, it could be useful to test out a stronger and more forceful message about the need to protect the commons, as well as identify the role of Digital Commons in other discourses around digital governance and human-centric digital transformation more broadly.

- **Consideration #3 – Consider funding holistically and examine in granular detail funding approaches from NGI and beyond, in order to learn what works and what does not:** In terms of funding, many believed that it would be difficult to quantitatively measure the leverage effect of NGI funding and that the research might uncover a need for NGI to test and experiment with different approaches. In particular, cascade funding for projects – to see what works for projects given their particular needs – was considered an approach worth studying and testing. In order to enable this, alternatives for legal/fiscal ownership and stewardship may need to be explored through NGI Commons policy recommendations.
- **Consideration #4: Connect the Digital Commons agenda to other policy debates:** In order to make a case for Digital Commons at scale, it will be important that the consortium does not allow Digital Commons to become siloed or separate from other policy debates. While the process of making this case is only just beginning with the NGI Commons project, many worried in the workshop that a lack of sustained attention would become a big threat to the Digital Commons agenda.

As the key considerations above make clear, the Digital Commons agenda has stirred useful conversations about how to create public alternatives to Big Tech solutions as part of our use of technology across the whole of society. While the Digital Commons landscape in Europe is still young, there are some strong foundations and even stronger opportunities for us to seize on as NGI Commons.

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ABBREVIATIONS

EDIC	European Digital Infrastructure Consortium
NGI	Next Generation Internet
OFE	OpenForum Europe
OF	Open Future
CNRS	Centre national de la recherche scientifique (National Scientfic Research Centre
LFE	Linux Foundation Europe
MIN	Martel Innovate BV
PO	Project Officer
EU	European Union
EC	European Commission
DPG	Digital public good(s)
DPI	Digital public infrastructure
OSPO	Open Source Programme Office
DCTF	Digital Commons Task Force
SAP	Strategic Advisory Panel
CIS	Centre Internet et Société (Center for Internet and Society)

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1 INTRODUCTION

What are Digital Commons? How could we possibly co-create Europe's digital future by developing shared, public interest digital resources and infrastructures? What role can or should the public sector play in funding the Digital Commons, and how can we measure the leverage effect of funding on the prosperity of the Digital Commons in Europe and beyond?

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The event gathered over 40 commoners and experts together, with 10 more participants joining online throughout various points of the day. Across six sessions, members of the NGI Commons consortium shared more details and context about the activities of the NGI Commons project, as well as situated their work in a broader context of the Next Generation Internet (NGI) and policy landscape. Two of these sessions were facilitated as interactive workshops, wherein participants shared their insights and experiences in relation to active work being done by the NGI Commons. The day concluded with an in-depth brainstorming and ideation workshop, where participants were invited to share their perspectives and experiences on the past and future of Digital Commons in Europe and discuss what the future priorities for the Digital Commons should be.

This workshop report summarises some of the main activities and insights of the day, providing a broad overview of what happened and why it mattered. It also distils key findings of the workshop and their applicability for future activities of the NGI Commons consortium. As such, this report is structured in four subsequent parts: *Overview of the Workshop*, *Key Findings of the Workshop*, *Applicability and Future Considerations*, and *Conclusion*.

A summary version of this more detailed report will be released publicly via the NGI Commons website, for consideration of the participants and other commoners interested in learning more about what happened in this engagement workshop and why it matters for future understanding of Digital Commons and their role in Europe's digital ambitions.

1.1 PROJECT CONTEXT

NGI Commons is part of the European Commission's Next Generation Internet (NGI) initiative[7]. The NGI initiative aims to reimagine the internet as an interoperable platform ecosystem that embodies the values of openness, inclusivity, transparency, privacy, and cooperation. The end goal is to create a range of open-source and decentralised solutions that users can choose

[4] https://commons.ngi.eu/
[5] https://commons.ngi.eu/event/ngi-commons-workshop-2024/
[6] https://digital-strategy.ec.europa.eu/en/policies/edic
[7] https://www.ngi.eu/

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from. NGI has already provided 1000+ innovative projects with more than 350 million euros of funding since 2018.

NGI Commons will act as an underpinning coordination project for the NGI initiative, seeking to learn from past experiences and propose a way forward for the EU. To this end it will **define a long-term strategic agenda to support Digital Commons**. NGI Commons is run by a consortium that includes Martel Innovate[8], who coordinates the project, OpenForum Europe[9], the Open Future Foundation[10], the Linux Foundation Europe[11], and the Centre Internet et Société[12] (CIS) of Centre national de la recherche scientifique[13] (National Centre for Scientific Research, in English). The project will be carried out between January 2024 to December 2026.

[8] https://www.martel-innovate.com/
[9] https://openforumeurope.org/
[10] https://openfuture.eu/
[11] https://www.linuxfoundation.org/
[12] https://cis.cnrs.fr/
[13] https://www.cnrs.fr/en

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2 OVERVIEW OF THE WORKSHOP

The NGI Commons Workshop 2024 was structured in six distinct parts, highlighted below. A more detailed version of the agenda for the day can be found in Appendix B.

2.1 EVENT OPENING AND INTRODUCTION TO NGI COMMONS:

Figure 1 | Workshop introduction by Jean-Luc Dorel of the European Commission
(Source: NGI Commons)

The workshop was opened by OpenForum Europe[14] (hereinafter 'OFE') and Martel Innovate[15] (hereinafter 'Martel'). Consortium members Nicholas Gates and Karolina Gyurovszka introduced the project to a broader audience and highlighted its goals and outcomes, as well as previewed what is to come from the workshop. They then invited Jean-Luc Dorel, the Project Officer (PO) for NGI Commons at the European Commission, to present his view on the goals and outcomes of the NGI Commons project, as well as discuss expectations and objectives for the project over its three-year lifecycle. How do we position the NGI Commons in the broader context of the Next Generation Internet initiative. Representatives of the European Digital Infrastructure Consortium (EDIC) for Digital Commons also came to discuss the emerging opportunity for Digital Commons funding in Europe by presenting the view of the EDIC and its role in the broader Digital Commons ecosystem.

Jean-Luc Dorel positioned NGI Commons in the broader context of the Next Generation Internet (NGI) initiative launched five years ago, and the broader ecosystem of NGI projects supported by the European Commission. Dorel stated that: "No other initiative at this scale had ever been made to support community-based open source projects. Over 1,000 projects have already been funded." Lieke van Schouwenburg, from the Dutch Ministry of Interior and Kingdom Relations, introduced the EDIC by framing it as a new tool which allows multi-country

[14] https://openforumeurope.org/
[15] https://www.martel-innovate.com/

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projects to be developed with the support from the European Commission. Van Schouwenburg also expressed a key topic in the initiative: the governance. “We want to reflect the bottom-up approach of Digital Commons in our design of the EDIC. We want to have stakeholders represented in an advisory board that will provide recommendations to the assembly of members (made of member states), which has decision power.”

2.2 INTRODUCTION TO THE EUROPEAN DIGITAL COMMONS LANDSCAPE:

Figure 2 | Presentation: Introduction to the European Digital Commons Landscape, by Jan Krewer of Open Future
(Source: NGI Commons)

Open Future[16] (hereinafter ‘OF’) briefly surveyed the history of Digital Commons policymaking in Europe, from earliest discussions in academic and policy circles all the way up to the attention provided by France’s EU Presidency in 2022 and the European Commission. The presentation was based on initial findings of the policy mapping that the NGI Commons consortium will produce in 2024.

OF demonstrated using numerous examples how in the early 2000s, European policymakers began promoting Digital Commons initiatives focused on openness and free access to knowledge. Influenced by Yochai Benkler’s concept of “commons-based peer production,” these initiatives emphasised the benefits of decentralised collaboration and free sharing of information over proprietary models. Advocates of the Digital Commons aimed to mitigate the restrictive nature of intellectual property laws by promoting private licences allowing the free sharing of digital resources and supporting the establishment of copyright rules that favoured open access. Key sectors targeted by policies included open source software, open data, especially within the public sector, open science, and open knowledge, to foster both innovation and democratic participation.

Over the past five years, the focus of policies has shifted towards supporting Digital Commons as alternative governance models for technology in response to the consolidation of power by

[16] https://openfuture.eu/

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major digital platforms and increasing concerns over digital sovereignty. Recognizing the limitations of mere openness, new policies stress the importance of managing digital resources to maximise public benefit and address power imbalances in the information economy. The EU's "Next Generation Internet" initiative exemplifies this approach, promoting digital sovereignty through investments that complement EU's new set of regulations. This evolving perspective aligns with global trends toward recognizing the need for more digital public goods and infrastructure, based on public intervention to ensure that digital technologies serve broader societal interests.

Paul Keller from OF joined in at the end to highlight this need and make a forceful case on how the NGI Commons project should shape the work of European institutions and get support for Digital Commons and public digital infrastructure included in the next multiannual financial framework of the European Union.

2.3 WORKSHOP #1 – WHAT DO WE MEAN WHEN WE TALK ABOUT DIGITAL COMMONS?:

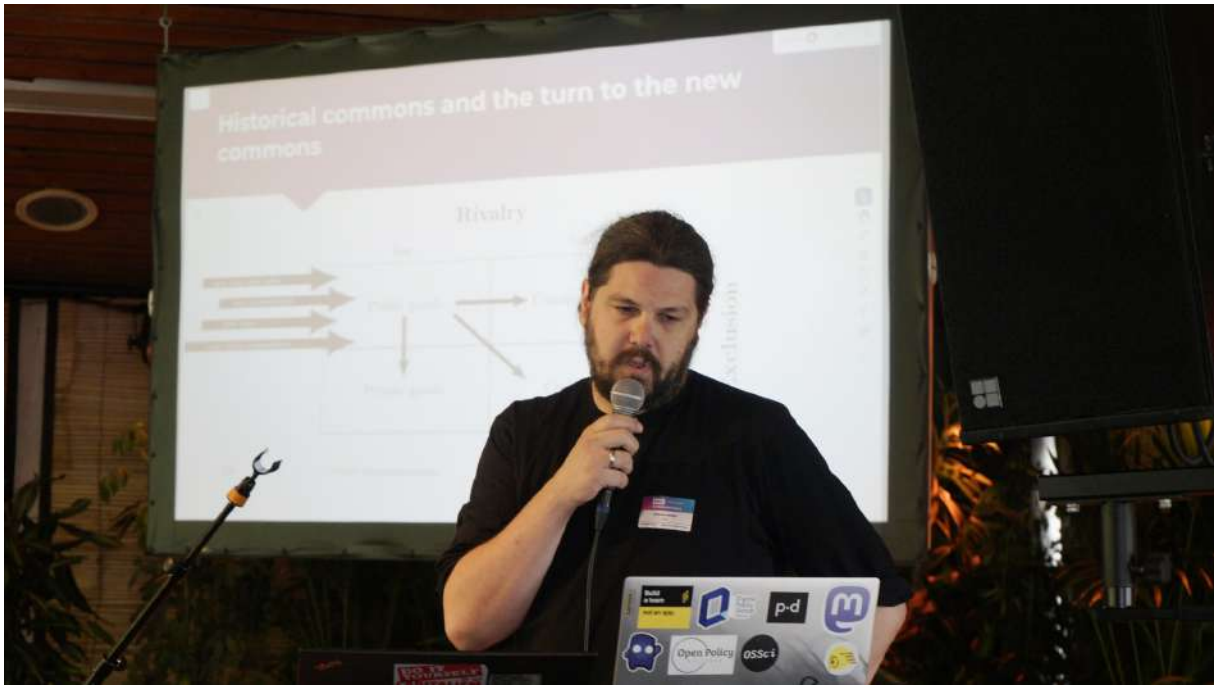

Figure 3 | Presentation: Workshop #1 – What Do We Mean When We Talk about Digital Commons?
(Source: NGI Commons)

Centre national de la recherche scientifique[17] (hereinafter 'CNRS') presented an overview of the work done to date on conceptualising and operationalising a definition of Digital Commons which is useful for evaluation of digital commons resources, communities, and governance. The session unpacked some of the common definitions of Digital Commons and presented the emerging perspective of consortium partners, as well as overview the methodology and evaluation criteria developed to date as part of our research into typologies of digital commons. It also facilitated discussion with the audience, inviting perspectives on the technical, governance, and values-laden discussions inherent in defining Digital Commons.

