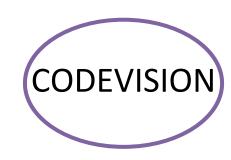
SMART INDIA HACKATHON 2025



TITLE PAGE

- Problem Statement ID SIH25029
- Problem Statement Title- Authenticity Validator for Academia
- Theme- Smart Education
- PS Category- Software
- Team ID-
- Team Name (Registered on portal): CODEVISION



IDEA TITLE



Problem 🔀

- 60% employers face fake certificates
- Manual verification = slow, inconsistent
- No single trusted source for credentials

Solution

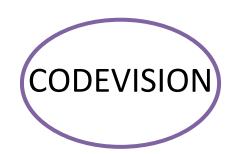
- AI + OCR \rightarrow detect tampering/forgery
- Blockchain → secure & immutable certificates
- Universal dashboard → quick verification



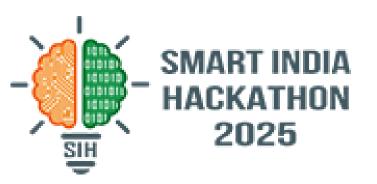


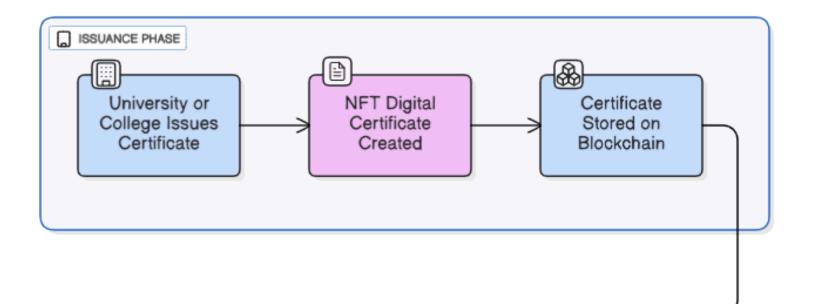
USP 🐪

- Works for old + new certificates
- Instant, global verification in seconds
- User ownership & trust restored



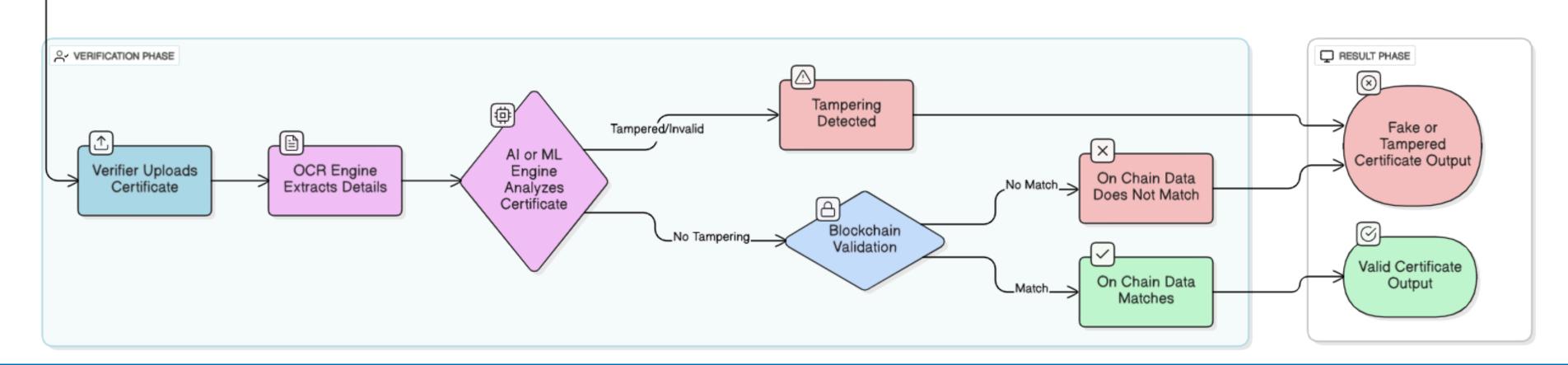
TECHNICAL APPROACH

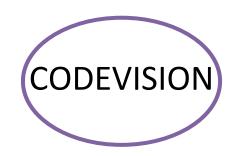




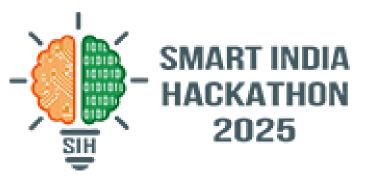
Tech Stack X

- OCR (Tesseract / Vision API)
- AI/ML anomaly detection
- Blockchain (Ethereum/Polygon) + IPFS
- Node.js + Express.js + MongoDB





