## From:

Hyperledger India Chapter

## To:

### Ministry of Electronics and Information Technology, Govt of India

We would like to thank everyone involved in designing the draft national strategy on blockchain technology. This is great to see as community, specially for us who are involved in the blockchain technology.

#### Who are we?

Hyperledger is a project hosted under The Linux Foundation.

- 1. Create an enterprise grade, open source distributed ledger framework and code base, upon which users can build and run robust, industry-specific applications, platforms and hardware systems to support business transactions.
- 2. Create an open source, technical community to benefit the ecosystem of HLP solution providers and users, focused on blockchain and shared ledger use cases that will work across a variety of industry solutions;
- 3. Promote participation of leading members of the ecosystem, including developers, service and solution providers and end users; and
- 4. Host the infrastructure for Hyperledger, establishing a neutral home for community infrastructure, meetings, events and collaborative discussions and providing structure around the business and technical governance of Hyperledger.

Majority of the companies (over 50%) from the Forbes list of top 50 blockchain projects are built on Hyperledger projects. The case study document <u>https://www.hyperledger.org/learn/case-studies</u> is an extensive list of all the success stories from the industry. The Hyperledger India Chapter is responsible for growing the Hyperledger community in India, promoting contributions to Hyperledger projects and providing a platform for collaboration, mentoring and support. The chapter aims to showcase the broad range of Hyperledger projects and initiatives to the Indian audience.

Hyperledger India Chapter started in 2019, has helped the blockchain enthusiasts within India. In the year 2020, the chapter organized multiple public engagement events to educate audience on the blockchain technology. Starting with the hackathon in February, then to hearing success stories of different organizations involved in the technology, providing platform to showcase their projects, ending the year with a technical series talk to increase the open source contributions. Recently, we published a blog post showcasing the community in India <a href="https://www.hyperledger.org/blog/2021/01/12/hyperledger-india-chapter-in-2020">https://www.hyperledger.org/blog/2021/01/12/hyperledger-india-chapter-in-2020</a>.

# **Proposal:**

Here are the list of potential use cases that we find are not mentioned in the draft national strategy

- 1. Cold chain for supply chain, giving confidence to the agriculture sector on their produce. Helps the farmers, suppliers, carriers in faster payment and dispute resolutions. This will be a big boost to SMEs and SMBs.
- 2. Improve trade finance, ease up operations and secure trade across ports.
- 3. Central Bank Digital Currency (CBDC).
- 4. Customs and trade finance, cross border trade.
- 5. Blockchain for social good use cases (charity, donations).
- 6. National and state highways, collecting tolls, keep track of public infrastructure.
- 7. Blockchain for urban development tracking through Public Private Partnership.
- 8. Track the progress on climate agreement through blockchain.
- 9. Coordinate asset transfer across different government departments. Including but not limited to transfer happening between state and the central government.
- 10. Use of digital identities, verifiable credentials to secure privacy and enable new use cases. Improving the accessibility to the citizens and enhancing the lives. Helps in letting unemployed youth find the right job by democratizing their capabilities on blockchain.
- 11. Use of blockchain in safe and secure vaccine distribution, administration.
- 12. Help in micro-financing. Financing small businesses or individuals.

The paper also does not call out advantages of integration projects such as DAML, that help in designing the protocol agnostic smart contract definition. There are patterns that help in achieving interoperability. We would like to take this opportunity to also highlight, that the use of technology does not come without risks. India requires strict security and privacy act/law for collection, storage, and sharing of Public Health Information (PHI) and Personal Identifiable Information (PII). Meantime, one should watch out on happenings around the world. To name one, Business Service Network (BSN) from China has enabled any person to host their blockchain solution quickly and through click of buttons. Readily available services on this would make countries that are not technologically strong, adopt to these models. This would be miss of an opportunity.

Few other opportunities where India can influence within the technology domain

- Interoperability is a key component for blockchain's success. Many compare blockchain at present to be early internet. This is where one has to define standards and make different protocols talk to each other.
- Ability to influence in open-source development and establishing standards through grant programs.
- Opportunities to be future ready in public health space.
- Increased opportunities by providing documents in native language.

We believe following actions will help in increased technology adoption

- Introduce curriculum in academia.
- Affordable learning and certification for mass adoption.
- Sample real life curated use cases as part of learning.

• Affordable and available infrastructure for blockchain networks

## How can Hyperledger India Chapter help?

In the year 2021, the chapter has planned on extending the presence by having dedicated student, industry engagement activities. The goal is to bridge the startup eco-system in India, give them the platform to reach out to wider community outside India. In addition to these public engagement activities, few of our members have their significant presence in the Hyperledger. As can be seen by the numbers in the blog post, we have over 100 contributors across India. Our community members have proposed new Hyperledger Labs projects as well.

Hyperledger Fabric project documentation is being translated into Tamil and Malayalam, making it easy for learning the technology. We have a vibrant list of volunteers and the community has domain expertise across various fields. With the help of grants through the MeitY, a strong working group can be formed. Hyperledger India Chapter can help in closing the tech debt by training engineers. A stronger blockchain community in India can help us influence global standardization activities. We envision India to be the top technology and service exporter on blockchain.

In addition, Hyperledger India Chapter can identify potential solution providers for the initiatives. The chapter can identify individuals with exceptional knowledge on blockchain technology. The chapter can also offer regular trainings and increase the competency of both regulators and administrators.

Thank you,

From the community, Hyperledger India Chapter