Valérian Guillier, the moderator of the session from CNRS, gave the floor to the participants who, one after the other, came up with their own key single words and key elements which

[17] https://www.cnrs.fr/en

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they think define Digital Commons. Participants shared examples like: “Everything that adheres to the principle of openness!”; “Digital resource, community, and governance!”; “Not for profit aspect, universalist aspect!”; “Digital solutions that can not be weaponised by states!”; “Digital public goods: non-rival and non-exclusive!”; And these are just a few of remarks gathered at the workshop.

One participant said during the discussion: “If you talk about Digital Commons, you talk about collective processes, you talk about communities governing together as stewarding resources. As a society, we have made quite a move towards an individualistic approach to everything. And in a way, the pendulum has to come back with a more collective approach. But that really requires a cultural change, a social cultural change. For the commons to thrive, this is really a priority.”

Valérian then presented some aspects of the definition as one could find it in the literature, as well as pointed out that the definitions of digital commons varied over time and depending on the different analysis. He offered some common ground of all definitions of digital commons and then pointed out differences and tensions between the definitions. (The point was not to offer the definitive definition but rather to show the spectrum of possibility.) He then presented the methodology of the research on actors of digital commons CNRS is about to start within the context of NGI Commons.

2.4 LIGHTNING TALKS – EUROPEAN DIGITAL COMMONS INITIATIVES:

Figure 4 | Christopher Wilson of MyData Global presents his work on a human-centric approach to digital commons during the lightning talks
(Source: NGI Commons)

This session was moderated by OFE and invited attendees to present perspectives from their existing initiatives and communities doing work in this space. It included 6x presentations of

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about 5-6 minutes each, with several minutes for Q&A from the audience. Detailed findings of this session have been summarised in the next section, which highlight interesting features of the profiled projects' funding and governance.

2.5 WORKSHOP #2 – DISCUSSION OF CRITERIA FOR EVALUATING LEVERAGE EFFECT OF NGI FUNDING:

Figure 5 | Presentation: Workshop #2 – Discussion of Criteria for Evaluating Leverage Effect of NGI Funding
(Source: NGI Commons)

Linux Foundation Europe[18] (hereinafter 'LFE') presented and discussed plans to research the "leverage effect" of NGI funding by providing a background on NGI funding, discussing the methodology currently being deployed, and presenting the selection criteria for choosing NGI funded projects. The session gathered inputs on refining the criteria, brainstormed and refined potential impact metrics, and highlighted emerging use cases from the Digital Commons ecosystem. It also facilitated discussion with the audience, gathering ideas for additional elements to include and determining next steps for moving the research forward.

Cailean Osborne, the moderator of the session from LFE, shared early insights on the possibilities of capturing how and to what extent projects are influenced by the funding they receive. "All models are wrong, but some are useful", as his presentation noted. He invited participants to share their feedback on the methodology for how this might be accomplished. Participants reacted strongly during discussions on whether and how the "leverage effect" of funding, particularly that provided by the NGI, can be quantified and operationalized – as well as the limitations of a quantitative approach.

In the discussions surrounding Cailean's presentation, participants highlighted the challenges in quantitatively measuring the variability of funding's leverage effect on project stewardship, maintenance, and governance. They shared their reflections on particular variables that were more or less difficult to evaluate, as well as their opinions on how feasible it would be to

[18] https://www.linuxfoundation.org/

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calculate leverage effect using a largely or purely quantitative methodology. For more on some of the key considerations that go into this quantitative approach, see Figure 6 below.

Figure 6 | Highlighted key considerations for potentially using a quantitative methodology for measuring leverage effect of NGI funding
(Source: NGI Commons)

In consideration of such a quantitative methodology, participants were not overly optimistic of the ability to calculate leverage effect in a way that was standardised, accurate, and meaningful given the many nuances between projects (e.g. funding approach, project maturity, etc); and some went so far as to state they thought it was impossible. Their insights proved critical in reframing some of the key elements of the discussion to focus on when it comes to evaluating the impact of funding, as well as directed the consortium to prefer a mixed-methods approach, which we had also given some consideration to. For more on the mixed-methods approach and the types of models that might entail, see **Figure 7** below.

Figure 7 | Overview of potential mixed-methods approach for measuring leverage effect of NGI funding
(Source: NGI Commons)

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There is no doubt that all of these reflections will help the NGI Commons project in operationalising its understanding of Digital Commons to increase investment in the space.

2.6 BRAINSTORMING – MAPPING AND IDENTIFYING PRIORITIES FOR DIGITAL AND INTERNET COMMONS:

Figure 8 | A scene from the brainstorming sessions at the end of the NGI Commons workshop
(Source: NGI Commons)

This session facilitated a brainstorming and ideation exercise which invited participants to share their perspectives, beliefs, opinions, and priorities for Digital Commons policymaking in Europe, wherein a SWOT analysis of the Digital Commons was conducted. Participants were broken into four groups. Afterwards, a synthesis exercise was facilitated by Karolina Gyurovszka of Martel to help bring the brainstorming outcomes together as part of a wrap-up exercise, mapping those priorities to different parts of the Digital Commons agenda. Participants heard summarised findings from the moderators, and were further invited to provide additional inputs, reflections, and clarifications.

As a summary of the session, it has been concluded that both funding and regulation can represent a strength, a weakness, a threat or an opportunity for the Digital Commons based on how they are defined. As regards setting up funding, the participants have agreed that both innovation as well as maintenance funding are important, with a slight inclination towards maintenance funding becoming increasingly important for the Digital Commons.

Participants agreed that the NGI initiative and its cascade funding has been one of the first and most important support mechanisms for Digital Commons in Europe, but that it would require additional resources to support Digital Commons sustainably in the long-term, and therefore to deliver all of the expected policy impacts at the technical, economic and societal levels, for instance on interoperability, digital sovereignty, or the respect of digital rights. While cascade funding can provide great support for bottom-up innovation, research and grassroots communities, more centralised and targeted funding for large-scale development and deployments of technologies could allow to have more strategic and impactful investments. In

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general, almost all participants agreed that the amount of funding available both at the EU and Member States level is currently largely insufficient.

Additionally, participants discussed some positive examples of collaborations between public institutions and the Digital Commons. Especially in the field of open source software, but also for citizen science initiatives for example, the synergies and positive relationships between public institutions and Digital Commons are mainstreamed and even increasingly formalised, as in the case of OSPOs for instance. One key challenge in this respect that was often mentioned by participants was the adaptation of procurement rules to the specific nature of Digital Commons. Unfortunately, there was not much time to discuss regulation in greater detail, but it has been agreed that it will be discussed at the next workshop.

Detailed findings of this session have been summarised in Appendix B.

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3 KEY FINDINGS OF THE WORKSHOP

While Section 2 highlighted in brief some of the main sessions of the agenda and what happened during them, this section will highlight cross-cutting key findings from different parts of the workshop and their relevance for our research projects and ongoing understanding of Digital Commons. The next section (Section 4) will then extrapolate from those findings and summarise the most important ideas and considerations for the NGI Commons project and its related activities.

In particular, this section will be broken into three parts:

1. A **thematic summary** which highlights key findings from the discussion parts of the initial two sessions of the workshop;
2. A **high-level projects analysis** featuring interesting features and takeaways from the projects presented during the Lightning Talks; and,
3. A **detailed SWOT analysis** of the Digital Commons landscape, summarising key findings and identified opportunities identified within the scope of the brainstorming exercise.

NOTE: A **high-level projects analysis** which extrapolates key learnings from each of the projects showcased during the Lightning Talks, can be found in Appendix A. Furthermore, a detailed account of the raw data found from the brainstorming sessions of the workshop (e.g. ideas entered onto post-it notes) can be found in Appendix B.

3.1 A BRIEF NOTE ON METHODOLOGY AND DATA PROTECTION:

Before proceeding with the analysis, we would like to offer a brief note on methodology and data protection in relation to the findings presented in the rest of this section.

3.1.1 Methodology

The organisers of the **NGI Commons Workshop 2024** – including team members from consortium partners CNRS, OpenForum Europe, Open Future, Linux Foundation Europe, and Martel Innovate – used inductive reasoning to gather and interpret findings from the workshop. This means that specific findings were used as the basis for thematic and pattern analysis, which were then used to inform the construction of broad findings.

For the brainstorming sessions, each session was moderated by an organiser who had run one of the previous sessions, representing each of the consortium partner organisations. Participants were divided into four groups to brainstorm strengths, weaknesses, opportunities, and threats of the Digital Commons landscape, as well as future considerations for policymakers and funders. Ideas were placed onto post-it notes and logged on chart paper. Each of these post-it notes has, for the purposes of this analysis, been logged as a data point. The data point findings from these sessions (found in Appendix B) were complemented in our analysis by notes taken contemporaneously.

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3.1.2 Data Protection

The discussion sections of our sessions and workshops were subject to **Chatham House rules**,[19] and thus the names of participants will not be disclosed and comments will not be directly attributed to individual participants. Individual quotes, paraphrased comments, or reflections have been anonymised and edited to remove personal identifiers, and overall findings have been extrapolated across multiple individuals without attribution to any group or individual in particular. Comments from the organisers and consortium partners will be attributed to those individuals, and reflections from individuals presenting the Lightning Talks have been done with the consent of the participating individuals.

3.2 THEMATIC SUMMARY – KEY THEMES FROM THE WORKSHOP SESSIONS:

The section below summarises some of the key emerging themes from the workshops and sessions that took place in the morning and early afternoon of the NGI Commons Workshop 2024. Where necessary, remarks have been paraphrased and/or edited for clarity, in order to capture the spirit of what was being said.

3.2.1 Theme #1: Defining and conceptualising Digital Commons

Why is it so hard to agree on what a Digital Commons actually is in the first place? Does it even matter?

The first workshop set the tone for the day, delving into a lot of complex definitional and theoretical work that is being done to define and operationalise a view of Digital Commons that has utility for policymaking. More importantly, it also showcased some of the important being done to create a typology of values and attributes associated with Digital Commons that enable us to meaningfully fund, maintain, and reuse them at scale.

3.2.1.1 Takeaway #1: Intrinsic versus extrinsic properties of Digital Commons make them hard to conceptualise

There are many definitions of Digital Commons, including the one adopted by the EU French Presidency report[20] and a new one being developed by the Digital Commons EDIC. But the workshop made the case for how it is important not to get too bogged down in the details and definitions of what is and is not a commons, and instead focus on the values and attributed associated with Digital Commons and how they can be useful for getting more funding, resources, and attention on Digital Commons projects.

