

## Building the Digital Commons - toward a shared, sovereign and collaborative internet



The public event "Building the Digital Commons" gave an insightful overview of the Digital Commons landscape in the Netherlands and abroad. The event convened experts from different fields resulting in a dynamic and lively discussion. The panel was moderated by our very own Sophie Bloemen alongside Koos Steenbergen from the Ministry of Internal Affairs, with the speakers Fabrizia Benini from the European Commission's DG Connect, Aik van Eemeren from the Gemeente Amsterdam's Digital Innovation project, Gijs van Maanen, expert on data commons from Tilburg University, and Daphne Muller, manager at NextCloud.

This resulted in quite the interesting panel with positive, insightful exchanges. Sophie Bloemen and Koos Steenbergen started the talk by welcoming everyone and giving a quick introduction of the Transition Collaboratory on Digital Commons. The Ministry is looking into Digital Commons because of the vast potential it holds in terms of innovation and the implementation of social values into digital systems. They then followed by presenting these values, some of which are: Economic transition - Democratization - Sovereignty - Resilience. The presentation then gave examples of different types of structures that could be considered Digital Commons initiatives such as: **open-source software**, **platform cooperatives**, **knowledge commons**, **and decentralized social networks.** Each one entails its own distinct form of governance, management, and participation practices but they necessarily share certain things:

- Shared resources
- Collective ownership
- Democratic governance
- Decentralization

Each form of Digital Commons comes with its own challenges and potential. For instance, there is some contention as to whether all open-source software can be considered Digital Commons. While the resource (the software) is open, it can be that the management of that resource is not. Hence, a big focus of the panel was on the importance of facilitating collaboration to safeguard the values of the Digital Commons. Given the panel's diverse backgrounds, the discussions revolved around the roles of different stakeholders such as governments, developers, private firms, and academics.



Fabrizia Benini began her talk shedding light on the European Commission's perspective on the Digital Commons to which she attributes much potential for the propagation and safeguarding of European values as well as collaborative innovation. According to a study done at the Harvard Business School, the global demand value of open-source software is estimated at 8.8 trillion dollars, an emphatic figure showcasing the need for commons-based systems. By their very nature, the Digital Commons promotes privacy, inclusion, and equity, all the while giving citizens more agency. These are values shared by the EU and are clearly laid out in the "European Declaration on Digital Rights and Principles", a document that explicitly states the EU's commitment to security, collaboration, equity, and sustainability online.

She then connects the question of sovereignty with the global landscape. Fabrizia mentioned India Stack, a set of open digital public goods that enable collaboration between developers, governments, businesses, and citizens. In China, community open source has also been added in the latest <u>five year plan</u>. While these can be considered as efforts to harness soft power, the key point is that the Digital Commons allows for governments to digitize in an autonomous and sovereign manner. At the same time, this also creates space for international collaboration, which Fabrizia believes to be especially important especially for digital innovation and the economic transition. This potential is now accepted globally; for instance, the UN's Global Digital Compact is an effort to bring together all stakeholders, to "outline shared principles for an open, free and secure digital future for all". Fabrizia concludes by hinting towards the importance of developing a sort of value compass for the new digital ecology. With the emergence of Web 4.0, cryptography, and virtual worlds, even larger swathes of data will be created and we need to develop a sense in terms of how to deal with this information.

Daphne Muller then introduces NextCloud and explained the viability of open-source based business models. NextCloud itself operates under this model, allowing customers to modify code for their own purposes and monitor their own data. The company maintains an industry-standard product and service, catering to bigger enterprises and smaller users alike. NextCloud allows its customers to submit suggestions to the project advisory board, thereby permitting them some say on the product roadmap.



Daphne then briefly explains how the NextCloud community collaborates together. Most of the work is done on GitHub where NextCloud's open standards allow users to fully edit, monitor, and audit the code to their ends. This happens on a global scale with users making different use of the code depending on where they are and their different use cases for the code. Mostly these developers are either curious, encounter something they'd like fixed, or do their thesis projects with NextCloud.

Gijs van Maanen shared some insights from his research on data commons. What stood out to him at first was that there are different traditions with respect to understanding the 'commons'. There is the more classical economic tradition associated with Elinor Ostrom where people come together to manage environmental resources like a community managing the resource of fish in a shared lake. So what does it mean when we transpose such an economic framework on data? Then, there is the legal/ institutional interpretation, that seeks to establish commons as a kind of institutional governance model.

Besides covering the different interpretations, Gijs also mentions the importance of a structure within the commons that ensures the proper sharing of resources. He cites the importance of making a distinction between managing the resource and managing the system in which that resource resides. When it comes to data commons for instance, he believes that besides the data itself, the technical, social, and infrastructural layers in which it resides need to be carefully managed. In other words, it is important to have a sort of commoning of all layers of the stack, including how it is managed from a leadership point of view.

Gijs also shed light on drawing a difference between public and common goods. Public goods are shared with the society, they are open and accessible to all. Common goods on the other hand can belong to a certain community, they can be gated and not at all entirely open. Public goods are more under the responsibility of the government. The task is to ensure an infrastructure for citizens that allows proper access and function of the public good.



