

Architect Insights

Blockchain for the Enterprise

THE NEXT ERA HAS BEGUN

AUTHOR

Glenn Gottlieb

SUBSCRIBE TO ARCHITECT INSIGHTS →

Executive Summary



Next Phase in Computing Infrastructure

Blockchain computing era could be as impactful as cloud computing



2024 Poised for Significant Growth

2024 is expected to experience strong growth in enterprise blockchain implementations



Impact Translates to a Huge Market

GlobalData projects the blockchain market value at \$500B by 2030



Challenges Remain

The industry must still address challenges such as security, regulatory compliance and scalability



Secure & Transparent Transactions a Key Feature

Blockchain will become a standard platform for exchanging assets and information



Funding Environment Improving

Capital availability has been fairly consistent in an overall slow funding environment



Significantly Reduces Process Complexity

Business processes become significantly more efficient by introducing automation



M&A Environment Needs Time to Mature

M&A activity is light, which is consistent with an early-stage market

Blockchain is the next era of computing infrastructure

Mainframe

central compute
dumb terminals
wide area networks



Client/Server

local servers
PCs
local area networks



SaaS

distributed private
servers
browser UI
Internet
mobile devices



Cloud

API-accessed
infrastructure
as a service

Blockchain

distributed public
servers
shared ledger
smart contracts
assets as tokens

The dawn

innovation blossomed
due to lower cost and
ease of software
development

access from anywhere
and even lower cost of
software development
with standardized
infrastructure

on-demand
compute, storage
and bandwidth as
“pay for service,
private utilities”
simplifying software
development and
lowering cost

emergence of the first
“public utilities” to
build software-based
applications

What makes blockchain impactful?

CHARACTERISTIC

IMPACT

Decentralized Architecture

Backend code runs on decentralized peer-to-peer servers

Trust and safety built with consensus model. **Users control their own data.** No control by any single entity

Distributed Ledger

A permanent record of agreed-upon, synchronized and shared data distributed across many sites and institutions

Trusted, shared and transparent data and asset management based on tamper-proof records

Tokenization

Digital representation of any asset (tangible or intangible), utility, or information stored on a blockchain

Tokens enable a more efficient and automated way to **manage and monetize assets** by turning ownership and rights into a digital and rules-based transferable format

Smart Contracts

Self-executing, multi-party agreements ensuring parties execute on their obligations without dispute

Simplifies complex processes, reduces costs, minimizes fraud, and increases trust with a permanent auditable trail

Enterprise applications of all types will be impacted

Enterprise Applications:

Software and software-based services that help businesses and their employees more efficiently manage day-to-day activities and processes.

Business Intelligence & Analytics

Human Resource Management

Corporate Finance

Learning Management Systems

Collaboration & Communications

Marketing/Product Management

CRM

Sales Management

Data & Content Management

Supply Chain Management

Document Management

Workflow Management

ERP

Why is blockchain so important?

Blockchain transforms the way companies interact with each other



Trust

Data cannot be modified or altered



Transparency

All parties access the same data.
New data is approved by consensus



Auditability

Once entered, data remains forever, allowing full traceability



Data Integrity

Establish and maintain ownership, origin, and authenticity of data and assets



Security

Consensus process and advanced cryptography enables tamper-proof data



Efficiency

Facilitates automation of business processes

Certainly, challenges remain, inhibiting widespread adoption

Technical Challenges

Interoperability

Interoperability standards are crucial for seamless data exchange across networks and platforms

Security

Smart contracts in particular require strong auditing for vulnerabilities

Performance & Scalability

Blockchains face a complex environment working to strike a balance between decentralization, which enables greater security, and scalability which improves performance.