The consortium partners made the case for how a commons generally consists of three things: *digital resources* (and generally highly open ones); *communities* organised around those resources; and *access and sharing rules* to govern fair and equitable participation/use. But, participants to the workshop also wondered: What are the intrinsic characteristics of a Digital Commons in comparison to its extrinsic characteristics? It was a matter of some discussion,

[19] According to the Facilitator School, Chatham House rules are: "... an agreement between meeting participants that allows people to use the information from a discussion, but they can't say who the speaker was, or what organisation they're from. For more info, see: https://www.facilitator.school/blog/chatham-house-rule#:~:text=House%20Rule%20Translations-,What%20is%20the%20Chatham%20House%20Rule%3F,what%20organization%20they're%20from.&text=Once%20the%20Chatham%20House%20Rule,it's%20binding%20on%20all%20participants

[20] To view the French presidency report, go to: https://openfuture.eu/wp-content/uploads/2022/07/220624digital_commons_report.pdf.

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with the discussion ultimately zeroing in on understanding the intrinsic and extrinsic aspects (e.g. values, attributes, etc) of Digital Commons.

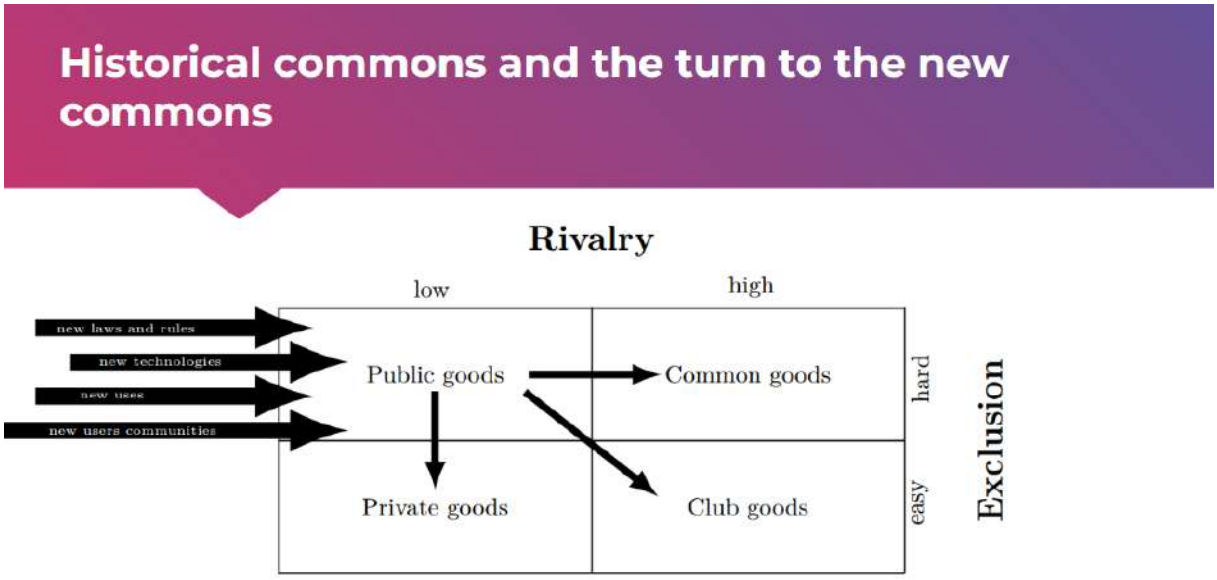

Figure 9 | Historical commons and the turn to the new commons
(Source: NGI Commons)

The foundation of this debate, as someone noted, goes back to the concept of "commons" as an economic idea more broadly (see Figure 9 above). One approach discussed followed the approach of Charlotte Hess (the Director of the Digital Commons Library at Indiana University): get rid of intrinsic characteristics and normative descriptions for the commons, and instead open up the the perspective of commons goods to include various kinds of commons, including Digital Commons.[21]

With Hess' baseline understanding of commons as a foundation, participants seemed to agree that it was hard for Digital Commons to have any intrinsic properties whatsoever, and that Digital Commons were largely extrinsically defined. One participant noted how, when defining these projects extrinsically, it is important not to define boundaries that exclude projects, but bring more projects into the debate as a way of discussing crucial concerns like licensing, funding, governance, and access/sharing rules. In some ways, then it is more about establishing good practices for projects, rather than defining 'best practices' that exclude other projects and make them subject to purity tests.

While we did not arrive at a definitive typology of extrinsically defined properties, we made significant progress in this regard. We showcased and discussed the early efforts underway by CNRS to understand these elements. Key aspects identified included: work organisation, organisation models, interconnectedness of the project with other ecosystems, funding models/public support, and transformational capacity. Additionally, a few promising research opportunities were identified such as tracking the evolution of uses of openness and commons' usage over the last decades, exploring the meaning of openness and evaluating the potential for 'commons washing'. These areas, while not a primary focus of our work, will undoubtedly inform and enhance our future research and activities.

3.2.1.2 Takeaway #2: The values and attributes of Digital Commons are inevitably inflected by political and policy considerations

The discussion of intrinsic and extrinsic properties prompted another debate: the instrumental value of Digital Commons as a policy instrument, and how debates around Digital Commons

[21] See: https://wiki.p2pfoundation.net/Charlotte_Hess.

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are inevitably inflected by political and policy considerations. How should we consider the "rhetorical utility" of the term Digital Commons? In other words, how should we understand the importance of the term itself in helping to achieve desired policy outcomes?

The value of an instrumentalist approach in practice was debated during the workshop. As some highlighted, Digital Commons as a concept can be (and often is) broad and open; which can make the idea inclusive but also, as some noted, risks creating 'too broad a tent'. Some made the case, however, for how the term has made it easier for policy work that seeks to channel funding, resources, and attention to projects which exemplify the values normally associated with Digital Commons[22] – even if they do not fit some pure definition defined in a vacuum.

Adding to the debate, attendees were also interested to hear more about what was geographically in- and out-of-scope for the project. It was obvious to many that while a project might be notionally European in the sense that it has an active European contributor base or was begun in Europe, it is difficult to define what makes sense to channel EU investment into. Many participants in the workshop cited examples of exciting projects in places like Brazil, India, and beyond with potentially high relevance for public administrations in Europe. Through discussions, it was generally agreed that while Digital Commons as a policy initiative was not intended to inform global policy instruments or for Europe to shape the global Digital Commons, projects which are considered European Digital Commons do not (and likely should not) have contributor or supporter bases which exist just inside Europe.

Many of the attendees also highlighted the proliferation of other terms similar to Digital Commons – including digital public goods (DPGs)[23] and digital public infrastructure (DPI).[24] They openly wondered if there might be an exhaustion with definitions which would plague Digital Commons debate. While Digital Commons is not bound by any geography – for example, many commons researchers come from the United States and other countries outside Europe – it was also noted how Digital Commons is for now receiving more attention at the political level in Europe than in other parts of the world.

Might there be some room for improving European policy coherence with the global policy landscape given the existence of such terms? The consortium partners responded to the discussion around the potential for concept drift by recognising that while there is a need for harmonisation of policy instruments being used in global policy discussions, we should instead wield Digital Commons as a policy tool by showing how it focuses on different attributes related to openness, public interest, and community governance. For example, while DPGs describe digital goods that are essentially publicly accessible, or non-excludable, DPI usually refers to goods that are not only universally accessible but that have society-wide economic or social functions. Digital commons on the other hand do not only reflect public attributes or functions of digital goods, but also specific modes of production and governance.

Furthermore, NGI Commons believes that the idea of Digital Commons offers a lot of value to global policy discussions and as a policy instrument for advancing European values, with participants seeming to largely agree on the notion of Digital Commons and their intrinsic characteristics are highly in line with the EU´s values. Moreover, at a higher level, the debates

[22] Note: These are currently in the process of being defined and are ones of the key areas of investigation during the research.
[23] According to the UN Secretary General's Roadmap for Digital Cooperation, digital public goods are "... open-source software, open standards, open data, open AI systems, and open content collections that adhere to privacy and other applicable laws and best practices, do no harm, and help attain the Sustainable Development Goals (SDGs)." For more information, see: https://digitalpublicgoods.net/digital-public-goods/.
[24] While DPI as a concept is evolving, one definition from University College London and the Co-Develop Fund refers to it as "... society-wide, digital capabilities that are essential to participation in society and markets as a citizen, entrepreneur, and consumer in a digital era." It generally refers to three things that are broadly agreed upon:digital legal identity, digital payments, and data exchange capabilities. For more information, see: https://medium.com/iipp-blog/what-is-digital-public-infrastructure-6fbfa74f2f8c.

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are taking into consideration global policies, but due to mandate and capacity constraints focusing more narrowly on Europe. This project being EU-funded means it primarily focuses on European policymaking; therefore, in defining the values and attributes associated with Digital Commons, as well as the criteria for funding, we need to have a level of normative subjectivity, as well as not exclude other terms as units of policy analysis.

3.2.2 Theme #2: Funding models for Digital Commons projects

What are key considerations for measuring return-on-investment in open source innovation? How should we capture the leverage effect on decentralised technologies?

These were some of the key questions that this workshop sought to address and help bring new understanding to. Building on preliminary research done, the consortium partners actively solicited inputs from the attendees to help improve the methodology for the research around funding models for Digital Commons, considering factors like the time for evaluation, balance in focus between short-term outcomes and long-term impact, and proxy measures to help capture impact of NGI funding.

3.2.2.1 Takeaway #1: Measuring leverage effect is difficult because it is challenging to quantify impact

One of the attendees summarised the difficulty in measuring leverage effect by asking an important question: Whom is the innovation actually for? Moreover, how can we use open source and open data to create a competitive edge and not just allow private companies to benefit from these resources? Who do we want to benefit from this?

Through these discussions, it was broadly concluded that it is important to not just focus on metrics for understanding impact, but to let people come up with their own metrics and speak to them about their own experiences. Many participants shared experiences which spoke to the importance of understanding individual project experiences and not generalising too much. Participants shared anecdotes about how hard it can be to quantify impact due to differences between projects (e.g. project maturity, different funding approaches, etc), as well as cautioned the conveners about the importance of impact metrics and considering over what timeframe they are being used.

One example was ‘lines of code’, or the idea that you can extrapolate insights around impact from how much more, or how much less, code is being written. But ‘lines of code’ as a metric is tricky because removal of code can be something that is part of maintenance work (that the attendee mentioned they support, for instance). It is one thing to measure lines of code, but you need to differentiate this from a statement as such and the learnings derived from it, as it is highly contextual to individual projects and maintainability is often overlooked. It was also discussed that instead of continuously funding research and innovation, perhaps more focus should be placed on what the needs are; for example, defining what people are dependent on, what they like, and what they need, as well as fund these projects – whether or not they already exist or need to be developed to address these needs.

Participants also noted the importance of differentiating between different stages of projects because the metrics will be quite different based on this. For example, every metric has a normalisation effect; basically, a statement that “this is a good thing”. But, people also discussed how to be cautious about the normativity, as it can create and sometimes introduce and/or reinforce negative incentives for projects. When considering impact there are many options to consider but also to be careful about. One attendee shared more about how the Prototype Fund in Germany has done research on application process and project life, funding rounds, impact measurement and different maturity of projects and the most adapted metrics. The key finding in that research was that project maturity is a key contextual factor and can

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vary over time, but they would not have uncovered this unless they really looked at individual project experiences using mixed-methods data.

