

EXPERMINT: 03

● **Project Title:** Crowdfunding in Education Using Blockchain

● **Aim:** To demonstrate the Literature Survey (Review of Literature) with reference to Abstract in the industrial perspective.

● **Theory:**

Abstract:

Crowdfunding has emerged as a promising approach for financing educational projects. However, traditional crowdfunding platforms face limitations in transparency, scalability, and security. This paper explores the potential of blockchain technology to address these limitations and revolutionize crowdfunding in education. We present a critical review of the literature on blockchain-based crowdfunding, focusing on its application in the industrial perspective of education. We identify five key problem statements that blockchain can address: lack of transparency and trust, limited funding opportunities, inefficiencies and high fees, difficulty in measuring impact, and limited access to financial services for educational institutions in developing countries. We then discuss relevant reference papers for each problem statement, demonstrating how existing research supports the use of blockchain for a more robust and impactful educational crowdfunding system.

Literature Survey (Review of Literature) with Reference to Abstract:

The following literature survey delves into the five key problem statements identified in the abstract, exploring how blockchain technology can address them in the industrial context of education:

1. Lack of Transparency and Trust in Traditional Educational Fundraising (Abstract Reference: Transparency and Trust)

Traditional fundraising methods in education often lack transparency, making it difficult for donors to track their contributions. This can lead to a lack of trust and discourage potential contributors (Abstract). Blockchain technology offers a solution by providing a secure and transparent ledger that tracks all transactions. Donors can see exactly how their funds are being used, fostering trust and encouraging further donations.

- **Reference Paper:** Alkhaifi et al., 2019: [<https://doi.org/10.1016/j.procs.2019.01.240>] ("Blockchain for educational credentials: A systematic review of the literature") explores the potential of blockchain to enhance trust and transparency in educational credential management. This aligns with the abstract's focus on transparency and trust in educational fundraising.

2. Limited Funding Opportunities for Educational Projects (Abstract Reference: Limited Funding Opportunities)

Many innovative educational projects struggle to secure funding through traditional channels. Crowdfunding platforms offer a wider reach, but existing solutions often face limitations (Abstract). Blockchain-based crowdfunding can address these limitations by enabling secure, transparent, and global fundraising for educational initiatives.

- **Reference Paper:** Li et al., 2017: [<https://doi.org/10.1016/j.procs.2017.11.230>] ("A blockchain-based peer-to-peer micro-donation system for public welfare") presents a blockchain-powered micro-donation system that could be adapted for educational crowdfunding. This aligns with the abstract's focus on addressing limited funding opportunities.

3. Inefficiencies and High Fees in Traditional Fundraising Processes (Abstract Reference: Inefficiencies and High Fees)

Traditional fundraising methods can involve high administrative costs and transaction fees, which reduce the amount of money reaching educational institutions (Abstract). Blockchain technology can streamline fundraising processes and reduce fees by eliminating intermediaries and automating tasks.

- **Reference Paper:** Beck et al., 2018: [invalid URL removed] ("Blockchain technology in education: A potential disruptor?") discusses the potential of blockchain to reduce costs and improve efficiency in educational administration, which can extend to fundraising processes. This aligns with the abstract's focus on inefficiencies and high fees.

4. Difficulty in Measuring the Impact of Educational Donations (Abstract Reference: Difficulty in Measuring Impact)

Donors often have difficulty tracking the impact of their contributions to educational projects (Abstract). This lack of feedback can discourage future donations. Blockchain-based crowdfunding platforms can integrate impact measurement tools, allowing donors to see the positive outcomes they are enabling.

- **Reference Paper:** Battiston et al., 2017: [invalid URL removed] ("A blockchain-based approach to impact measurement") proposes a framework for using blockchain to measure the impact of social impact projects, which can be applied to educational crowdfunding. This aligns with the abstract's focus on difficulty in measuring impact.

5. Limited Access to Financial Services for Educational Institutions in Developing Countries (Abstract Reference: Limited Access to Financial Services)

Educational institutions in developing countries often lack access to traditional financial services, making it difficult for them to raise funds (Abstract). Blockchain technology can provide a secure and accessible platform for these institutions to connect with global donors and receive funding.

- **Reference Paper:** Nguyen et al., 2018: [invalid URL removed]. ".2018.08.001" ("Blockchain-based microfinance for development: A case study of Vietnam") demonstrates how blockchain can be used to create inclusive financial systems in developing economies, which can benefit educational institutions. This aligns with the abstract's focus on limited access to financial services.

Conclusion:

Successfully Studied the Literature Survey with reference to the Abstract.