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A decentralized
future for AI

| SECURE AND LEAK PROOF | LAYER 1 - DAG 700K+ TPS | DECENTRALIZED DATA STORAGE | ANNE GENAI |
| AI RESOURCES EFFICIENCY | USER HARDWARE FUELD AI | AUTOMATED WEB3 INTEGRATION |

AI - the primary driver for computation resources demand and cybersecurity risks

The availability of computational resources is the number one constraint on the growth rate of AI and its accessibility to users

> We're seeing a lot of interest from startups and smaller companies in using LLMs, but the cost is often a major hurdle. We need to find ways to make these models more accessible and affordable for everyone.

Clement Delangue,
CEO of Hugging Face

> The development of AI is currently bottlenecked by the availability and cost of computational resources.

Andrew Ng,
Co-founder of Coursera and deeplearning.ai

Companies and solutions that have been exposed to information leaks when using AI:

SAMSUNG

Cambridge Analytica

amazon

Google

In 2023, the computational cost of maintaining AI was 240 billion USD

In 2027, the computational cost of maintaining AI is projected to be 1.1 trillion USD. (CAGR 40%)

DLT as a means to decentralize AI

and gain access to growing computation resources available to consumers as a response to AI driving demand


DLT has the necessary properties and potential to meet the key needs of AI infrastructure.

Once it solves key industry bottlenecks

Network speed

Network scalability

Data storage

Access to consumer computation resources
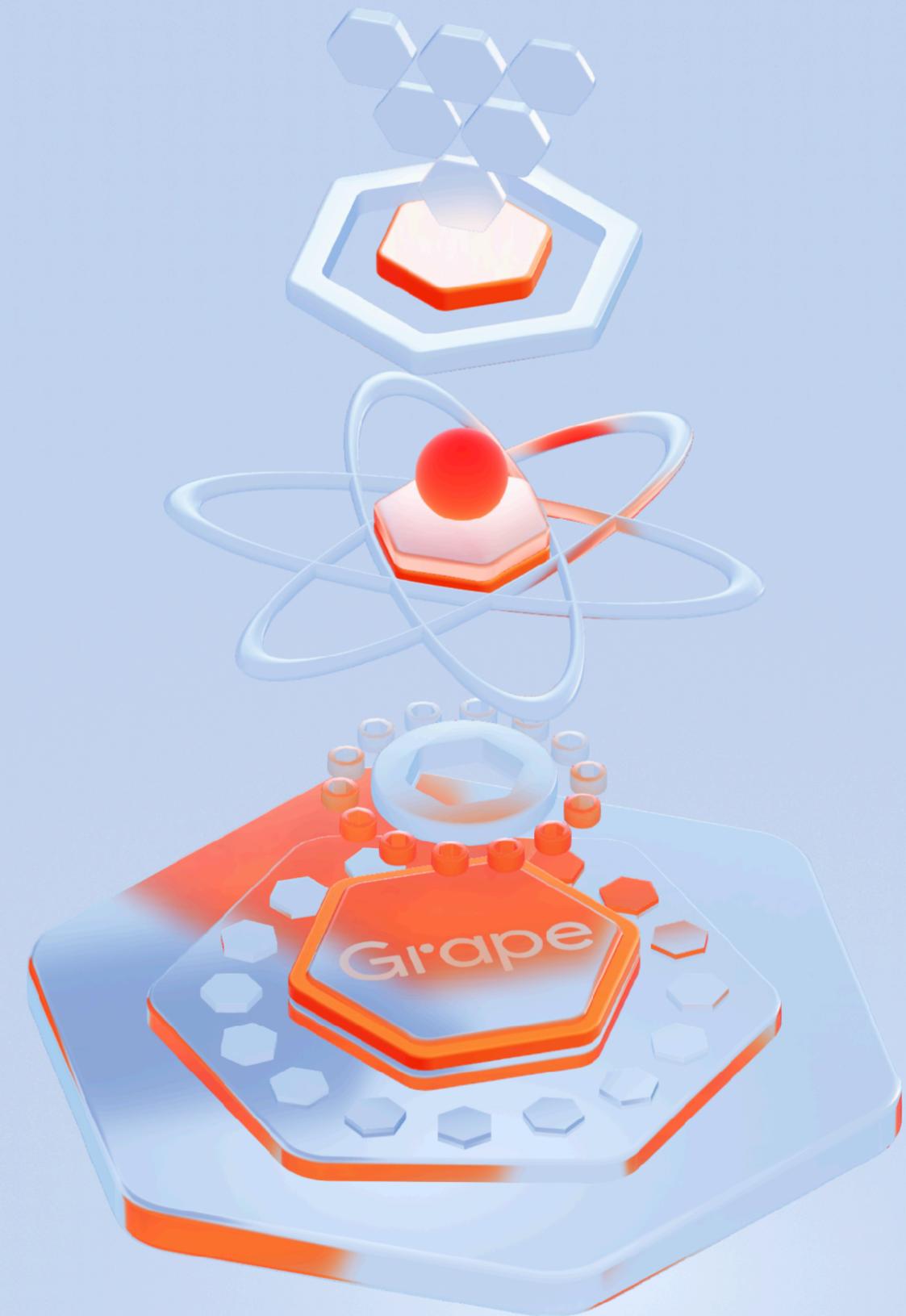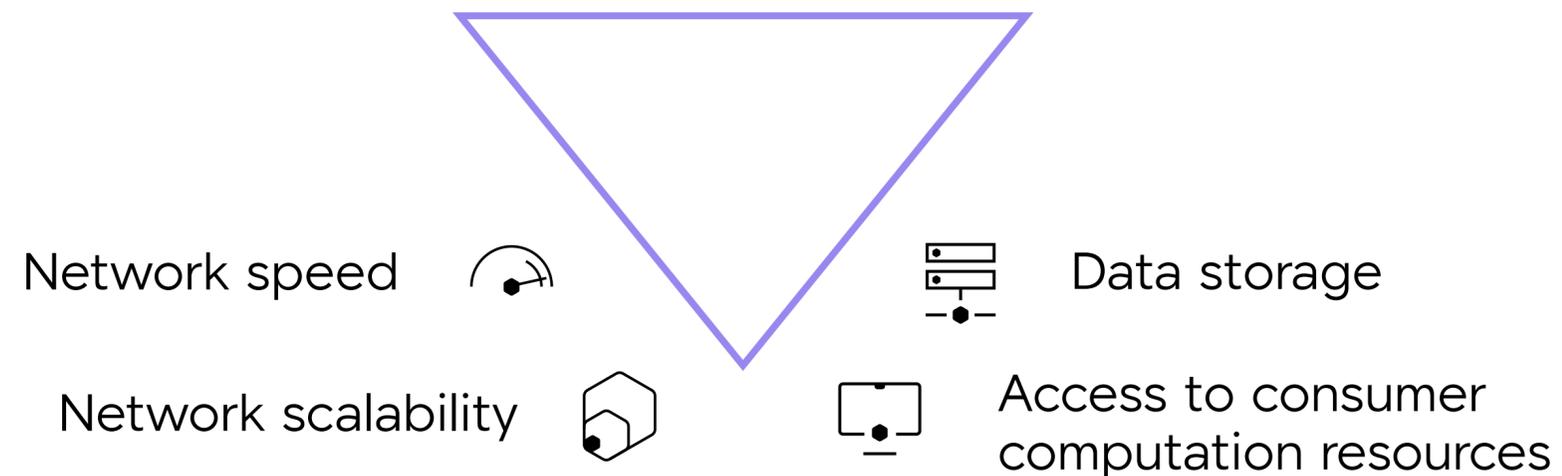
ANNE – DLT fueled AI