Figure 10 | The discussions around leverage effect and funding continued into the coffee break
(Source: NGI Commons)

3.2.2.2 Takeaway #2: Mixed-methods approaches are critical for evaluating whether projects are successful

The second workshop devoted some time to the inadequacy of current methodologies for helping us to understand the leverage effect of funding. But most participants seemed to agree that if we were going to be able to understand leverage effects, a mixed-methods approach that complemented robust quantitative data analysis with interview insights and other qualitative data points would be critical. In other words, the importance of mixed-methods approaches for dealing with potential issues of data scarcity and measurement will be critical for project success.

One participant shared a research paper that demonstrates the critical insights gained from qualitative interviews for measuring software ecosystem health in data-scarce contexts.[25] However, the limited scalability of interviews as a data collection strategy requires consideration of how (many) interviews can be included in this study. Another participant suggested that maturity models are an approach that allows you to easily combine diverse methods into a single (rather quantitative) metric. Out of different categories, you can build indicators based on scoring, this can be generalised in an ultimate score. This allows one to combine qualitative research with quantitative metrics.

[25] For more information on the research paper, see: https://link.springer.com/chapter/10.1007/978-3-319-69191-6_9.

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It was also discussed how – since there is not already a maturity model available for what we are trying to achieve – we would first have to make a model. It could be based on existing maturity models, they could be merged to create a new one, and use that to assess all projects. There are many maturity models around that are somewhat relevant, so it could work pretty well, they suggested. A challenge for this methodology is the vast quantity of qualitative and quantitative variables that are typically considered per project in a maturity model, which would not be feasible for the quantity of NGI-funded projects that are included in the scope of this study.

Participants also suggest several sources of data we might consider. If we decide to not use maturity models but a mixed methods design, it was suggested that one research paper – *Health Measurement of Data-Scarce Software Ecosystems: A Case Study of Apple's Research Kit*[26] – could help. The paper covers mixed-methods approaches for measuring open source ecosystem health which many thought might be relevant for helping to design the right methodology for evaluating leverage effect. It was also suggested that public funding should be used to support diversity, equity and inclusion, and we should consider metrics proposed by CHAOSS.[27] Peer-review grant-making is important for supporting diversity, and evidence suggests that when we ask for gender in grant proposals, we see an increased number of women involved in projects.[28]

3.2.2.3 Takeaway #3: Projects need diverse funding sources in order to be successful, and funding can therefore not be considered in a vacuum

Much of the discussion in the second workshop came back to how important it was for funding to be diverse, and how it would be therefore difficult to understand the leverage effect of NGI funding in a vacuum. In this regard, It is important to consider the importance of diversity of funding, and to make sure that the effect of NGI funding is considered in relation to other sources of funding. Attendees broadly seemed to believe that diverse funding is a good thing, and that this must be reflected in any takeaways looking at the value or impact of NGI funding specifically.

Based on the experience of one project who applied for funding and had to report on some metrics (whose experience was highlighted during the workshop but cannot be attributed due to Chatham House rules), we should value and encourage the creation of quality communication around diverse sources of funding and their potential impact on project governance. It is easy to feel when communication is good that the impact of funding can be easily understood, but this attendee believed that projects themselves should have the responsibility to communicate about the value a project generates.

As a result, experiences can vary widely with funding and use of funding, and it is important not to generalise from individual experiences or overall quantitative analysis too much. Participants shared stories of how and why we need granular data which considers funding in relationship to many different contextual factors. Unfortunately, such public data is not easily available from the NGI, and what is available is not available in sufficient level of detail needed for mixed-methods analysis, let alone rigorous quantitative analysis. Regarding NGI Commons' future work, some participants suggested that data on the impact of funding on governance could come from extensive questionnaires; for example, following a model of the P2P Lab Value research projects,[29] which were based on 150 variables.

[26] For more on the paper, visit: https://link.springer.com/chapter/10.1007/978-3-319-69191-6_9.
[27] For more information, see: https://chaoss.community/unveiling-the-impact-dei-metrics-overcoming-social-barriers-in-open-source/.
[28] For more information, see: https://chaoss.community/unveiling-the-impact-dei-metrics-overcoming-social-barriers-in-open-source/.
[29] For more information, see: https://www.p2plab.gr/en/archives/1075.

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3.2.3 Theme #3: Governance models for Digital Commons projects

Cross-cutting many of the different workshops and sessions of the day was the topic of governance, and the obligations of the NGI Commons project towards contributing to understanding of, and good practices, for governing Digital Commons projects. This was first discussed in the sessions on the policy landscape and the definition of Digital Commons, but was later covered as part of the funding discussions as well. During these discussions, it became clear that many viewed governance as multidimensional, and that we should exercise caution in drawing out 'best practices' and instead focus on understanding variation in project experiences and recommend 'good practices'.

3.2.3.1 Takeaway #1: Good governance is not easy to define, and even harder to operationalise

During the discussion, a lot of attention was paid to governance, but also specifically the question of what 'good governance' looks like. Burned by many experiences with policy position papers and indices, many participants reflected on how the definition of Digital Commons linked in principles of governance, but that they themselves were wary of being too prescriptive when recommending what 'good governance' looks like, as needs and experiences can vary project-to-project.

Some feedback comes from individuals more active in the open source community, where many bristle at the idea that what applies to one project can or need necessarily apply to others. Many open source projects specifically have been successful while adopting different models for governing the core codebase, with more or less contributions from the community. In this way, while many seemed to welcome the normative contributions of governance to creating sustainable Digital Commons, they were a bit wary of being too prescriptive or didactic about it.

One comment from the workshop also noted how the applications of Digital Commons to public digital infrastructures warranted some consideration of the public sector's role in governing Digital Commons specifically. Some argued that because of, for example, rigid legal requirements or public procurement practices, it would be difficult for governments to leverage Digital Commons downstream or contribute upstream without sandboxes to facilitate rules-based participation in the governance of those projects. In this way, there must be some innovation in figuring out how and in what way public sector bodies can best support Digital Commons projects, and that there may be some need for experimentation, building on what governments like Germany's ZenDis office have done.

3.2.3.2 Takeaway #2: The impact of funding on governance of digital commons is important to consider

Some of the attention in the second workshop was also paid specifically to the impact of received funding on governance, particularly the commons' business model. For example, one comment from the audience posed the question: Was it intentional not to consider benchmarks of ideal governance/organisation of the Digital Commons? In other words, what is the model we should be looking for/supporting? For those present in the room, this seemed to be the "million dollar question", as it would influence how NGI Commons addressed a number of other questions through its research.

The consortium noted how the plan for the research on leverage effect was not to make normative claims about the optimality of one particular model, but instead to examine the very idea of self-organisation and consider how different governance approaches are being used to facilitate it (and whether they are successful or not). In this regard, some attention will be given in the research to the effect of funding on governance, but not through the prism of a

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deductive approach which values one/several model(s) over others, but more inductively through observation of how models are governing themselves.

While this had not been a key part of the research methodology designed so far, it was considered an important dimension to add given the fact that the moment you introduce funding it changes incentives, which can significantly affect project governance. For example, sometimes metrics can create negative incentives for projects. If you support a project with a massive amount of money, open source projects can implement hundreds of features, which can make it hard for a community to keep up with the pace of people full-time paid during a year. In the long run, this can harm the sustainability of the project since it discourages volunteer contributors.

3.3 HIGH-LEVEL PROJECTS ANALYSIS – PRESENTATIONS FROM THE LIGHTNING TALKS

3.3.1 healthsites.io (Mark Herringer, The Global Healthsites Mapping Project)

Figure 11 | Mark Herringer answers questions about his project healthsite.io during the lightning talks
(Source: NGI Commons)

Summary: "When a natural disaster or disease outbreak occurs there is a rush to establish accurate health care location data that can be used to support people on the ground. This has been demonstrated by events such as the Haiti earthquake and the Ebola epidemic in West Africa. As a result valuable time is wasted establishing accurate and accessible baseline data. Healthsites.io establishes this data and the tools necessary to upload, manage and make the data easily accessible."

Analysis: Mark Herringer, the Director of the Global Healthsites Mapping Project, discussed his Digital Commons project, an open data commons for health facility data derived from the

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popular project, OpenStreetMaps. In adapting OpenStreetMaps to the needs of ministries of health, Herringer described a common use case for ministries of health in countries across the globe, particularly those in developing countries: the need to access and maintain high-quality, up-to-date baseline data on healthsite location data in order to allocate resources. As he found it, this need is particularly acute during times of emergency or crisis.

But how has this been achieved through project governance? In the healthsites.io model, ministries of health are considered as product owners and take ownership over their local data, while working as part of a global community of contributors. Using OpenStreetMaps, they can work within already existing World Health Organisation (WHO) Member State efforts to list and maintain data on health facilities, creating a common platform on which to do that that members can collaborate on. The data is managed and maintained by anyone and everyone who wants to get involved and add information to the platform, from ministries of health all the way down to the health facilities, who can update the information on their facility. This community helps facilitate rules and norms around updating and maintaining data on the platform, as well as contributing to the codebase (which is available on GitHub).

As with any Digital Commons project, funding is critical and the foundation for enabling healthsities.io to sustain itself as an open data commons. At the moment, the project has relied on philanthropic funding and is working to try and find the best business model for maintaining the project at scale while continuing to build out the community of contributors that are building and deploying it. In Herringer's view, there are various options for achieving financial sustainability and enabling the types of collaborative governance a Digital Commons requires, particularly because there is a variety of organisations with interest in having accurate information from businesses to states. Over time, it is forecasted that more organizations will come on board and different models for deployment will be tested, so it is believed that the core maintainers at The Global Healthsites Mapping Project can adapt to these business realities and find a suitable model.

3.3.2 Chritopher Wilson - A human-centric approach to Digital Commons (MyData)

Summary: "MyData is a human-centric approach to personal data management, which combines industry need for data with digital human rights. MyData is an alternative vision which offers guiding technical principles for how we, as individuals, can have more control over the data trails we leave behind in our everyday actions. The core idea is that we should have an easier way to see where our personal data goes, specify who can use it, and alter these decisions over time."

Analysis: Christopher Wilson, the CEO of MyData Global – a global community of entrepreneurs and personal data experts – shared his idea of how the MyData founding principles constitute a form of data commons. As Christopher outlined, the founding idea of the MyData community – outlined in the MyData declaration – was that individuals should be in control of their personal data. Therefore, as he said, there needs to be decentralised and community-based governance to uphold control of personal data, as well as federated architectures in place to support those collective forms of governance.

But how has this been achieved in practice? As Christopher highlighted, many of the members of the community represent not-for-profit and self-organised institutions. By embedding the principles of their community through their members, they have been able to advocate for members adopting their approach and using it in their own work. This also leads to common de-facto standards for them to work together, enabling collaboration on various issues and the sharing of learning. While not a formal "product" in any sense, by acting like a collaborative standard and being empowered through collective governance, they are able to embody many of the values associated with digital commons.

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Figure 12 | Christopher Wilson presenting his project MyData during the lightning talks
(Source: NGI Commons)

Moving forward, Christopher and the team at My Data Global are interested in exploring how they can further embrace collective forms of governance through more active forms of collaboration. For example, they want to work to align some Common European Data Spaces that will be created in various sectors to align with the principles of the MyData charter and MyData community more broadly. In doing so, they will focus on empowering instead of burdening, and explore new technical processes like federated algorithmic access, and exploring new ideas like 'data-at-rest' versus 'data-in-use'.

