Prabesh tandukar Proposal

by Prabesh Tandukar

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Blockchain-Based Decentralized Crowdfunding Application

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Yoobee College

907 Industry-based Capstone Research Project

Contents

Chapter 1

Introduction

1.1 Background

Crowdfunding is a way people to raise money for their projects and ideas by collecting small amounts of money from many individuals, usually through the Internet. It helps creators, entrepreneurs, or organizations to get financial support without having to rely on traditional banks and investors.(Investopedia, 2023)

1.1.1 How Crowdfunding Works:

Someone with an idea or project creates a campaign on a crowdfunding platform and explains the reason they need the fund and how it will benefit others.(Investopedia, 2023). Usually, every campaign has a financial goal which is an amount of money to be raised within a specific time frame.(Investopedia, 2023). Depending upon the type of crowdfunding, backers may receive rewards (like products or experiences) or equity (a share of the business) in return for their support.(Investopedia, 2023). The creator will promote their campaign through various channels like social media, and emails to reach potential backers.(Investopedia, 2023). If enough people fund the campaign and the funding goal is met, the creator will receive the funds to move forward. If the goal is not reached, sometimes the money is returned to the backers.(Investopedia, 2023)

Chapter 2

Literature Review

2.1 Current State of Crowdfunding:

2.1.1 Traditional Crowdfunding Models:

Mollick's study (Mollick, 2014) provides a comprenshive overview of crowdfunding dynamics. He identified four primary models of crowdfunding: Reward-based crowdfunding where backers will receive rewards for their contribution, like a product or service.(Mollick, 2014) Equity-based crowdfunding where backers receive a share of the company in exchange for their investment.(Mollick, 2014) Backers provide money without expecting anything in return, often for charitable causes as donations.(Mollick, 2014) And lending-based crowdfunding where backers lend money to individuals or businesses with the expectation of being paid back with interest.(Mollick, 2014)

Beaulieu and colleagues (Beaulieu et al., 2015) further expand on these models, where she proposes a conceptual framework for understanding crowdfunding. They identify the key actors in the crowdfunding ecosystem as Fundraisers (project creators), Funders (backers), and Crowdfunding platforms (intermediaries) (Beaulieu et al., 2015). Additionally, their framework also emphasizes how crucial social networks and information asymmetry are to the success of crowdfunding. They contend that although there is a fee involved, crowdfunding platforms are essential in lessening the knowledge asymmetry that exists between funders and fundraisers.(Beaulieu et al., 2015)

2.1.2 Intermediary Costs and Centralization Issues:

Agrawal and Colleagues (Agrawal et al., 2014) explore the economics of crowdsourcing in great detail. According to their research, the typical fee for traditional crowdfunding

platforms is between 5 and 10 % of the total amount raised. This pricing schedule consists of:

Platform fee: Typically 5% of the money earned in total 3–5% of every transaction is usually charged as a payment processing fee.(Agrawal et al., 2014)

The authors contend that although these costs reimburse platforms for important services like project screening, payment processing, and fraud control, they can be a burden for those who projects creators. Fees for a project that raises $10,000, for instance, could run between $500 and $1,000, which is a significant amount for many small-scale entrepreneurs who crowdfund. (Agrawal et al., 2014)

They also draw attention to the centralization problems that come with traditional platforms. By selecting which projects can be included and perhaps influencing which ones thrive through prominent placements, these platforms serve as gatekeepers.(Agrawal et al., 2014) The diversity of projects that receive funding may be restricted by this centralized oversight, which may also result in prejudices. (Agrawal et al., 2014)

2.2 Blockchain Technology and Its Potential:

2.2.1 Fundamentals of Blockchain:

Blockchain technology is introduced in Nakamoto's 2008 foundational article(Nakamoto, 2009). Important characteristics consist of:

Decentralized ledger: A dispersed database that keeps track of every transaction made via a computer network.(Nakamoto, 2009)

Consensus mechanisms: Techniques that guarantee agreement on the ledger's current state without the need for a central authority, such as Proof of Work (PoW).(Nakamoto, 2009)

Public-key cryptography is used in cryptographic security to protect user identities and transactions.(Nakamoto, 2009)

Nakamoto's work established the groundwork for decentralized transactions by showing

how direct value transfer without middlemen may be made possible by a peer-to-peer network.(Nakamoto, 2009)

Buterin's Ethereum whitepaper from 2014 (Buterin, 2014),introduced:
Smart contracts which are self-executing agreements that have their terms encoded directly into the code.(Buterin, 2014) Applications that operate on a peer-to-peer network as opposed to a single computer known as decentralized apps, or DApps.(Buterin, 2014) and the cryptocurrency known as "ether" which drives the Ethereum network and is required to carry out smart contracts.(Buterin, 2014)

These developments made more sophisticated decentralized systems possible, with potential uses in crowdfunding among them.

