

AnaSupCliniSolTM

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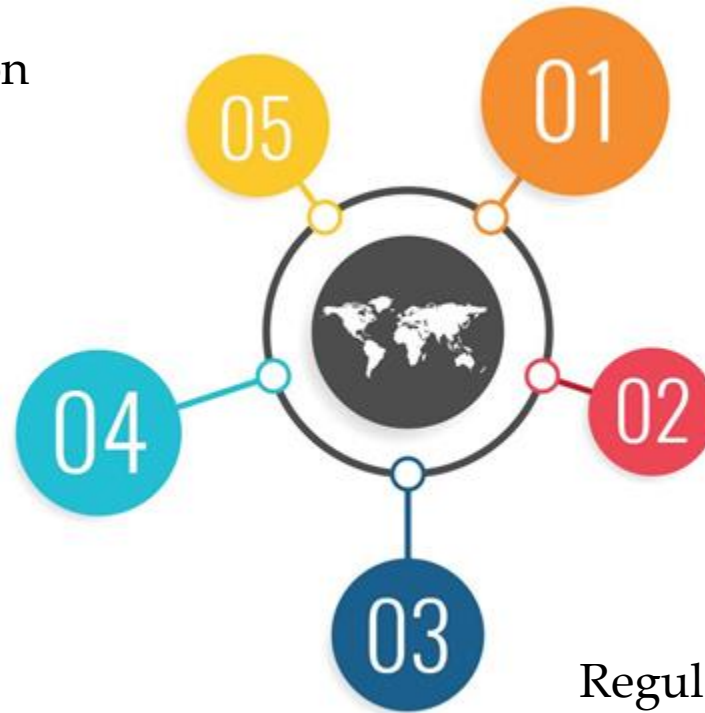


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Current Challenges in Clinical Trial

Documentation

Trust – Sponsor and Strategic Partner



Fraud in the ecosystem

Patient Retention

Regulatory monitoring



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Design Approach

- Anasup CliniSol is an integrated Clinical Trial Operations Block chain Solution.
- The design is embraced by using a Hybrid Block chain Platform –**Auxledger – AI, Ethereum and Hyper ledger.**
- The design approach is focused around reflecting our vision of **customer centricity and user friendly applications while utilizing the capabilities and promises of block chain technology.**
- The technical solution can be both **mobile and web enabled.**



Technology Stack

- Front End – Angular 5, Backend – Node JS, Web 3 JS, Couch DB
- Nodes will be forked using IPFS Swarm/ Storj
- Block chain – **ERC 20 Protocol, Hyper ledger**
- AI Enablement - Auxledger
- Enablement on Cloud Platform – AWS, IBM Blue Mix



Design POV

- From the Design point of view the whole system is divided in to five main components to help the platform to scale maintain and add new features while maintaining the highest level of security in a decentralized environment for the block chain features.
- The block chain technology enables business collaborations for high reliability and shared, trusted privacy to preserve immutable data repositories for smart contracts



Solution Components

- **CliniConnect** - It is an authorization and Biometric Identity Management Layer. The layer is also enabled through the Mobile using Two Factor Authentication or IOT Chip
- **ClinNet** – This is a smart decentralized block chain smart contract framework with Ethereum, Hyper ledger and AI through AuXledger. The smart contracts can be defined for Patient Consent, Clinical Trial Investigation Center Sign off, Ethics committee approval with the unique nodes in the system, CRF forms
- **ClinFabric** – This layer is the middle layer which has fraud protection mechanism, Messaging, Real time visibility to clinical trial patient recruitment, Analytics on the various aspects, Clinical trial supply requirements.



Solution Components

- **ClinChain** – This component is the interoperable interface from Preclinical to Regulatory submission and also integration with third party systems like E.H.R. for data synchronization.
- **ClinData** – All the data nodes are connected to Gatekeeper through Decentralized and governance model
- **E-Wallet** – Finally an E-wallet can help process the payments with no time lag through Tokens



Customers

- LifeSciences Organizations
- CRO's
- Consulting Companies
- Federal agencies
- IT Product and Services Organizations



Significant Impact

- Creates trust among sponsors and strategic partners
- Reduces Fraud
- Streamlining regulatory monitoring
- Technologically scalable
- Decentralized
- Real time
- Highly Secure
- AI Enabled
- Faster Payments processing



Why Users will embrace this model?

- Hands on POC will be effective
- Why this model?
 - Cost effective
 - Faster
 - Transparent
 - Decentralized
 - Secure Transaction
 - Scalable
 - Analytics driven
 - AI Enabled



How the users will this model?

- Initially enable as a POC for a clinical trial for one drug
- Implement this process as a transformation exercise in the BAU activity
- Get Training on the new concept
- Implement the model
- Find the changes and how it is effective
- Finally Scale the model



Considerations & Challenges

- Integration with mobile layer
- Hyper ledger wrap with Ethereum smart contracts
- External DB API interfaces
- Financing the entire development
- Planning to launch a ICO in near future
- First Customer Acquisition and Implementation



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Thank You



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