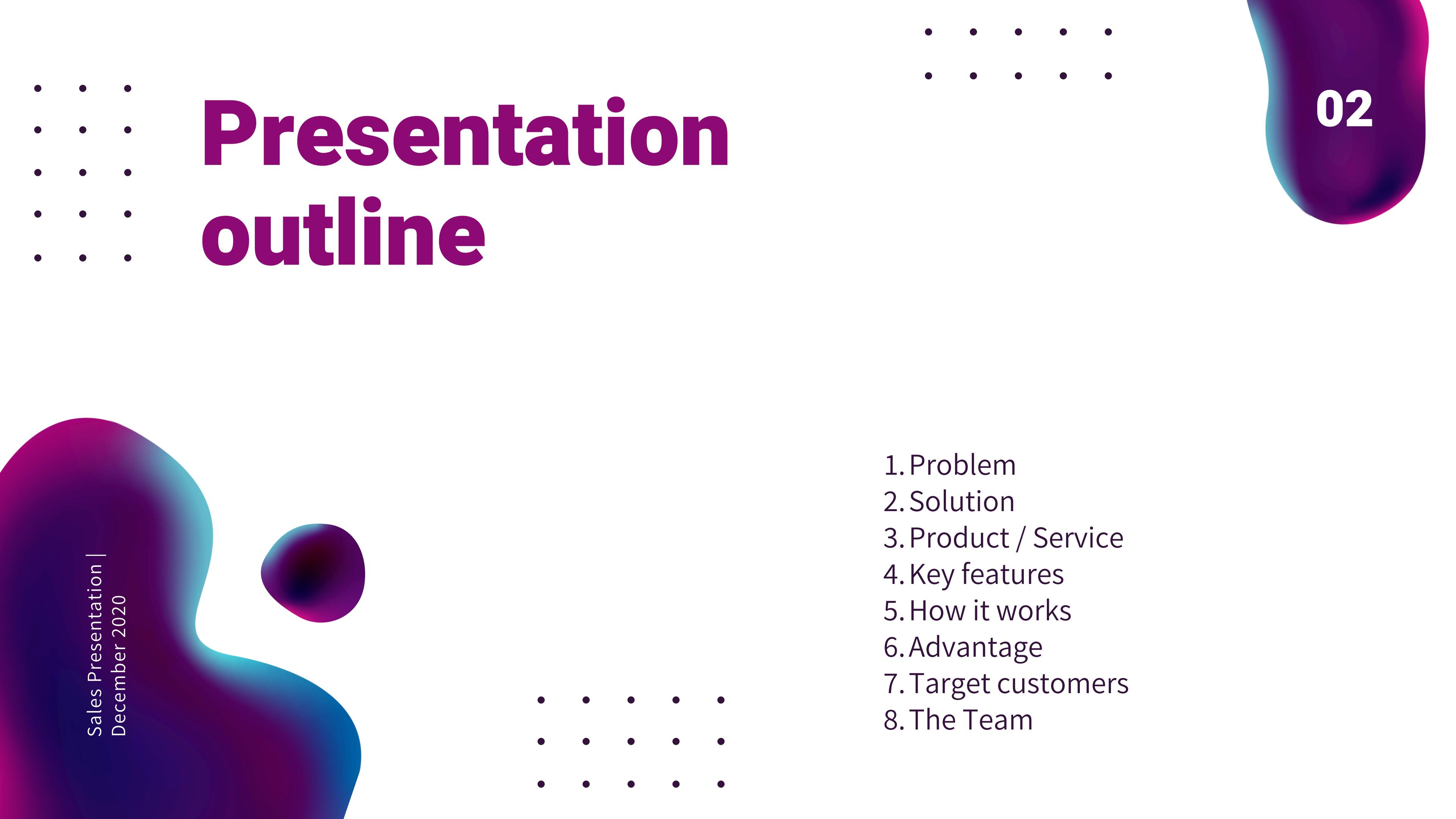
