


**NAME:** Cardano Blockchain

**DATE:** September 4, 2024 9:19 PM

**DESCRIPTION OF TECHNOLOGY**  
A third generation Blockchain that will be responsible for serving the Cardano network. With frequent development updates that evolve out of a scientific peer reviewed philosophy this blockchain aims to provide scalability, performance, low cost and decentralization. This would enable a new way of building our world. With recent implementation we can create a whole decentralized network.




**IMPACT ON SOCIETY**




Cardano is still in very early days of development. Numerous issues still need to be solved. Scalability is the most notable one of those. Other issues are ease of development and environmental impact.

**HATEFUL AND CRIMINAL ACTORS**




With decentralization we hit a bit of a grey area, most countries are not adapted and are frankly not understanding of what the possible impact could be of this technology for our society. Countries like China and Amerika are front runners in regulation. One example of decentralization could be that in theory you could decentralize the government and let it run autonomously and transparently. You could pretty much decentralize everything in this way.

**PRIVACY**



It can, but it doesn't have to. It all depends on the implementation of the technology. We could build a fully transparent log of everything that is stored on the chain. This would make all stored data publicly available, or to those who need it. One could also differentiate from this and build a private blockchain, and share anything. This would be comparable to the implementation of a public or private network.

**HUMAN VALUES**



Only recently Cardano has enabled smart contracts on their blockchain. Because there are still scalability problems you can't provide any large scale decentralized applications yet. Once this is solved, and this will come rather fast, your imagination is the limit of where you want to take decentralization.

**STAKEHOLDERS**




**DATA**



Yes, and this will be one of the biggest challenges to get right. For example, if one builds a decentralized app it is critical that implementation is done correctly. If done right this technology could effectively be used to give data rights back to the user. Blockchain will play a big part in Web 3.0.

**INCLUSIVITY**




At the current stage yes, only people with a deeper technical expertise will really understand what this blockchain does and how it functions. If you ask a random person about blockchain, chances are high he will think crypto/bitcoin is all blockchain is. There aren't many people yet that see the big picture of blockchain. People with no technical expertise aren't included. One of the challenges is to create more user friendliness around blockchains.

**TRANSPARENCY**




Yes, all the information is very public. All research papers are public. All the development updates and code is public. The tokenEconomics and roadmap for Cardano is all public. You will need some technical expertise to understand some of these things.

**SUSTAINABILITY**



With the new Proof-Of-Stake protocol that Cardano uses it effectively replaces the energy wasteful proof-of-mining protocol that older blockchains like Bitcoin use. It reduces the validation process that cost energy to less than 1% of a proof-of-mining protocol. Although it is still necessary and reflect how much energy we actually use to keep the network running. Things like servers and nodes all have energy cost, and it might be possible to improve more.

**FUTURE**



This Technology could become as big as the Internet and compete with other current 3th generation blockchains like Ethereum, Solana and more. Alongside the race to the most used blockchain an enormous growth in Applications, systems and other use cases that blockchain provide will come with it.

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HUMAN VALUES




How is the identity of the (intended) users affected by the technology?

To help you answer this question think about sub questions like:

- If two friends use your product, how could it enhance or detract from their relationship?
- Does your product create new ways for people to interact?...


TRANSPARENCY



Is it explained to the users/stakeholders how the technology works and how the business model works?

- Is it easy for users to find out how the technology works?
- Can a user understand or find out why your technology behaves in a certain way?
- Are the goals explained?
- Is the idea of the technology explained?
- Is the technology company transparent about the way their...


IMPACT ON SOCIETY



What is exactly the problem? Is it really a problem? Are you sure?

Can you exactly define what the challenge is? What problem (what 'pain') does this technology want to solve? Can you make a clear definition of the problem? What 'pain' does this technology want to ease? Whose pain? Is it really a problem? For who? Will solving the problem make the world better? Are you sure? The problem definition will help you to determine...


STAKEHOLDERS



Who are the main users/targetgroups/stakeholders for this technology? Think about the intended context by...

When thinking about the stakeholders, the most obvious one are of course the intended users, so start there. Next, list the stakeholders that are directly affected. Listing the users and directly affected stakeholders also gives an impression of the intended context of the technology.  
...


SUSTAINABILITY



In what way is the direct and indirect energy use of this technology taken into account?

One of the most prominent impacts on sustainability is energy efficiency. Consider what service you want this technology to provide and how this could be achieved with a minimal use of energy. Are improvements possible?


HATEFUL AND CRIMINAL ACTORS



In which way can the technology be used to break the law or avoid the consequences of breaking the law?

Can you imagine ways that the technology can or will be used to break the law? Think about invading someone's privacy. Spying. Hurting people. Harassment. Steal things. Fraud/identity theft and so on. Or will people use the technology to avoid facing the consequences of breaking the law (using trackers to evade speed radars or using bitcoins to launder...

DATA




Are you familiar with the fundamental shortcomings and pitfalls of data and do you take this sufficiently into...

There are fundamental issues with data. For example:

- Data is always subjective;
- Data collections are never complete;
- Correlation and causation are tricky concepts;
- Data collections are often biased;...


FUTURE



What could possibly happen with this technology in the future?

Discuss this quickly and note your first thoughts here. Think about what happens when 100 million people use your product. How could communities, habits and norms change?


PRIVACY



Does the technology register personal data? If yes, what personal data?

If this technology registers personal data you have to be aware of privacy legislation and the concept of privacy. Think hard about this question. Remember: personal data can be interpreted in a broad way. Maybe this technology does not collect personal data, but can be used to assemble personal data. If the technology collects special personal data (like...

INCLUSIVITY



Does this technology have a built-in bias?

Do a brainstorm. Can you find a built-in bias in this technology? Maybe because of the way the data was collected, either by personal bias, historical bias, political bias or a lack of diversity in the people responsible for the design of the technology? How do you know this is not the case? Be critical. Be aware of your own biases....

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