1. **Summary**

Open Technology Ecosystems such as Open-Source Software, Open Standards, Open Protocols etc. have played a significant role in lowering barriers of innovation, making systems interoperable, and providing alternatives to proprietary software.

Omidyar Network is seeking a consultancy to conduct a landscape analysis of this Open Technology Ecosystem, identify critical challenges that need capacity building, and issue a set of recommendations for Omidyar Network to evaluate and intervene.

Please indicate a preliminary budget, team credentials, and expression of interest by July 12th, 2021, and a full proposal by July 26th, 2021.

1. **About Omidyar Network and Responsible Technology**

Omidyar Network envisions a world in which individuals have the social, economic, and democratic power to thrive.

We are a social impact venturethat works in partnership to reimagine critical systems, and the ideas that govern them, to build more inclusive and equitable societies, for the benefit of the many - not just the few- across the globe.

One of our core programmatic areas of work is Responsible Technology. Technology has undoubtedly made the way we work, play, and connect easier than ever. It has brought advantages to all of our lives. But we’ve seen a collapse in trust in the use of digital technologies, suggesting the time has come to reset the tech industry, restore competition, and renew trust. The world needs more than convenience from tech; we need it to be safe, just and compassionate for all.

To accomplish this, we need to create the conditions that enable a new wave of more purposeful tech entrepreneurs and empowered users, while also establishing strong checks and balances that hold mature tech companies accountable and support competition.

1. **What is Open Technology Ecosystem? What is our initial hypothesis?**

We are hypothesizing an umbrella term that envelopes r open-source software, open standards, open protocols etc. and calling them Open Technology Ecosystem for the want of simplicity. The internet is built on a set of open standards, and open source software dominates the infrastructure on which many of the Big Tech companies have built their applications, however, our hypothesis is that despite its ubiquity there are critical challenges facing this ecosystem including creation of new open infrastructure, maintenance of existing critical projects and ensuring that standards are interoperable, but also have adequate representation from various stakeholders who currently inhabit the internet.

* **Open-Source Software:**
  + Over 96% of Codebases use open-source software, but many code databases have not been updated leading to security issues
  + Few open-source projects receive lot of attention, but some critical infrastructures often don’t receive funding
  + Ability of open-source products to lower the barriers of innovation and provide alternatives to Big Tech incumbents
  + Developers lack support, and there is an urgent need for greater diversity in the broader community to bring different perspectives to technological outcomes that emanate from Open Source
* **Open Standards and Open Protocols**
  + The internet was founded on open standards, and many Standard Setting Organizations have historically been multistakeholder governed, however some countries and vendors are starting to threaten this
  + There is a risk that a few vendors and sovereign nations are proposing new standards for newer technologies including vehicle surveillance, facial recognition, video monitoring and this will be followed by 100’s of other countries who don’t have the resources to develop standards themselves
  + There is limited Civil Society Representation in Standards Setting Organizations
  + There is a need to bridge the linguistic gap between what standards and protocols as technical terms convey versus impact of these technicalities which result in market / societal outcomes. For example – There are stakeholders who care about a safer and secure internet but don’t understand the language of TCP/IP and other protocols, and there are stakeholders who are passionate about protocols but need more wider education in terms of the policy, law and other ramifications of their decisions.

1. **Omidyar Network Investments in Open Technology Ecosystems**

Omidyar Network is more familiar with Open Source with our involvement in the [Critical Digital Infrastructure Initiative](https://omidyar.com/major-philanthropies-tackle-inequality-by-strengthening-how-open-source-code-is-developed-and-maintained/) where we supported research and application of open source critical digital infrastructure challenges and Ethical Source and the Corporate Accountability Lab, which challenges the notion that open source is “values neutral” by deploying tactical, practical licensing and legal frameworks to allow developers to center values in their work

Our knowledge and investments in Open Standards and Open Protocols need to be significantly augmented from a first principles standpoint.

1. **Objectives**

The objectives of this project are to:

* Conduct a landscape analysis of the Open Tech Ecosystem,
* Identify the critical challenges and needs of this ecosystem, and
* Make a series of recommendations for Omidyar Network to intervene to ensure the community and ecosystem continues to grow responsibly
  1. **Conduct a landscape analysis of the Open Tech Ecosystem**
     1. Brief history, overview, and power dynamics in this ecosystem
        + 1. Also indicate what else should be included in Open Tech Ecosystem
          2. We expect this analysis to include primarily “Soft” Open Technology Ecosystems. Consultancies can decide if they want to allude to any “Hardware” implications per their own judgement and knowledge
     2. Evolution and Current state-of-affairs in North America and Europe
     3. An inclusive network mapping of stakeholders and various actors working in this ecosystem
  2. **Identify critical challenges and needs of this ecosystem**
     1. A set of needs and capacities of actors in the ecosystem to amplify and accelerate their impact
  3. **Make a series of recommendations for Omidyar Network to intervene to ensure the community and ecosystem continues to grow responsibly**
     1. Recommendations that tackle issues at a systemic level beyond frameworks that rely on individual responsibility
     2. Short and Long-term strategic interventions including identification of grantees, convenings and networks etc.
     3. Comparison of initiatives undertaken by other funders and where Omidyar Network can be additive?

