

15

Cosmos



Cosmos

Lesson 15

Cosmos (ATOM) - The Internet of Blockchains

The digital economy evolves and matures more every day, which is why it makes a lot of sense for us to continue investing time to learn about blockchain technology and the different altcoins, including Cosmos, which trades on crypto exchanges with the symbol “ATOM.

Like other altcoins, ATOM strives to solve some of the most pressing challenges facing the blockchain industry today, including:

- » scalability,
- » usability, and
- » interoperability.

In that way, it’s similar to other altcoins we’ve covered previously, such as Cardano. Both of these altcoins address some of the blockchain industry’s fundamental challenges, but they approach the challenges differently and focus on different aspects.

Cosmos aims to create an “Internet of Blockchains,” a network of interconnected blockchains that can communicate and transact with each other seamlessly. This lesson delves into Cosmos’s innovative architecture, its role in the broader blockchain ecosystem, and how it can potentially be leveraged by initiatives like Prison Professors to further our mission.

Introduction to Cosmos

Developers sometimes refer to Cosmos as the “Internet of Blockchains” because of its goal of creating a framework for different blockchains to interact with one another in a decentralized way. Cosmos utilizes a suite of modular tools and protocols to achieve this ambitious goal, fostering a more connected and efficient blockchain ecosystem.

Both Cosmos and Cardano strive to improve scalability, usability, and interoperability within the blockchain ecosystem. But they offer unique solutions and innovations. A basic understanding of both can help us make better investment decisions, and assess which altcoin may advance problems that we want to tackle.

Key Features of Cosmos

Inter-blockchain Communication Protocol (IBC): At the heart of Cosmos’s interoperability solution is the IBC, which allows sovereign blockchains to exchange data and tokens with each other securely and seamlessly.

Tendermint Core: Cosmos leverages the Tendermint consensus mechanism, which provides high performance, consistency, and security to the blockchains built on top of it, all while being energy-efficient compared to traditional Proof of Work (PoW) systems.

Cosmos SDK: This modular framework enables developers to build customized blockchains quickly and easily, tailored to specific applications or use cases.

Cosmos’s Potential for Prison Professors and Reintegration Efforts

Since Prison Professors is striving to create innovative, non-governmental-tools to help people who want to help themselves, we envision a decentralized application (DApp) ecosystem that supports:

- » **Secure Communication:** Securely and privately sharing information and resources among various support networks, educational platforms, and

employment services, all built on different blockchains but interconnected through Cosmos.

- » **Tokenization of Achievements:** Implementing a system where educational milestones and rehabilitation progress are tokenized and recognized across different service platforms within the Cosmos ecosystem, facilitating a more holistic and integrated approach to reintegration.
- » **Decentralized Identity (DID):** Utilizing Cosmos to create and manage decentralized identities for formerly incarcerated individuals, giving them control over their data and how it's shared across services.

As I worked with Ryan on this project, we came up with a potential use study to consider.

Those who've read my book, *Earning Freedom*, know that a central core of our advocacy comes from incentivizing excellence. Through Cosmos, we could issue tokens that would lead to higher levels of liberty and more opportunity.

The introductory course that Prison Professors offers, "Preparing for Success after Prison" strives to encourage personal and professional development. With Cosmos, we could issue "success tokens" to signify completion of each lesson.

How It Would Work:

Token Issuance: By using the Cosmos blockchain, we could deploy a smart contract for the "Preparing for Success after Prison" course. Whenever a participant completes a lesson, the smart contract would automatically issue Success Tokens to the participant's blockchain wallet. These tokens serve as immutable proof of a person's educational achievements while incarcerated.

Token Utility: Participants could use the Success Tokens in various ways:

- » **Liberty Levels:** Participants could present their token holdings to case managers in exchange for access to work-release programs, or to furloughs, or to access to home confinement. Probation officers could use the tokens as evidence of a person's commitment to rehabilitation, possibly influencing decisions regarding their levels of liberty.

- » **Employment Opportunities:** Participants could share tokens with prospective employers as verifiable credentials of their dedication to personal growth, potentially improving their chances of employment.
- » **Access to Credit:** Through partnerships with DeFi platforms built on Cosmos, participants could use Success Tokens as collateral or influence credit scores, enabling participants to access financial services more easily.