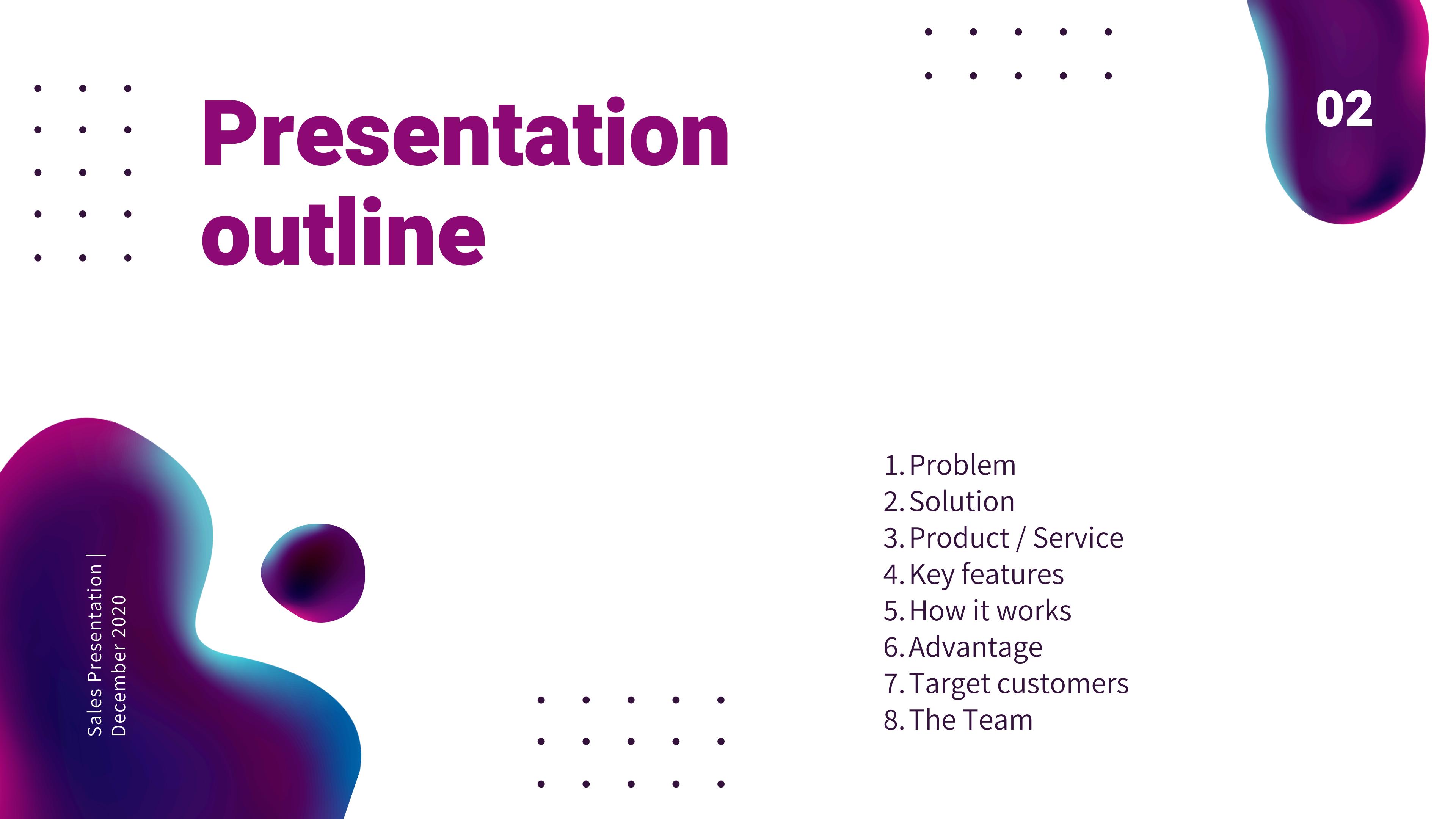