FEASIBILITY AND VIABILITY

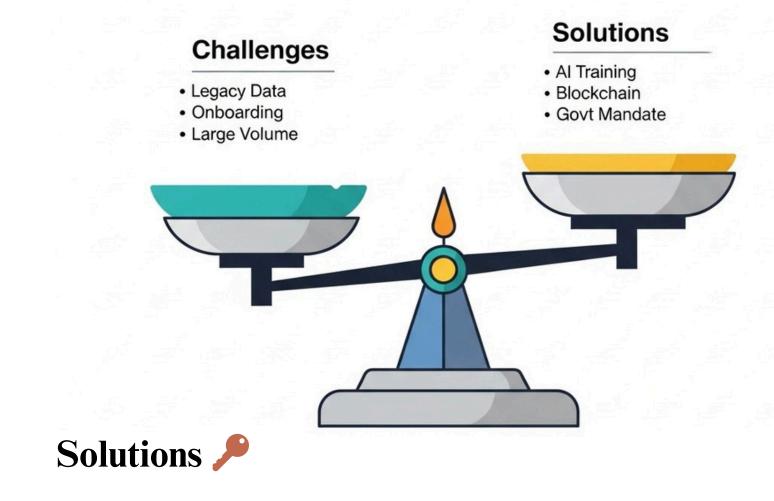


Feasibility

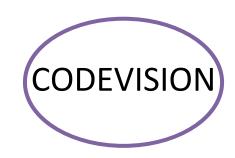
- ERP + bulk upload integration
- AI handles multiple formats
- Blockchain ensures tamper-proof

Challenges **(**

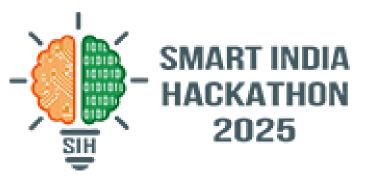
- Legacy Data Efficient Digitization
- Smooth Institution Wide Onboarding
- Large Volume Scalable Handling



- Govt. mandate for data upload
- ML training on all university formats
- SaaS rollout (affordable, scalable)



IMPACT AND BENEFITS

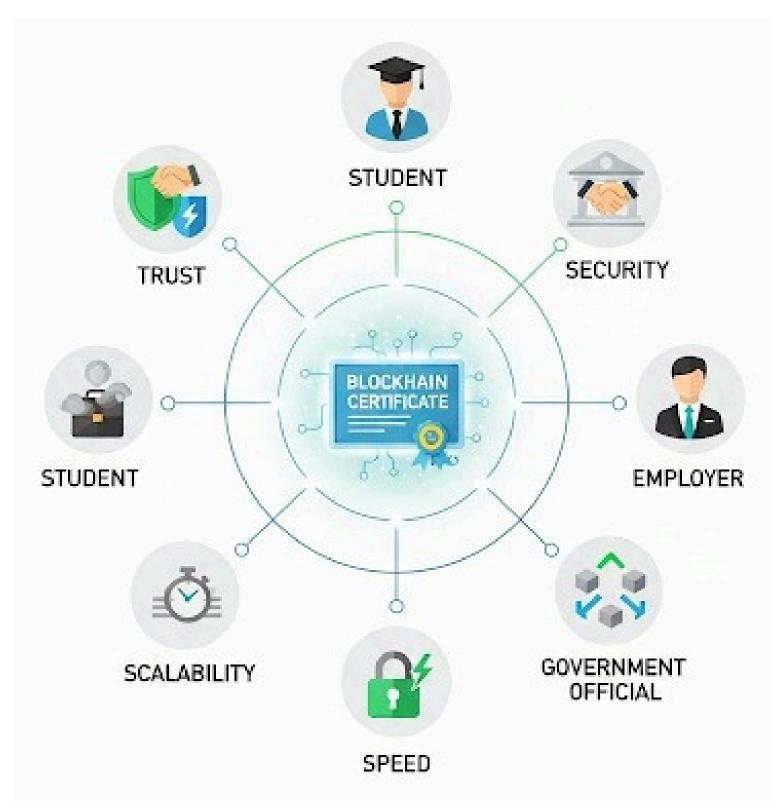


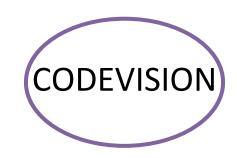
Impact 🍣

- Restores academic integrity
- Safeguards student achievements
- Reduces fraud in jobs, admissions & schemes

Benefits 🚀

- **Ö** Verification in seconds
- **| Single source of truth**
- 🔒 Secure data privacy





RESEARCH AND REFERENCES



Blockchain in Education – ScienceDirect

• Discusses benefits of blockchain for digital certificates – efficiency, cost saving, and fraud reduction.

https://doi.org/10.1016/j.compedu.2019.103706

Systematic Review of Blockchain in Higher Education – MDPI

Comprehensive study on blockchain initiatives for certificate management.

https://doi.org/10.3390/computers14040141

National Academic Depository – Govt. of India

• India's official initiative for secure storage and verification of student records.

https://nad.gov.in