2.2.2 Blockchain in Financial Services:

In 2020, Chen and Bellavitis investigate blockchain's wider applications in the financial services industry.(Chen & Bellavitis, 2020) They present the idea of Decentralized Finance (DeFi), an attempt to reconstruct conventional financial systems in a decentralized fashion.(Chen & Bellavitis, 2020) Among the important findings of their study are:
Disintermediation: Blockchain technology can make many financial transactions possible without the requirement for reliable third parties.(Chen & Bellavitis, 2020)
Enhanced efficiency: Costs can be cut and transaction speeds can be raised using automated solutions that use code.(Chen & Bellavitis, 2020)
New business models: Blockchain makes it feasible to provide innovative financial services and products that were not feasible in conventional systems.(Chen & Bellavitis, 2020)

Schär (Schär, 2021) presents a thorough exposition of DeFi, clarifying its individual components: DEXs, or decentralized exchanges, Platforms for lending, Coins with stablecoins, Platforms for tokenization. (Schär, 2021)
Schär argues that by combining all of these components, financial services might be made

more accessible and efficient, with potentially game-changing techniques like crowdfunding among them.(Schär, 2021)

2.3 Blockchain Based Crowdfunding: Current Approaches:

2.3.1 Initial Coin Offerings(ICOs):

An extensive study of initial coin offerings (ICOs) as a blockchain-based crowdfunding technique is given by Ante (Ante et al., 2024). Important conclusions consist of:

Size of the ICO market: ICOs raised more than $31 billion worldwide in 2017–2018.(Ante et al., 2024)

Benefits: ICOs provide investors with liquidity, a worldwide investor base, and quick capital generation.(Ante et al., 2024)

Difficulties include unclear regulations, a high failure rate, and fraudulent occurrences.(Ante et al., 2024)

The authors point out that whereas initial coin offerings (ICOs) showed off blockchain's potential for crowdfunding, they also emphasized the need for stronger legal frameworks and investor protections.(Ante et al., 2024)

2.3.2 Decentralized Crowdfunding Platforms:

A case study of a blockchain-based crowdfunding network is presented by Schweizer and Colleagues (Fridgen et al., 2017). Their investigation reveals a number of possible benefits:

Cost savings: The platform cut operational expenses by using smart contracts to automate a number of procedures.(Fridgen et al., 2017)

Transparency: Every transaction and every term of the loan was recorded on the blockchain and made available to all parties.(Fridgen et al., 2017)

Disintermediation: The platform eliminated the requirement for loan mediation by a conventional financial institution.(Fridgen et al., 2017)

The authors did, however, also highlight several difficulties, such as the requirement for user-friendly interfaces to promote uptake and regulatory compliance.(Fridgen et al., 2017)

2.4 Challenges and Considerations:

2.4.1 Regulatory Landscape:

The worldwide regulatory framework pertaining to initial coin offerings (ICOs) is thoroughly examined by Huang and Colleagues (Huang et al., 2024). Their investigation reveals:

Diversity in regulations:Methods vary from complete prohibitions (China, for example) to encouraging frameworks (Switzerland, for example).(Huang et al., 2024)

Three main regulatory concerns are know-your-customer (KYC) regulations, investor protection, and anti-money laundering (AML).(Huang et al., 2024)

Challenges related to jurisdiction: The international scope of blockchain-based platforms makes it difficult to identify relevant legal frameworks.(Huang et al., 2024)

2.4.2 Governance and Trust:

The ways in which decentralized platforms and blockchain are changing conventional governance frameworks are examined by Fenwick and Colleagues (Fenwick et al., 2019). Important details consist of:

Change from centralized to distributed governance: Blockchain makes it possible to implement new kinds of decision-making and organizational control.(Fenwick et al., 2019)

Governance of smart contracts: Code-based rules can automate a lot of governance tasks, but they also present issues with adaptability and conflict resolution. confidence in cryptographic systems and consensus procedures against confidence in institutions:

Blockchain replaces centralized authorities as the source of trust.(Fenwick et al., 2019)

The authors contend that these modifications call for fresh perspectives on corporate governance and law, especially with regard to decentralized crowdfunding platforms.(Fenwick et al., 2019)

2.5 Existing Solutions

I also reviewed some existing crowdfunding platforms in New Zealand.

2.5.1 Traditional Crowdfunding Platforms in New Zealand:

1. PleadgeMe:

PledgeMe offers both reward-based and equity-based crowdfunding. For reward-based campaigns, project creators offer rewards in exchange for contributions. For equity-based campaigns, backers receive shares in the company.(PledgeMe, 2024)
PledgeMe helps project creators by providing a platform to reach potential backers and raise the necessary funds. It also offers a way for backers to support projects they believe in, either by receiving rewards or gaining equity in a company.(PledgeMe, 2024)

