

Bloqcube Inc.

Category:

Best Startup

Company Name:

Bloqcube Inc.

Turnover and/or Funding:

Raised \$2,000,000 since inception via Family Foundations, Angels, Friends, Family. Over \$100,000 in Gross revenue since inception from Early Adopters. Two new orders are being negotiated that would be over \$1 million in total. Initiating a \$3 - \$4 million Seed Funding round. Expecting two major customer orders shortly.

Sub-Category:

Medical Technology / Digital Health

Corporate history (creation, key milestones, main funding,...) Information on Condition / Disease and need for solution / product (prevalence, existing treatments / solutions):

Bloqcube® is how blockchain technology was meant to be used for applications beyond crypto finance. Bloqcube® Inc. Piscataway NJ is an innovative, unified, clinical trials management and financial software company focused on accelerating clinical trials at Lifescience firms- especially small and mid-sized firms that have to rely on expensive systems. Its multiple modules (eConsent/eTMF/CTMS/EDC/Kit SCM/Financial module etc.) are integrated into a unified Desktop/Android/Web/IoS Cloud and Blockchain platform. It accelerates patient-centric, decentralized clinical trials (DCT), where data integrity during the gathering with decreasing vulnerability to ransomware. Bloqcube's user-friendly offering addresses critical challenges faced today by clinical trials around access assurance. This allows patients to engage remotely, thus enabling better enrollment of the diverse, underrepresented, and geographically dispersed populations. The distributed ledger technology (DLT) allows data to be time-stamped and stored at various nodes, reducing vulnerability to ransomware attacks while providing data in 'Real Time'.

It was set up in July 2017. It is building the foundational rails for a Web3.0 system for decentralized science leveraging frugal innovation, applying LEAN methodologies and measured steps. Its journey has been five stages - (1) 2017/'18: Technology assessment, inception, and PoC build. (2) 2019/'20: MVP build, IP structures, and Beta customer acquisition. (3) 2020/'21: FDA compliant software platform built

and commercial launch. \n(4)2022/'23: Commercial delivery \n(5) 2023/'24: Customer feedback used for a revamp of the system. \n(6) Two main orders are being negotiated - one that applies our system for communities in Rural America -for upto/over \$1 million. \n(7) AI driven modules to accelerate clinical trials are being piloted with the help of our partners\n(8) Very early stage discussions with engineering firms to use our system for PFAS and Carbon credit tracking\n\nFunding for this pre-Seed is from family Foundation, and Angels.\n\nCompetitors are in four broad categories: Siloed systems like eClinical, Clinical Ink, CRIO. Integrated large company systems like : Rave/Medidata, Medable, Science 37, Veeva. Financial systems like Greenphire, and Decentralized/distributed Ledger siloed systems like Trialx, but we are the only one with a distributed ledger integrated Clinical Trials Management and Financial system with finance and supply chain integrated into it.\n\nThe pain points of data integrity, lack of Real time data, vulnerability to Ransomware attacks, and payment inefficiencies are its focus. Its fully decentralized software is well suited for Hybrid or Decentralized trials and is compliant with Part 11 guidelines. Led by Rama K Rao INSEAD MBA - who spent 28 years in the Pharma industry (Lilly/Novartis) in multiple roles globally - it has a strong team of Clinical domain advisors -each with over 3 decades of direct experience and many with MDs and PhDs - for execution efficiencies. \nOur vision is to convert the ~45 million clinical study subjects to over 6-7 billion people to become healthcare producers by permitting digital assetization of their data and bio-specimens. Other areas are Animal Health studies, Nutraceuticals, Cosmetic sciences, and ESG/Carbon credit reporting and are laying the foundational rails for a Web3.0 system in healthcare that will enable diversity

History of the development of the solution/product (Intellectual Property, preclinical and clinical data, development collaborations):

