DISTRIBUTED CONFIDENTIALITY

TOKENIZATION

ENTERPRISE GATEWAY TO WEB3

ACCELERATING THE JOURNEY OF BUSINESS TO WEB3 ADOPTION

[partner version]

The Web 3.0 Platform



giving enterprises control in open decentralized ecosystems.

FOR BUSINESSES SEEKING TO TAKE ADVANTAGE OF PUBLIC BLOCKCHAINS, WHILE RETAINING GOVERNANCE AND SECURITY

DGT aims to resolve the most pressing issues in enterprise adoption

DGT

and become the universal Web3 solution for the \$60T market of business ecosystems by 2025



DGT

Private blockchains are for constrained ecosystems,

but public blockchains are too risky.

- open ecosystem vs. control

- hard to onboard

- lack of data confidentiality

- low interoperability

THERE IS A MAJOR BLOCKCHAIN PROBLEM



DGT

Enterprise blockchain integration = one of the leading problems of this 86% CAGR market.

94% of Fortune 500 execs have blockchain plans. Yet only **27%** have a functioning product.

Among those products, most are limited pilot projects without concrete results.

UNMET GLOBAL DEMAND

There is a clear gap between the capabilities of blockchain projects and enterprise demands.

This leads to few adoption cases over the years and even fewer success stories:

PERMISSIONED CHAINS

- Successful only in regulated, high-trust environments
- Unclear, risky, expensive versus legacy systems
- Lack of ability to form open business ecosystems

PUBLIC CHAINS

- Lack of control and governance (roles, transactions, permissions)
- Eventual high fee and scalability concerns
- "Flat" networks do not reflect layered business ecosystems

3 CROSS-CHAINS

- Lack of enterprise integration
- Mostly connects blockchain to blockchain or other decentralized organizations (DeFi)
- Projects compete, rather than create shared value



HYPERLEDGER







CØSMOS

: Polkadot



DGT Network is a Web 3 enterprise hybrid-permission platform.

DGT's cluster structure provides enterprises with *ecosystem-building* and resources scaling of public chains, while retaining permissioned *governance and control* over their own multi-organizational blockchain cluster.

SOLUTIONS

- Open ecosystem, while retaining control (H-Net Architecture)
- 50k TPS Secure processing (F-BFT Consensus)
- Simple onboarding (Clusters, Programmable tx)
- Real-life asset / identity / business verification (Digital Identity, Off-Chain Oracles)
- Exchanging sensitive data confidentially, securely and compliantly (SMPC, ZKP)
- Blockchain interoperability (Layer 1 Bridges)

PRODUCTS / SERVICES

- Native tokenization without smart contracts
- Data ecosystems for sharing sensitive information in untrusted environments
- Decentralized Digital Identity as a Service
- Notary Nodes as a Service



DGT VALUE PROPOSITIONS

DGT WEB 3 LAUNCHPAD		Key value:	Standard package for enterecosystems using blockch Non-core revenues Omnichannel enrich	erprises to create their o ain. Cross-o ed data Tokens	 ate their own connected Cross-environment integration Tokens – new carriers of value 	
\$ ® \$ A&A	Decentralized Marketplaces	Key services:	1 TOKENIZATION Connected loyalty economies and more liquid fundraising	s; faster 2 MULTI-P Enriched d minimal re	2 MULTI-PARTY COMPUTATION Enriched data insight and exchange with minimal regulatory / security risks	
	B2B2C Ecosystems	Business	Native direct tokenization	 Off-chain calculations (Notary ORACLES) 	Integration into major blockchains	
	Asset Tokenization	capabilities:	[) Embedded digital [) objects	Oecentralized native identity system	Secure Multi-Party Computation algo	
	Privacy-Enhancing Technology	Tech capabilities:	میہ Hybrid network of governance (clusters)	Absolute horizontal & Consensus (Sv vertical scalability BFT, governar		
7			performance	capital foundation	transactions	



DGT DEVELOPED 8 KEY TECHNOLOGIES:





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GARANASKA Tokenization smart-contract-free token emission

Embedded Identity native, practical decentralized ID

Notary ORACLES off-chain calculation nodes





H-Net Architecture

segments of different access types



Transaction Families processing of any digital asset or value



Secure Multi-Party Computation for sharing sensitive data



Variable Cryptography including quantum-resistance



DGT's hybrid network and a two-layer consensus adapt to the blockchain trilemma (decentralized, scalable, secure).