Proof of Augmentation Intelligence (PoAI) is the foundation of our consensus algorithm, designed to create a decentralized network of computing power contributed by Grape users. This innovative approach uses a unique reward, computational and data resources distribution mechanism to meet the exponential growth demands of AI infrastructure.
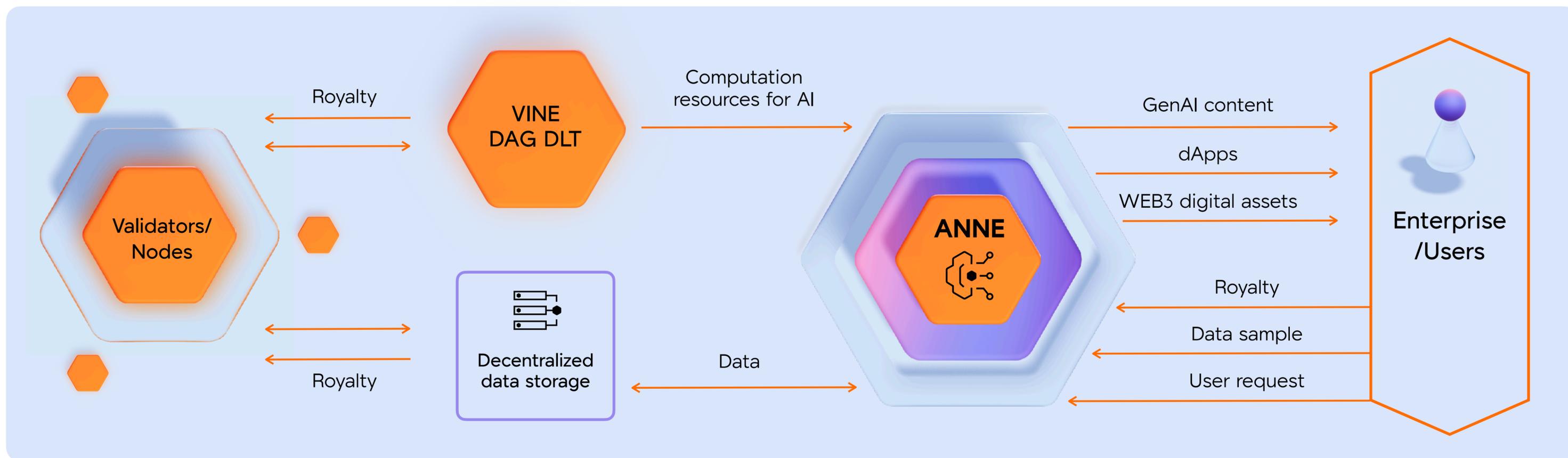
Grape is a solution to **decentralize AI**

