

DEFI AND WOMEN IN BLOCKCHAIN

AGENDA

- Blockchain: The Foundation of DeFi
- What is Decentralized Finance (DeFi)?
- Flash Loan Attacks: What Are They?
- Real-World Examples of Flash Loan Exploits
- Why DeFi Security Matters
- How to Build Safer DeFi Systems
- Women in Blockchain: Breaking Barriers
- Empowering Women in Blockchain
- Opportunities in the DeFi Space

Evolution of the Internet: Web1, Web2, and Web3



1990s-early 2000s

WEB 1.0

- READ-ONLY CONTENT
- STATIC WEBPAGES.



MID-2000S-PRESENT

WEB 2.0

- INTERACTIVE CONTENT
- SOCIAL MEDIA.



EMERGING/CURRENT

WEB 3.0

- DECENTRALIZED
- BLOCKCHAIN-BASED

- **BLOCKCHAIN: THE FOUNDATION OF DEFI**

- Definition: A decentralized digital ledger that records transactions securely and transparently.
- Key features:
 - **Decentralization:** No single authority or control.
 - **Transparency:** Transactions are visible to everyone.
 - **Security:** Protected by cryptography.
- Real-world analogy: A shared Google Doc where everyone can view changes but cannot delete or alter data.
- Blockchain's role: Forms the backbone of cryptocurrencies and DeFi.

INTRODUCTION TO BLOCKCHAIN

DECENTRALIZATION

Records are kept simultaneously across multiple computers.

IMMUTABILITY

Once recorded, the data in any given block cannot be altered.

TRANSPARENCY

Changes to public blockchain are publicly viewable.

SECURITY

Enhanced by cryptographic hashes.



WHAT IS DECENTRALIZED FINANCE (DEFI)?

How DeFi works?

Smart contracts: Self-executing programs on the blockchain.

Key services:

- Lending,
- Borrowing,
- Trading,
- Saving.

Benefits:

- **Global access:** Anyone with internet can participate.
- **Transparency:** Every transaction is visible on the blockchain.
- **Low fees:** Eliminates the need for middlemen.

Core Components of DeFi:

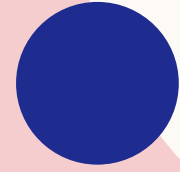
1. Decentralized Exchanges (DEXs)
2. Lending and Borrowing Platforms
3. Stablecoins
4. Yield Farming and Liquidity Mining
5. Decentralized Insurance

Advantages of DeFi:

1. Accessibility
2. Financial Sovereignty
3. Transparency
4. Efficiency and Cost-Effectiveness
5. Innovation

Challenges of DeFi

1. Security Risks
2. Regulatory Uncertainty
3. Complexity
4. Over-Collateralization
5. Scalability



Decentralized vs. Traditional Financial Systems



DECENTRALIZED
FINANCE



TRADITIONAL FINANCE

HIGH, DUE TO DISTRIBUTED LEDGER.

TRANSPARENCY

LOW, AS RECORDS ARE HELD
CENTRALLY.

GENERALLY FASTER, NO
INTERMEDIARIES.

TRANSACTION SPEED

SLOWER, INVOLVES INTERMEDIARIES.

GLOBAL ACCESS WITHOUT CENTRAL
CONTROL.

ACCESSIBILITY

LIMITED TO INSTITUTIONS' REACH.

LOWER, DUE TO THE ELIMINATION OF
MIDDLEMEN.

COSTS

HIGHER, DUE TO FEES CHARGED BY
INTERMEDIARIES.

WHAT IS A FLASH LOAN ATTACK?

Flash loans: Borrowing large amounts without collateral, repaid in the same transaction.

Legitimate uses: Arbitrage (buying low, selling high), liquidity management.

Attack definition: Exploiting vulnerabilities in smart contracts to manipulate prices and make illegal profits.

Real-world analogy: Borrowing a huge sum, buying all the products in a store to raise their prices, and selling them back for a profit—all in seconds.

REAL-WORLD EXAMPLES OF FLASH LOAN EXPLOITS

1. Example 1: bZx Protocol lost \$37M due to price manipulation.
2. Example 2: PancakeBunny saw its token price crash after an attack.

Lessons learned:

1. Importance of secure smart contract design.
2. Need for robust price oracles (data providers).



WHY DEFI SECURITY MATTERS

Why security is critical?

- Protecting user funds.
- Ensuring the credibility of DeFi platforms.
- Attracting new users to the ecosystem.

Challenges:

- Complex smart contracts.
- Rapid innovation outpacing security measures.

Importance of collaboration between developers, auditors, and users.

WOMEN IN BLOCKCHAIN: BREAKING BARRIERS

Why blockchain needs women?
Diverse perspectives lead to innovation.

Current challenges: Gender imbalance, lack of representation.

Opportunities:

- Building inclusive financial systems.
- Leading innovation in security and DeFi.
- Success stories: Inspirational women in blockchain driving change.



EMPOWERING WOMEN IN BLOCKCHAIN

- Why diversity matters: Gender-diverse teams solve problems more effectively.
- Women leading the way in DeFi security and innovation.
- How to empower women:
 - Education and mentorship.
 - Highlighting role models.
 - Creating supportive communities.



OPPORTUNITIES IN DEFI FOR NON-TECH PEOPLE

- Non-technical roles in DeFi:
 - Community management.
 - Marketing and education.
 - Policy and compliance.
- Learning resources: Online courses, blockchain communities.



**THANK
YOU**

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