Gijs also gave some examples of data commons. In Detroit, for instance, a neighborhood community pooled their data in hopes of reducing the amount of traffic accidents nearby. They then collaborated with the government using this data in order to implement changes and work towards reducing the accidents. Gijs suggests that what is most interesting in this case is not just the fact that this community had control over the use of their data but also, and perhaps more importantly, that they become recognized as a community and legitimate party themselves.

**Aik van Eemeren**, bringing his experience with working on public technology at the Gemeente Amsterdam for many years, then shared his thoughts. He starts by talking about the importance of safeguarding the values of the Digital Commons. These values, if not properly protected, are subject to change. These changes can come in the form of either new government leadership or, in the case of the private sector, investors that have a different vision for the company. Within this transition, some values are kept while others are discarded.

He outlines some projects he's collaborated on, from the multistakeholder Decode research project, to managing Airbnb's presence in Amsterdam by introducing the requirement of a registration form to the Gemeente for renting out a property. The latter example was then adopted by dozens of cities in Europe and eventually became standard practice. This showcases how a small project can end up playing an important role.

Aik's current project is working on making Amsterdam digitally independent. This entails developing tailor-made systems by and for Amsterdam that do not rely on big corporations. This is to ensure autonomy of both the Gemeente and its citizens. However, he also highlights the challenges that arise as a result of this transition. Mainly, it seems that people are reluctant to switch to alternatives like NextCloud as opposed to Microsoft. The issue remains unresolved due to its complexity. Existing systems are deeply intertwined and a transition can be as costly as it is risky. Moreover, this shift would also affect how budgeting is done given that large amounts of money go into services like Microsoft's Azure.

Above all, however, the problem stems from how the narrative of this transition is presented. Seeing solutions such as NextCloud to be 'alternatives' to mainstream platforms does not provide the public traction needed to make a significant change. Rather, Aik suggests that these platforms be considered in and of their own right.



# Conversation with Audience

After the individual talks, the panel convened to have an open conversation with the audience. Main issues that were discussed were the need for i) protection from outside investors, ii) looking at digital commons as new opportunities for innovation rather than alternatives and iii) the fact that Big corporations usually have systems that are unified and interoperable. Yet for open standard products so far that isn't the case, and there is a role for government there. Here below we give a short overview of opportunities and insights identified in the overall conversation.

### **Opportunities and insights**

Human rights and public values For the EU, the Digital Commons are a means to ensure sovereignty but also ensure individual rights and certain values in the design and implementation of digital infrastructure. By their very nature, the Digital Commons promote values such as privacy, inclusion, and equity, all the while giving citizens more agency. These are values shared by the EU and are clearly laid out in the "European Declaration on Digital Rights and Principles", a document that explicitly states the EU's commitment to security, safety, and sustainability online. Governments are therefore very interested in the concept of the Digital Commons as a potential new pathway to structurally secure individual rights. For citizens, it is not just about the commons themselves but also the possibility to develop autonomous and recognized communities.

Innovation and EU positioning On the other hand, the Digital Commons can and should be a tool to bring different parties together for the sake of innovation. In fact, the Digital Commons make possible both the autonomous development of governments and international collaboration. Throughout the event, the panel reiterated its emphasis on multi-lateral collaboration that brings together stakeholders from governments, software developers, civil society, the private sector, academia, and citizens. Within the context of the EU, bringing together these players could help in rendering the EU a powerful digital standard-setter and to make innovative strides towards building a new digital landscape. Globally, there are also efforts being made to ensure this drive for collaboration. For instance, the UN's Global Digital Compact is an effort to bring together all stakeholders, to "outline shared principles for an open, free and secure digital future for all".



#### Economic

Beyond political potential, the Digital Commons offer an excellent opportunity for an economic transition that ushers in new and interesting business models. As mentioned a Harvard Business school study indicates the global demand value of open-source software is estimated at 8.8 trillion dollars. This figure represents open-source only, meaning that the broader use-cases of Digital Commons would result in an even higher number.

Therefore, there is a massive market potential for the Digital Commons. NextCloud showcases the viability of open-source based business models. NextCloud itself operates under this model, allowing customers to modify code for their own purposes and monitor their own data. The company maintains an industry-standard product and services, catering to bigger enterprises and smaller users alike.

NextCloud also allows its customers to submit suggestions to the public advisory board, thereby permitting them some say on the product roadmap. There are a host of other open-source based companies that operate under this model offering a suite of high quality products and services. There are however also opportunities for access to technology for SME's, increasing their potential through the creation of a level playing field.

#### Protection of the Digital Commons

However, all the potential that the Digital Commons carries with it also makes it a target. The overall sentiment during the event was somewhat protective of the commons. Participants expressed their concerns about ensuring a resilient Digital Commons that upholds its values despite changes whether that be in government or the private sector. These changes can come in the form of either new government leadership or, in the case of the private sector, investors that have a different vision for the company. It seemed that this was the main concern the participants carried. In a way, the solution is simple: Ensure more open collaboration between different stakeholders through structures that maintain the values of the Digital Commons on all levels of the Stack.

#### Conclusion

The event itself is a testament to this desire to share knowledge and experience. It was an overall fruitful conversation that shed light on the current state of the Digital Commons and the drive to protect it. To build the Digital Commons is to foster a safe, equitable, sustainable, and overall collaboratively-driven digital landscape.