3.3.3 glossAPI (Alexandros Melidis, Greek Open Technologies Alliance (GFOSS))

Summary: "The mission of glossAPI is to create a high-quality, open ([including] source, data, models, [and] governance) language model in [the] Greek [language]. [In doing so, glossAPI] promotes open access to linguistic data sets [and] supports community driven development, transparency and participation."

Analysis: Alexandros Melidis from the Greek Open Technologies Alliance (GFOSS) shared more about the efforts of open source developers from the developer community in Greece to create a high-quality and open language model in Greek. glossAPI initiated to address the lack of open large language models (LLMs) in Greek, as well improve human annotation of the models through a stronger emphasis on criteria-driven preparation of training material and continuous quality improvement and control. In practice, glossAPI is run and governed by default as a commons; it promotes open access to linguistic data sets but also community driven development, transparency, and participation.

How is the project governed in practice? The project promotes multi-stakeholder involvement from across the Greek open community, taking a highly participatory and community-driven approach. They frequently coordinate online via Element, as well as articles and presentation; but they also organise meetups and presentations in-person. They use these interactions to

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promote collective action and transparent decision-making with key stakeholders. They uphold this commitment to transparency through regular updates, and it is a part of the technical side of the project too, with version-controlled protocols sent out to the community in order to ensure consistency and reproducibility.

As with many projects, funding is a challenge. Future funding and investment will be critical for the future sustainability and life of the project. Right now, they are funded through Combination of self-funding and a Digital Europe Programme via the Digital Innovation Hubs. Moving forward, they hope to broaden the scope of the project and open up dialogue with similar efforts across the open source AI community, as well as improve integration with similar open data-open science initiatives. This will require active participation in relevant EU policy discussions – e.g. agenda-setting and peer pressure for digital commons AI development – as well as advocacy for inclusive and ethical digital commons AI development in multi-stakeholder fora such as the Open Government Partnership (OGP) action plan.

3.3.4 Public Product Organisations – Creating sustainable stewardship for digital public goods (Ben Cerveny, Foundation for Public code):

Summary: "In our work over the years developing large-scale codebase collaborations, we have repeatedly seen the need to establish sustainable organisational vehicles for stewardship activities. Therefore, we [focus] our efforts on supporting the creation of Public Product Organizations around emerging public codebases. These NGOs hold *commonsed* digital assets and provide governance and financial models, among other things."

Figure 13 | Introduction of Public Product Organizations and the concept of Public Product ecosystems by Ben Cerveny
(Source: Ben Cerveny, Foundation for Public Code)

Analysis: Ben Cerveny, the President and Chairman of Foundation for Public Code, shared more about his teams' efforts to diversify their work away from standards and focus on governance of code, including digital commons. Recognising the potential for 'public products' to emerge from single administrations looking for replicators – as well as the outputs from granted projects like Horizon Europe or NGI and pooled procurements to start new codebases – they developed an approach for what comes next for these products. In each of these cases, there is greater success when explicit Public Product Organizations (PPOs) are formed around these *commonsed* assets.

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How would this argue? Ben argued that while technical development of new products and innovation is key, what comes next is more important. As a community supporting *commonsed* assets, we therefore need stewardship organisations with a sustainable financial and governance model. As a result, there is a need for vehicles for sustainable development, product organisations within the public sector that have the capacity to work with open source communities. This is particularly relevant for public sector institutions, where political changes can create challenges for longevity so vehicles need to take into account options to diversify support.

So, can you explain how you make the framework scalable for startups? Ben argued to the crowd assembled that you need drivers in different legal contexts to help support adoption and scale of new products and assets. Part of what they are doing at the Foundation for Public Code is working with organisations about how to scale beyond their jurisdictions, similar to how open source software codebases are hosted by international vehicles and within countries there are specific distributions, figure out how national and international efforts fund and support development and fit together. While they are still working out the best business models to govern these PPOs, there remains optimism that this offers a future sustainable model for scaling up digital commons or moving them out of existing institutions to help create new forms of open and collective governance.

3.3.5 Francesco Siddi (Blender Foundation) – Is Blender a digital common?:

Summary: "Blender is the free and open source 3D creation suite. It supports the entirety of the 3D pipeline – modeling, rigging, animation, simulation, rendering, compositing and motion tracking, even video editing and game creation. Advanced users employ Blender's API for Python scripting to customise the application and write specialised tools; often these are included in Blender's future releases. Blender is well suited to individuals and small studios who benefit from its unified pipeline and responsive development process. Examples from many Blender-based projects are available in the showcase.

Blender is cross-platform and runs equally well on Linux, Windows, and Macintosh computers. Its interface uses OpenGL to provide a consistent experience. To confirm specific compatibility, the list of supported platforms indicates those regularly tested by the development team.

As a community-driven project under the GNU General Public License (GPL), the public is empowered to make small and large changes to the code base, which leads to new features, responsive bug fixes, and better usability. Blender has no price tag, but you can invest, participate, and help to advance a powerful collaborative tool: Blender is your own 3D software."

Analysis: Francesco Siddi from Blender came to describe their thinking whether or not Blender, an open source project they had been working on for years, should be considered a digital commons. Blender has for years been working with open source developers media, industry, filmmaking, gaming, and beyond to support the use of its suite of tools to support the needs of the 3D pipeline at scale, and in a completely open way. It is easy for people to join the community and contribute back to it, but the rules and mechanics of how this is done are evolving.

For years, Blender's mission has been to give everyone the capacity to create content online using open source software. This mission has led to them to largely agree that the project is a commons, but that their governance and funding model might require some evolution. In the past, they have governed the project with the community and survived largely by donations, but they also have had to slowly develop a complex governance model to ensure both commercial activities to generate some revenues and ensure everything comes back to the not-for-profit foundation.

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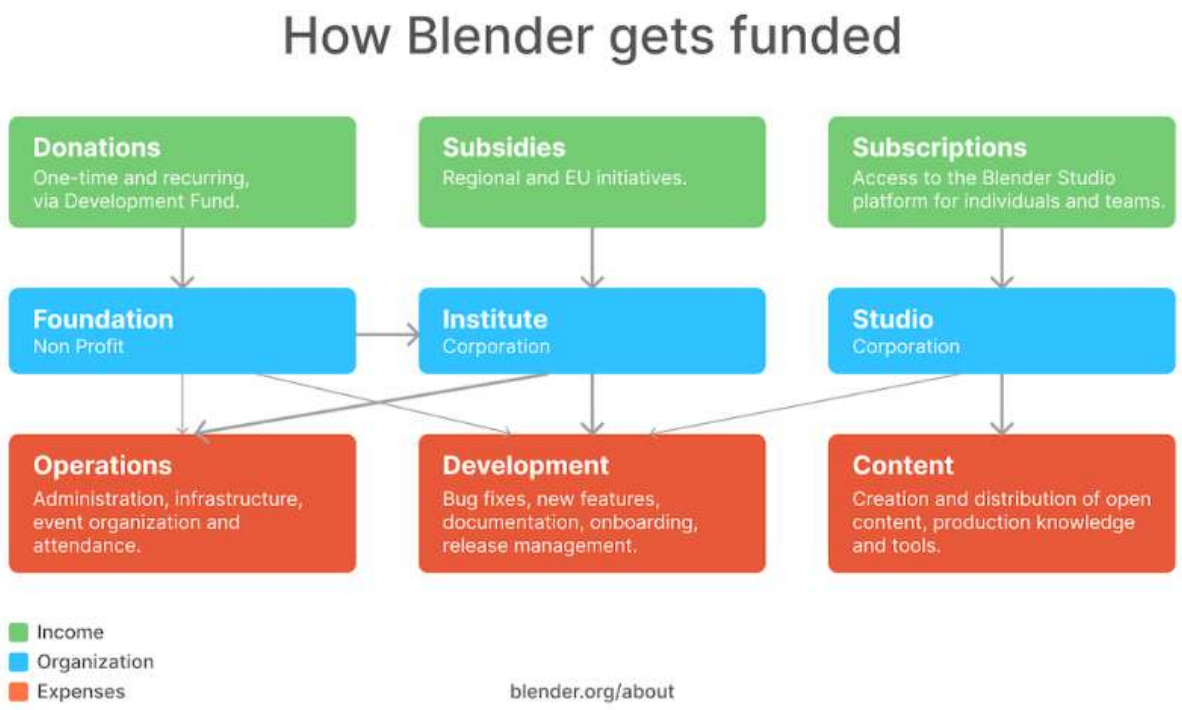

Figure 14 | How Blender gets funded
(Source: Francesco Siddi, Blender)

Francesco pointed to funding as a potential existential threat to the future of Blender, and to many digital commons projects more broadly. (For more on Blender's experience with funding, see Figure 14 above.) In his view, the donations-based, piecemeal model which has so far enabled Blender to continue has been very lucky, and is not necessarily dependable or sustainable. In order for digital commons to be viable as governance models for communal digital resources, he believes it will require more large-scale public investment and diversification of the opportunities available to projects like Blender, which will require continual research into better governance and investment practices. In conclusion, he argued that they also need a focus by policies on the actual end-user tools as commercial software is important, not only open source as a research and innovation model.

3.3.6 Nil Homedes Busquet (Decidim) – Open source digital infrastructure for participatory democracy

Summary: "Decidim is a Free Open-Source participatory democracy platform for cities and organisations. But Decidim is more than a digital platform: it's a common[s] free and open project and infrastructure involving code, documentation, design, training courses, a legal framework, collaborative interfaces, user and facilitation communities, and a common vision. Decidim makes it possible for thousands of people to organise themselves democratically by making proposals, attending public meetings, fostering decision-making discussions, deciding through different forms of voting and monitoring the implementation of decisions.

Analysis: Nil Homedes Busquet from Decidim came to give a forceful case for how Decidim is a digital common, and how it has evolved from an open source platform into a fully-fledged, democratically governed community of collaborators and contributors. In this regard, Nil showcase how the Decidim model of governance is based on three things:

- **Participation model:** Open, flexible and replicable, a model to maximise citizen participation.
- **Public-common code:** Building a FLOSS project from public sector

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- **Democratic governance:** Public-community governance of a digital common