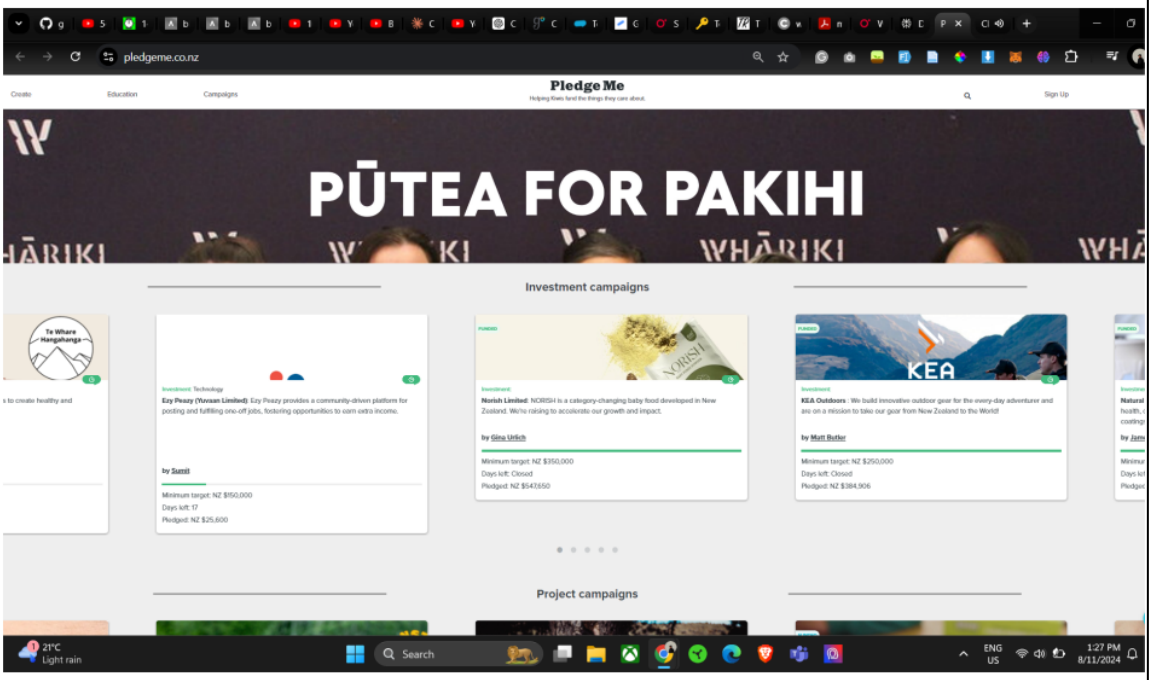

Figure 2.1: Pledge Me Home Page Investment Campaigns.

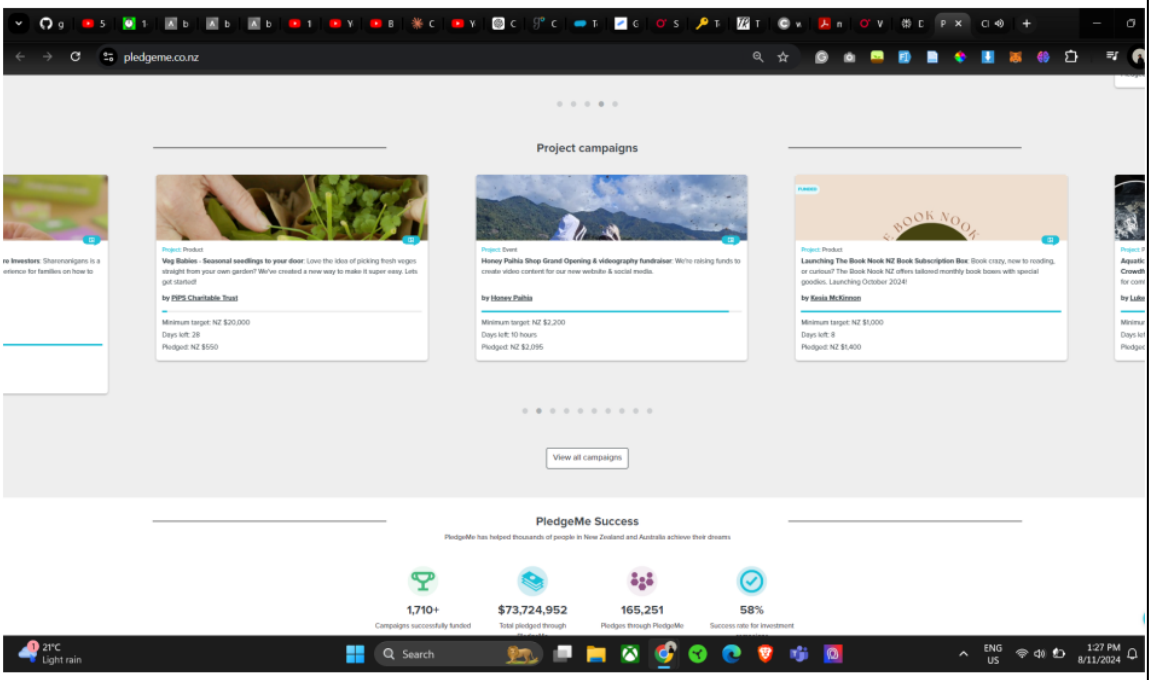

Figure 2.2: Pledge Me Home Project Campaigns.