DGT's support for variable permissions bridges institutional market participants to crypto-native systems.



DGT PLATFORM APPROACH

NODE INTERACTION

DGT is used for deploying decentralized DeFi and Web 3.0 services. You can think of the platform as an infrastructure solution to support various applications targeted at the end user market.



The DGT platform has a unique architecture based on a hybrid network and a two-layer F-BFT and POS consensus, which makes the system secure and performant, allowing it to solve the blockchain trilemma (decentralized, scalable, secure). An important feature of DGT is the support of special network segments with special permissions, which allows building a bridge to institutional market participants from crypto-native systems.



\$14 Ballion expected spending on blockchain in 2023 alone.

Yet most use cases for enterprises remain unsolved by current

blockchain providers.

DGT FEATURES

DGI

The DGT version is being developed in accordance with the roadmap and CORE/GARANASKA versions. For convenience, the functionality is presented in the form of packages, also combined into groups:

JGT



PROCESSING

The characteristics of the network can be derived from the idea of its volume (the number of verifying nodes), as well as the volume of transactions and their characteristics.

		TPS	Nodes	Validators	Transaction Fee	Transaction Finality	Total Transactions to date	Transaction Governance	Governance Supervision
Ethereum	¢	15	300 000	6833	\$4 - \$40	5min	18	Soft governance	Off-chain governance processes
Binance Smart Chain	Ŷ	100		21	\$0.01	75sec	144M		Community-governance voting mechanism
Solana		50K TPS (or 3K TPS according others etc.)	685	1000+	\$0.00001	~1sec	72B	Coin Holder Staking	Validators (KYC needed)
Algorand	Algorand	20 TPS (1M Daily)	140	Flexible	\$0.0001	4.5sec	N/A	Coin Holder Staking	Governors (each governor must commit to keeping a certain Algo balance)
Cosmos	сøѕмоѕ	1 400 TPS (10 000 daily)	125		\$0.1		290000		
Avalanche		4 500 TPS (20K Daily)	865	~1000	\$0.1	3sec	1.9M	Coin Holder Staking	Validators
Polkadot		400 TPS (10K Daily)	297	~1000	\$0.01	30sec	78.93M	Coin Holder Staking	Coin Holders
Terra		3 TPS	100+	130	0.1%-1% for all Terra transactions	1min	N/A	Coin Holder Staking	
Polygon	°℃	60-105 TPS (~3M Daily)	400+	100	\$0.002	2.3sec			
VeChain	V	10 000 TPS	2500	100+	\$0,12				Validators
Fantom		10K TPS	50	57	\$0,05				
Cardano		2 TPS	3173			10-60sec			
Bitgert	▶								
SafeCoin		50K+			\$0.0001	~1sec		Coin Holder Staking	Validators (no KYC)
DGT*	🕅 прт	1K	36	24	\$0.1	~2 sec	0	Delegates	Validators
DGT**		50К	161	91	\$0.1	~1sec	15M	Coin Holder Staking	Coin Holders





Alexander Khvatov Finance DGT Token Exchange

Valery Khvatov Technology & Solution Architecture



LEADERSHIP



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Persival Ballesté, PhD



Ecosystem Growth



Titan Technology Off-shore development

ProperT Real estate tokenization

PROPERT

Saint-Petersburg U Research Team

TAC Consulting LatAm Growth

TAC

CONSULTING

THANK YOU







DGT Network Inc. is a startup company founded in Toronto, Canada in 2017

2019-20 Enterprise focused

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2017-18

Crypto-winter, pivoting to enterprise blockchain.

Project beginnings, called "BGX". Surviving the ICO rush.

First release of the platforms and promising developments.

DGT HISTORY

DGT finds footing as a Layer 1 ecosystembuilding blockchain.

DGT turns towards developing tokenization.