1. **Scope of work**

We seek to partner with a firm / individual with knowledge, networks, and experience in the Open Tech Ecosystem. Our partner is expected to conduct primary and secondary research, gather evidence, and produce a report for Omidyar Network that can inform us to develop a strategy for intervention in this space. This work includes

* Secondary research and literature survey of existing research
* Firsthand telephonic or in person conversations with different stakeholders such as Open Source Foundations, Community Leaders, Developers, Standard Setting Organizations, Venture Capital Firms, Startups, Civil Society Organizations, Academics, Technology Employees in Big Tech companies, Industry Associations, Government etc.
* Creating a document that
  + Informs us about the State of the Open Tech Ecosystem
  + Indicates the challenges in the ecosystem and what capacities need to be built
  + Posits a series of recommendations for Omidyar Network to develop a strategy

1. **Deliverables**

The deliverables will include

* A detailed report targeted at Omidyar Network stakeholders to inform and educate our colleagues and senior management
* A brief presentation to present the findings
* A small external facing document targeted at convening other funders (No more than 4 pages)

1. **Time / Budget and People involved from Omidyar network**

* **Budget:** The study is expected to take about 10 - 12 weeks, and our partner is advised to indicate a budget, background of the team, their networks and framing for approaching this work
* **ON Point person:** Govind Shivkumar
* **Steering Group:** Omidyar Network + 1 External participant
* Please send your proposal to [gshivkumar@omidyar.com](mailto:gshivkumar@omidyar.com)
* **Timeline**
  + Expression of Interest: 12th July
  + Full proposal and Budget: 26th July
* **Appendix 1:**
* **Learning Questions**

1. What are the Interlinkages between Open-Source Software, Standards and Protocols?
   1. What else should be include in the Open technology ecosystem (Only soft infrastructure – no hard infrastructure)
2. Open-Source Software
   1. How is the sector organized?
      1. What work is done by individuals, nonprofits, corporations, foundations etc.?
   2. What are the power dynamics within groups and where is power concentrated?
   3. Explain the role Big Tech plays in this ecosystem?
   4. What is the typical output and impact and who are the target audiences? Any case studies would be welcome
      1. For example output can be \*Code, Documentation etc).
      2. Audience (Academic, Developers, Enterprises etc.)
   5. What are the critical challenges that are barriers to success?
      1. Developer related challenges such as lack of diversity, incentives etc.
      2. Which are the most critical projects / infrastructure that should get attention but are not?
3. Open Standards
   1. How is this sector organized?
      1. Identify the main Standard Setting Organization’s?
      2. What are their key functions and what do they influence?
      3. What is the organization composition and how are they governed?
      4. Are they adequately staffed?
   2. What are the power structures?
      * 1. *(For example,* [*SC42 secretariat*](https://www.iso.org/committee/6794475.html) *on AI Standards has convened its first meeting and American National Standards Institute was selected?*
        2. *Since international standards bodies like the SC 42 often do not have sufficient staffing resources or the technical expertise to manage everything related to standards development, the secretariat plays an important guiding role*
   3. What are the critical challenges that are preventing Open Standards?
      1. Pros and Cons of Open Standards?
   4. How can we preserve multistakeholderism in the Standard Setting Organizations?
4. Open Source in Emerging Technology Ecosystems
   1. What frontier trends you see in open source that may become mainstream in the near future (technologies, practices, patterns)?
   2. Which technologies are the most important for whom standards are being discussed today that will impact us in the future?
      1. AI, Datafication, Censorship, IOT, Biometric (Facial recognition, surveillance) (First order of preference)
         1. What are the subjective nuances in these sectors where standards can have an impact?
      2. Connectivity, Spectrum, Wireless networking (Second order importance)
   3. What is the Chinese influence on [AI,](https://www.newamerica.org/cybersecurity-initiative/digichina/blog/chinese-interests-take-big-seat-ai-governance-table/) [Facial Recognition, Surveillance standards](https://www.ft.com/content/c3555a3c-0d3e-11ea-b2d6-9bf4d1957a67)?