

DIGITAL
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FUND

RFP #4

APRIL 2024

The Digital Infrastructure Insights Fund, established in 2018, is a global multi-funder initiative supported by Ford Foundation, Alfred P. Sloan Foundation, Omidyar Network and Schmidt Futures.

Together, they sustain a platform for academics and practitioners to better understand how *open digital infrastructure* (see “Scope”) is built and deployed. Through open calls and commissions, D//F curates a body of research and implementation insights that advance a mutual goal: to ensure a public commons of technology, for the benefit of everyone. By fostering collaboration, experiments and sharing of knowledge, the circle of funders supports those who build, use, and rely on critical open source projects on the base layer.

Safeguarding sustainable, open digital infrastructure is a matter of public interest. Without a deeper understanding of the dynamics influencing and more just ways of maintaining our shared digital resources as joint effort across foundations, governments, businesses, academia and volunteer communities, inequities will follow.

These could manifest as the consolidation of essential services within monopolies or the potential loss of access to knowledge and (digital) means of production.

Our approach is interdisciplinary:

- we are looking for analyses on how open digital infrastructure interacts and intersects with politics & sovereign responsibilities, diverse economic sectors and scientific research throughout the disciplines.
- we seek to investigate the issues of under-maintenance and potential undermining of infrastructural Free and Open Software (FOSS), and to explore any geographical or other disparities/ dichotomies within the communities responsible for providing and sustaining this open digital infrastructure amid evolving economic, regulatory and socio-technical environments.
- we aim to back the development of pertinent work that examines the convergence of FOSS infrastructure with social movements focused on democracy, rights, justice, the environment as well as the advancement of knowledge in academia and beyond.

Examples of Past Work:

In 2018, 2020 and 2023 the partnership published three open RFPs that resulted in groundbreaking [research and hands-on experiments](#) to better understand the incentives and constraints that influence the creation and maintenance of open digital infrastructure, as well as its use throughout science and research, administrations or the economy.

The **current project portfolio** (Cohort #3) and exemplary research questions can be accessed here:

<https://infrastructureinsights.fund/#projects>.

Open Digital Infrastructure as a Digital Commons

To pursue D//Fs agenda, the 2024 RFP now invites further proposals to study the rationales, production, use, governance and maintenance of open digital infrastructures.

The Open Call #4 runs from April 2nd to June 2nd. Investigations could be looking at, but are not limited to, the aspects listed below.

Open Digital Infrastructure (ODI) represents the set of Open Source code, institutional settings (f.i. technical standards) as well as knowledge assets that **building block- technologies** (like software libraries, compilers, or communication- and network protocols) are composed of. They are created by individuals, in volunteer communities, in research institutions and SMEs or other corporate environments. Together, they form a foundation of free and public code that is designed to solve common challenges- firstly, in programming, but when applied, also to provide a multitude of (digital) core functions for society.

ODI is a distinct area of focus sitting in intersection with other critical technology ecosystems like hardware, the internet and data, has personal (needs-related), social (functions), economic (business activities) and cultural-political components.

It hence can be classified as a genuine common and **pertains to us all** (see [Eghbal, Roads and Bridges 2016](#)): Everything in our modern society, from social services and hospitals to banks and collaborative research depends on it. Open Digital Infrastructure provides essential functions for society by f.i. reducing the cost of establishing new businesses, supporting data-driven discovery across research disciplines, and granting access to crucial technical innovations like encryption that would otherwise be too expensive.

In recent reports, it has been approximated that Free and Open Source Software (FOSS) building blocks make up 70-90% of all software solutions globally - and have long become a crucial asset encompassing both public and private sectors.

100% of this **digital infrastructure relies on humans behind the code**, supplying it and tending for it. Their labor is knowledge- and time intense: substrates that don't reciprocally scale with the programs they produce.

Critical software projects at the core of our modern world thus are often under-resourced and their (volunteer) maintainers overworked and overlooked.

