

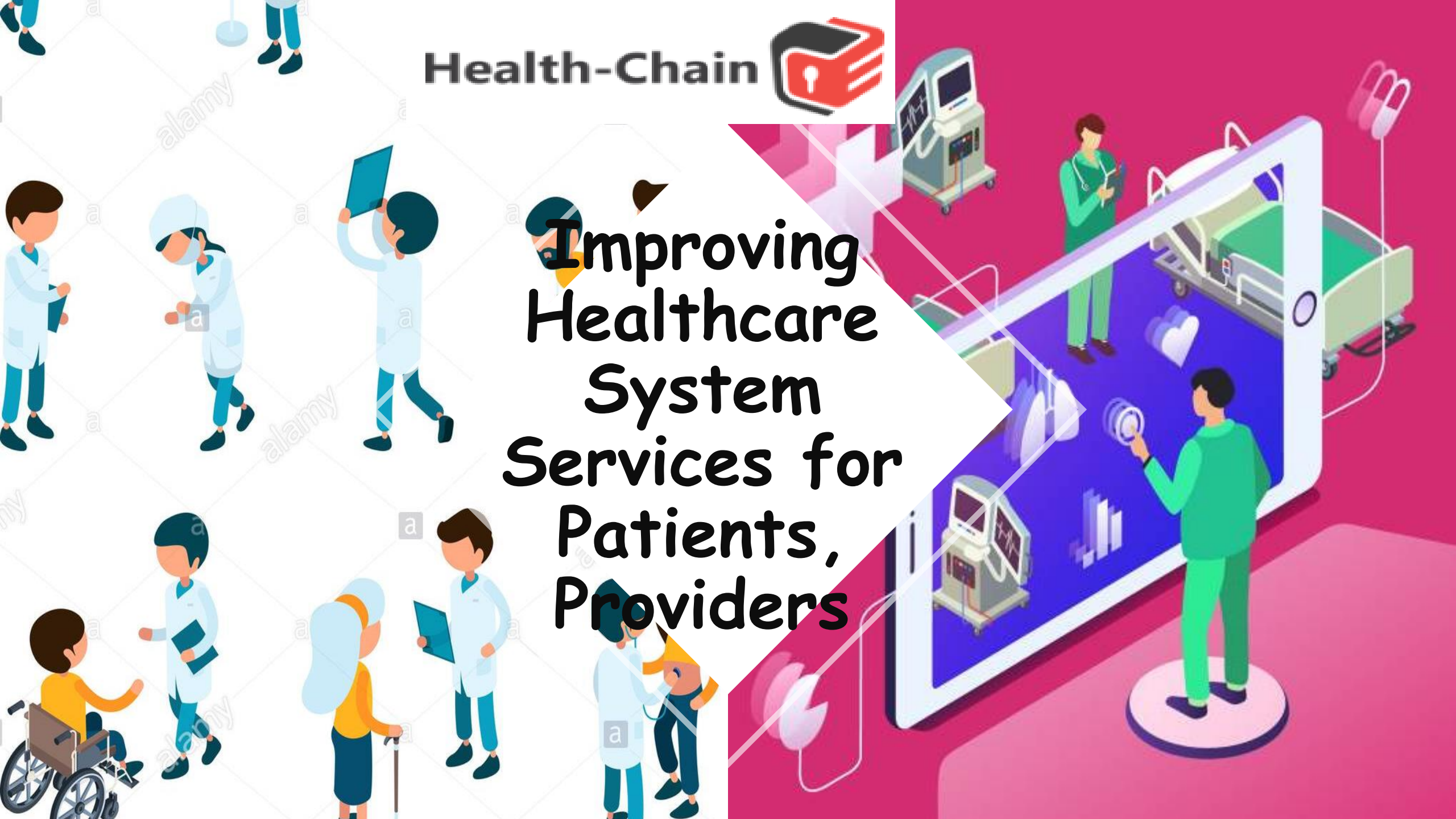


Improving
Healthcare
System
Services
for
Patients,
Providers

Health-Chain



Improving Healthcare System Services for Patients, Providers

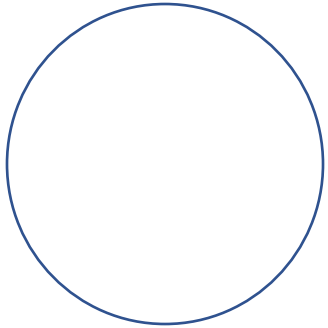


Health Care-Team5 Members:

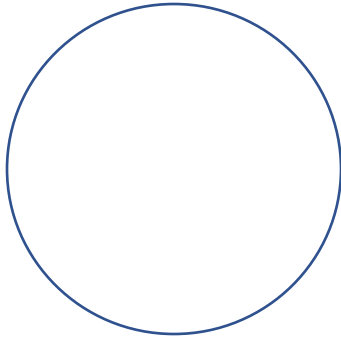
We missed one Pro Member during the project timeline!

Our Project Github Repository is:

[Myshgithub/TechPoint-S.O.S-Health-Care-Challenge-](https://github.com/Myshgithub/TechPoint-S.O.S-Health-Care-Challenge-) Provide Better Health Care guidance to Patients as core of the System using Blockchain Technology



Cam West

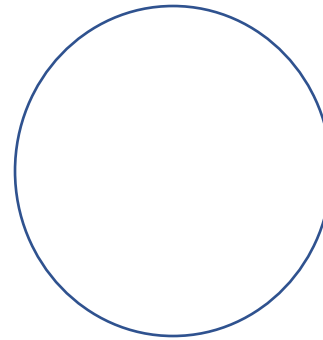


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**Coaches/
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Problem:

- The average cost of a healthcare data breach (average breach size 25,575 records) in the United States is \$15 million.
- Specifically, a data breach can violate trust, put patient safety at risk and irreparably damage the provider-patient relationship.
- Example: In 2018, Anthem Inc. had to pay \$16,000,000 in order to settle a healthcare data breach that affected nearly 80 million people.
- The U.S. Department of Health and Human Services Office for Civil Rights says it's a problem faced by more than 81.72% of the U.S. population.
- Not only do data breaches in healthcare affect money and time, but they also make patients withhold important information from their healthcare providers due to mistrust.
- The global cybersecurity market will be worth \$300B by 2024, according to Global Insights.
- So, Identifying applications of blockchain in the healthcare industry that help healthcare systems and providers protect their data and their patients, with encouraging the use of systems, instill confidence in the general public to improve the speed, quality, and security of healthcare is needed.



Solution:

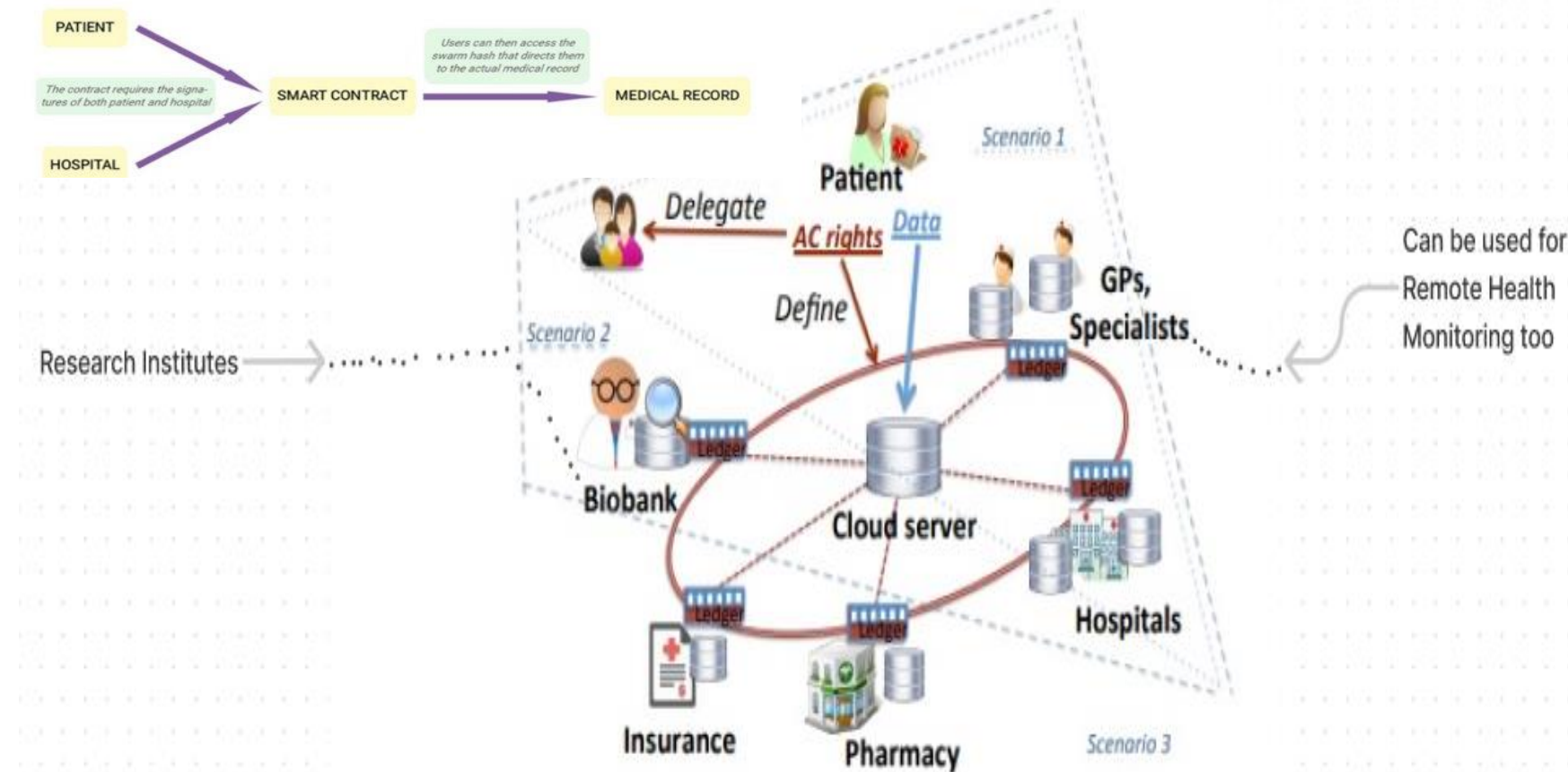
A combination of blockchains and off-blockchain repository that creates a data sharing and management model focused on security and privacy. Our 3 scenarios are:

Scenario 1: Primary Patient Care, productively and faster with focusing on Empower patients to retain full control over their data, choosing when, and to whom, to grant permission to access their information

Scenario 2: Data Aggregation for Research Purposes and incentivize patients for sharing data

Scenario 3: Connecting Different Healthcare Players for Better Patient Care.

Proposed Patient-Centered Blockchain Model Application as Website Interface with explaining the back end implementation idea:



Market:

- Healthcare providers, healthcare professionals, and patients.
- We did an experimental study of the new blockchain-based platform for sharing user profile data that allows users to retain control of the sharing and earn rewards.
- The use of healthcare blockchain for health data exchange is expected to contribute the largest market share, reaching a value of \$1.89 billion by 2025.



