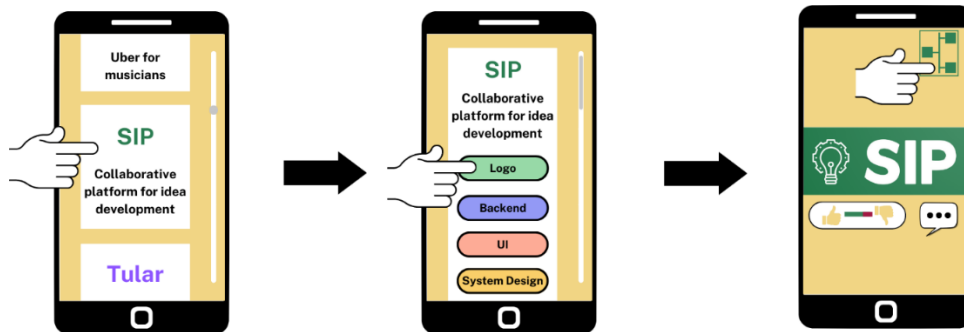# Modular Tools for Decentralised, Everyday Innovation:
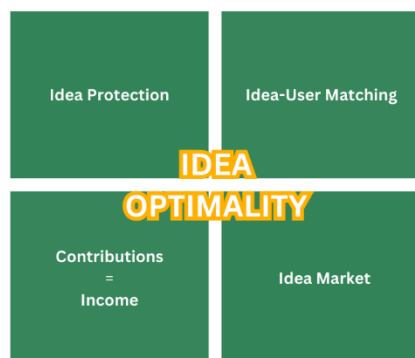## Blockchain Backend

Objective

To engineer a permissioned blockchain system that facilitates the co-ownership of ideas for our first users, us.
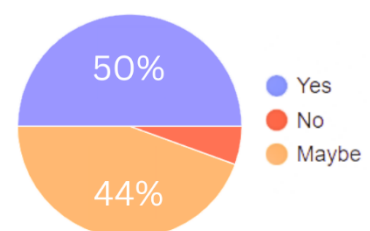
Significance

Every day, people must choose how they spend their time. Work for a wage or solve problems you care about? the intimidating responsibilities of a business leader and venture capital success rate of 25% are boasted but not fit for purpose. With people's ideas and knowledge creating 70% of the value of an average business, SIP ensures they get this value by addressing the risk pain point of investors.

Ironically, SIP faces the barriers to innovation it aims to solve. Hence, we must *build SIP to build SIP* - optimising its design, proving its concept and becoming investor ready in the process. Our Self-Hosting Prototype would be a crucial step toward achieving 'idea optimality' for decentralised, everyday innovation.

169+ people were asked "what stops you from bringing ideas to life?"

KNOWLEDGE GAPS
60%

DON'T KNOW HOW TO START A BUSINESS
48.6%

DON'T HAVE TIME
42.9%

Idea Protection

Idea-User Matching

IDEA OPTIMALITY

Contributions = Income

Idea Market

Given the current economic crisis, **would this platform improve your livelihood**?

50%
44%

- Yes
- No
- Maybe

Opportunity

- Your contributions will be SIP valuated and compensated in the long-term based on terms agreed.
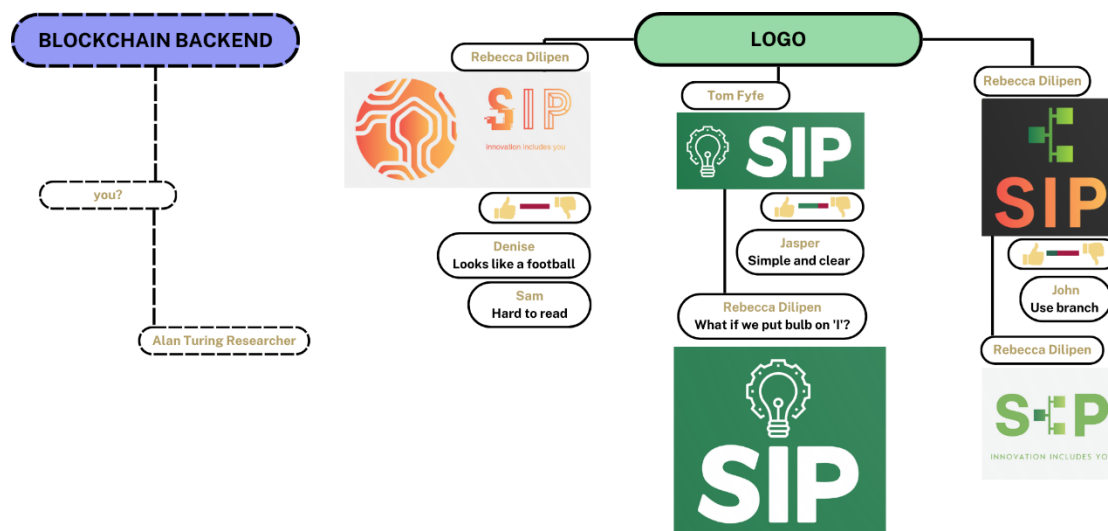
- Co-applicant support for the Collaboration and Co-Production fund which could compensate up to £3,000 for your work in the short-term [appendix].
- Real world experience in the FinTech, Blockchain and Data Science space.
- Work on systemic problems with lasting impact in a lean startup environment.
- Subject to agreement, work alongside someone from The Alan Turing Institute, Engineers Without Borders or The Gillmore Centre for Financial Technology.
- Continued user access or flexible involvement in future SIP development.
- Help SIP's long innovation journey be the last of its kind, increasing your future chances of accumulating equity from contributions to other ideas.