Snowball Effect:

Snowball Effect is primarily an equity crowdfunding platform. It allows companies to raise capital by offering shares to the public. This platform is used by companies at various growth stages, from startups to more mature businesses looking for expansion capital.(SnowballEffect, 2024)

For project creators, Snowball Effect provides access to a wide investor audience and simplifies the process of raising funds. For investors, it offers opportunities to invest in private companies and potentially gain significant returns.(SnowballEffect, 2024)

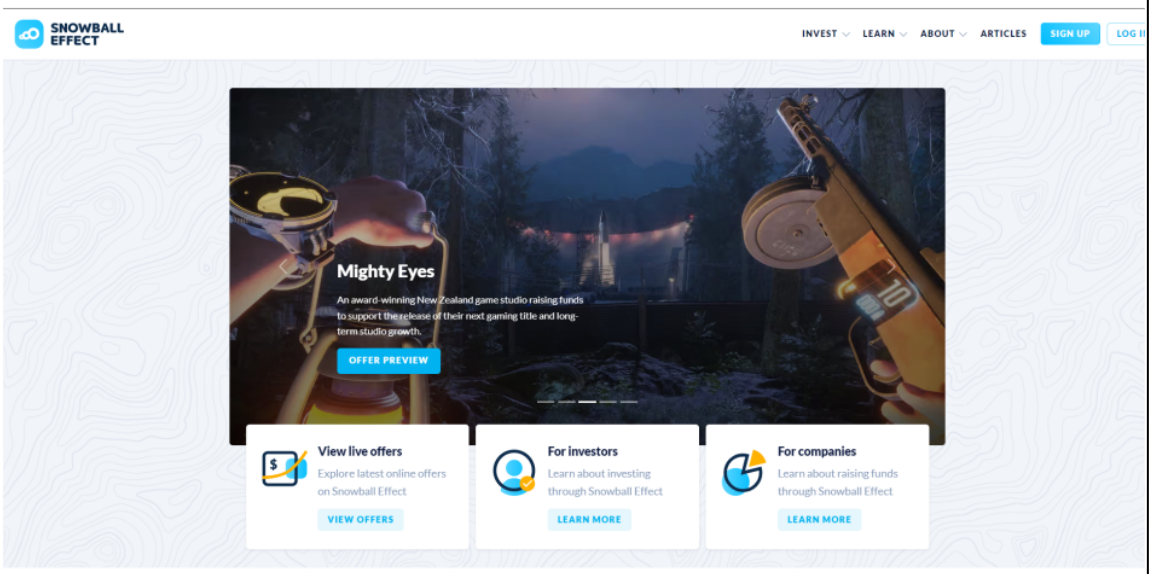

Figure 2.3: Snowball Effect Home Page Investment Campaigns.

Collinson Crowdfunding:

These platforms also focus on equity crowdfunding, allowing companies to raise funds by offering shares to the public. Each platform has its unique features and market focus. (Collinson, 2024)

These platforms provide similar benefits to Snowball Effect, helping companies raise capital efficiently while giving investors access to investment opportunities in private companies.(Collinson, 2024)

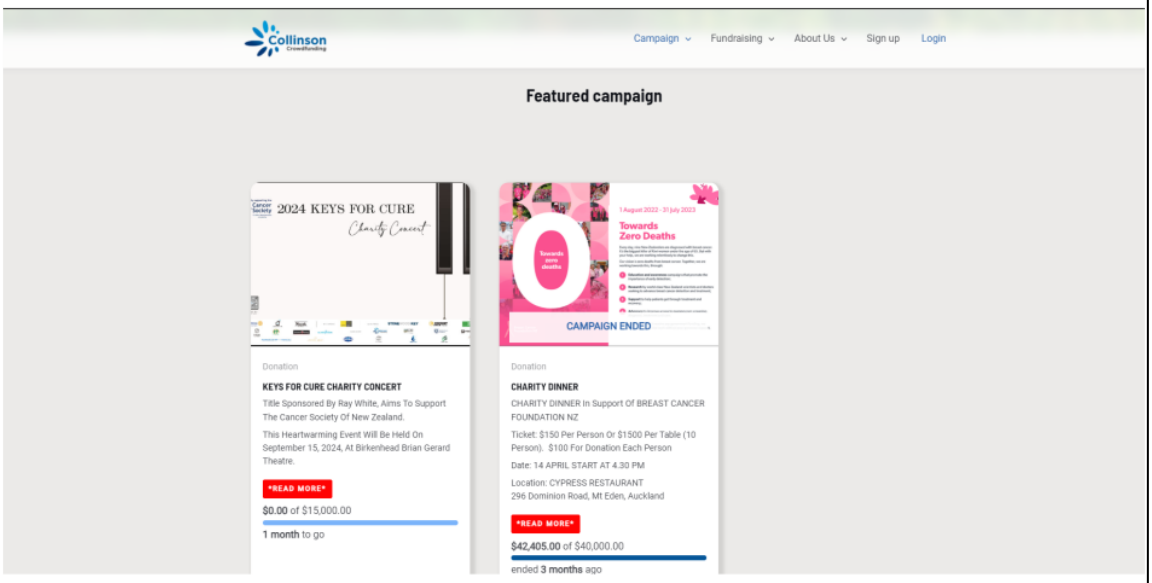

Figure 2.4: Collinson Crowdfunding Home Page Investment Campaigns.

