



# BLOCKCHAIN SOLUTIONS

We specialise in distributed ledger solutions that deliver meaningful business improvement by utilising best of breed blockchain technologies.

We work closely with each client to identify where these technologies can be applied to deliver substantial cost and time savings, improved customer experience and demonstrated commercial optimisations.

DigitalX has partnered with the world's only managed blockchain platform to support multi-region, multi-cloud, borderless blockchain networks.

**Discover where to unlock the value from distributed ledger technologies in your organization.**

# OUR PROCESS

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## 1. DISCOVERY

We work with people and organisations to assess pain points and identify where a distributed ledger may deliver clear benefits throughout the business - and where it wont.



## 2. OPPORTUNITY

We listen and engage with key internal change makers to rapidly design bespoke solutions uncovered in the discovery phase. Through in-person workshops and collaborative prototyping we flesh out exactly how a solution should look for your business.



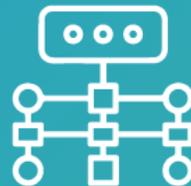
## 3. BUILD

Once we have the framework determined by your team, we go away and implement a simplified solution that you will soon be able to interact with to identify exactly where further optimisations and opportunities may be.



## 4. REFINE

We take lessons learnt from the initial build phase and evolve the solution towards being production ready. We iterate your solution to ensure the implementation is effortless.



## 5. INTEGRATE

After stress testing the solution, we work with your team to integrate the optimised blockchain processes into the enterprise it's business processes.

# SMART CONTRACT MANAGEMENT

INDUSTRY EXAMPLE:

## MINING AND RESOURCES

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### EXAMPLE APPLICATIONS:

- Royalty Transaction Management
- Tolling Arrangements
- Joint Venture Cost Accounting

### PROBLEM:

#### LNG JV Tolling

Aligning stakeholders, managing contract terms and differing interpretation of data leads to inefficiencies and disputes across the royalty and cost management process of asset owned under a share JV structure.

### SOLUTION:

Allowing parties to publish contract terms and relevant data to a shared distributed ledger (blockchain) enables each party to reach agreement in a faster, more transparent and efficient manner. An automated, shared interpretation among parties builds trust, reduces disputes and lowers administrative costs.

### KEY CONSIDERATIONS:

- **Confidentiality:**  
Contractual data must remain confidential.
- **Privacy:**  
Data must reside on a private blockchain.
- **Granular Security:**  
Parties should only have access to that which they require.

### TECHNOLOGY PLATFORMS:

Amazon Web Services, Google Cloud, Microsoft Azure, R3 Corda

### FUTURE OUTCOMES:

Accomplish a dispute-free state of interaction in order to deliver end to end completeness of JV accounting for all parties.

*"Reconciliation is a symptom of disjointed systems and disparate sources of truth... Traditionally, accounting relied on books and offline ledgers, creating a foundational need for reconciliation. With blockchain technology, we have interconnected self-balancing digital ledgers. Manual reconciliation becomes irrelevant."*

**Rohit Amberker, Finance Director for Royalties and Content Operations, Microsoft**

## DIGITALX CAPABILITIES SUMMARY:

# IOT BLOCKCHAIN INTEGRATION

## INDUSTRY EXAMPLE:

## RENEWABLE ENERGY

### EXAMPLE APPLICATIONS:

Solar Battery Usage History.

### PROBLEM:

A large and growing second hand market exists for lithium batteries due to their ability to be recycled many times over, but determining the remaining health and economic value of a battery is difficult without a full record of its usage history.

### SOLUTION:

The battery management system (BMS) is adapted with a secure hardware element to enable blockchain connectivity. Operating data is periodically written to the blockchain, creating an unchangeable record of how the battery has been used.

### KEY CONSIDERATIONS:

- Data volume, variety and velocity.
- Available connectivity methods.
- Physical device security

### TECHNOLOGY PLATFORMS:

Ledger IoT, Amazon Web Services, Ethereum

### FUTURE OUTCOMES:

Enable more reliable data sharing among separate, but mutually reliant supply chain stakeholders in order to promote increased utilisation of IoT enabled assets.



## INDUSTRY QUOTE

*“Blockchain technology can create a decentralized market for VPPs and peer-to-peer energy trading. Blockchain is able to handle transactions and payments on both sides of the meter, in real time, at a lower cost to all involved.”*

**Jemma Green, Power Ledger**

## DIGITALX CAPABILITIES SUMMARY:

# ASSET TOKENISATION & FINANCE

## INDUSTRY EXAMPLE:

### PRECIOUS METALS AND COMMODITIES

#### EXAMPLE APPLICATIONS:

Asset backed stablecoins and digital assets.

#### PROBLEM:

xbullion, a gold backed stable coin, needed a way to collect management fees from token holders for the vaulted, insured and audited gold backing each token. Furthermore, the method of fee collection needed to minimise blockchain transaction costs.

#### SOLUTION:

DigitalX designed and implemented a customised token to include a global fee collection and accrual function. The design ensured that fees payable accrued daily, but were only collected upon token transfer or by calling the global collection function, which minimised the number of transactions and therefore transaction costs on the Ethereum blockchain.

#### KEY CONSIDERATIONS:

- **Token design** - the token contract reflects the stablecoin's business model.
- **Transaction costs** - minimise gas costs and improve efficiency.
- **Exchange integration** - maintain a level of standardisation for ease of integration.

#### TECHNOLOGY PLATFORMS:

ZipMex exchange, Ethereum blockchain

#### FUTURE OUTCOMES:

Provide institutional grade exposure to vaulted, insured and audited gold assets at a lower cost than traditional investment means such as ETFs, managed funds and physical allocated storage.



## INDUSTRY VALIDATION

*“One of the biggest barriers holding institutional investors back is the lack of transparency about the quality of digital assets.”*

**Tim Aman, BDO**

# OUR TEAM

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**LEIGH TRAVERS**  
Executive Director

Leigh is Vice Chairman of the Australian Digital Commerce Association (ADCA). Leigh previously worked for seven years at a publicly listed wealth management firm. Leigh holds a Bachelor of Commerce and Communications from the University of Western Australia and a Fintech Certification from MIT.



**DAVID BEROS**  
Head of Product

David most recently worked and consulted in corporate innovation roles for companies in the energy and insurance sectors. He went on to start two digital financial services businesses and is co-organiser of Fintech Perth – a community of finance industry startups in WA.



**MIKE SEGAL**  
Chief Technology Officer

Mike is an expert in cryptography and machine learning and has worked on a diverse set of problems including weather prediction, consensus protocols, and mesh networking at several Boston and San Francisco-based companies.



**MICHAEL BUCHANAN**  
Blockchain Developer

Since completing a Bachelor's Degree in Chemical and Process Engineering, Michael has worked as a Technical Analyst and Blockchain Developer at DigitalX for the past year. Michael is fluent in solidity, the programming language of the Ethereum protocol, and has a deep knowledge of smart contracting, decentralised systems and consensus mechanisms.

# PLATFORMS AND PARTNERS

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## BLOCKCHAIN

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KALEIDO



**HYPERLEDGER**  
BLOCKCHAIN TECHNOLOGIES FOR BUSINESS

## CLOUD

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Google Cloud



**BRING YOUR APPLICATION TO LIFE**

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Contact [info@digitalx.com](mailto:info@digitalx.com) to discuss your project.