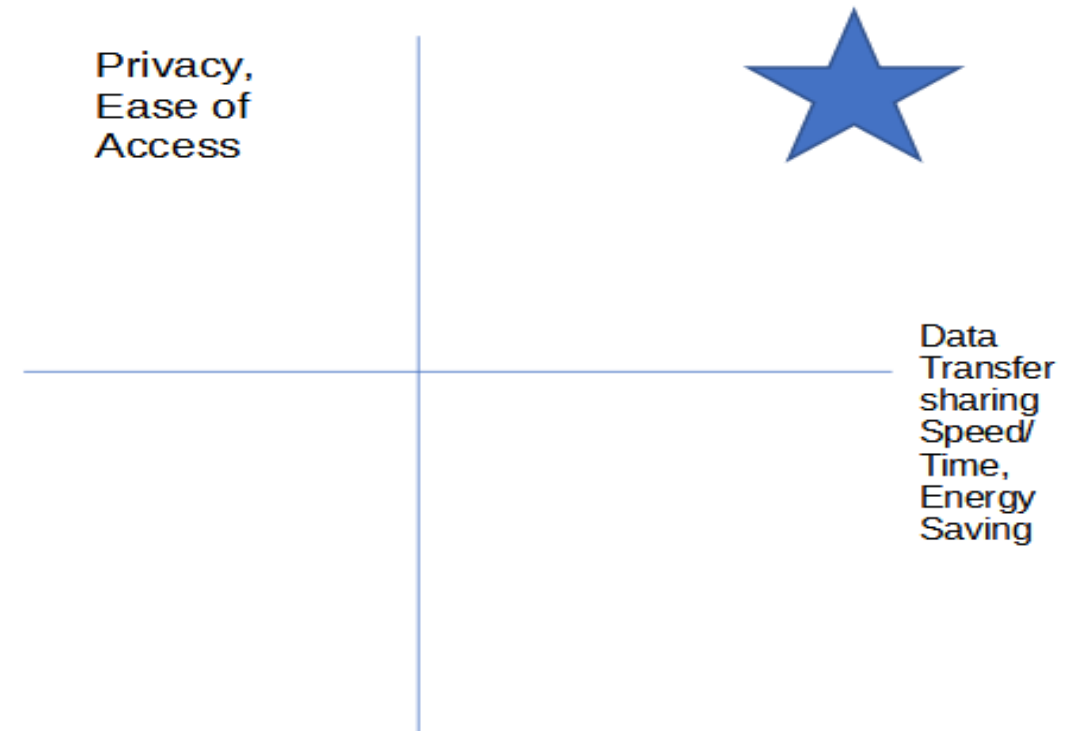
Competition:

Unlike mHealth apps, who only provide some self service access to patients, *our product*:

- ✓ Focuses on ease of access to services, Documents and Recoords for both patients and Health care providers with high security and Guarantee patients' Privacy.
- ✓ Transfers digital tokens as an incentive to patients as data owner of our system (incentivize).
- ✓ Is Secured and Time Saving
- ✓ Maintains complete and updated information with a verifiable record of the provenance.
- ✓ Pharma companies \$43 billion revenue loss reduction.

Hospital online patient portals and mHealth apps:

- ✗ Design and usability barriers.
- ✗ Potential data breaches.



Business Model

**\$/month
Membership
Subscription
for users**

At the beginning, only selected institutes and Healthcare providers have access to user/patient's data by subscribing to the Membership Service and streams in the Multichain.

Sales and Marketing:

Over 40% of health executives see blockchain as top 5 priorities and the global healthcare market spend on blockchain is expected to hit \$5.61 billion by 2025, according to a report by [BIS Research](#).

Healthcare providers:

- Hospitals
- Pharmacies
- Clinical/Research Institutes
- Insurance Companies

Healthcare professionals:

- Doctors
- Primary Care Physician
- Nurse Practitioners
- Family Practice Doctors
- Internal Medicine Doctors
- Gynecologist or Obstetrician
- Geriatricians and Pediatricians

Patients/Users



Milestones:

June-July 2021	July-Aug2021	Sep- Dec 2021	Jan 2022
<p>- Experimental study of the new blockchain-based platform for sharing user profile data in Health care that allows users to retain control of the sharing and earn rewards.</p>	<ul style="list-style-type: none"> • Designing the system and evaluate the requirements for implementing • Bring on Technical Advisors 	<ul style="list-style-type: none"> • Finish Implementation, Coding and testing the system • Improving the model • Bring on sales and marketing advisors 	<ul style="list-style-type: none"> • Launch the system • evaluating the usability and usefulness of the approach, and the trust users can have in the system • Fundraising