Business Challenges

Knowledgeable Workforce

There is a shortage of skilled professionals outside of large consulting/IT firms with critical experience planning, developing, and implementing blockchain-based solutions

Regulatory Environment

Blockchain assets and transactions don't always fit neatly into existing categories, creating an uncertain legal, regulatory and compliance environment, especially across geographic regions

Coopetition

Shared environments represent a unique challenge for businesses, especially when it comes to building trust with a decentralized blockchain. Governance, consensus and decision-making rules need to be clear, fair, and transparent

Fortune 100 companies are already implementing today



In 2020 Amazon was granted a patent for using blockchain to track supply chain and package movements resulting in their Track & Trace system. Track & Trace enables Amazon to combat issues like counterfeit goods and compliance violations, and to improve efficiency in its own supplier network



Blockchain technology improves transparency, efficiency, and traceability in its supply chain and transportation systems. The system cuts Walmart costs significantly



Verify platform – An industry solution where media companies can register their content to the platform to verify that it's theirs. Once the content is verified, they can grant usage rights to AI platforms that want to use their content to train the large language models (LLMs) that support apps like ChatGPT or Bard



BMW developed PartChain to optimize processes, enable tamper-proof data sharing, and ensure seamless traceability of components throughout the entire automotive value chain. BMW Group is using this technology in purchasing to ensure the traceability of components and raw materials in multi-stage international supply chains

Dozens of young companies are building the future

(MINIMUM \$5M INVESTED IN COMPANY)

SUPPLY CHAIN MANAGEMENT



HUMAN RESOURCE MANAGEMENT



LEARNING MANAGEMENT SYSTEMS



CONTENT MANAGEMENT



DOCUMENT MANAGEMENT



CORPORATE FINANCE



WORKFLOW AUTOMATION



COLLABORATION & COMMUNICATION



MARKETING & PRODUCT MANAGEMENT



Case Studies

CHAMP TITLES

Solution Category:

Document Management



Capital Raised / Valuation:

\$45M Total Raised

Investors: Point72 Ventures, Ally Ventures, A100x, Ally Corporate Finance, Eos Venture Partners, Guidewire Software, Humla Ventures, Rev1 Ventures, Sadie Ventures, State Auto Labs, Westerley Ventures

Overview:

Champ Titles provides a digital title and registration suite to streamline the vehicle titling process. This platform enables the creation of legal, digital titles for easy transfer and verification, serving insurance carriers, lenders, state governments, auto dealers and owners. Stakeholders, including state authorities, lenders, and vehicle owners, benefit from a unified and transparent system, where all information is readily accessible, and disputes are markedly reduced. The governance of the digital platform is established through clear guidelines, ensuring all parties adhere to the updated processes and regulations.

GRAINCHAIN

Solution Category:

Supply Chain Management



Capital Raised / Valuation:

\$39.7M Total Raised

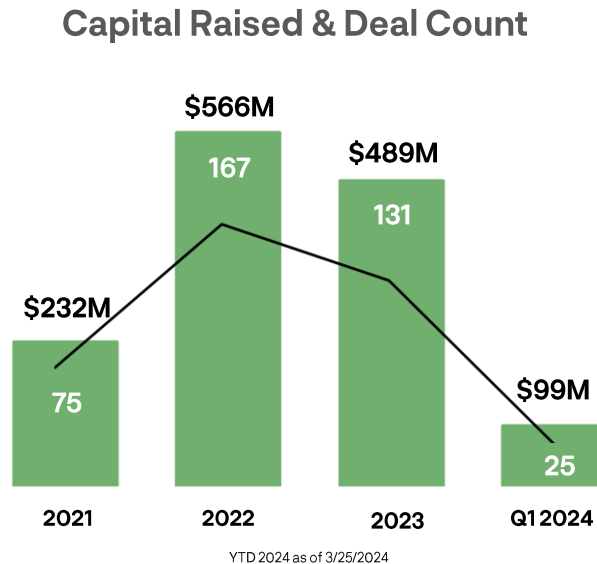
Investors: Medici Ventures, Eden Block, Pelion Ventures, BYU Cougar Capital, Overstock

Overview:

GrainChain delivers a blockchain-based agricultural transaction platform. Their solutions address complex challenges faced by the global agricultural industry and streamlines processes for all participants along the agricultural supply chain. Their cloud-based, blockchain, and IoT-enabled platform manages pre-harvest and post-harvest operations, including inventory management, complex processing, and logistics. GrainChain's approach combines the security and traceability of blockchain with the efficiency of self-executing smart contracts. This ensures that producers receive prompt payments, buyers obtain immediate tradable titles to commodities, and lien holders and other payees are prioritized.