Grape – is a DLT DAG based ecosystem built to
create **highly efficient AI infrastructure** that includes:

ANNE – generative AI supported by decentralized computation resources

- READINESS - 40%
- SMM CONTENT GENERATION
- IMAGE, VIDEO,VOICE GENERATION
- DIGITAL AND GAMING ASSETS GENERATION
- AUTOMATED WEB3 INTEGRATION
- AUTOMATED/CODELESS DAPP CREATION
- AUTOMATED WEB3 INTEGRATION

Vine – the most scalable and high throughput Layer 1 DLT on the market

- READINESS - 70%
- 700K + TPS BY END 2025
- SCALABILITY WITH NO DIMINISHING RETURNS
- CURRENT DIGITAL ASSETS CAP - $40 MLN
- 5 PATENTS PENDING

Decentralized data storage

- READINESS - COMPLETE
- DIGITAL ASSET STORAGE
- SECURE STORAGE OF PRIVATE AND SENSITIVE DATA
- ROYALTY AND DATA DISTRIBUTION SYSTEM
- STORAGE OF USER-GENERATED AI MODELS
- STORAGE OF USER GENERATED AGENTS AND CONTENT

A Booming Industry:
Global Gaming Market Set to Triple in 6 Years

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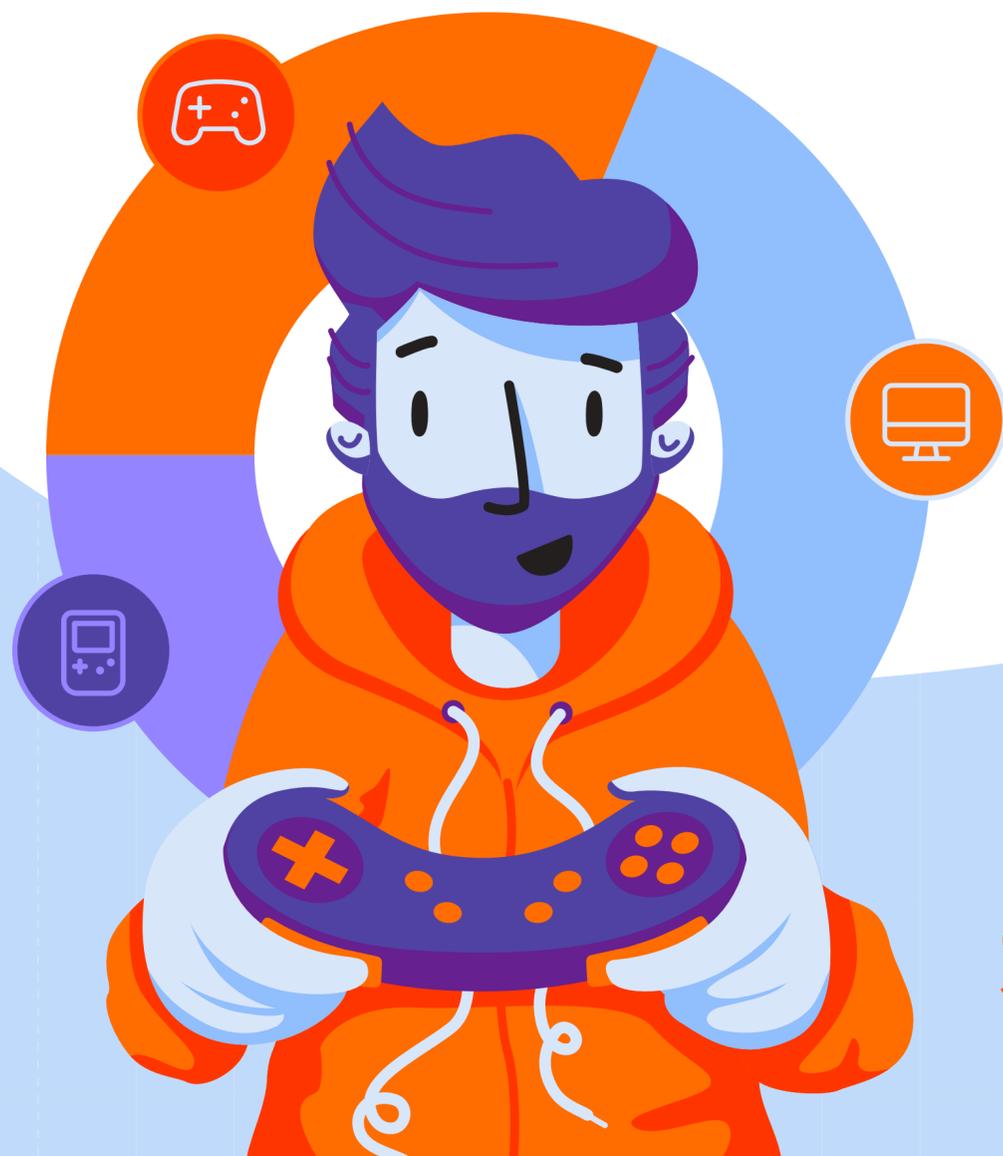
$665.77 billion 2030

Between 2023 and 2032, the worldwide market for **Generative AI in the gaming industry** is anticipated to grow by 23.3% and be worth $7.105 billion by 2032.