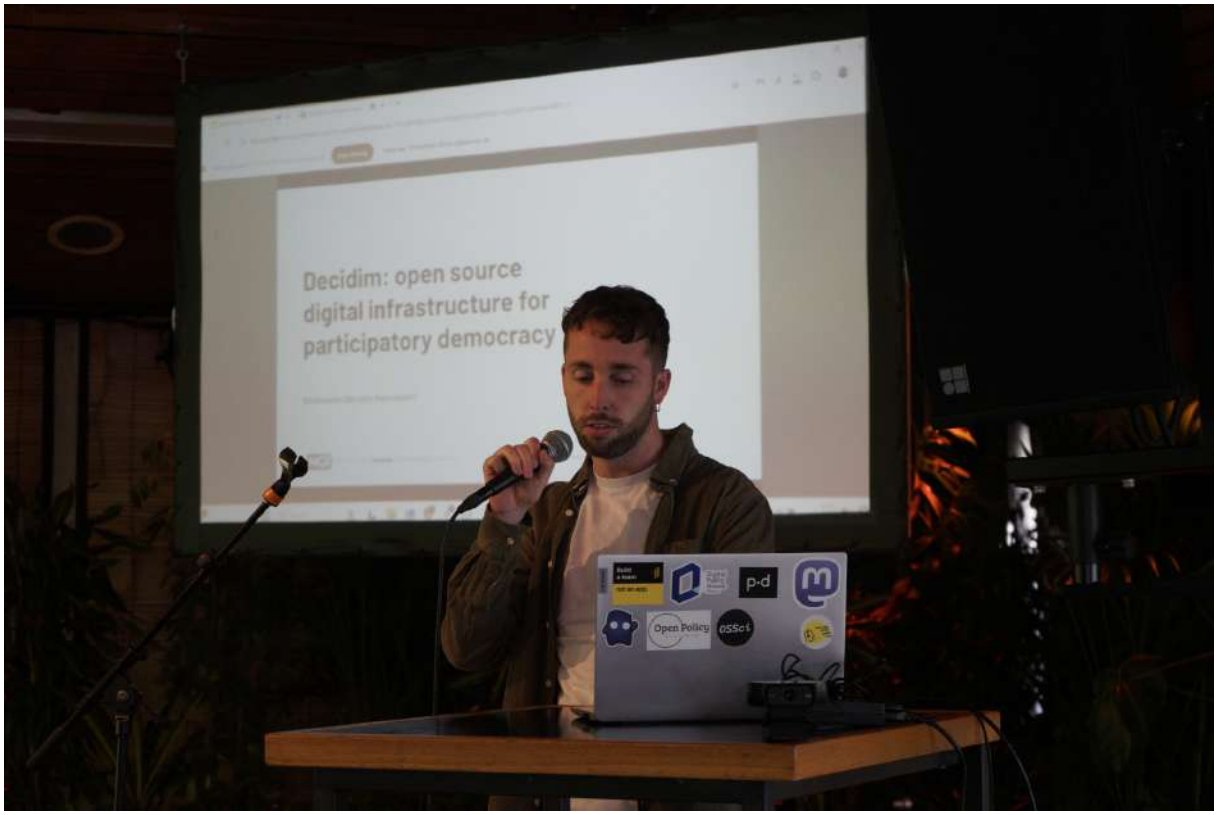

Figure 15 | Nil Homedes Busquet of Decidim presenting the project during a lightning talk
(Source: NGI Commons)

In this way, the community is characterised by a governance model which organises itself around the three core features of digital commons: a digital resources, a community, and a governance/participation model. The reason Decidim is able to do this is because of a true participation model which is open, flexible, and replicable in order to help maximise citizen participation. This model is highlighted in Figure 16 below.

Figure 16 | Participation model for Decidim
(Source: Nil Homedes Busquet, Decidim)

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In reflecting on how the project has embraced openness through democratic governance and its participation model, Nil also spoke Unique example of FLOSS as a “public policy”, recognised as the central actor but based on community governance. He highlighted how despite having a core team to steward the project, they are not alone implementing Decidim, and that many companies do. They only maintain Decidim and have established a partnership policy to receive a small (non compulsory) fee from organisations that use our code.

In terms of funding, it remains a constraint. They are highly dependent on the Barcelona City Council and want to diversify their model, potentially by working with other public administrations to share costs as they adopt Decidim at scale. They also have a true desire to see Decidim adopted as infrastructure at scale, which they see as a standard for democratic participation.

3.4 DETAILED SWOT ANALYSIS – AGGREGATE FINDINGS FROM THE BRAINSTORMING SESSIONS:

Figure 17 | The workshop discussions were spirited and led through individual breakout groups
(Source: NGI Commons)

Whereas the last section summarised more cross-cutting findings from the workshops and other sessions, this section will focus specifically on the findings from the brainstorming sessions, using the methodology discussed previously. Note that where **bolded**, this has been done to indicate where an observation is being drawn from the data points summarised by the participants. Some of the extrapolations from those observations have been taken from the discussions surrounding those brainstorming exercises and contemporaneous notes by the moderators, which have been paraphrased here.

3.4.1 Strengths

While there was admittedly much focus on weaknesses, opportunities, and threats in the discussions participants had, the Digital Commons debate taking place in the workshop was widely recognised as largely being possible because of the strong digital and non-digital foundations already established in Europe.

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People recognised that there was generally a high value of **trust** in Europe already, and that **Digital Commons raised trust** and **built a narrative of trust and community cooperation**. In this way, many believed that the **inherent association with public values and public goods** would help make the agenda successful, as well as give it a competitive edge in Europe when compared to some other policies. This would provide a strong foundation for doing anything in the digital policy space, but especially activities around Digital Commons, which are premised on cooperation and support.

Additionally, it seemed to be a widely held belief among the workshop's participants that because of the **EU's convening power and the recognition provided by the European Commission**, the Digital Commons policy mandate was one that had huge potential to bring together diverse individuals, organisations, and communities in Europe towards **common goals aligned with European values**. It was also recognised by attendees that the **fundamental willingness and proclivity** to collaborate made this possible, and that there was a **natural openness** to working towards **shared and common goals** given the history of working across borders.

The **adequacy of European governance instruments towards supporting Digital Commons** was also recognised as a strength. The **presence of a common market**, the **relative availability of public funding** (albeit not enough), and the **existence of public funding frameworks** meant that there was a **large ecosystem of supporting technology providers** from which to draw on and support. There was some optimism in the room that this might help to **concretise existing bottom-up initiatives** by linking them with EU instruments.

3.4.2 Weaknesses

Admittedly, many of the strengths were *potential* strengths of the EU environment, ones which had not necessarily been fully realised. As a result, there was also a long list of weaknesses that people saw in the landscape as it is currently constituted, which people thought might naturally provide a constraint on the Digital Commons agenda despite the presence of some enabling values and building blocks.

Many pointed to the fact that, at present, there was a degree of **fragmentation** in the Digital Commons agenda across Europe. The belief here seemed to be that while there are many pockets of activity in various jurisdictions and initiatives, the lack of a **formal and uniform "commons culture"** presented challenges to policy coherence and further policy development. Furthermore, the **detachment of those policy discussions from technical communities** was seen as exacerbating these challenges, as was the lack of **wider adoption** and the lack of **support tools for standardisation and interoperability**.

Relatedly, the **policy agenda was also seen as opaque** by some, when compared to what people were doing on the ground at the project level. It was believed by some that there were **few prescriptive policies** at the moment and **a lot of talk, but with very little action**. Moreover, it was worried that there might be a degree of **groupthink** in policy circles regarding Digital Commons, which created some distance between them as a technocratic policy ideal and the real experience of specific projects and communities. People were worried that over time, this would create **misaligned incentives for the policy and technical communities,** with the policy community pushing for a "one-size-fits-all" or "few sizes fit most" approach that was just **solutionism** by a different name.

Even amongst policy circles, many saw the Digital Commons agenda as currently constituted as rather niche (though with the opportunity to scale). Many pointed out that was **not really a part of the policy agenda for digital government** at the EU-level or within Member States yet, and that a lack of demand or buy-in from governments might not be there while countries struggle with more pressing geopolitical challenges. Additionally, other issues like interoperability were seen as eating up a lot of the oxygen at the EU-level, which many worried

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might have cascading effects in terms of the EU being able to provide the sustainable levels of investment that a Digital Commons agenda demands.

The EU instruments were also seen as having some weaknesses in terms of its ability to **fund and support commons at scale**. People wondered aloud whether antitrust law was sufficient to help combat **market concentration**, get Digital Commons on the agenda at scale, and fight the monopoly power of Big Tech. They also saw a **diverse but under-funded range of funding modalities** that were insufficient to support Digital Commons in a harmonised way. In order for the agenda to be successful, many attendees pointed out that there would need to be **more funding – and different types of funding** – available to support a range of activities, from innovation to maintenance to adoption and scaling.

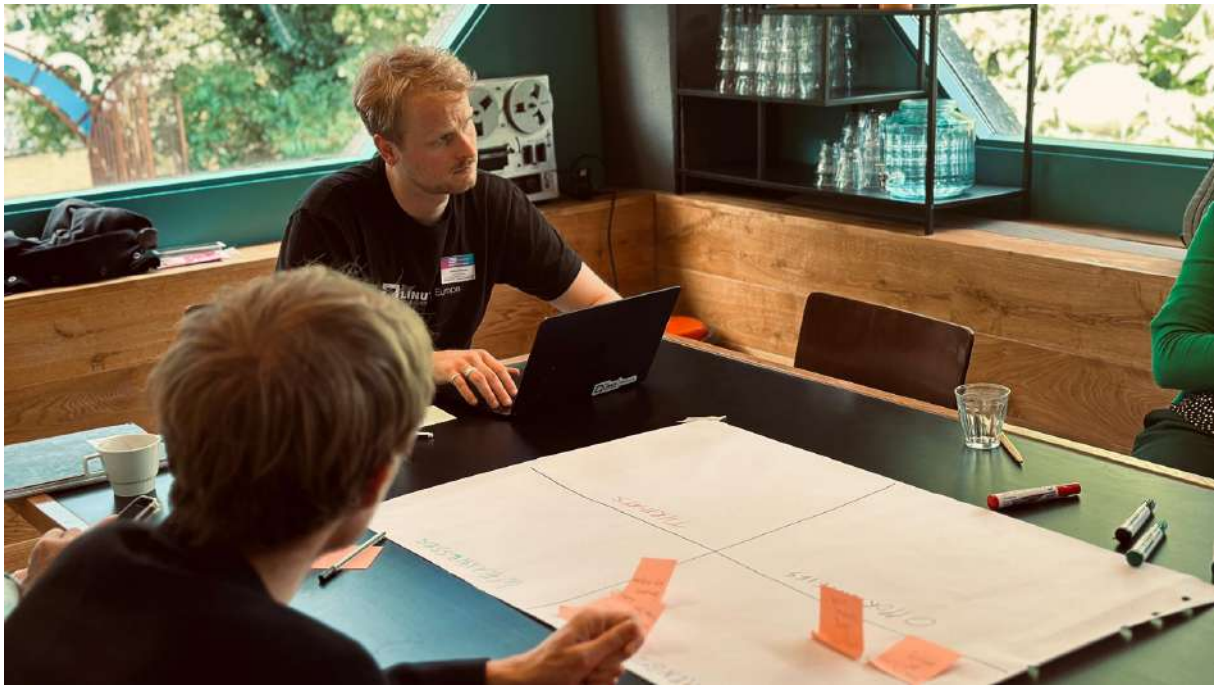

Figure 18 | The workshop discussions were spirited and led through individual breakout groups
(Source: NGI Commons)

3.4.3 Opportunities

Despite those weaknesses, many were strongly declaring the potential of Digital Commons coming out of the workshop, even if there were a lot of unknowns and dependencies on certain things becoming true (or continuing to be true).

Regulation was seen as an opportunity for Digital Commons, if the right attention was given to implementing recently passed European digital regulations in a way that supports the Digital Commons agenda. In this regard, many believed that the pace of digital regulation might slow down a little given the volume passed in recent years, and that there might be an opportunity to **create standards and frameworks** for implementing Digital Commons. For example, some highlighted the Interoperable Europe Act and the **mandate for interoperability in EU texts** as helping to create an opportunity for the Digital Commons agenda to support collaboration around common resources for standardisation and interoperability.

Many people shared their beliefs that a **larger diversity of digital actors** needed to be brought into the Digital Commons agenda. In particular, **integration channels with industry** were seen as a priority, as was the **involvement of telecommunications providers and the media**. Relatedly, another opportunity seen was to diversify the range of initiatives involved in the project. For example, **better defining what Digital Commons are and explicitly defining the relationships between different types of open initiatives** might help to surface new

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innovations that could be connected into the Digital Commons agenda and gain attention, as well as access to resources and funding.