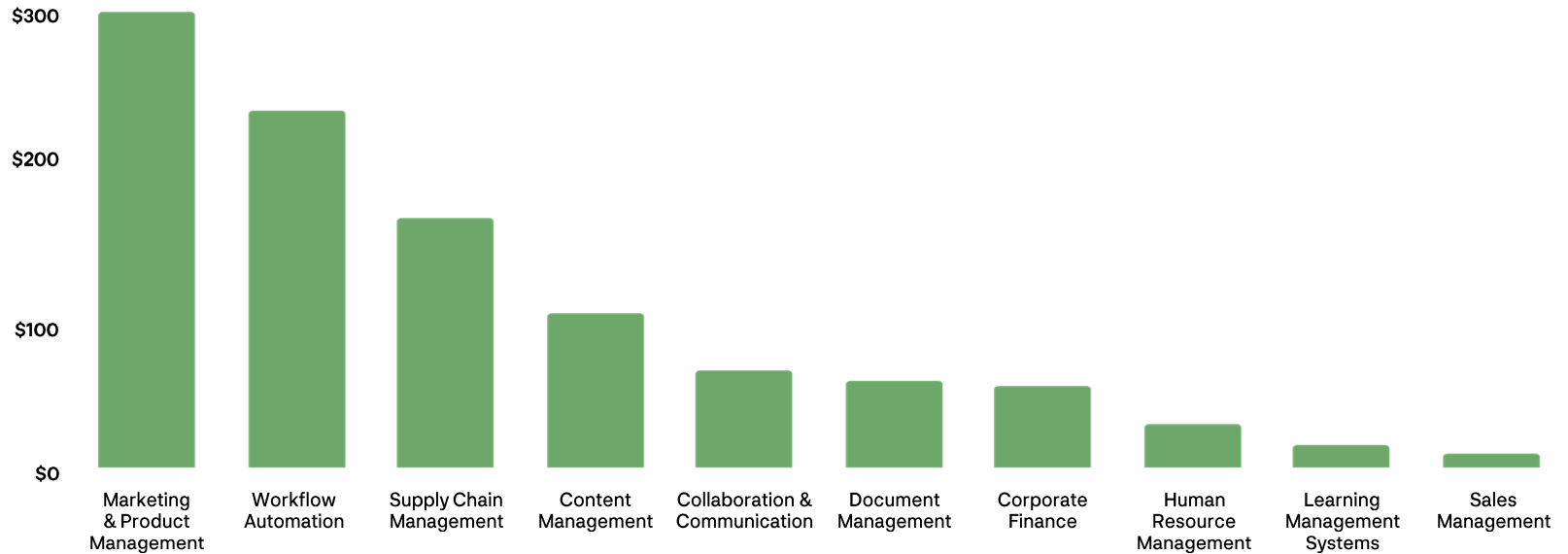
Capital raised remained consistent throughout the funding downturn

The 2023 funding environment was very challenging, with significant decline in general. Crypto and software funding levels were down significantly: crypto dropped 68% year over year, and software dipped 41%. Enterprise blockchain bucked the trend, maintaining a fairly consistent funding level, albeit relatively small in comparison. This resilience signals growing confidence in the technology's potential to streamline operations and boost business efficiency.