More insights are needed to distinguish how Open Digital Infrastructure and its creators can be supported best.

There is a growing need for specialized and updated knowledge about the production, governance, exploitation, sustainability and security of FOSS -

Infrastructure from different actors, as reliance upon those digital base components also grows.

We are generally interested in a **set of core research areas**, listed below - but are looking forward to read your individual take on our scope:

- **Boundaries of Openness:** Normative & Ideological Foundations, political economies, legal loopholes & other challenges in FOSS (Infrastructure)
- **ODI as accelerator:** Role & adoption in Knowledge Dissemination and Innovation from Basic Research to Field Work in academia, factories and beyond
- **Building “Cyber Resilience”** from Weekend Projects to Critical Infrastructures: DevOps, Consolidation, Regulation, (sociotechnical construction of) supply chains
- **Group- and Power- Dynamics** impacting the development of communities, artifacts, and policy in FOSS
- **ODI and its intersections** with materiality, technical standards, hardware, coding practices, automation and AI, data pipelines, connectivity ...
- **Geopolitics, Policy Frameworks, Markets, Law:** landscapes shaping the trajectory and long-term sustainability of ODI
- **The Human Infrastructure in Digital Infrastructure:** Global Shifts, Demographics and other opportunities (or impediments) of building and maintaining software and communities
- **Social, Material, Environmental, Temporal (...)** **Dimensions of Sustainability** (including observations on practices of Sustenance & Sunsetting in infrastructural FOSS-Software Lifecycles)
- **History & Ontologies:** Learning from Public Works and other (historic) infrastructure for the custody and care of ODI, bridging and discussing paradigms from open innovation to digital public goods
- **Models & Metrics:** Defining and demonstrating Health, Risk and more

We´re also soliciting the implementation of (small-scale) prototypes like frameworks, policy work or strategic communications that help achieve more sustainable practices in the communities providing and deploying ODI components.

Key Facts

Due Date Proposals:

June 2nd 2024

Application via:

[Screendoor](#) (application platform)

Selection of successful projects completed: in late July 2024 (tbc.). A board of external experts helps us identify the most relevant research questions.

Research period must start: Between mid-August 24 and October 24 (Kickoff Workshop for Grantees planned for the second week of October tbc.).

Grant Amount, Number of Grants & Disbursement:

We seek to support proposals addressing a range of issues and scopes in a ballpark between \$50k – \$100k (incl. overhead costs) for 6 - 12 months projects (exceptions in duration possible for up to 14 month-proposals). Grants will be disbursed against milestone achievements.

We expect to select a total number of 7- 10 projects for the Cohort #4. The individual size of the grant will be negotiated post-selection.

Further Opportunities: For more information about the Digital Infrastructure Insights Fund and its initiatives, please visit <https://infrastructureinsights.fund>.

To stay updated about all D//F activities, subscribe to our [Newsletter](#).

Eligibility Criteria

- Individuals, Organizations (nonprofit and for-profit) as well as Academic Institutions are eligible.
- Individuals and Organizations based outside of the United States and Europe are especially encouraged to apply.

For more information and sending your proposals, visit the Digital Infrastructure Insights Research - Application Platform

Tips

- Make sure to **read the RFP thoroughly** and familiarize yourself with prior grant projects to ensure to meet the scope, but not to replicate.
- **Be specific in your research questions** - and specify the open foundational technologies, systems or maintainers it centers (keep in mind: Infrastructure ≠ Software application), too.
- **To be able to fund implementation experiments**, we need to know which prior findings you base your idea on, and/or which communities you'll work with to make ODI more sustainable.
- **Definitions vary:** If your proposal approaches open digital infrastructure, communities & the public interest (f.i. consolidation, openness, sustainability, disparities) transcending our definitions, put your lens in context to our scope and explain.
- **No technology fund:** We don't fund software development in itself- unless it enhances a specific research questions related to our scope and serves a scientific purpose in this context.



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