$189.3 billion 2024

ANNE – user flow

Effortlessly Familiar: UI/UX Aligned with GameDev's. Layer/Scenario Workflow

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Data input

I want a marketplace
for gaming assets with
Web3 integration and
platforms like OpenSea

Providing test variants

ANNE provides initial test results
to gather feedback from the user
in order to refine the final output

Variations
Re-forge
Upscale
Export
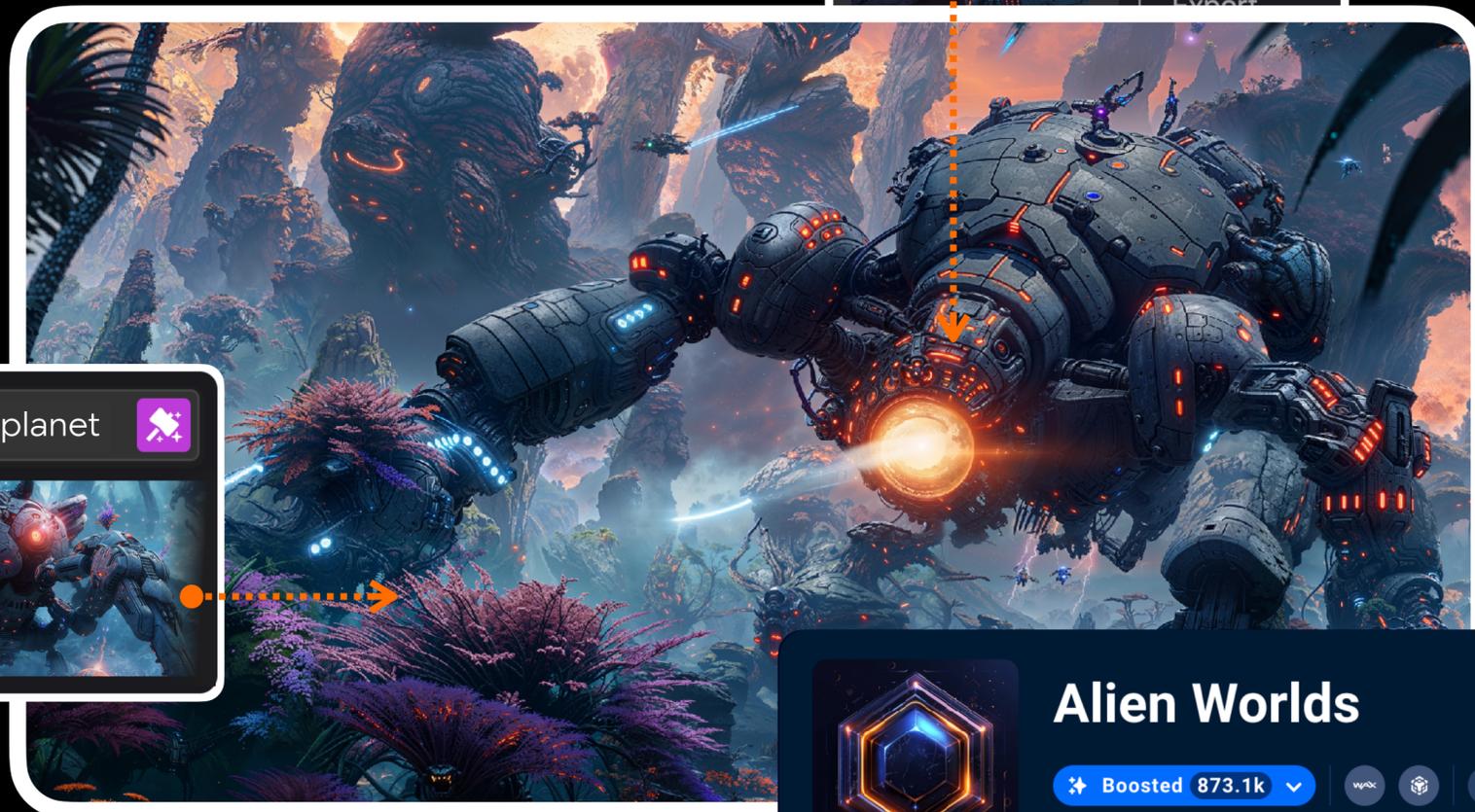
Collecting additional deal flow details and requirements

Gathering key information necessary
for setting up Web3 infrastructure,
details for smart contracts, etc.