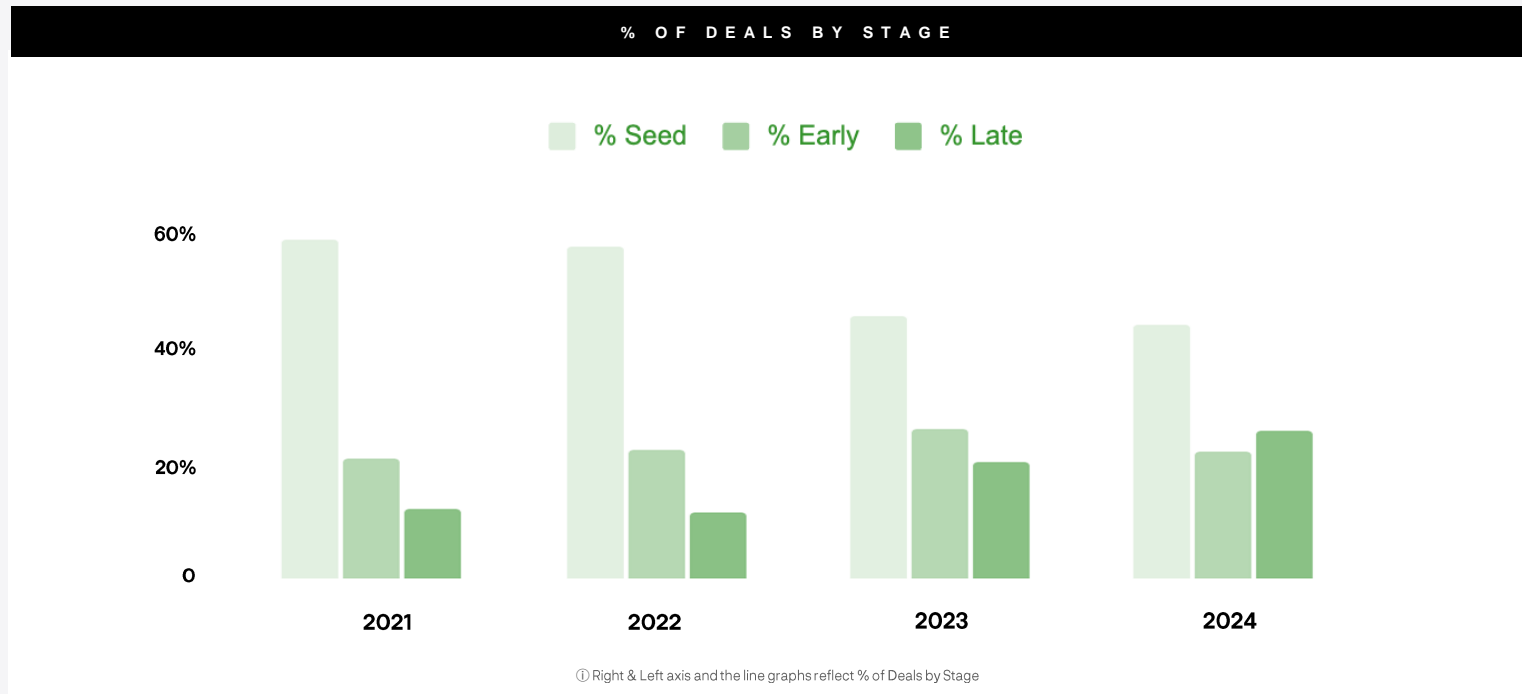


Investment has supported a wide variety of enterprise applications over the last 3 years

SUBCATEGORY CAPITAL RAISED (\$M) 2021 - Q1 2024: BY SUBSECTOR



Funding activity remains focused on earlier stage companies today



Example investors include both traditional and blockchain native investors

INVESTOR GROUPS

TRADITIONAL FINANCIAL

al6z, BREVAN HOWARD, Bessemer Venture Partners, DRAPER ASSOCIATES, 500, NEA, WHITE STAR CAPITAL, SoftBank, INSIGHT PARTNERS, breycapital, GoldenTree ASSET MANAGEMENT, LIBERTY CITY VENTURES, BREVAN HOWARD, VALOR, SEQUOIA, EQT VENTURES, PLUGANDPLAY

BLOCKCHAIN NATIVE FINANCIAL

10T, FABRIC VENTURES, CMS, variant, SET CAPITAL PARTNERS, DECASONIC, SCALAR CAPITAL, BORDERLESS CAPITAL, Arca Capital, CASTLE ISLAND VENTURES, FJ LABS, LEADBLOCK PARTNERS, MIDDLEGAME VENTURES, SBI Investment, NewForm, GRV

TRADITIONAL STRATEGIC

Alphabet, SAMSUNG, salesforce, Pearson, Mankind Serving Life, EXCEL INDUSTRIES, PORSCHE, overstock, KAISER PERMANENTE, Nestlé, LLOYDS BANKING GROUP, Sumitomo Corporation, Microsoft, VOLVO, APEX, JLR