Our journey has been five stages - \n(1) 2017/'18: Technology assessment, inception, and PoC build. (2)2019/'20: MVP build, IP structures, and Beta customer acquisition. \n(3) 2020/'21: FDA compliant software platform built and commercial launch. IP Trademark registered \n(4)2022/'23: Commercial delivery \n(5) 2023/'24: Customer feedback used for a revamp of the system for a Web Based solution to accelerate diversity in patient recruitment and breaking the stranglehold of proprietary systems like IoS \n(6) 2025 Integrated dynamic forms, telehealth and patient schedulers\n\nUS PTO approved trademark in Dec 2022 & confirmed first usage commercially in Dec 2019. Possibly the first clinical trial software on blockchain executed in 2020. Health Innovation Technology Labs (HIT Labs) of Columbia Business School did a detailed validation of the system.\nMany articles published on the adoption and applicability of blockchain in healthcare, many of which are curated in the Journal Blockchain in Healthcare Today'. Recently an article was published in this journal (<https://pubmed.ncbi.nlm.nih.gov/38715764/>) that focusses on decentralized science and decentralized CTMS \nAs the abstract suggests:\n"Decentralized clinical trials (DCTs) recently gained attention in research necessary for drug development. The DCTs

were necessary to allow research activities to occur across many locations. The use of DCTs can profoundly impact reshaping healthcare by enabling participants to partake in clinical trials remotely; however, implementation challenges must be considered as technology expands. A working group of participants was assembled during an interactive learning exercise at the Conv2X conference (2023) to explore challenges related to the diffusion of innovation among key stakeholders. Pain points experienced with using and implementing technologies were identified, and an innovative solution using a blockchain-anchored option was presented. Participants were divided into three stakeholder groups: patients, payers, and pharmaceutical sponsors. After a time of discussion, the groups reconvened for review. Several themes that can be supported by blockchain technology emerged. These include enhanced efficiencies, patient experience, and demographic diversity, as well as data integrity, privacy, security, and cost-effectiveness. Future research might focus on strategies to facilitate the adoption of the idea across key stakeholder groups."

Collaborating partners for this product development include Hyperledger Fabric, CDISC, AYS Software, HIT LABs(Health Innovation Technology) Labs of Columbia Business School and others

Evidence for the pain points indicates 17% of studies are impacted by data integrity issues, (a few years back the EU delisted 100 drugs for data quality issues by a CRO), Doctors and patients get paid late in the US - over 4 months in a study by an industry association, (Whitepaper by Society for Clinical Research Sites) and causing a 41% churn. The Desktop and Cloud based system permits data collection at patients' home protecting them and medical personnel in Covid like epidemics and enhancing diversity. Furthermore, Ransomware attacks that have impacted large firms like BMS and IQVIA. A distributed ledger engine permits studies to continue even if one node is attacked thus reducing vulnerability to Ransomware attacks. We also have built a Supply Chain solution for our Clinical trials materials. (Waste in this area is 50%)

Why this drug or device is innovative, the broad implications for future research, and/or how it will improve the human condition:

Bloqcube is redefining the clinical trial ecosystem through innovation in four key domains-designed to accelerate timelines, lower costs, and increase equitable access to life-changing therapies. With every day saved in drug development estimated to be worth \$8 million, the economic and human impact of our platform is profound. At the heart of Bloqcube lies a secure, blockchain-powered engine that ensures transparency, auditability, and automation across the trial lifecycle. First, our distributed architecture mitigates ransomware risk by eliminating single points of failure. Data is stored across multiple secure nodes, enhancing system resilience and ensuring uninterrupted access to trial records, even during cyber threats.

Second, Bloqcube enables real-time access to decentralized data globally, giving sponsors and monitors a unified, mission-control-style view of trial activities across all geographies. This is particularly valuable for decentralized and multi-site trials, where real-time updates and consistency are critical. Third, the platform facilitates

simultaneous access to data by all authorized stakeholders-such as investigators, CROs, and DSMBs-supporting rapid response to adverse and serious adverse events (AEs and SAEs). For example, a Data Safety Monitoring Board composed of clinicians across continents can evaluate AE trends in real time and make informed safety decisions without delay.

Fourth, Bloqcube leverages smart contracts to automate complex workflows. Our blockchain-powered finance module uses programmable logic to trigger milestone-based actions such as site payments, budget reconciliations, and audit flagging. This automation improves accuracy, ensures transparency, and enables real-time decision-making based on live financial data. Underlying all of this is a blockchain-based governance structure that delivers verifiable data integrity, addressing the very challenges that have recently led to resignations and regulatory scrutiny at major institutions. Single Sign On(SSOs) enable role based access

Our BloqBridge© module transforms clinical supply chains from inefficient \"push\" logistics to demand-driven \"pull\" systems. Rather than overstocking investigational product at sites-leading to wastage rates of up to 50%-our system forecasts patient visits and ships drugs just in time. IoT sensors embedded in the packaging track temperature, humidity, light exposure, shock, and geolocation, enabling precise control even for advanced modalities like CAR-T therapies.