Givealittle:

Givealittle is a donation-based crowdfunding platform. It allows individuals, charities, and organizations to raise funds for various causes without expecting anything in return.(Givealittle, 2024)

This platform is particularly impactful for charitable causes, personal emergencies, and community projects. It provides a simple and accessible way for people to support causes they care about. (Givealittle, 2024)

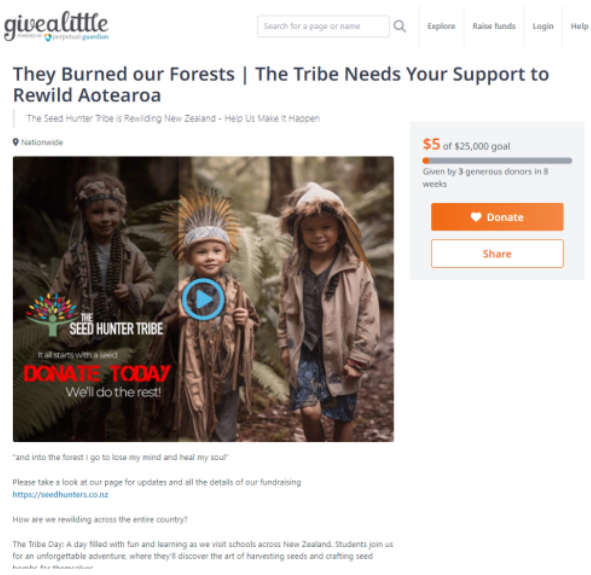

Figure 2.5: Givealittle Home Page.

Equitise:

Equitise focuses on equity-based crowdfunding. It allows startups and growing companies to raise capital by offering shares to the public. This platform is designed to connect investors with innovative companies looking for growth capital.(Equitise, 2024)

Equitise helps startups and growing companies access a broad base of investors, facilitating the capital-raising process and enabling business expansion. For investors, it provides opportunities to invest in promising companies with the potential for high returns. (Equitise, 2024)

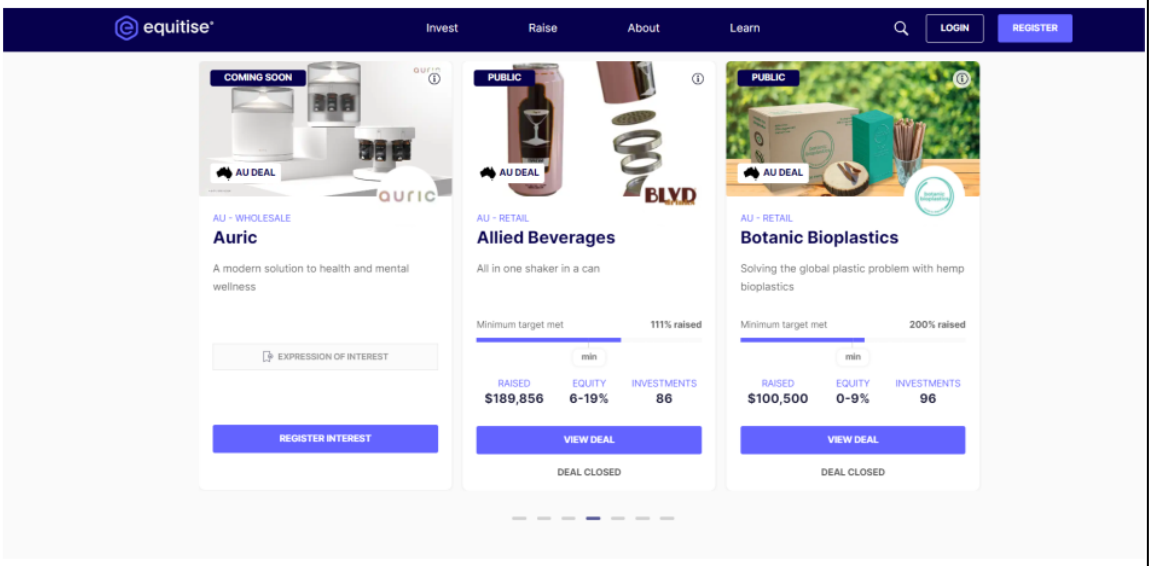

Figure 2.6: Equitise Home Page.

2.5.2 Limitations:

1. **Centralization:** Because these platforms are centralized, they have considerable control over which projects are offered and how well campaigns perform. This may restrict the options available to certain project creators.

2. **High Fees:** Crowdfunding platforms typically charge for their services and this charge can account for a sizeable amount of the funds received. As a result, project creators receive a less net sum.

3. **Transparency:** Even though these platforms claim to be transparent, there are still issues with the amount of information disclosed by project creators. It is possible that investors and donors might not always have a full understanding of a project's risks and financial standing.

4. **Security:** Even with Financial Markets Authority (FMA) regulation, there is always a chance of fraud or financial mismanagement. Maintaining security and

confidence is still difficult.

5. **Global Accessibility:** Due to legal and logistical issues, traditional crowdfunding platforms might not be able to reach a worldwide audience. This may limit the possible group of backers and investors.