Data sample

The user
provides key
references in
both visuals
and text

robotic enemy, alien planet

Data output

Complete and integrated dApp
with all content and **digital &
gaming assets** delivered to the
user on web or mobile platforms.

Alien Worlds

✦ Boosted 873.1k ∨   #8 in Games

OPEN DAPP

Innovative Metaverse where everything is tokenized **Read more**

Is Grape's VINE a Blockchain?

Grape's VINE network delivers **Distributed Ledger Technology (DLT)** based on **Directed Acyclic Graph (DAG)** technology, which differs from Blockchain in its record structure and asynchrony.

DAG functions as a network of interconnected branches that expands in multiple directions. Transactions can be confirmed much faster while remaining decentralized since each node only confirms the previous one.
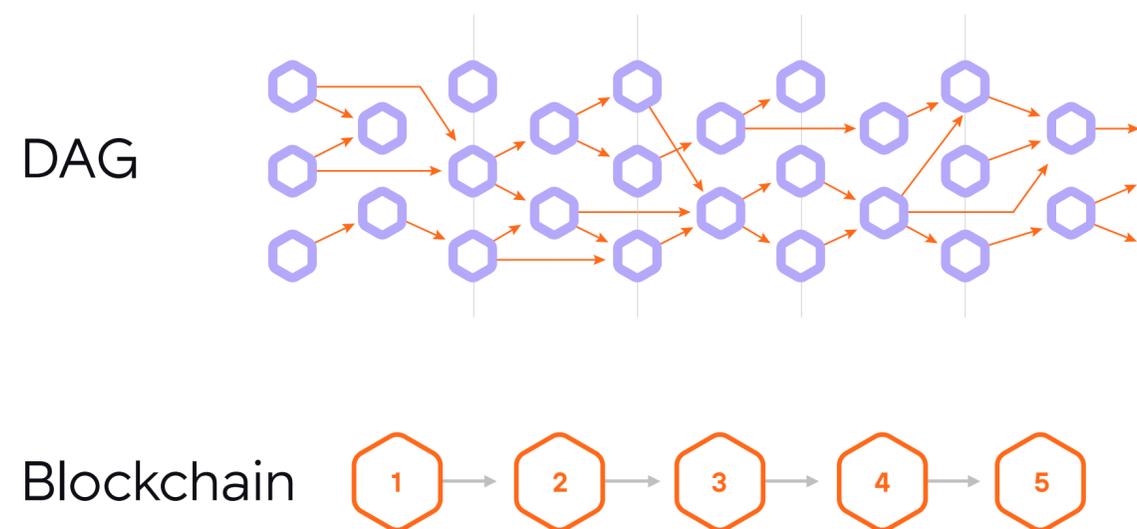
Core Benefits of VINE

DAG

Blockchain

Scalability
User growth does not create bottlenecks, but rather more nodes create greater scalability resulting in more TPS.

Asynchronous
Transactions are not queued or formed into blocks, a crucial factor for real-time focused applications used for banking, gaming, etc.

Flexibility
Microtransactions are handled much more effectively due to the lack of technical requirements affecting fees.