Crucially, Bloqcube's architecture also addresses future-facing needs in Rare disease and Personalized medicine. For ultra-rare conditions-with as few as 8 patients globally-existing EDC systems often default to spreadsheets or paper. Bloqcube's decentralized, cloud-based system makes these trials not only feasible but robust, enabling secure, real-time collaboration across continents. As the industry moves toward N=1 personalized trials, a blockchain-based system becomes essential for maintaining trust, traceability, and automation at the individual subject level. Moreover, the platform's versatility allows it to support cross-species research: trials repurposing animal health drugs for human use can be managed within a single unified system-ensuring compliance and traceability across both categories.

Built for modularity and scalability, Bloqcube also integrates telehealth, patient scheduling, and NFT-tagged data tracking to support HealthTech Web3.0 and Decentralized Science (DeSci). It's future-ready and extensible to adjacent fields such as nutraceuticals, ESG reporting, PFAS monitoring, and carbon credits-positioning Bloqcube as a transformative infrastructure layer for the next generation of data-driven, inclusive, and intelligent clinical development

Please provide appropriate references (PubMed, Abstract, Website):

1. Rao RK. Leveraging Decentralized Clinical Trial Management Systems (dCTMS) to Advance Science: Exploring Challenges Related to the Diffusion of Innovation and Its Execution. Blockchain Healthcare Today. 2024 Apr 30;7. doi: 10.30953/bhty.v7.305. PMID: 38715764; PMCID: PMC11073476.
2. Rao, R., & Perfler, E. . (2025). Revenue Automation Enhancing Operational Efficiencies and Financial Tools for CROs and Clinical Sites. Blockchain in Healthcare Today, 8(1). <https://doi.org/10.30953/bhty.v8.41>
3. Society for Clinical Research Sites(SCRS)\n(a) 'Why is clinical source data still collected on paper' - May 2017' White Paper; 'CenterWatch, SCRS & Clinical Ink. Research Site Source Survey. December 2016. [n = 656]'\n(b) (b)"90% of sites create study specific source forms.... Of those sites, 96% still use paper-based approaches when creating source forms and collecting source data"; Page 1 \n(c) \"Site Payment\" May 2016. White paper by SCRS Panel co chaired by Messrs. Kelly Cummings, Claire Grace, David Vulcano\n○
4. \" In a survey conducted by SCRS in 2016 sites are reporting a profit margin of 13%,.... In addition to receiving payments well after they complete their work, holdbacks mean that more than the entire profit margin on a study may not be realized until months after the study ends....unrealistic burden on the site to remain cash positive or even neutral. It is no wonder that guaranteed payment in 30 days is considered \"very valuable\" by 77% of research sites doing more than 5 studies per year. Yet only 28% of site payments are monthly \n○
- 5.'The Road to Positive R&D returns' David, Tramontin, Zimmel - MckInsy Quarterly Feb 2010\n○
- 6.\"\$8m revenue loss per day\" - 'Drug Development Technology'
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7. *Parexel Biopharmaceutical R&D statistical source book 2016/2017 Page247-250. 'Clinical Trial Costs: An examination of costs by Phase, Therapeutic area and the key contributing factors' Eastern Research Group July 2014\n○
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9. : Parexel Biopharmaceutical R&D Statistical Sourcebook 2016/17; Pg. 66-67.\"A global CRO market model to 2018: A 2015 analysis\"- UBS Investment Research; Jan 2015 \\n○

10. Speed up biopharma clinical trials to boost R&D output | McKinsey [Internet]. www.mckinsey.com. [cited 2024 Mar 8]. Avail-able from: <https://www.mckinsey.com/industries/life-sciences/our-insights/accelerating-clinical-trials-to-improve-biopharma-r-and-d-productivity>\\n\\n\\n<https://bloqcube.com/>\\n\\nPowerpoint deck attached\\n

References File Document upload:

Bloqcube_ RamaKRAO_May 25 Galien Product Journey May 2025.pdf

Bloqcube Marketing brochure.pdf

bloqcubevideo1_v2 720p 1.mp4

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