Decentralized Verification: The Cosmos blockchain ensures transparent and tamper-proof issuance and ownership of Success Tokens. Employers, probation officers, and financial institutions could verify the authenticity of a participant's achievements without relying on a centralized authority—such as an indifferent or apathetic human.

Inter-blockchain Communication: Leveraging Cosmos's Inter-Blockchain Communication (IBC) protocol, Success Tokens could interact with other blockchain networks, expanding their utility beyond the Cosmos ecosystem. For example, participants could exchange tokens for other digital assets or use them in other blockchain-based job marketplaces.

Implementation Steps:

- » **Smart Contract Development:** Develop smart contracts on the Cosmos blockchain that govern the issuance and redemption of Success Tokens.
- » **Partnership and Integration:** Collaborate with probation departments, employers, and financial institutions to recognize Success Tokens as a valid measure of an individual's efforts to rehabilitate.
- » **Wallet and User Interface:** Provide an intuitive interface for participants to manage their tokens and for stakeholders to verify token authenticity and ownership.

Potential Impact:

This application not only incentivizes participation in rehabilitation programs but also provides a blockchain-based solution to the challenges faced by formerly incarcerated individuals in reintegrating into society. By leveraging Cosmos's technology, Prison Professors can create a scalable, secure, and interoperable platform that bridges the gap between personal development in prison and tangible benefits in the outside world.

Conclusion:

Using Cosmos (ATOM) to create a “Success Tokens” system exemplifies how blockchain technology can be applied to address real-world problems, offering a novel approach to supporting reintegration and opening up new opportunities for those committed to changing their lives.

This concept demonstrates the power of blockchain to create positive social impact, aligning with Prison Professors’ mission to empower individuals through education and technology.

In our next lesson, we’ll discuss the popular Doge Coin.

Investment:

On Friday, February 23, 2024, at 2:05 pm Pacific time, the price of Bitcoin continued trading in a range when I looked at Coinbase: \$50,991.50

- » Total investment in BTC at end of day, February 19, 2024: \$192,202.76.
- » Total holdings: 4 BTC
- » Total value: \$203,966.00
- » Gain or Loss: \$11,763.24

The value of my holdings surpassed the total amount that I had paid by \$11,763.24 since I began investing in cryptocurrency, on January 31, 2024.

Separately, I purchased 1 ETH. It was valued at \$2,954.74 and Coinbase charged me a fee of \$66.48. My total investment: \$3,021.22. Value of ETH at end of day: \$2,946.80.

- » Value of Link today: \$18.113
- » Value of ADA today: \$0.5888
- » Value of ATOM today: \$10.00

Disclaimer:

For full transparency, I am not an investment advisor. Our nonprofit, Prison Professors, offers these lessons for the singular purpose of helping people learn more about the digital economy. I provide information on my personal investments to show that even a person who served 26 years can participate in the digital economy. I am an investor and a speculator, understanding the

risks. No one should invest in any asset class without a strategy and a plan, as shown through our introductory course: Preparing for Success after Prison. Always develop an understanding of investment risks—especially with cryptocurrency.

Critical Thinking Questions

How does Cosmos's approach to interoperability challenge the current landscape of isolated blockchain networks?

In what ways could the Cosmos SDK and IBC protocol be utilized to enhance reintegration services for formerly incarcerated individuals?

Consider the role of decentralized identities in the Cosmos ecosystem. How could this impact the privacy and autonomy of individuals in the reintegration process?

Advocacy Initiative

Prison Professors is committed to exploring cutting-edge blockchain solutions like Cosmos to enhance our reintegration efforts. We believe in the power of technology to foster change and create opportunities for those looking to rebuild their lives.

Join us as we continue to explore the potential of blockchain technology to support societal reintegration and empower individuals with the tools they need to succeed.

Please share your story and responses through the manner that works best for you:

1. Send through email to Interns@PrisonProfessorsTalent.com
Subject line: Digital Economy Course
2. Send through regular mail:
Prison Professors
% Digital Economy Course
32565 Golden Lantern, Suite B-1026
Dana Point, CA 92629
3. Send through the Edovo tablet
Prison Professors
% Digital Economy Course
32565 Golden Lantern, Suite B-1026
Dana Point, CA 92629

Three most recent lessons sequences:

- » Lesson 14: Chainlink (Link)
- » Lesson 15: Cosmos (Atom)
- » Lesson 16: Doge (Doge)