Grape's VINE is an evolutionary mechanism for scalability

700K+ TPS Grape

10x faster than Solana

150x faster than Avalanche

350x faster than Tron

2Kx faster than Cardano

5Kx faster than Polygon

7Kx faster than BSC

17Kx faster than ETH

84Kx faster than BTC

Year

2023

2020

2017

2015

2009

| 5 | 25 | 60 | 100 | 250 | 2000 | 4500 | 70 000 | 700 000 + | TPS |
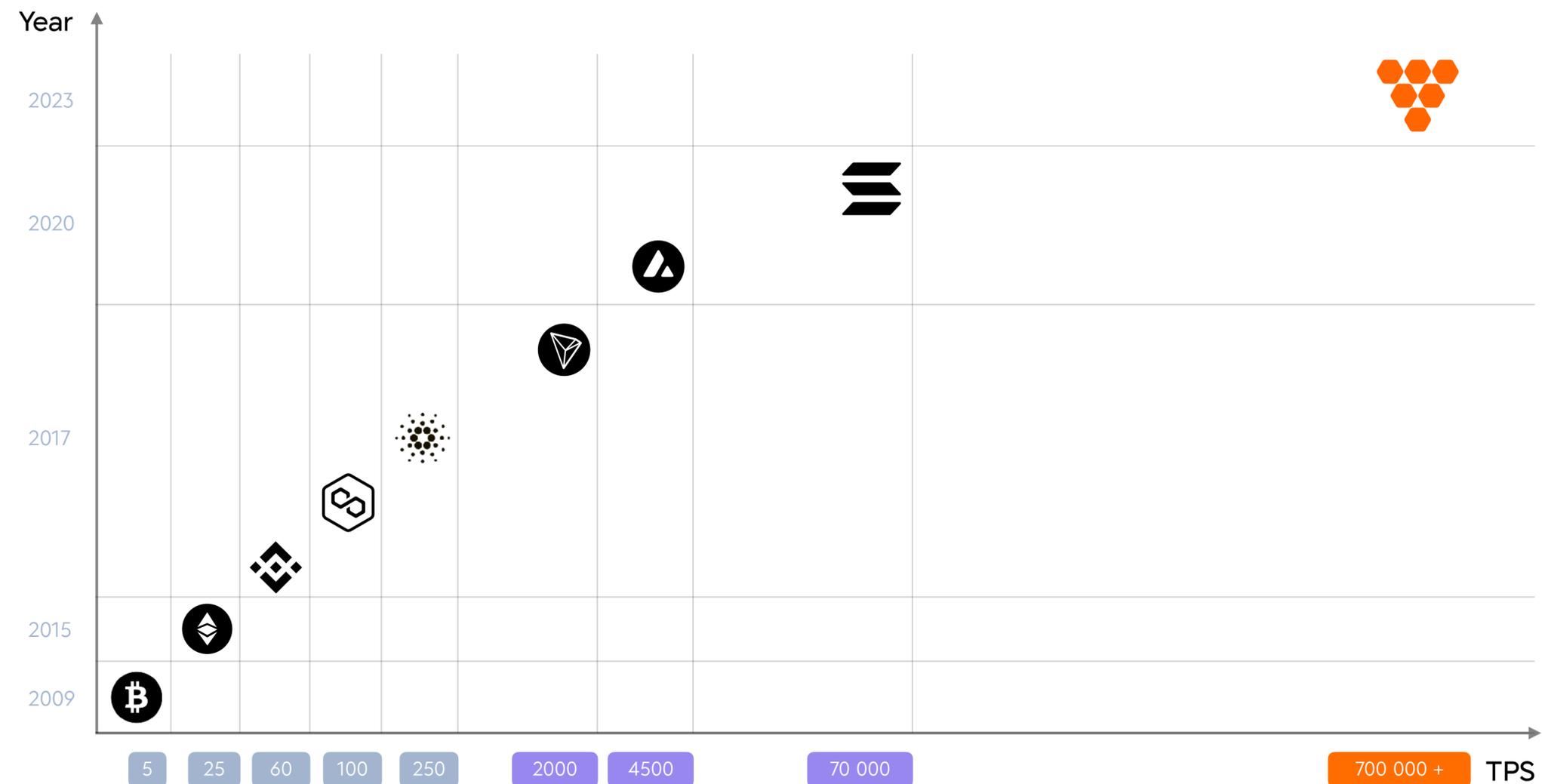
Which industries can benefit from Grape?

Grape is a comprehensive decentralized infrastructure that is designed to withstand huge loads. It has all the necessary functionality to support the needs of DApps for various industries.

Grape has chosen gaming and virtual worlds as a starting point to validate the functionality of the ecosystem, test its scalability, and potential.

Gaming

Banking

Supply chain

Logistics

Internet of Things (IoT)

eGovernment
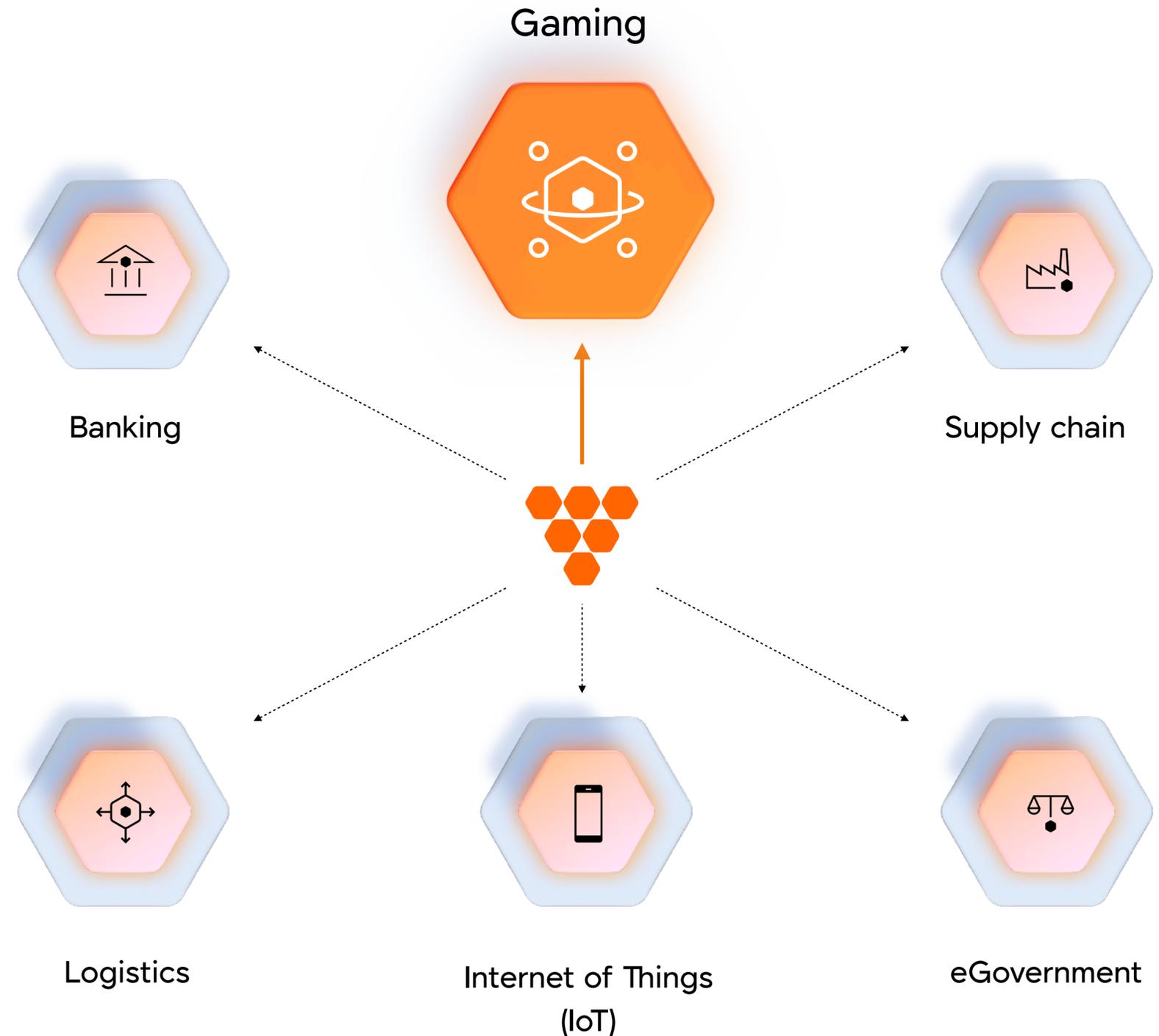
Decentralized Cloud Storage (DCS) is a crucial element of the decentralized ecosystem