AVACERTIFY

A Decentralized Application (dApp) on Avalanche

Presentation outline

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- • • • •
 - • • • •
 - • • • •
 - 1. Problem
 - 2. Solution
 - 3. Product / Service
 - 4. Key features
 - 5. How it works
 - 6. Advantage
 - 7. Target customers
 - 8. The Team
- 

03

Problem

Problem 1

Time-consuming
manual verification.

Problem 2

Lack of trust in
centralized systems.

Problem 3

Fraudulent and
counterfeit
certificates

Solution



Solution 1

Avacertify is Instant on-chain verification.

Solution 2

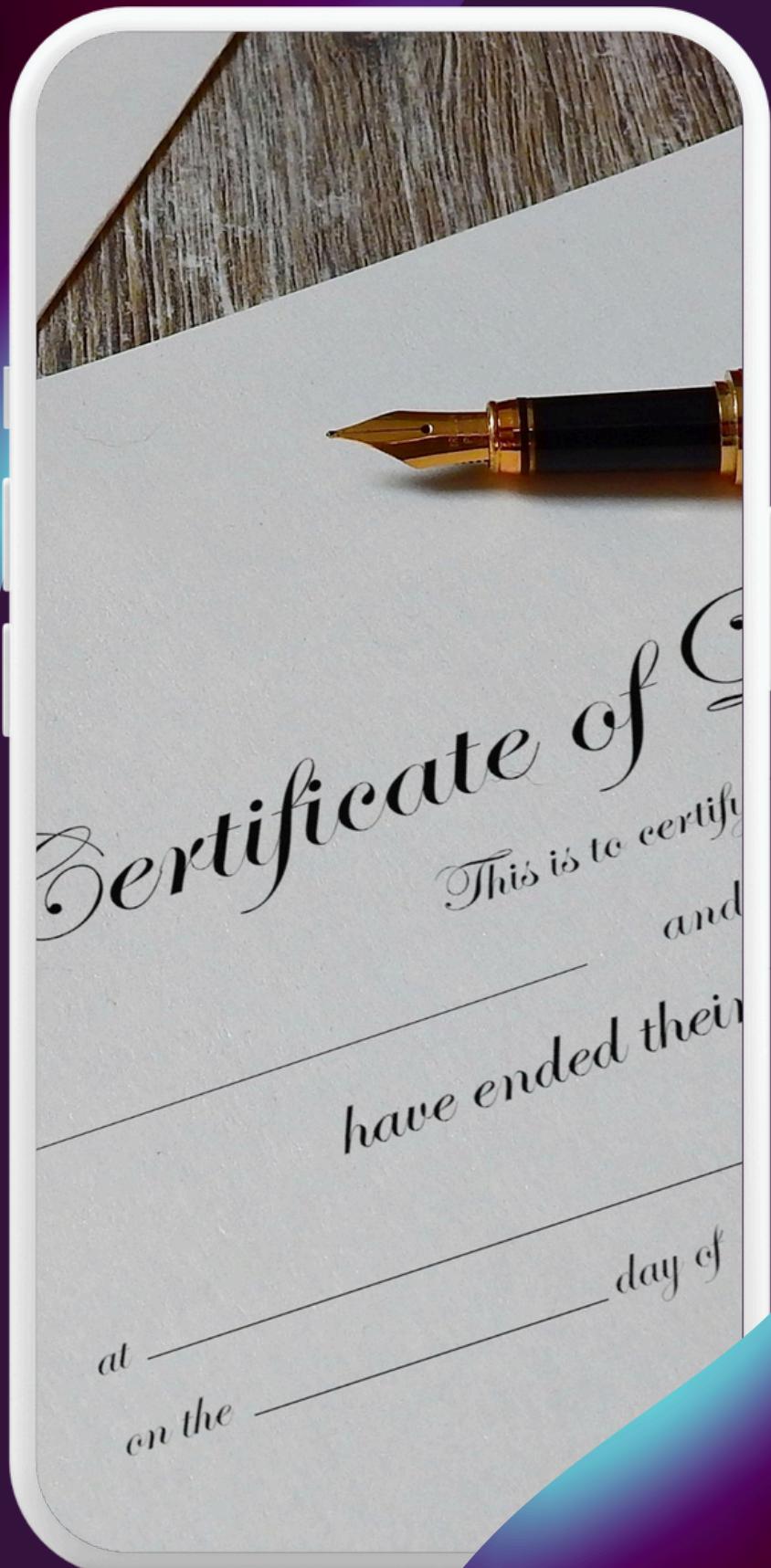
Transparent and accessible anywhere globally.

