

Blockchain Implementation Challenges

LATEST SUBMISSION GRADE

80%

1. In what sense is blockchain technology “not ready for prime time?”

0 / 1 point

- ☐ The infrastructure is unevenly distributed
- ☐ There is not enough wallet support, and a lot of interfaces are not user-friendly
- ☒ Implementing blockchain technologies requires a profound shift in culture, behaviour, and ideology
- ☐ All of the above

! Incorrect

This statement is true, however it is not the best answer. Please look carefully at the other options, and review the video "The Technology is Not Ready for Prime Time" from Module 5, Lesson 1 if needed.

2. One of the biggest challenges associated with using proof-of-work (PoW) as a consensus mechanism is:

0 / 1 point

- ☐ It is relatively easy and inexpensive to perform an attack on a network that uses PoW
- ☐ PoW is still very new and has not been widely tested; potential malfunctions are unknown
- ☐ The amount of energy required to solve PoW problems is unsustainable
- ☒ Validating a miner's solution to a PoW problem is both difficult and costly

! Incorrect

Please review the content from Module 5, Lesson 2 for more information.

3. How have some governments and lawmakers stifled blockchain innovation?

1 / 1 point

- ☐ By attempting to introduce laws or policies without fully understanding the technology
- ☐ By applying intellectual property rules to any non-physical property (e.g. cryptoassets)
- ☐ By imposing heavy regulations in response to fears or worst case-scenarios
- ☒ All of the above

**Correct**

All of these represent ways that various governments have stifled blockchain innovation.

4. In 2014, thieves stole 8 million VeriCoins from the MintPal exchange. Within days of the attack, VeriCoin developers released new code that, in essence, rolled back time prior to the attack. They then collaborated with exchanges to make sure that this new code was adopted. This situation is an example of:

1 / 1 point

- ☒ a fork
- ☐ a Sybil attack
- ☐ branching
- ☐ hashing

**Correct**

This was an example of a hard fork.

5. In the Bitcoin blockchain, what would likely happen if there were no transaction fees to incentivize miners?

1 / 1 point

- ☐ Nothing would change.
- ☐ The block reward would increase.
- ☐ The consensus mechanism would change.
- ☒ The hash rate would drop and network security would decline.

**Correct**

Transaction fees incentivize miners to secure the network.

6. How is blockchain a “job killer?”

1 / 1 point

- ☐ Blockchain enables radical automation of asset management.
- ☐ Blockchain reduces or eliminates the need for intermediaries to establish trust.
- ☐ Blockchain enables physical objects (e.g. IoT devices) to create and control wealth.
- ☒ All of the above

**Correct**

All of the above statements are true.

7. Why is the governance of blockchain protocols so difficult—particularly for large, public blockchains?

1 / 1 point

- ☐ Unlike the Internet, formal oversight bodies do not exist.
- ☐ It is difficult for stakeholders with diverse interests to agree on a path forward.
- ☐ Making ad hoc changes to a blockchain protocol could put everyone's assets at risk.
- ☒ All of the above

**Correct**

All of the above statements are true.

8. Which of the following refers to an entity that uses intelligent software to manage and organize resources and processes?

1 / 1 point

- ☐ decentralized network
- ☒ distributed autonomous agent
- ☐ full node
- ☐ mining pool

**Correct**

You will learn more about distributed autonomous agents in a subsequent course.

9. Which of the following best illustrates the concept of “privacy by design?”

1 / 1 point

- ☐ Google's *Nest* thermostat uses cameras and sensors to collect data about users' homes.
- ☐ Social media users receive targeted advertisements and marketing messages.
- ☒ A peer-to-peer messaging protocol is built with end-to-end encryption, and respects users' right to be forgotten
- ☐ All of the above

**Correct**

Privacy-by-design should include end-to-end encryption and should respect users' right to be forgotten.

10. In 2014, Europol and the US Federal Bureau of Investigation (FBI) seized a dark-web marketplace for illegal drugs, which had 13,757 listings priced in Bitcoin. Consequently, the price of bitcoin plummeted and cryptocurrencies became synonymous with crime. What was the name of this site?

1 / 1 point

- ☐ Anonymous
- ☒ Silk Road
- ☐ The Farmers Market
- ☐ Tor



Correct

Silk Road was a dark-web marketplace that made people perceive cryptocurrencies as being synonymous with crime.