Grape will allow anyone to become a node operator and provide disk space for distributed data storage in exchange for a reward.

Secure data storage

Data segmentation and encryption using DART layer

User 1

DCS

Possibility to monetize free space

Data uploading

User node 1

User node 2

User node 3

User node 4

dApps

User 2

ANNE

Data uploading
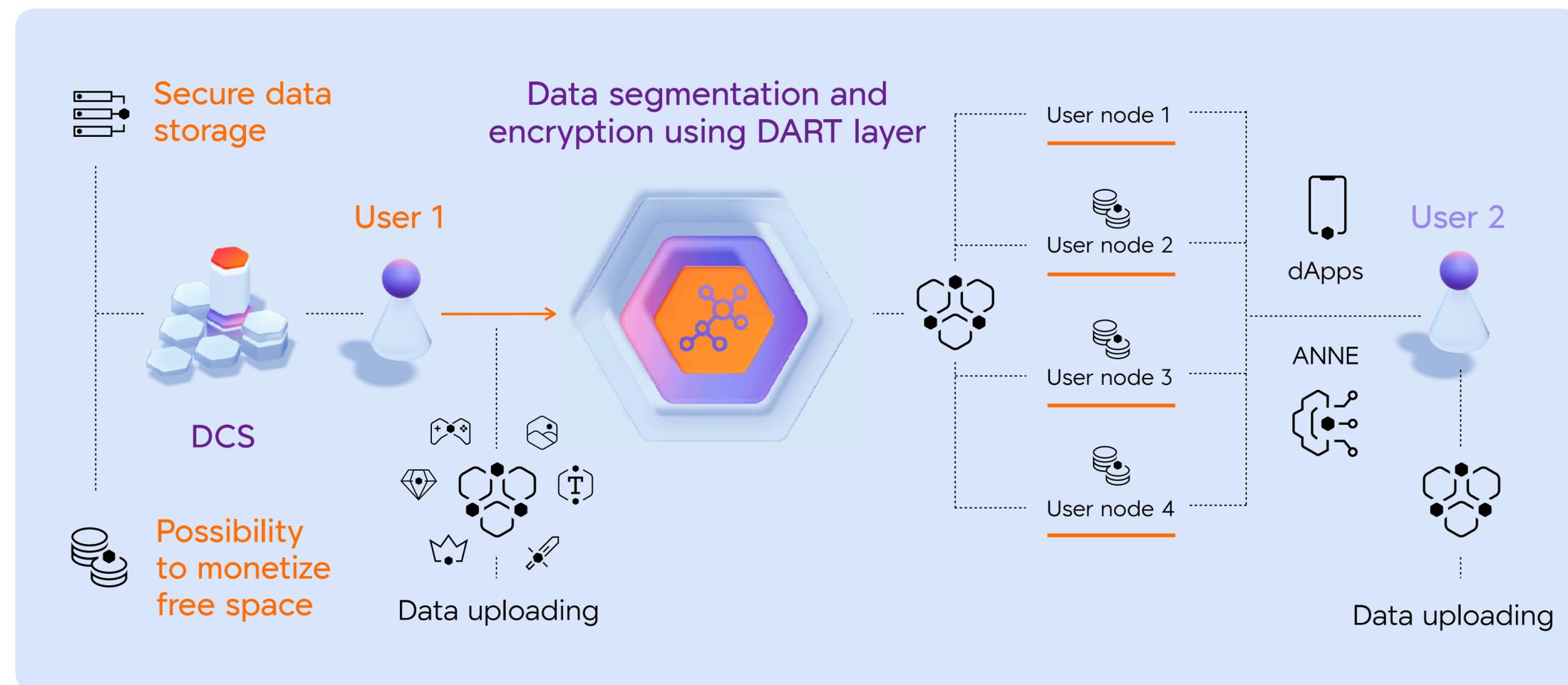
Patents Pending for Grape