- **Technology:** Kawartha 1.0 and GARANASKA development.
- Investment: \$600K USD angel investment.
- **Business:** moving into international markets (LatAm), fighting off raid, growing business capabilities.

DGT successfully pivots in crypto-winter to an enterprise-focused blockchain.

- **Technology:** second (Mississauga) and third (Kawartha) releases. Tech partnerships. Topology develops. Scientific publications.
- **Business:** Working with enterprises; great tests with large banks. Decentralized project concepts developed on platform HR, privacy, crowd investment.

DGT was created as a blockchain for digital and gaming assets.

- **Technology:** first platform release ("BGX Kowabunga"). Native coin. Integration with Magenta marketplace. Consensus developed. Secondary tokenization and NFT concepts.
- Investment: angel funding of \$900k USD. Later spin-off into DGT Network and smaller BGX (defunct).
- Business: successful pre-ICO sale. Partnerships with gaming companies. Partnerships with universities.



PLATFORM POSITIONING

THE PLATFORM'S CORE ADVANTAGE IS ITS ARCHITECTURE THAT SUPPORTS SCALABILITY & USE CASE VERSATILITY

The network that can process any digital value, integrate any centralized or decentralized system, and provide the tools for a thriving ecosystem.



DGT is looking to build a leading ecosystem using its many technological capabilities, including an integrational "Layer 1" network and additional built-in capabilities that augment real business cases.





BASIC BLOCKCHAIN FUNCTIONALITY

DGT.CORE – contains the main functionality of the platform with support for a test family of transactions and the main provisions of the F-BFT consensus.



TOKENIZATION AND SMART CONTRACTS

GARANASKA

DGT.GARANSKA – the financial subsystem of the platform, aimed at the implementation of the token subsystem, including the native DGT cryptocurrency.

While DGT-CORE is intended to be distributed as a «box» (you can use it to develop your own functionality), DGT.GARANASKA is distributed as node software that connects to an existing network



DEC: UNPRECENTED NATIVE COIN

The Decentralized Economy Coin is the native coin of DGT Network. DGT Network is organized into clusters (ecosystems), each a distinct economy, sharing DEC as their one common currency.



Join the DEC economy to utilize the decentralized token with the best governance system behind it.



VERSATILE WHITE -LABEL TOKENIZATION

DGT.GARANASKA is compatible with all Ethereum token families, implementing similar functionality through different type of transactions



COMMODITY-BACKED

ERC-1400

SECURITY TOKENS Controlled distribution of tokens with certificate issuance

AND EVEN MORE...

Mirroring Anchor possibilities in other blockchains

Security

Absolute security

against attack vectors



White-label tools Including mobile wallet aps, APIs, dashboards



Volatility-free

Independent value from core native coin

DGT Network enables the creation of any white-label token with no limits on its properties.

These tokens are **ideal for the rapid enterprise** development and deployment.



Any value Variable transactions; any digital asset



Atomic swap Internal zero-fee exchange mechanism

Special types of nodes (NOTARIES) play the role of bridges to the physical world

Built-in gateways for exchanging tokens for fiat money and cryptocurrencies

State reflection in the Ethereum network



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Enterprise ecosystems rely on data sharing to generate benefit. But sharing confidential data on blockchain is unsafe and often illegal.



DGT uses ZKP and SMPC to secure three processes: data exchange, decentralized identity management and off-chain calculations (notaries).

DGT Zero-Knowledge Proof

- Succinct non-interactive arguments (SNARG), such as "Bulletproofs"
- Interactive ZKP methods for proofing on-chain data with off-chain info without the ability to directly compare (notaries)
- Classic k-Anonymity; l-Diversity; t-Closeness for identity
- Shamir Secret Sharing-based for tokenization

DGT Secure Multi-Party Computation

- Proprietary PSI/SMPC protocol based on primitives of Diffie-Hellman exchange protocol, BFV HE scheme, Cuckoo hashing, and Oblivious Pseudrandom Function (OPRF)
- Two phases: preliminary calculation (offline), then executing intersection (online phase).