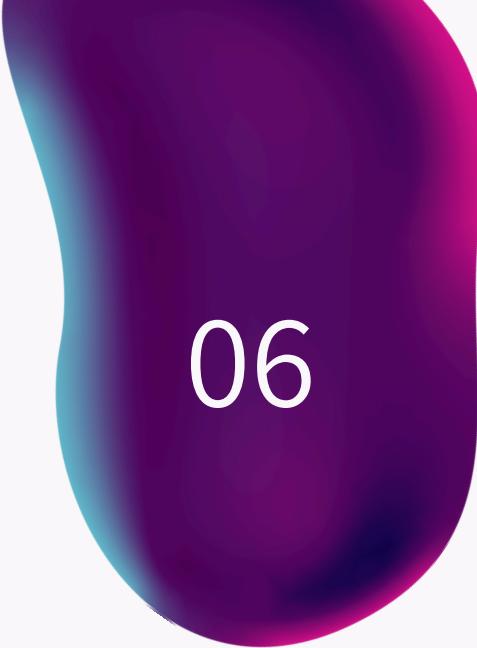
Solution 3

Secure revocation of invalid certificates.

AvaCertify

A secure and transparent solution for issuing, verifying, and revoking certificates using blockchain technology.





06

KEY FEATURES

01

Certificate Creation

The contract owner (issuer) generates a new certificate.

02

Recipient Information

Stores the recipient's name, course, and issue date.

03

Unique Certificate ID

Assigns a unique ID for identification.

How it works

Steps for using the system

- Issuance: Institutions issue certificates as NFTs.
- Verification: Publicly verifiable via blockchain.
- Revocation: Institutions revoke certificates on-chain if needed.



1. Verify Certificates:

Functionality and Use Cases.

- Anyone can verify the authenticity of a certificate by entering its unique ID.
- The system retrieves and displays the certificate details, including recipient information and issue date.
- Used by employers, educational institutions, and individuals for authentication.



2. Revoke Certificates.

Functionality and Importance

- The contract owner (issuer) can revoke a certificate if it is found to be fraudulent or invalid.
- A record of the revocation is added to the blockchain, making it permanent and publicly auditable.
- Ensures the integrity of the certificate system and protects against forgery.



Smart Contracts and Avalanche Blockchain



Smart contracts automate and enforce the rules of the system, ensuring secure and transparent operations.

Benefits of AvaCertify

Security

Securely issued and verified certificates.

Transparency

Publicly auditable records on the blockchain.