Many also believed the Digital Commons agenda could help make an effective case for **public policy innovation** at the EU-level, which in turn could spill down to projects. If funded and resourced sufficiently, Digital Commons could create **good/strong collaboration between EU researchers**, leading to better collaboration around open science. Using the Digital Commons agenda to **incentivise more participatory open source development** was seen as possibly supporting a wide range of actions and initiatives, including (but not limited to): growth of **public large language models (LLMs)**, a business case for **publishing and sharing open data**, **convergence between similar projects** to support interoperability, and **more collaboration around data spaces**.

Finally, another opportunity identified – and a risk if not done right – was simply to build more awareness and understanding of the Digital Commons and what it represents. This could be done through **funding incentives to provide motivation for communicating the value of wider adoption**, as well as marketing efforts to **promote communication about public values and why it matters**. In turn, this could help bring necessary **political attention** and use that attention to connect different communities.

Figure 19 | Karolina Gyurovszka wraps up the workshop on behalf of the NGI Commons consortium
(Source: NGI Commons)

3.4.4 Threats

While many were optimistic about the potential strengths and opportunities of Digital Commons, they also saw the weaknesses and were therefore also verbose in communicating potential threats.

One concern considered the definition itself. A few people thought there were several **overloaded definitions** for Digital Commons at present (e.g. that they promised a lot and tried to bring many ideas together), and that there was an attendant threat of **concept drift**. They also believed that the proliferation of different understandings of Digital Commons might lead to **initiatives that promise a lot, but where the promise is disconnected from reality**.

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Another commonly identified threat was that, broadly, the scope of the ambition from policymakers might not match the realistic possibilities for these projects actually being implemented through policymaking and/or legislation. For example, many worried that **hesitant policymakers** might abandon the Digital Commons agenda at the drop of a hat, that **existing regulations and frameworks** might dominate all the attention, that **government funding** dries up, or the EU fails to create a strong **market rationale** for governments to adopt Digital Commons at scale. Some also mused about potential other issues, including the implementation of the **Cyber Resilience Act (CRA)** or **central government interferenc**e in Member States.

Governance of Digital Commons was also cited as a challenge that could potentially become a threat to Digital Commons' long-term viability, with some viewing the prospects better than others. Some pointed to challenges in **long-term maintenance**, the **complex governance model** for commons, and the **inherent difficulty of democratising**. Some worried that some of the new efforts around **standardisation (e.g. from the CRA) might leave out smaller initiatives that lack the resources to comply**, therefore making it more challenging for projects to continue governing themselves sustainably.

Many of the attendees also admired the ideals of Digital Commons, but were concerned about the potential threat of **market capture** and/or capture by industry incumbents. In other words, they believed it was very possible that that market logic that has dominated the last 30 years of digital infrastructure development would continue to dominate conversations about using Digital Commons alternatives. Some pointed to **"big market sharks"** which might sweep in and buy out smaller initiatives or **undercut approaches at public commons partnerships**. Others pointed to potential **infrastructure bottlenecks like cloud** that might make it hard for Digital Commons to wrest meaningful control back from the private sector.

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4 APPLICABILITY AND FUTURE CONSIDERATIONS

While Section 3 presented an overview of many of the findings from the different parts of the workshop, this section will consider the applicability of those findings as a whole and identify some future considerations for using them as part of the NGI Commons research, policy, and advocacy work to be implemented till the end of the project. These considerations are based on all of the reflections gathered and analysed during the workshop, as well as the second part of the brainstorming sessions where people addressed more forward-looking ideas regarding the Digital Commons policy landscape in Europe.

4.1 4.1 CONSIDERATION #1 – BE AWARE OF AND RESPOND TO THE POTENTIAL FOR CONCEPT DRIFT:

While there have been many attempts at defining and providing more substantiation to the idea of Digital Commons, there is a risk that people do not connect with the definition and it loses its currency amongst policymakers. This could happen as a result of any number of factors, whether it be the failure of specific policy initiatives or simply the inability to properly socialise and raise awareness of the concept.

Building on this, it will be important for Digital Commons to achieve a similar level of awareness in Europe and be part of the conversation around how to improve and govern highly open technologies in the public interest. This might be achieved through a disciplined message about what comprises Digital Commons – for example, digital resources, communities, and access and sharing rules. Therefore, NGI Commons will need to continue socialising the term and identify ways of talking about it that resonate with decision-makers, even if people don't always agree on the specifics.

This is not a big shift, it just requires redoubling our efforts, and ensuring our research informs our policy-advocacy. The work we are doing to conceptualise common attributes and properties of Digital Commons will be vital in this regard, as will marketing and socialisation of the concept in new fora and communities.

4.2 CONSIDERATION #2 – MORE ACTIVELY MARKET AND RAISE AWARENESS AROUND THE TERM DIGITAL COMMONS:

As a result of some of the considerations highlighted above, it will be important to build a narrative for Digital Commons which extends beyond NGI Commons. Many suggested more active 'marketing' of the term, trying to get it part of more regular policy debates by collaborating more with the media. In this way, it could be useful to test out a stronger and more forceful message about the need to protect the commons, as well as identify the role of Digital Commons in other discourses around digital governance and human-centric digital transformation more broadly.

Attendees suggested different points of emphasis to help make this case. It was also suggested that these efforts could improve the message around inclusion as part of Digital Commons, as well as their role in safeguarding digital infrastructure. Some participants also suggested 'emphasising the local', and actively trying to localise the message to the needs

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and interests of particular Member States. Pursuing both of these paths might help involve communities more in decision-making around Digital Commons, as well as create a federated network of individuals and 'lobbying' organisations fighting for Digital Commons across Europe.

4.3 CONSIDERATION #3 – CONSIDER FUNDING HOLISTICALLY AND EXAMINE IN GRANULAR DETAIL FUNDING APPROACHES FROM NGI AND BEYOND, IN ORDER TO LEARN WHAT WORKS AND WHAT DOES NOT:

In terms of funding, many believed that it would be difficult to quantitatively measure the leverage effect of NGI funding and that the research might uncover a need for NGI to test and experiment with different approaches. In particular, cascade funding for projects – to see what works for projects given their particular needs – was considered an approach worth studying and testing. In order to enable this, alternatives for legal/fiscal ownership and stewardship may need to be explored through NGI Commons policy recommendations.

Most attendees at the workshop seemed to believe that NGI funding was important, but insufficient on its own. Many called for robust public investment at the EU-level, and from Member States, for Digital Commons funding that could complement the NGI innovation funding which is already being provided. Many believed that additional funding would help support both maintenance and innovation, as well as promote digital skills-building and help attract IT competition and talent; for example, funding education for IT and open source skills from primary school onward.

Some other suggestions were identified as well. Given the variability in project sizes, structures, and experience, a participatory approach towards deciding how funding is used was something highlighted as a strong potential of NGI funding. Funding might also need to be long-term and support scale-up, not just innovation, for many projects. It was also suggested that improving the application processes and funding not just one project but the application of a project, could be useful as well.

While the Digital Commons debates create a lot of discussion around governance of digital resources and the communities that support them, it is also important not to forget about the issue of maintenance. Digital Commons are historically hard to govern at infrastructure-scale given the fact that they are decentralised and run by communities, and this requires an active debate around how to maintain them and make them secure, not just adding new features or scaling them. This will require dedicated funding and resources over time.

4.4 CONSIDERATION #4: CONNECT THE DIGITAL COMMONS AGENDA TO OTHER POLICY DEBATES

In order to make a case for Digital Commons at scale, it will be important that the consortium does not allow Digital Commons to become siloed or separate from other policy debates. While the process of making this case is only just beginning with the NGI Commons project, many worried in the workshop that a lack of sustained attention would become a big threat to the Digital Commons agenda.

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For example, there are many important debates happening around digital government, cybersecurity, and standardisation which it will be important to connect into the messaging around Digital Commons. It will also be important to position Digital Commons as part of the broader debates for combating the power of Big Tech and creating public alternatives that help to reduce market concentration.

Another suggestion is to improve the connection between the debates around Open Source Programme Offices, or OSPOs. An OSPO is a centre for excellence and policy coordination around open source, such as Germany's Center for Digital Sovereignty (ZenDis), and they are leading the way in supporting the health of open source communities and helping governments to nurture and contribute back to them. Given the role OSPOs play in formalising and coordinating relationships with open source communities, OSPOs could provide a unique form of 'policy infrastructure' that supports rules and governance for Digital Commons.

Some other suggestions included embedding principles of the Digital Commons agenda in policy being created to implement different pieces of digital regulation, like the Interoperable Europe Act, the Digital Markets Act, and the Cybersecurity Act. But it will also require more novel policy instruments beyond these pieces of regulation, such as being part of public tenders, embedding common principles in future data governance policies, or getting the idea of "public money, public code" into EU legislation. In other words, the Digital Commons agenda will need help with lobbying, and ensuring that the recently adopted regulation is implemented well.

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5 CONCLUSION

NGI Commons approach to Digital Commons is multifaceted, reflecting a commitment to a broad, sustainable and impactful exploitation of digital resources. By fostering collaboration among diverse stakeholders and aligning policies with European values, our aim is that NGI Commons' work will bring clarity to debates about Digital Commons in Europe, evaluating current funding and investment in Digital Commons, and propose a way forward that makes sense in the evolving landscape. This workshop was the first step towards helping us to achieve that.

The workshop was rich and busy in this regard, providing us a useful foundation of inputs from the community which will hopefully lead the way in creating a Digital Commons environment that serves the interests of all its citizens and contributes positively to global progress. During our brainstorming sessions, participants broadly agreed that the future of the Digital Commons landscape in Europe should capitalise on its strengths, address weaknesses, mitigate threats, and seize opportunities to flourish – even if they differed in their understanding of Digital Commons and how to achieve that.

As the detailed findings above make clear, the Digital Commons agenda has stirred useful conversations about how to create public alternatives to Big Tech solutions as part of our use of technology across the whole of society. While the Digital Commons landscape in Europe is still young, there are some strong foundations and even stronger opportunities for us to seize on as NGI Commons.