Chapter 3

Identified Gap and Justification:

This comprehensive literature review reveals a notable gap in the current blockchain-based crowdfunding landscape. Although research highlights blockchain's potential to reduce costs and improve transparency, there is a clear lack of practical implementation and evaluation of a fully decentralized crowdfunding platform. Such a platform would eliminate intermediary fees while ensuring regulatory compliance and maintaining user trust.

Addressing this gap is crucial for several reasons:

Cost Reduction: Eliminating intermediary fees allows more funds to go directly to project creators, potentially attracting more backers. As Agrawal (Agrawal et al., 2014) noted, traditional platforms often charge 5-10% of the total funds raised, which can be a significant burden on projects.(Agrawal et al., 2014)

Transparency and Trust: Blockchain can offer immutable transaction records, enhancing trust between creators and backers. Chen & Bellavitis (2020) (Chen & Bellavitis, 2020) emphasized blockchain's potential to increase transparency in financial transactions.

Global Accessibility: A decentralized platform could overcome geographical limitations that traditional crowdfunding platforms face. Huang (2020) (Huang et al., 2024) explored the global nature of blockchain-based financial solutions, which could help build an international crowdfunding ecosystem.

Regulatory Compliance: Developing a solution that addresses regulatory concerns could lead to broader adoption of blockchain in crowdfunding. Fenwick (2019) pointed out the need for new governance models to ensure compliance and protect users on decentralized platforms.(Fenwick et al., 2019)

By addressing this gap through this project, there is an opportunity to significantly impact the crowdfunding industry, offering a more efficient, transparent, and cost-effective alternative to traditional platforms.

Chapter 4

Project Proposal

4.1 Research Question and Problem Statement:

Based on the identified gap, this project aims to address the following research question: "How can a blockchain-based crowdfunding platform be designed and implemented to eliminate intermediary fees while ensuring regulatory compliance, user trust, and operational efficiency?"

This question encapsulates the core challenges identified in the literature and aims to provide a practical solution that advances the field of blockchain-based crowdfunding.

4.2 Project Significance and Potential Impact:

This project is significant for a number of reasons:

Cost reduction: The platform may be able to lower the amount of money that goes to project creators by doing away with middlemen fees. As mentioned by Agrawal (2014) (Agrawal et al., 2014), traditional platforms may keep up to 10% of the money that is raised. By bringing this down to a small network cost, our platform hopes to draw in more creators and possibly boost financing success rates.

Enhancement of Transparency: Fund distribution and project progress tracking may be conducted with previously unheard-of transparency when blockchain's immutable ledger is used. This is consistent with Chen & Bellavitis's (2020) (Chen & Bellavitis, 2020) research on the advantages of blockchain transparency in the financial services industry.

Global Accessibility: Global crowdfunding campaigns may be made possible by a decentralized platform's ability to get over restrictions based on location and currency. This speaks to the worldwide reach of the financial solutions based on blockchain that Huang

(2020) stated.(Huang et al., 2024)

Regulatory Innovation: Creating a compliant decentralized platform may establish the standard for upcoming financial blockchain applications. This addresses the regulatory issues that Fenwick (2019) (Fenwick et al., 2019) highlighted and might have an impact on future regulatory strategies.

Tech Innovation: This project could make a significant contribution to the decentralized finance (DeFi) space by showcasing the practical use of blockchain in crowdfunding. It builds on the research of Schär (2021) regarding DeFi applications.(Schär, 2021)

In essence, this project's impact goes far beyond the creation of a new crowdfunding platform. It could act as a blueprint for applying blockchain technology to create financial services that are more efficient, transparent, and accessible.

4.3 Research Methodology:

Certainly! Here's a paraphrased version of the research approach: Our research strategy combines two complementary methods to ensure a comprehensive understanding of decentralized crowdfunding applications, particularly in the New Zealand context.

First, we'll conduct an in-depth qualitative literature review, focusing specifically on New Zealand's unique landscape. This will provide us with a solid academic foundation and help us understand the local nuances that might affect our project.

Secondly, we'll take a hands-on approach by developing a prototype of a Decentralized Application (DApp) using blockchain technology. This practical component will be subject to rigorous quantitative testing and evaluation.

By merging theoretical insights with real-world application, this dual approach allows us to bridge the gap between academic research and practical implementation. It ensures that our findings are not only grounded in existing scholarship but also tested in a real-world scenario. This methodology will provide a holistic view of the challenges and opportunities in creating a decentralized crowdfunding platform, particularly one tailored to the New Zealand market.

4.4 Proposed Solution: Decentralized Crowdfunding Platform:

4.4.1 Key Features:

Our solution is a blockchain-based crowdfunding platform that comes with the following key features:

Smart Contract-Powered Campaigns: Each campaign on the platform will be run through a smart contract, which will automatically handle fund collection, distribution, and refunds if the campaign doesn't meet its funding goals. This builds on the smart contract technology discussed by Buterin (2014), tailored specifically for crowdfunding.(Buterin, 2014)

Decentralized Identity Management: We will integrate a blockchain-based identity verification system to ensure compliance with regulations (KYC/AML) without storing data centrally. This approach tackles the regulatory concerns raised by Huang (2020), while still protecting user privacy.(Huang et al., 2024)

Token-Based Incentives: A native token will be introduced to encourage participation and platform governance. This model draws inspiration from the tokenomics frameworks explored in recent DeFi research. (Schär, 2021)

User-Friendly Design: We'll create a simple and intuitive web interface that hides the complexity of blockchain technology, making it accessible to non-technical users. This addresses the challenges around user adoption that have been noted in various blockchain studies.