Verifiable

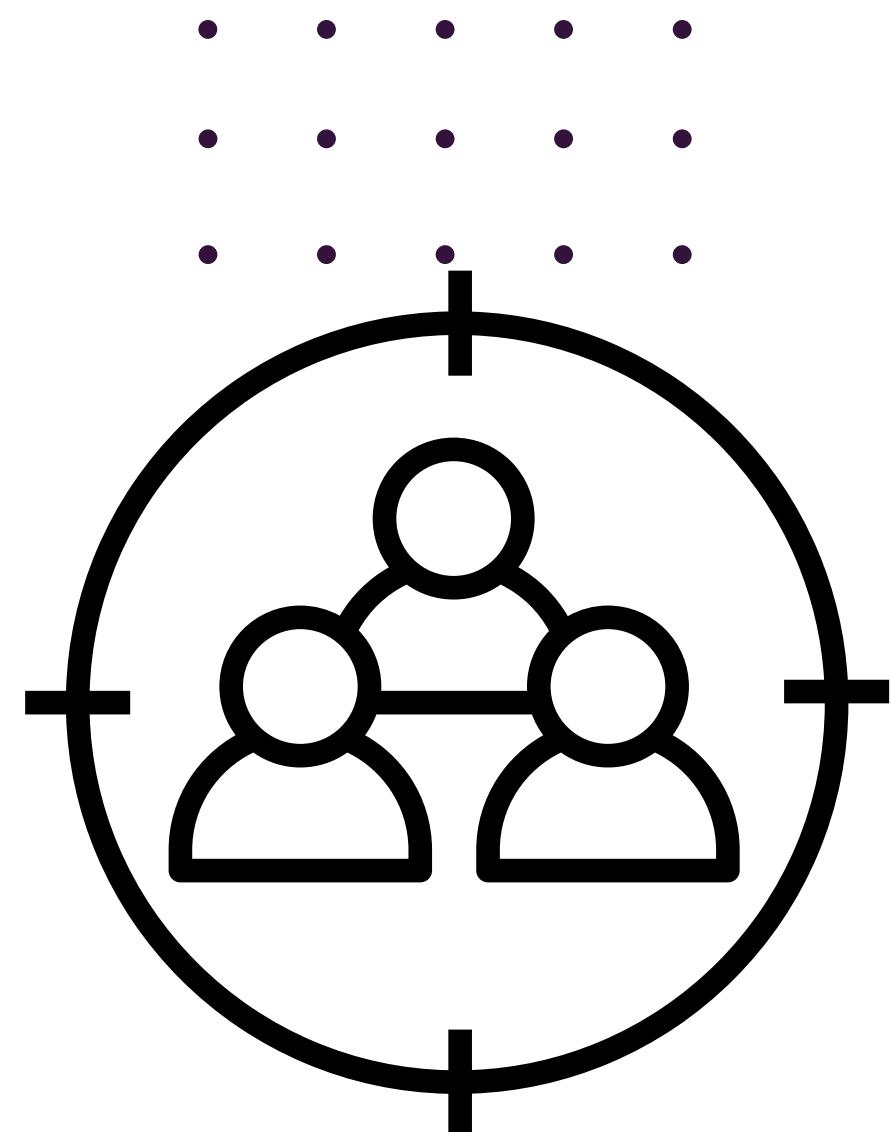
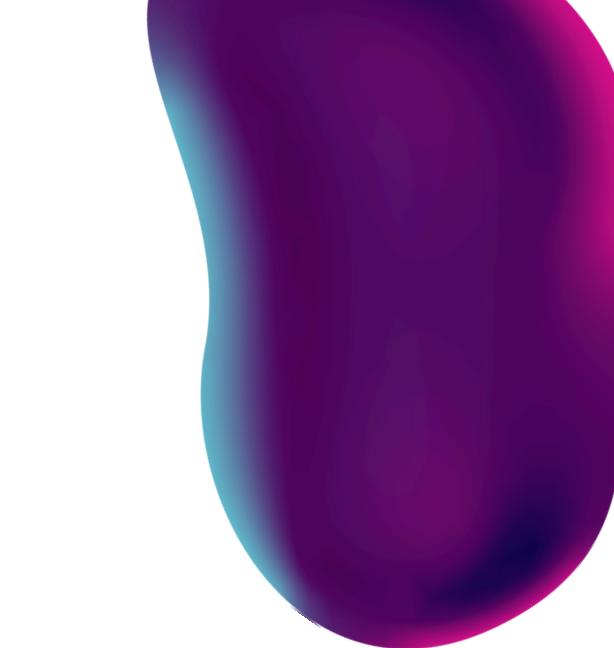
Streamlined and automated processes



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01

Universities and
educational
institutions.

02

Professional
certification
bodies.