Invention Name

Description

**1** Vertex selection system

The purpose of the invention is to protect against attacks when choosing vertices in a distributed ledger based on DAG. The Vertex selection system includes forming a DAG and protecting against lazy (placed close to the genesis block) vertex nodes of the graph.

2 Data consistency and synchronization

The main purpose of the invention is to ensure consistency and synchronization of data in DLT based on DAG. Due to the asynchronous nature of DAG, there is a need to have protection against the uncontrolled creation of parallel chains. A special structure of vertex confirmation achieves this.

3 System for resolving transaction order inversion and method for rapid ledger verification

The invention is intended for resolving the inversion of transaction order in a DLT and checking the consistency of the ledger and balance calculation, providing enhanced security, reliability, scalability, and performance of DLT based on a DAG. It is achieved by establishing global consistency in transaction order without using timestamps and other parameters vulnerable to manipulation.

4 System for ensuring irreversibility and consistency of data when processing smart contracts

The invention focuses on enhancing stability, security, and reliability using commit transactions when operating smart contracts in the DAG-based DLT.

5 Sharding - special use

Grape have found a way to use sharding in a unique way to work within the Grape VINE network.

VINE vs. other DAG-based systems

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Technology	Release Date	Consensus	Transaction Speed (TPS)	Scalability	Security	Governance	Transaction Approval time	Fee
IOTA	June 2016	Coordinator-based consensus	1,000 (with Coordinator)	Limited by Coordinator, it's slower without it	Cryptographically secured	Decentralized foundation	1-3 minutes	zero
DAGCoin	July 2018	DAG-based consensus	8,000	Limited by hardware resources	Cryptographically secured	Centralized	30 seconds	0.0005 DAGCoin
ByteBall	December 2016	DAG-based consensus	100	Limited by hardware resources	Cryptographically secured	Centralized	Few minutes	1 Mb storage fee $0,033
Nano	November 2017	Open representative voting consensus	Up to 7,000	Limited by hardware resources	Cryptographically secured	Decentralized	Limited only by transaction transfer delays	zero
XDag	December 2017	DAG-based consensus	200-300	Limited by hardware resources	Cryptographically secured	Decentralized	30 seconds	min of 0.01 XDAG
Fantom	February 2018	Lachesis-based consensus	300,000 (Up to 10,000 in real test)	Horizontally scalable	Cryptographically secured	Decentralized	Few seconds	very low
Grape	2023	VINE proprietary synchronization and confirmation algorithms complex	Higher than 700,000	Increased with every connected node (linear effect)	Post-quantum cryptographically secured	Decentralized	Sub-second limited by front-end	very low or zero

Grape is the most advanced DAG-based Layer 1 infrastructure for a decentralized internet

Quantum resistant

Multiplatform non-custodial wallet

Web3 codeless integration

ANNE gen AI

ANNE smart contract builder

Direct Acyclic Graph
for unparalleled scalability

700,000+ TPS

Launchpad
for fundraising

NFT marketplace

Native DEX
for token trading

Low barrier
to network validation
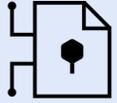
Easy-to-use
Web UI to launch dApps

Native fiat
onramp
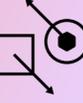
Interoperable virtual assets as an NFT standard

AI Neural Network Engine
for simple access to decentralized infrastructure

Decentralized Storage
for personal data and digital assets
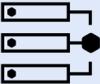
Current raise

The total amount sought in investment is $25 million USD

The current amount of debt obligations is $0

$40 million is the current valuation of Grape's crypto assets

Expectations

	According to Bloomberg data, the projected revenue will be:	Our projected share of the GenAI market:	ANNE services royalty: 5% EBITDA:	Valuation:
2025	$217 billion	1% – $2.17 billion	$100 million	>$1 billion
2026	$304 billion	5% – $15 billion	$750 million	>$10 billion
2027	$399 billion	10% – $39.9 billion	$1.99 billion	>$20 billion

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Q4 2025
- Mainnet Phase 1
- Smart Contracts
- AI Announcement
- Game Partner Announcement
- Free Zone Phase 1
- GRP Listings
- GGT Listings

Q1 2026
- Mainnet Phase 2
- Freezone Phase 2
- AI Apps Phase 1

Q2
- Mainnet Phase 3
- AI Games Phase 1
- AI Apps Phase 2
- Decentralized Web Browser

Q3
- Mainnet Phase 4
- AI Games Phase 2

Q4
- AI Games Phase 3

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