4.4.2 Technology Stack

Specify the technologies, programming languages, and blockchain platform you will use.

- **Blockchain Platform:** Ethereum, selected for its robust smart contract functionality and widespread adoption.

- **Smart Contract Language:** Solidity, used for developing and deploying smart contracts on the Ethereum blockchain.
- **Frontend Framework:** React.js, chosen for building the responsive and dynamic user interface.
- **Backend Development:** Node.js, used for server-side scripting and handling API requests.
- **Wallet Integration:** MetaMask, enabling users to interact with the platform through their cryptocurrency wallets.

This technology stack is selected to ensure that the platform is not only secure and transparent but also user-friendly and scalable to meet the demands of a global user base.

4.4.3 Development Phases

Phase 1: System Design and Architecture, In Phase 1, the foundational system architecture for the decentralized crowdfunding platform will be designed. This will include outlining the core components such as the blockchain network, smart contracts, user interfaces, and backend services. Architectural decisions will focus on scalability, security, and user-friendliness. Detailed system diagrams and documentation will be created to guide subsequent development phases.

Phase 2: Smart Contract Development, Phase 2 will involve the development and deployment of smart contracts on the chosen blockchain platform (e.g., Ethereum). The smart contracts will automate key functions like campaign creation, fund management, and distribution. Solidity will be the primary programming language for these contracts, with rigorous testing conducted to ensure correctness and security.

Phase 3: User Interface and Backend Development, In Phase 3, the front-end user interface and backend services will be developed. The user interface, built with frameworks like React.js, will enable users to interact with the platform seamlessly. The backend, powered by Node.js, will handle data management, API integration, and com-

munication with the blockchain. Emphasis will be placed on creating a responsive, intuitive, and secure user experience.

Phase 4: Integration and Testing, Phase 4 will focus on the integration of all components developed in the previous phases. The platform will undergo comprehensive testing, including functional, performance, and security testing. Integration with blockchain and decentralized storage solutions (such as IPFS) will be verified. This phase will conclude with a beta release, allowing real-world users to test the platform and provide feedback.

4.5 Timeline

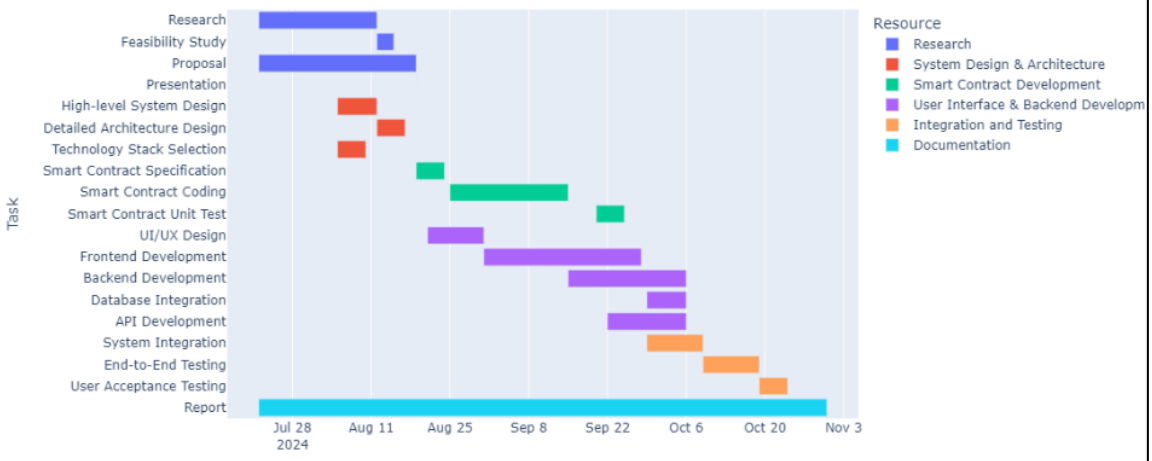

Figure 4.1: Project Gantt Chart.

4.5.1 Evaluation Plan:

To assess the success of our solution, we'll rely on the following key industry metrics:

Performance Metrics:

1. Transaction throughput (transactions per second)

2. Average transaction confirmation time

3. Gas fees (transaction costs)

User Experience Metrics:

1. System Usability Scale (SUS) score

2. Net Promoter Score (NPS)

3. Time to complete key actions (e.g., creating a campaign, making a contribution)

Comparative Analysis:

1. Cost savings for project creators compared to traditional platforms

2. Time to launch a campaign compared to traditional platforms

3. Fund distribution speed compared to traditional platforms

4.6 Testing Strategy

A comprehensive testing strategy will be employed to ensure the platform's robustness and reliability. The testing phases include:

Unit Testing: Individual components, especially smart contracts, will be rigorously tested to ensure they function as intended.