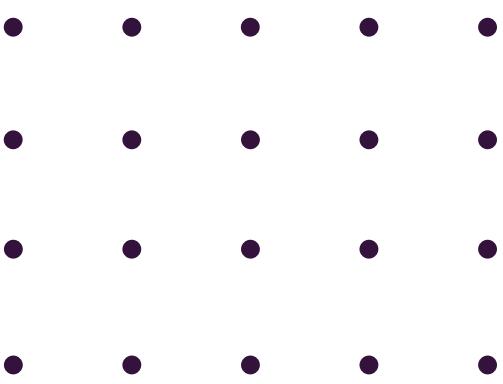
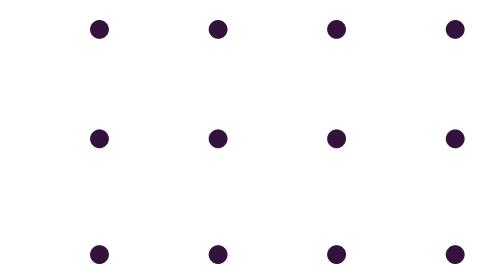
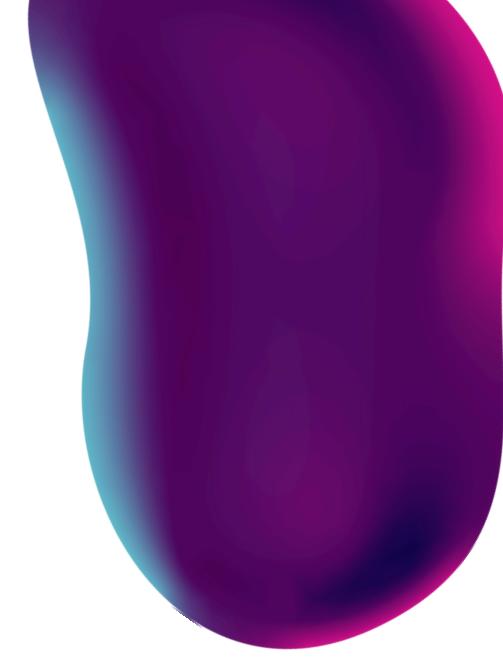
03

Corporate
training
programs.

04

Events and
awards.





1. Universities and Educational Institutions

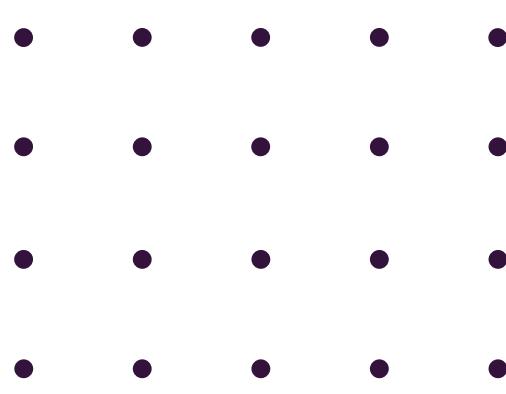
Challenges:

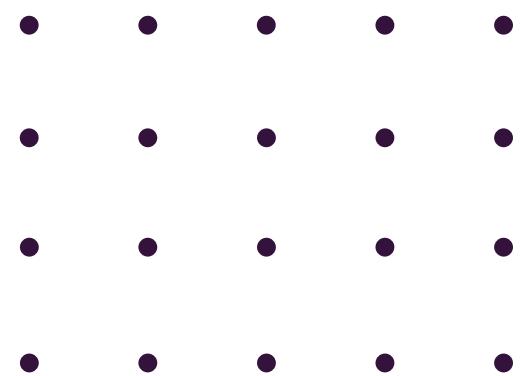
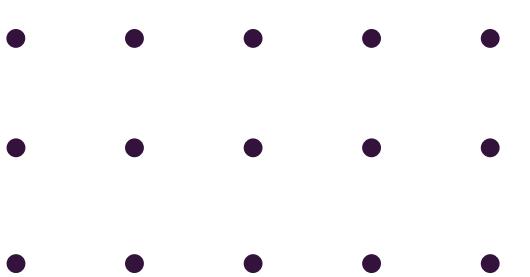
Managing the issuance and verification of degrees and diplomas for thousands of students.

Addressing fraudulent claims of degree ownership.

How AvaCertify Helps:

- **Automated Issuance:** Universities can issue digital certificates as NFTs directly to students upon graduation. These certificates include detailed metadata like student name, degree program, and graduation date.
- **Instant Verification:** Employers or third-party organizations can instantly verify the authenticity of degrees by checking the blockchain, eliminating the need for manual verification processes.