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APPENDIX A: BRAINSTORMING ACTIVITIES (RAW DATA)

SWOT ANALYSIS – THE STATE OF THE DIGITAL COMMONS LANDSCAPE IN EUROPE

Question: *What are strengths, weaknesses, opportunities and threats to Digital Commons in Europe right now?*

Strengths

- No one can disagree with it
- Willing to collaborate
- Attention
- Recognition by EU and EC
- OSA funding
- EDIC – intent
- Understanding a shared goal of working for "good"
- Flexible
- "Proclivity to collaborate"
- Structured initiatives around federated organisations
- Public funding availability (not enough)
- EU values are somehow supporting commons mindset
- Potential for diversity
- Moving from regulation to frameworking
- Net neutrality
- Good basis of digital skills
- Public funding frameworks → Large ecosystem
- Public goods, public codes, governance hierarchic
- Concretising bottom-up initiatives
- Easy to join for interested persons/individuals (at least in theory)
- Different communities of practices throughout EU, and possibility for EU to connect
- Diverse ecosystem already and learning from each other
- Complimentary nature of DG until European challenges such as: fragmentation, high market concentration
- Inherent association with public values, public goods, public intention
- Commons delivery foster community trust
- Elimination of the "black box" of data & decision making

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- Efficiency of funds
- Commons raise the trust
- Community: The motive and the narrative of the commons can bring community together

Weaknesses

- Fragmented
- Policy agenda seen as opaque
- Lack of established, formal “commons culture”
- Not top EV Gov priority
- Detachment from technical communities
- Lack of transparency
- Inside baseball group think
- Wider adoption issues
- Integration to/transition from existing systems
- Misalignment of “insider” incentives (esp. in business)
- Lack of funding
- Long-term sustainability
- Not known enough “ordinary” EU citizens
- Solutionism with Digital Commons is still solutionism
- The EU bodies are not role models
- Not a clear definition of what it is (?)
- Very few prescriptive policies
- Publication of open data usage – does your company use open data?
- Role models in diversity
- Caught up in meetings, no action
- Definition clarity → Also in relation to interoperability
- Lack of awareness for advantages of open source
- Adoption by general public
- Terrible UX
- No marketing department → ambassadors! (ex: Radio 1)
- Documentation
- Ownership (who owns the code @ FOSS?)
- Fragmentation
- Antitrust law
- Burn out

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- Sustainability (long term stability)
- Lack of government buy-in
- Lack of support tools for standards results in more fragmentation
- Diversity of practices leading to lack of homogeneity creating more efficient use of resources
- Connecting initiatives on the technical level →
- “everything is different”

Opportunities

- Regulation (DMA, IEA, DA, PSP2)
- Failing fast and failing often
- Creating standards and frameworks
- Small community to connect with
- Involve telco + media
- Incentives/motivation/communicating value for wider adoption
- Building industry integration channels
- Explicitly define and leverage relationship to other initiative types (data spaces, altruism, portals)
- Connect the EDICs
- Political attention
- Good/strong collaboration between EU researchers leads to good FLOSS for science
- Understand the business case of publishing open data
- Public LLMs
- EDI framework (bringing opportunities to minorities)
- Participatory OSS/H development
- Incentivise the sharing of open data
- Fund the key converging projects to focus on
- Building bridges between technical & non-technical
- Alignment along (European) values
- Awareness. Communication about public values! Why it matters.
- Subsidiarity for managing ← complexity
- Public policy innovation (EU)
- Subsidiary funding/possibilities
- Interoperability in EU texts
- Flexible or opportunistic roadmap

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Threats

- Big market sharks
- Hesitant policymakers and landscape
- Regulations
- Gov't funding
- Lack of market rational (business models, sustainability, incentives)
- Overloaded definitions
- Concept drift
- Infrastructure bottlenecks (cloud?)
- Tragedy of the commons (capitalism0
- Further loss of value outside of EU (e.g. USA)
- Use AI to support data validation by citizen scientists
- Public commons partnerships (ex: IGN in France)
- Laziness
- Losing certain classes of society → who can benefit from the commons, and who will benefit
- Capture by industry incumbents
- CRA
- Weakness of civil society and communities
- Central government interference
- Maintenance long-term
- Surveillance legislation
- Complex governance model → Inherent difficulty of democratising
- Biggest actor could set the standard (de facto)
- Standards leave out smaller initiatives that lack the resources to comply.
- Middle ground between public and market & between Big Tech or solitary work
- Lack of public sector or public authorities
- Recognition of Digital Commons leading to disconnected initiatives from reality

OTHER FUTURE OPPORTUNITIES AND PRIORITIES

Question: *What are some future opportunities and policy priorities you would like to see represented in the European digital policy agenda and related EU funding programmes/support modalities? In particular…*

What are some good examples of current Digital Commons initiatives, either at the community level or the policy level?

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- BCN Supercomputing Centre (BSC)
- Support for maintenance (Sovereign Tech Fund)
- Strategic long-term investments (Sovereign Workspace)
- Blue Hats prizes to support EU FLOSS
- Blue Hats Prize
- Supporting “open AI” and computing infrastructure
- Sov. Tech Fund
- GNU Taler
- Datalog Es
- NGI Pilots
- PSDII
- Cooperaticu (?) OGD Austria
- Open Knowledge Maps
- Signalen and Nextcloud → not easy, lots of conditions
- qGIS
- Wikipedia and the wiki-family
- Bottom-up small project funding through NGI!
- OS2
- CHAOSS – sharing documentation & metrics for OS projects
- Linux – clear strategy and open source

Bad examples

- Amazon
- Commercial opps are mining value and nothing is returned (to EU)
- Protect collective ownership – not
- Not harmonised freedom of panorama
- Humanitarian data exchange
- Technofeudalism! taxation on the platform

What policy priorities are missing from the current strategic agenda and what would you like to see represented?

- Inclusion
- Interoperability everywhere
- EU level public fund
- Use public funds to attract IT comp. + talent
- 27 OSPOs

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- Safety
- UPIs
- Emphasise the local
- EU NIIST
- (More) centralised information & communication
- Coupling techno platforms to digital and analogue commons (Amazon ←> store owner)
- Formalising type of non-profit stewardship entity
- Move from commercial full-fledged suite (Google Drive/Microsoft) to open suite with multiple open components
- Maintenance!! of code not only new features!

What would you prioritise for the Commission and NGI to help strengthen the governance of Digital Commons?

- Standards!
- Pipelines for innovation and reuse
- Dynamic results → measurement → evaluation → iteration
- Protect the commons!
- Fund education from primary school onward
- Human-centric digital transformation maturity → focus
- Market the term DC
- Digital Commons as part of education on primary level
- Idea of ‘common core’ central to European Union
- Improve governance? Diversify, but have a lower bar. Learn and reflect, Decidim ←> EU Voice, EU Taler
- Involving the communities in decision-making

What would you prioritise for the Commission and NGI to improve the funding and support Digital Commons?

- Cascade funding help
- Involve telco media
- Funding based on usage and dependency
- Governance framework for smaller projects
- Helping the Digital Commons with lobbying
- Fund education
- Sometimes fund not one project but an application of a project

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New ideas

- Simplified application processes
- All user/citizen generated data (from any opp) should be in a commons
- Explicit support for commons within data governance policy
- Long-term funding + participatory approach
- Public money public code into EU regulation
- A way to easily receive funds from different countries (fiscal host)
- Federated network fighting for Digital Commons
- Public tenders: Bonus for DC contributors

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APPENDIX B: AGENDA FOR THE WORKSHOP

Figure 20 | NGI Commons Workshop 2024: social media card
(Source: NGI Commons)

9:00-9:30 | Breakfast and Registration

9:30-9:40 | Event Opening and Introduction to NGI Commons
Presented by Monique Calisti, Martel Innovate, and Nicholas Gates, OpenForum Europe
The workshop will be opened by the consortium members of NGI Commons and feature an introduction from Monique Calisti, the CEO of *Martel Innovate* and Project Coordinator for NGI Commons. Monique will introduce the project to a broader audience and highlight its goals and outcomes, as well as preview what is to come from the workshop.

9:40-10:00 | Introduction from the European Commission
Presented by Jean-Luc Dorel, European Commission
This presentation will invite the *European Commission*, project sponsors for NGI Commons, to present their view on the goals and outcomes of the NGI Commons project, as well as discuss expectations and objectives for the project over its three year lifecycle. It will also situate NGI Commons in the broader context of the Next Generation Internet initiative and the broader ecosystem of NGI projects that the Commission supports.

10:00-10:15 | Introduction to the Digital Commons EDIC
Moderated by Lieke van Schouwenburg, Ministerie van Binnenlandse Zaken en Koninkrijksrelaties
This presentation will invite members of the *European Digital Infrastructure Consortium* (EDIC) to discuss the emerging opportunity for digital commons funding in Europe by presenting the view of the EDIC and its role in the broader digital commons ecosystem. In doing so, it will present the goals and outcomes of the EDIC over its project lifecycle and discuss the potential impact on members and beneficiaries.

10:15-10:45 | Introduction to the European Digital Commons Landscape
Presented by Jan Krewer and Paul Keller, Open Future Foundation
This presentation will be led by *Open Future Foundation*, consortium members of NGI Commons, and will briefly survey the history of digital commons policymaking in Europe, from earliest discussions in academic and policy circles all the way up to the recent attention provided by France's EU Presidency in 2022 and the European Commission. It will discuss the

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consensus definition of digital commons put forth by the French Presidency and unpack how the understanding of digital commons differs across European Member States and public administrations, as well as survey what the role of businesses and civil society has been to date. It will conclude by presenting an initial taxonomy of digital commons policies and inviting brief reflections from the audience.

10:45-11:45 | Workshop #1: What Do We Mean When We Talk about Digital Commons?
Moderated by Valérian Guillier and Mélanie Dulong de Rosnay, CNRS
This workshop will be moderated by *Centre national de la recherche scientifique* (CNRS), consortium members of NGI Commons, to invite feedback on research to date. CNRS will present an overview of the work done to date on conceptualising and operationalizing a definition of digital commons which is useful for evaluation. The session will unpack some of the common definitions of digital commons and present the emerging perspective of consortium partners, as well as overview the methodology and criteria for evaluation developed to date. It will also facilitate discussion with the audience, inviting perspectives on the technical, governance, and values-laden discussions inherent in defining digital commons

11:45-12:00 | Coffee Break

12:00-13:00 | Lightning Talks: European Digital Commons Initiatives
Moderated by Astor Nummelin Carlberg, *OpenForum Europe*
This session will be moderated by Astor Nummelin Carlberg of *OpenForum Europe*, consortium members of NGI Commons, and will invite attendees to present perspectives from their existing initiatives and communities doing work in this space. It will include 6x presentations of about 5-6 minutes each, with several minutes for Q&A from the audience.

13:00-13:45 | Lunch Break

13:45-14:45 | Workshop #2: Discussion of Criteria for Evaluating Leverage Effect of NGI Funding
Moderated by Cailean Osborne, *Linux Foundation Europe*
This workshop will be moderated by *Linux Foundation Europe*, consortium members of NGI Commons, to invite feedback on research to date. LF Europe will present and discuss plans to research the “leverage effect” of NGI funding by providing a background on NGI funding, discussing the methodology currently being deployed, and presenting the selection criteria for choosing NGI funded projects. The session will gather input on refining the criteria, brainstorm/refine impact metrics, and highlight emerging use cases from the digital commons ecosystem. It will also facilitate discussion with the audience, gathering ideas for additional elements to include and determining next steps for moving the research forward.

14:45-15:00 | Coffee Break

15:00-16:15 | Brainstorming #1: Mapping Priorities for Digital and Internet Commons
Moderated by Nicholas Gates (OpenForum Europe), Jan Krewer (Open Future), Cailean Osborne (Linux Foundation Europe), Valérian Guillier (CNRS)
This session will be a facilitated brainstorming exercise which will invite participants to share their perspectives, beliefs, opinions, and priorities for digital commons policymaking in Europe. Participants will be broken into four groups.

16:15-16:45 | Brainstorming #2: Identifying Priorities for Digital and Internet Commons
Moderated by Nicholas Gates (OpenForum Europe), Jan Krewer (Open Future)
This session will be a synthesis exercise which will help bring the brainstorming outcomes together as part of a wrap-up exercise, mapping those priorities to different parts of the digital commons agenda. Participants will hear summarised findings from the moderators, as well be invited to provide additional clarifications and reflections

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16:45-17:00 | Wrap-Up and Conclusion
Presented by Monique Calisti, Martel Innovate, *Nicholas Gates and Astor Nummelin Carlberg, OpenForum Europe*
This session will feature a final thank-you from *OpenForum Europe* on behalf of all the workshop facilitators, as well as invite final words from the European Commission and Project Coordinator Monique Calisti.

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