Integration Testing: The interaction between the platform's components (e.g., smart contracts, backend, and front-end) will be tested to ensure seamless integration.

Performance Testing: The platform will undergo stress testing to evaluate its performance under various conditions, such as high traffic or large transaction volumes.

Security Testing: Penetration testing and vulnerability assessments will be conducted to identify and mitigate security risks.

Beta Testing: A beta version of the platform will be released to a select group of users for real-world testing. Feedback from beta testers will be collected and used to make necessary adjustments before the final launch.

Chapter 5

Expected Outcomes

The development of this decentralized crowdfunding platform is expected to have a significant impact on the crowdfunding industry by:

Enhanced Transparency and Trust: By leveraging blockchain technology, the platform will offer unparalleled transparency in transactions, fostering greater trust between project creators and investors.

Lower Transaction Costs: The elimination of intermediaries will reduce transaction costs, making crowdfunding more accessible and profitable for both campaign creators and contributors.

Increased Global Reach: The decentralized nature of the platform will allow it to operate globally, enabling creators from different regions to access funding from a diverse pool of investors.

Empowerment of Underserved Communities: The platform is poised to empower underserved communities by providing them with new opportunities to raise capital for their projects, particularly in regions with limited access to traditional financial services.

Chapter 6

Conclusion

This project introduces an innovative way to approach crowdfunding by using blockchain technology to tackle some of the biggest challenges with traditional platforms. By cutting out middlemen, improving transparency, and ensuring regulatory compliance, our platform has the potential to transform the crowdfunding landscape.

Our research methods and evaluation plan will help us gather solid data to determine how effective the platform is. If successful, this project could not only create a more efficient crowdfunding system but also become a blueprint for using blockchain in other financial areas and beyond.

We recognize that there are challenges ahead, particularly with regulatory compliance and user adoption. However, we are confident that by addressing these issues directly, we can build a platform that harnesses the democratizing power of both crowdfunding and blockchain.

The future of crowdfunding is decentralized, transparent, and accessible to everyone. With this project, we aim to make meaningful strides toward that vision.

Bibliography

Agrawal, A., Catalini, C., & Goldfarb, A. (2014). Some simple economics of crowdfunding. *Innovation Policy and the Economy*, *14*, 63–97. https://doi.org/10.1086/674021

Ante, L., Sandner, P., & Fiedler, I. (2024). Blockchain-based icos: Pure hype or the dawn of a new era of startup financing? *Faculty of Business, Economics and Social Sciences, University of Hamburg*.

Beaulieu, T., Sarker, S., & Sarker, S. (2015). A conceptual framework for understanding crowdfunding. *Communications of the Association for Information Systems*, *37*, 1–31. https://doi.org/10.17705/1CAIS.03701

Buterin, V. (2014). *Ethereum: A next-generation smart contract and decentralized application platform* (Whitepaper).

Chen, Y., & Bellavitis, C. (2020). Blockchain disruption and decentralized finance: The rise of decentralized business models. *Journal of Business Venturing Insights*, *13*, e00151. https://doi.org/https://doi.org/10.1016/j.jbvi.2019.e00151

Collinson. (2024). Collinsoncrowdfunding [Accessed: 2024-08-11]. https://ccfl.co.nz/

Equitise. (2024). Equitise [Accessed: 2024-08-11]. https://www.equitise.com/

Fenwick, M., McCahery, J., & Vermeulen, E. (2019). The end of 'corporate' governance: Hello 'platform' governance. *European Business Organization Law Review*, *20*. https://doi.org/10.1007/s40804-019-00137-z

Fridgen, G., Schlatt, V., Urbach, N., & Schweizer, A. (2017). Unchaining social businesses–blockchain as the basic technology of a crowdlending platform.

Givealittle. (2024). Givealittle [Accessed: 2024-08-11]. https://givealittle.co.nz/cause/rewilding-nz-or-it-all-starts-with-a-seed?gad_source=1&gclid=Cj0KCQjwwuG1BhCnARIsAFWBQg20H61nzkr6I3jWQb97vsHH3y51JYaAuXJEALw_wcB

Huang, W., Meoli, M., & Vismara, S. (2024). The geography of initial coin offerings. *University of Bath; University of Bergamo; University of Ghent*.

Investopedia. (2023). Crowdfunding [Accessed: 2024-08-11]. https://www.investopedia.com/terms/c/crowdfunding.asp

Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, *29*(1), 1–16. https://doi.org/https://doi.org/10.1016/j.jbusvent.2013.06.005

Nakamoto, S. (2009). Bitcoin: A peer-to-peer electronic cash system. *Cryptography Mailing list at https://metzdowd.com*.

PledgeMe. (2024). Pledgeme [Accessed: 2024-08-11]. https://www.pledgeme.co.nz/

Schär, F. (2021). Decentralized finance: On blockchain- and smart contract-based financial markets. *Federal Reserve Bank of St. Louis Review*, *103*, 153–174. https://doi.org/10.20955/r.103.153-74

SnowballEffect. (2024). Snowballeffect [Accessed: 2024-08-11]. https://www.snowballeffect.co.nz/

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