2. Corporates and Training Providers

Challenges:

- **Validating employee certifications in professional training programs.**
- **Preventing employees from falsifying training credentials.**

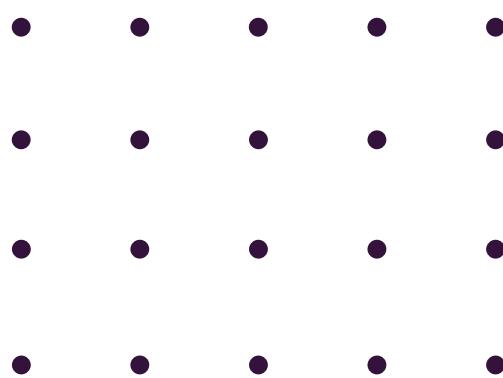
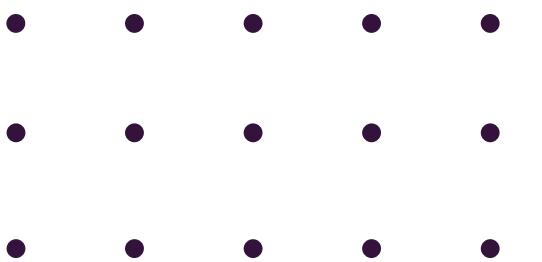
How AvaCertify Helps:

- **Real-Time Issuance:** Corporate training departments can issue certificates immediately after a training session or course completion, making the process seamless.
- **Easy Authentication:** HR teams can verify an employee's certifications through a simple blockchain query, ensuring they meet the required qualifications.

3. Event Organizers and Award Distributors

Challenges:

- .• . Verifying the authenticity of awards and recognitions distributed during events.
- .• . Ensuring that awards are tied to the correct recipient and not duplicated.



How AvaCertify Helps:

- **Customizable Certificates:** Event organizers can issue unique, branded NFT certificates for awards, with metadata that includes recipient details, award category, and event information.

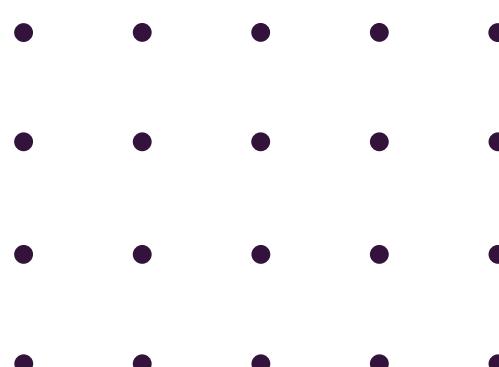
Professional Certification Bodies

Challenges:

- **Preventing fraudulent claims of certification.**
- **Maintaining a record of revoked or expired certifications.**

How AvaCertify Helps:

- **Dynamic Records:** Certificates issued with expiry dates or re-certification requirements can be updated or flagged for renewal.



Security and Transparency with Blockchain

Immutability

Once recorded, certificate data cannot be altered.

Transparency

All transactions and certificate information are publicly viewable.

Trust

Builds confidence in the authenticity of certificates.