BLOCKCHAIN NATIVE STRATEGIC

animoca BRANDS, CIRCLE, HASKEY Capital, GEMINI, polygon, ripple, matrixport, NEAR, matrixport, AMBER, POAP, Dunamu & Partners

2023 – Q1 2024 top enterprise solutions capital raises

TOP 15 TRANSACTION LIST (sorted by amount raised)

COMPANY	TOTAL RAISED (\$USD)	ANNOUNCED DATE	STAGE	SUBCATEGORY
Futureverse	\$54,000,000	18-Jul-2023	Late Stage	Marketing & Product Management
WaveBL	\$37,000,000	11-Jan-2024	Late Stage	Supply Chain Management
GrainChain	\$29,000,000	16-Feb-2023	Late Stage	Supply Chain Management
Jada AI	\$25,000,000	17-Aug-2023	Early Stage	Workflow Automation
Zeebu	\$25,000,000	7-Sep-2023	Early Stage	Marketing & Product Management
Prins AI	\$22,000,000	21-Aug-2023	Early Stage	Human Resource Management
Medallion	\$21,460,000	1-Sep-2023	Early Stage	Marketing & Product Management
Sound.xyz	\$20,000,000	12-Jul-2023	Early Stage	Marketing & Product Management
REALLY	\$18,000,000	28-Feb-2023	Early Stage	Collaboration & Communication
Champ Titles	\$18,000,000	25-Mar-2024	Late State	Document Management
Humanscape	\$15,080,000	12-May-2023	Late Stage	Content Management
AGII	\$15,000,000	14-Jul-2023	Early Stage	Content Management
Briya	\$11,500,000	19-Sep-2023	Early Stage	Content Management
Web3 Pro	\$10,010,000	28-Aug-2023	Late Stage	Content Management
Syky	\$9,500,000	17-Jan-2023	Early Stage	Marketing & Product Management

① Ranking does not include non-disclosed transactions.

Source:Architect Partners Crypto Private Financing Tracker

2024 Outlook

Market Growth

Focus on Production Implementations

Organizations are gradually becoming comfortable with the technology and 2024 is already experiencing an emphasis on the growth of production implementations vs POCs. Several factors are positively influencing this change, including:

- Proven benefits
- Tokenization of assets
- Ecosystem collaboration through decentralized systems
- Value chain efficiency
- Digital identity and data control
- Fusion of AI and blockchain

Industry Recognition of Importance

To underscore the growing importance of enterprise blockchain applications, and to assist with challenges to adoption, both Amazon Web Services and Microsoft's Azure are providing infrastructure and tools to more easily and effectively develop and deploy scalable blockchain solutions



2024 Outlook

Financings and M&A

Financings

Capital flows in H2 2022 and 2023 were challenging across the entire technology spectrum. Given the early stage of enterprise blockchain, capital investment has been moderate, but consistent.

The VC ecosystem anticipates moderate improvements in 2024 due to economic strength and signals of easing rates. Interest in enterprise blockchain will see greater attention due to growing use.

Recently, Architect Partners has already seen an increase in venture capital interest in quality enterprise focused blockchain based solutions, including leading SaaS and enterprise solution investors

M&A

Acquisition activity has been very light, as would be expected at this stage of market development. Activity will increase in proportion to the successes of funded companies. A more robust M&A market may not emerge until 2025, or later, which provides enough time for successful funded companies to begin showing consistent success and growth



About Architect Partners

Architect Partners is the leading M&A and strategic financing advisory firm serving companies on the front lines of crypto, blockchain, DeFi, fintech, and digital assets.

Architect Partners offers unparalleled senior judgment and expertise, delivering premium-value results for its clients. The Architect Partners team has completed over 350 transactions worth over \$30B in value across the globe.

Architect Insights ([Insights – Architect Partners](#)) brings an informed perspective backed by hard-earned lessons from the early years of tech, crypto, and fintech. We don't have a content authoring department—every member of the team is responsible for analyzing key transactions and sharing our insights on industry dynamics. To date we've published over 400 M&A Alerts and Ecosystem Insights, all openly shared on our site and via email.

Contact information: glenn@architectpartners.com

Learn more at: architectpartners.com

