

Cyber Ethics 4.0: Serving Humanity with Values



Photo by [Erik Eastman](#) on [Unsplash](#)

Module 4

Blockchain Functionality

Blockchain for Voting

As governments think about applying Blockchain to voting to fight fraud and corruption, what happens if the Blockchain stops being anonymous and voter records are publicly exposed, unable to be erased?

If governments will implement Blockchain technology for usage in voting, they must take significant steps to ensure the privacy of the votes and preserve the freedoms of free and democratic votes.

Blockchain for Transparent Trade Tracing

De Beers, the world's largest diamond producer, plans to launch an industry-wide Blockchain to help track diamonds from the moment they are extracted from the ground and each time they change hands. The implementation of Blockchain in the diamond industry will help fight against blood diamond trade as well as prevent the ability of synthetic stones to be claimed as natural.



Blockchain Energy: Environmental Impact

- Blockchain transactions rely on complex algorithms that require large amounts of computing (hash) power.
- Depending on the amount and speed at which calculations must take place will increase the amount of resources required.
- Blockchain mining is an energy-intensive task and as the technology is more widely adopted, it will require more processing power and more energy consumption.



Blockchain Energy: Environmental Impact

- Blockchain still heavily relies on traditional energy supplies in many areas.
- Due to the large increase in power consumption of blockchain electrical companies may not be able to supply sufficient electricity to the regular consumers.



The End