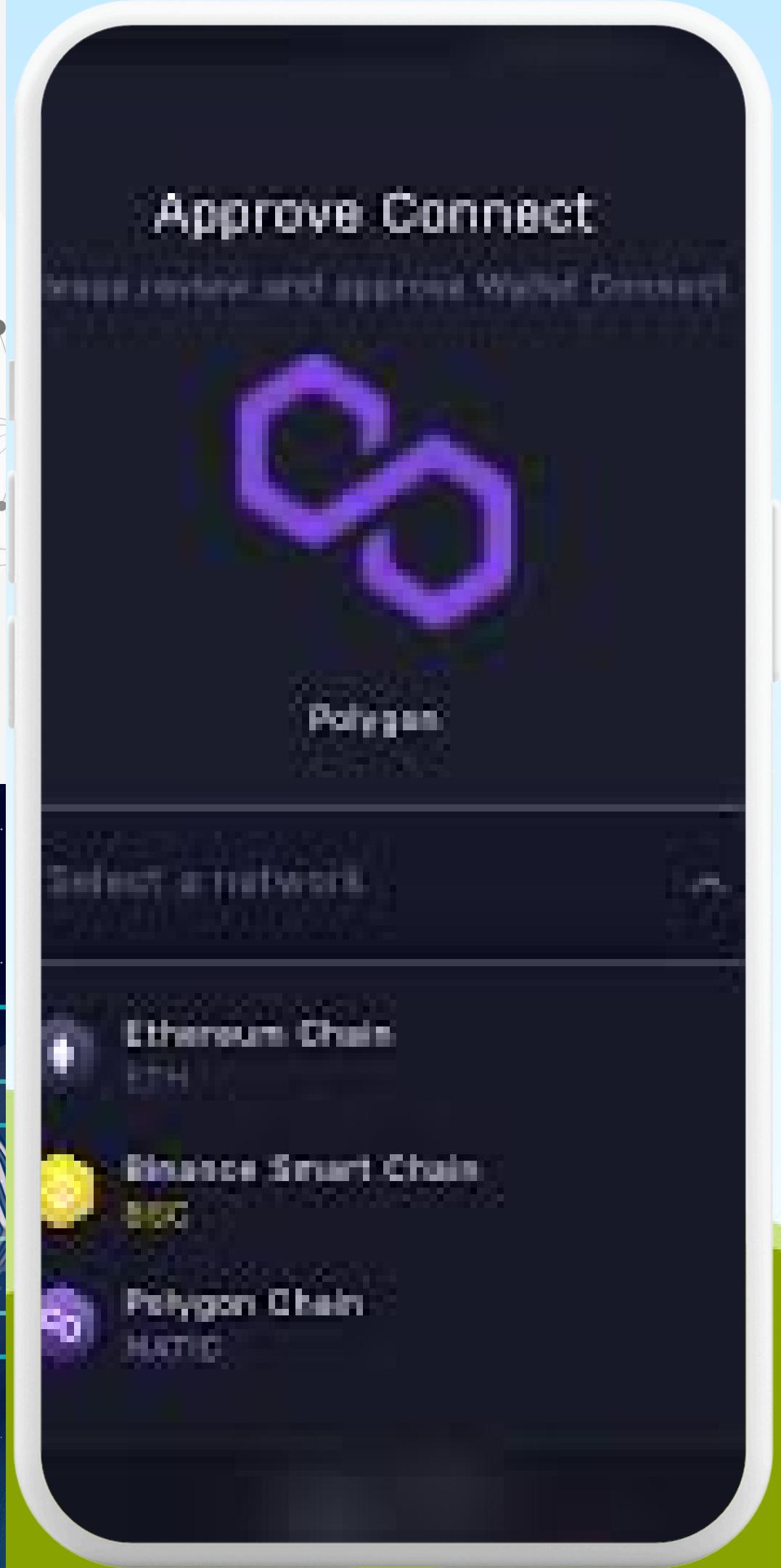
Technology Stack

- Blockchain Platform: Avalanche
- Programming Language: Solidity for smart contracts and JavaScript for front-end application
- frameworks: React, Node.js, Firebase
- Wallet Integration: MetaMask, Wallet Connect



MILESTONES FOR SUCCESS

- MVP launch with basic issuance and verification features.
- Partner with educational institutions and certifiers.
- Add advanced features like analytics and multi-language support.
- Expand to additional markets and explore cross-chain compatibility.

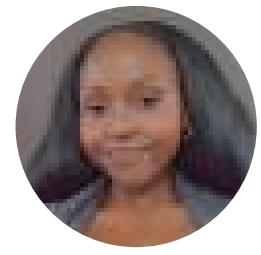


The Team



Ian Macharia -

Smart contract developer



Sharon Kitavi -

Back-end developer



Farhiya Omar

Back-end developer and Data science



Linet Mugwanja

Front-end developer



Salma Adam

Smart Contract



Stan

Back-end developer



Truth

Back-end developer



Join Us



On Github