NEW AMERICA

BLOCKCHAIN TRUST ACCELERATOR

The Blueprint for Blockchain and Social Innovation

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The Blueprint for Blockchain and Social Innovation is a guide to blockchain technology for public sector and social impact leaders. The blueprint leads with a basic technical overview of blockchain technology and explores applications to increase security, accountability, and efficiency at every level of social infrastructure. Organizations looking to apply blockchain will find recommendations, real-world case studies, and insights on the future of this frontier technology. The research for this project was conducted by the Blockchain Trust Accelerator at New America and was made possible by the generosity of the Tata Trusts.

Law. Scientific discovery. Civilization itself. Trust rests at the core of our greatest human endeavors. It is the mechanism by which we collaborate and progress. It sustains communities and builds successful societies. When trust erodes, human progress goes with it.

Historically, institutions have served as custodians of trust. They safeguard the facts and systems that allow human beings to cooperate effectively at scales. But global confidence in institutions has dropped precipitously in recent years. As the vulnerabilities and inefficiencies of existing institutional structures have emerged, these pillars of modern civilization have started to falter under the weight of antiquated systems, human error, and heightened public scrutiny.

Blockchain technology has been called a "trustless" system. In fact, the opposite is true. Blockchain isn't a replacement for or a shortcut to building trust, but it is a trust accelerator. It gives individuals and organizations a headstart in cultivating solid relationships—built on a foundation of security, accountability, and transparency. Blockchain is an opportunity to establish previously inaccessible channels for collaboration and reinforce existing partnership, lengthening and strengthening the ties that bind us to each other.

To date, blockchain has been deployed most often in for-profit sectors such as finance. However, many of the technology's most promising applications lie in the fields of social and civic innovation. Realizing this potential will only be possible as organizations push forward the frontiers of trust. As blockchain solutions are more widely applied to address global inefficiencies, their potential to fortify institutions and improve lives will become more powerful and could usher in the next chapter in the story of human cooperation.

Checklist For Deploying a Blockchain-Powered Solution

- **Define your challenge, define your solution**: Blockchain is powerful technology, but it can't solve every problem. You wouldn't use a scalpel to crack an egg, right? Before adopting a blockchain-based solution, know your goal and know how blockchain technology will help to achieve it.
- **Prep your data**: Any digital system that runs on shoddy data runs the risk of garbage in, garbage out. With blockchain's immutable data structure, if you start with bad data, you could be stuck with it forever. Ensure accurate, high quality data before moving to blockchain.
- **Make friends**: Collaborating with partners can lower costs, improve outcomes, and deliver more powerful solutions for everyone. Identify potential stakeholders—entities with shared interests who may benefit from the fixes you're introducing—and consider inviting them to the party. Innovation is an opportunity to make new alliances and engage old ones as you work together to build a secure common platform.
- **Think ahead**: You don't want today's solution to turn into tomorrow's headache. During the design process, consider your solution's compatibility with existing legacy systems and other frontier technologies, as well as other blockchain platforms; in the future, your project could create unwanted silos if it's not interoperable. Think of both the financial and human resources required to maintain it—how much will troubleshooting cost and who will do it? Design today for a world three to five years in the future.
- **Innovate ethically**: Technology can have unintended consequences. Given the difficulty of altering data on a blockchain, consider how your solution will affect the people represented by the sensitive data contained therein—both now and into the future. Their privacy is your responsibility.
- **Consider accessibility**: What level of tech literacy or access is required to participate in your solution? Is the language accessible? How will particular communities respond? If you aim to serve marginalized populations, keep their needs in mind as you design.
- **Solve for identity**: Who are your users? More importantly, how do you know it's actually them? Identity is at the root of blockchain solutions. Scrutinize how best to confirm user identity in your project; biometrics, passwords, government issued IDs, and knowledge-based authentication are all potential options.
- **Assess risks**: Every new technology has its risks; blockchain is no different. Try to anticipate potential pain points between collaborators and carefully weigh the pros and cons of design features like vendor and platform lock-in as you build. Factor in cybersecurity as well; just because blockchain is cryptographically secure doesn't mean that software built on it will be. Independent security audits can help fortify systems.
- **Expect to grow**: Starting small with a pilot or proof-of-concept makes sense, but you don't want to stay there. As you perform controlled tests of your blockchain-based system, remember that your ultimate goal is to reach full-scale operation. As you begin to scale up, consider running your blockchain solution in parallel with its predecessor until you're confident in the new system's results.
- **Comply and codify**: Blockchain solutions for governance and social impact rarely encounter major regulatory hurdles, but platforms that transfer financial assets or issue tokens with monetary value face more stringent requirements. Engaging legal counsel at the outset of your project can save a lot of trouble (and money) later on.
- **Assume unknown unknowns**: Blockchain is a new technology. Since unexplored territory is, well, unexplored, it's best to anticipate some uncertainty. Incorporate flexibility into your project timelines to accommodate surprises along the way. Ask questions about the tech and the specific solution on which you're working to clarify problems and inspire innovations.

About the Blockchain Trust Accelerator at New America and Tata Trusts

The Blockchain Trust Accelerator (BTA) is a leading platform for harnessing blockchain technology to solve social impact and governance challenges. Established in 2016, BTA brings together governments, technologists, civil society organizations, and philanthropists to build Blockchain pilots that benefit society. BTA projects and research help organizations and institutions increase accountability, ensure transparency, create opportunity, and build trust in core institutions.

Throughout the process of conceptualizing, researching and crafting the Blueprint, our team has been extremely fortunate to partner with the Tata Trusts. Tata Trusts funded the Blueprint for Blockchain and Social Innovation to ensure that the benefits of blockchain technology transcend high finance and reach individuals with the greatest needs. Since its inception, Tata Trusts played a pioneering role in transforming traditional ideas of charity and introducing the concept of philanthropy to make a real difference to communities.

Contact Us

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