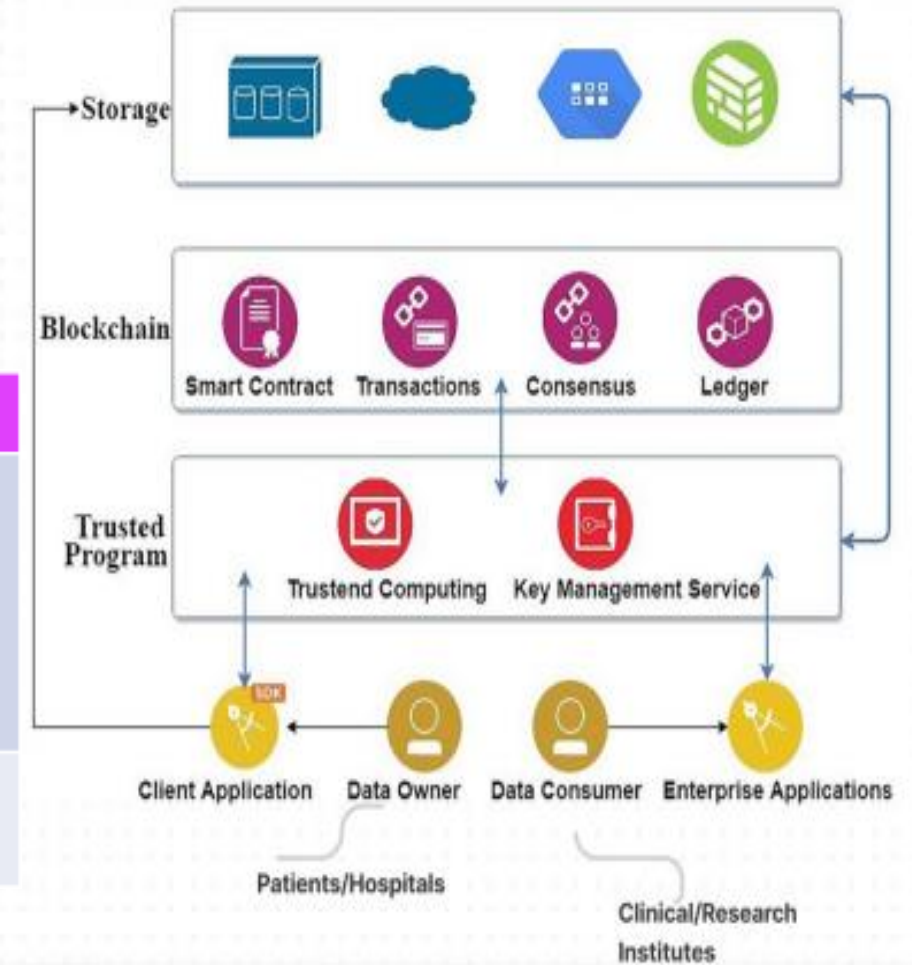
Ask and Use of funds:

\$55,000 - \$100,000

To use Ethereum service, a decentralized platform that allows developers to run applications on a custom-built blockchain



Allocation	Use of Funds	Milestones Hit
\$55K-100k	Use of Ethereum service, a decentralized platform that allows developers to run applications on a custom-built blockchain	Implementation, Coding and testing the system With Improving the model for user testing
\$50k	Marketing and commission sales	Growth team to improve the quality



Burn rate: \$10k/month

Links to Our Product:

- **Design and prototyping links:**
- Membership service web site: to register users with different roles(currently Doctor and Patient). <https://rooppatel175.wixsite.com/blockchain>
- Chain Code Prototyping: chaincode is deployed on every Node that acts as a Hyperledger validating peer. Nodes receive all transactions submitted by the users through a role-based APIs.

[https://www.figma.com/file/CcBKCBw9U7Pf6jggA1SmML/Provide-Better-Health-care-Guidance-to-Patients-on-Blockchain-\(chainCode\)-side?node-id=0%3A1](https://www.figma.com/file/CcBKCBw9U7Pf6jggA1SmML/Provide-Better-Health-care-Guidance-to-Patients-on-Blockchain-(chainCode)-side?node-id=0%3A1)

- [https://www.figma.com/proto/CcBKCBw9U7Pf6jggA1SmML/Provide-Better-Health-care-Guidance-to-Patients-on-Blockchain-\(chainCode\)-side?node-id=16%3A2&scaling=contain&page-id=0%3A1&starting-point-node-id=2%3A4&show-proto-sidebar=1](https://www.figma.com/proto/CcBKCBw9U7Pf6jggA1SmML/Provide-Better-Health-care-Guidance-to-Patients-on-Blockchain-(chainCode)-side?node-id=16%3A2&scaling=contain&page-id=0%3A1&starting-point-node-id=2%3A4&show-proto-sidebar=1)

- Nodes and Permissions(Smart Contract): <https://www.figma.com/file/7Zn2f4jY6U4R4hYOMH63Kf/Nodes-and-Current-Permissions?node-id=0%3A1>