Deliverables

<center>**Blockchain Backend**</center>

1.1: *Network Configuration and Setup* – A fully functional Hyperledger Fabric network with well-defined APIs.

1.2: *Smart Contract Development and Integration* - A deployed smart contract that can be invoked by users to perform idea development transactions, reflecting the defined logic.

Involves: topology, configuration files, hardcoding certificates, Docker-based deployment scripts; chaincode specification, writing, testing, and deployment.

Where Your Component Fits In   [diagram key in appendix]
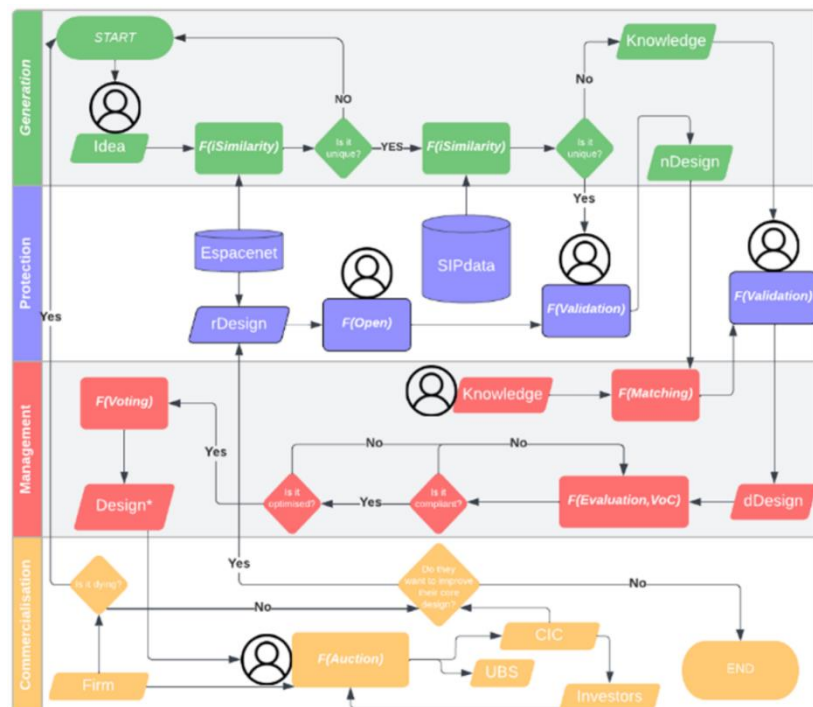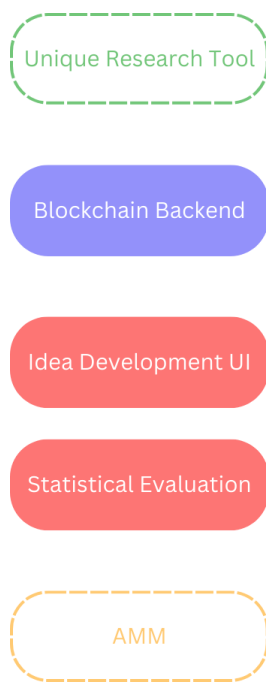
Expected Timeline

Week 1-2: Team building, specify project milestones, set up the development environment and outline the network topology for the Hyperledger Fabric setup.

Week 3-4: Configure the Hyperledger Fabric network, including hardcoded certificates and configuration files, to prepare for deployment.

Week 5-6: Develop and test the smart contract (chaincode), ensuring it meets the defined logic, and prepare deployment scripts using Docker.

Week 7-8: Deploy the smart contract on the Hyperledger Fabric network, test its functionality, and implement the API endpoints for the statistical model and UI.

Week 9-10: Conduct end-to-end testing, finalise documentation, introduce new users and implement final iteration based on user feedback.

Requirement	Interest Area
JavaScript	Blockchain

Prospective User Feedback

"...this platform **allows you to be aware of potential solutions** to problems in the market which aren't visible at first sight."

"...connecting me with experts and entrepreneurs in the field relating to my idea **would be very valuable**"

"Excellent and new, good critical analysis **will help in new way of thinking**"

"If such a platform existed where I could be sure I would be rewarded for my idea, **I'd certainly use it.**"

"It is a great concept and **I would be glad** to see it soon."

"**Interesting**, if it could be implemented."

"I think it's a good concept that **helps promote collaboration**"

"...people could **apply their personal convictions** to ideas that they want to see come to life."

"I feel it will **enable others to share ideas** they wish to share with the world"

"I got this from Francis, **just to give him some credit.** I like your idea."

"Many people have lots of innovative ideas but they can't share them with anyone because the **probability of those ideas being stolen is very high currently.**"

SIP

Appendix

WIPO (2022). Blockchain technologies and IP ecosystems: A WIPO white paper [online]. Available at: https://www.wipo.ch/export/sites/www/cws/en/pdf/blockchain-for-ip-ecosystem-whitepaper.pdf

F(...) – Function of...

iSimilarity – Idea Similarity

nDesign – New Design

Espacenet – Patent Database

SIPData – Social Ideas Platform Data

dDesign – Developing Design

VoC – Value of Contribution

Design* - Optimal Design

rDesign – Registered Design

CIC – Community-Interest Cooperative

UBS – Universal Basic Services

Collaboration and Co-Production Fund

Symbol	Description
Start / End	Used to represent the starting point or terminal point of a flowchart
Flow lines	Connects components in a flowchart and indicates flow direction
Input / Output	Represents information or data that is transmitted or received
Decision	Represents checkpoints to evaluate conditions for making decisions
Process	Represents processes (e.g., mathematical operations)
Database	Represents databases
Person	Represents actors or users or a software system