SOME RISK SCENARIOS

- **Contextual enrichment.** Blockchain startup distributes coins to team and investors. Approximating ownership can identify public key to person. From then on, all their transactions and contacts can be tracked.
- K p

KYC. Submitting personal ID docs for KYC discloses public key <-> person to private providers, exchanges, and start-ups, not bound by banking confidentiality.

Smart contracts. Tokenizing assets leaves metadata. Because of the uniqueness of assets, further kanonymity approaches can easily reidentify connected people & objects.



Identification. Necessary for AML, security laws, but placing information on-chain is visible to all and illegal under privacy laws. Accessing off-chain is expensive.



Data integration. Corporations benefit from combining financial, geo-tagged, marketing data. Unprecedented cross-selling opportunities arise. But exchanging this data is unsafe and often illegal. ... and more.

DGT's GARANASKA tokenization is based on advanced financial-economic models

DGT MEANS EMBRACING NEW POSSIBILITIES



MODULAR



OPEN SOURCED

INTEGRATIVE



DGT

H-NET ARCHITECTURE



H-NET architecture – the architecture of a blockchain network built in a federated way:

- Network nodes are grouped into Fi clusters, allowing BFT consensus to be reached in the fastest way;
- The network simultaneously presents private and public structures (hybrid network) with delineated segments
- Each node supports several types (families) of transactions at the same time (the network is multifunctional)
- The distributed ledger is built on DAG technology and is a combination of related graph structures, each of which can have its own visibility for different segments (the so-called private branches);
- The nodes of the system have various roles, including:



Validators that approve transactions within a cluster

Nodes that provide data validation at the network level (on-chain Trust Providers). Any transaction within a trust group (node clusters) requires approval outside that group (Circle of Trust, CoT)



Service Provider (SP) – a node that provides service for its clients connected via API

Notary, an off-chain node commonly called oracle but with off-network validation



Rely (Gateway) – a node that provides data synchronization with external blockchain networks and payment systems



H-NET ARCHITECTURE

Hybrid networks with H-architecture allow them to be effectively used for the organization of ecosystems by supporting several transaction families at once, the ability to efficiently allocate computing resources and reduce internal barriers. At the same time, different host roles allow you to more accurately manage security and provide better integration with external systems





NODE INTERACTION

- 1) Several parties/organizations interact. Each organization is represented by its own node (agent) that is connected to legacy systems. To connect the node as a validator, several conditions (staking) are required.
- 2) Data source other nodes, networks or corporate information systems, each of which is connected to its own node. When data is added, it is validated and propagated by other nodes (CONSENSUS). Data is combined in a strictly specified form.



DGT BUSINESS LAYOUT

DGT





SELEC	TED CASES	PRESS TO GO BACK
= SOLANA	Valuation: \$33,000,000,000 Investments: \$330,000,000	Founded: 2017
Algorand	Valuation: \$4,700,000,000 Investments: \$70,000,000	Founded: 2017
сøѕмоѕ	Valuation: \$6,000,000,000 Investments: \$23,000,000	Founded: 2014
AVALANCHE	Valuation: \$19,000,000,000 Investments: \$42,000,000	Founded: 2018
Polkadot	Valuation: \$19,000,000,000 Investments: \$253,000,000	Founded: 2016
🖻 fantom	Valuation: \$2,700,000,000 Investments: \$15,000,000	Founded: 2018
😋 polygon	Valuation: \$10,000,000,000 Investments: \$10,000,000	Founded: 2017

APT套S

Valuation: **\$1,000,000,000 2022 Seed Round: \$200,000,000**

Founded: 2021

\$146,000,000

Average Layer 1 Investment by **2022**:

DGT

 Record blockchain investments in 2021

BLOCKCHAIN INVESTMENT 2021-22



- Historic levels of VC investment into crypto companies (more in 2021 than in 2016 2020)
- Rise of unicorns (+491% over two years)
- NFT / Gaming rise (42% of top 15 deals)
- L1 ecosystems attracted investment (73 in Solana, 53 in Polkadot, etc.)
- Record M&A activity (197 in 2021, +130% compared to 2020)



 Seed investments accelerate further in 2022

crunchbase