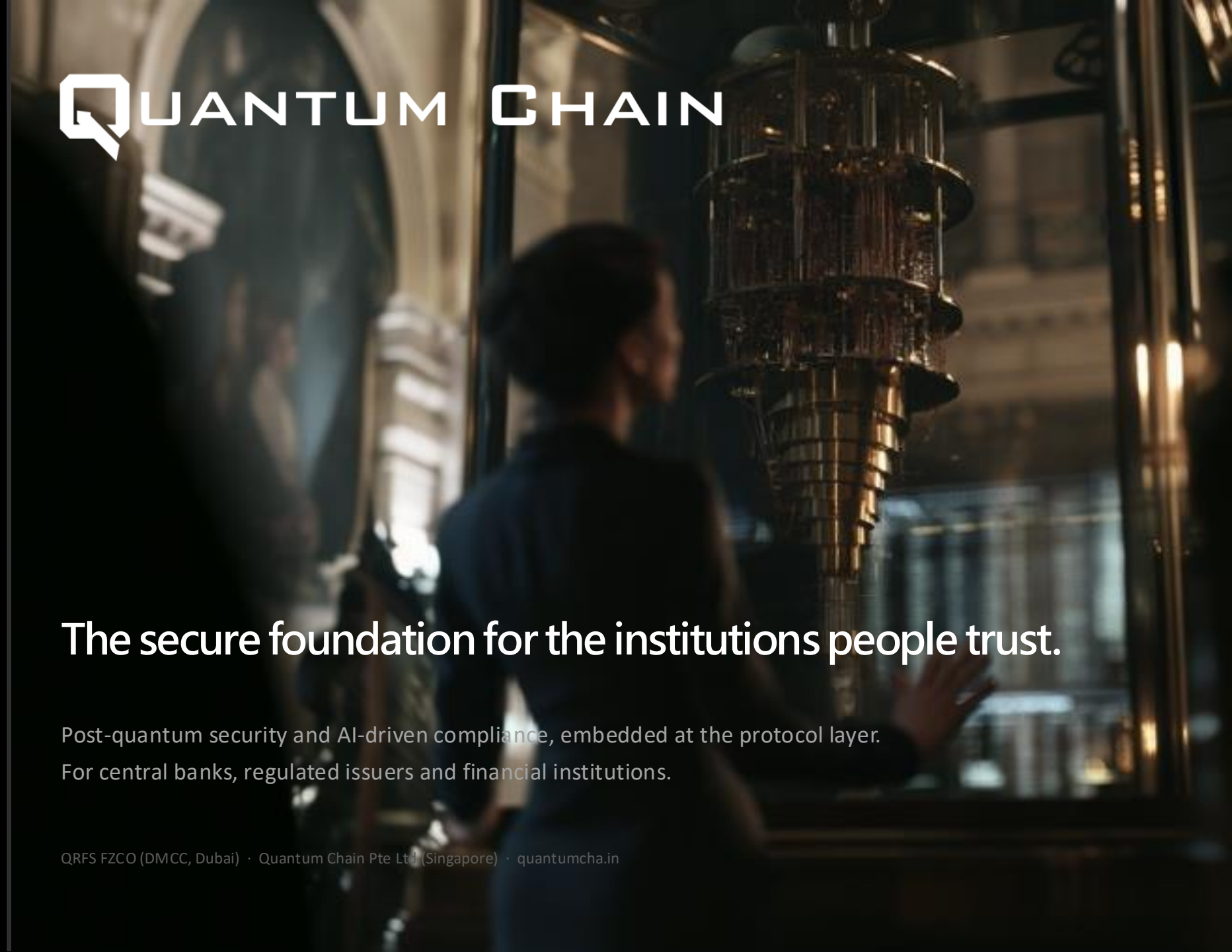

QUANTUM CHAIN

Quantum-Secure Financial Infrastructure for Payments, Digital Assets and Currencies

Institutional Overview
2026

For regulated institutions

The secure foundation for the institutions people trust.

Post-quantum security and AI-driven compliance, embedded at the protocol layer.
For central banks, regulated issuers and financial institutions.

QRFS FZCO (DMCC, Dubai) · Quantum Chain Pte Ltd (Singapore) · quantumcha.in

THE CASE FOR ACTION

Why this matters now.

01

The threat.

Within the next decade, quantum computers computers are expected to break the cryptographic standards securing today's today's financial infrastructure. Trillions in in assets routed over SWIFT, traditional rails rails and first-generation blockchains will will become exposed.

02

The mandate.

Regulatory bodies in the United States, European Union, Singapore and the Gulf are formalising post-quantum cryptography requirements. NIST has standardised the first post-quantum algorithms. The transition window is closing.

03

The response.

Quantum Chain is built from inception on on post-quantum cryptography, with regulatory compliance embedded at the the protocol layer rather than retrofitted retrofitted downstream. Institutions deploy deploy now - before the threat materialises materialises and before mandates require it. require it.

MIGRATION TOWARDS POST-QUANTUM CRYPTOGRAPHY ISN'T SO SIMPLE

What makes a PQC migration so difficult.

Everyone is being told to migrate to post-quantum standards.
This is necessary, but only the first step in an industry shift and nowhere near sufficient

WHAT'S THE CONTEXT

CURRENTLY

Most cryptography is hard-coded

Welded into HSMs, chip cards, terminals, firmware and immutable smart contracts. A full transition using current systems would take an intensive tech team to alter the cryptography. They'd also need to find a way to make the code cryptographically agile to ease future upgrades.

28 Jul 2026

AI broke a NIST post-quantum candidate.

Anthropic's Claude Mythos Preview found a key-recovery attack on HAWK-256 in roughly 60 hours, cutting the attack cost from about 2^64 to 2^38 operations. HAWK had survived two years and two rounds of expert human review. Its authors withdrew it from NIST standardisation within 24 hours.

2025 → 2026

AI agents now exploit code autonomously.

In one year, agents went from exploiting 2% of post-cutoff smart-contract vulnerabilities vulnerabilities to 55.9%, at roughly $1.22 per contract scanned. Open-source codebases codebases are the first frontier.

WHY QUANTUM CHAIN SURVIVES IT

Crypto-agility wins during an era of advanced technology

Algorithm families are swappable without redesign. We run NIST-finalised ML-DSA and SLH-DSA and rotate primitives as the standards picture moves.

Proof of Authority consensus

Identity-bound validators under governance. No anonymous write access, no permissionless attack surface for an agent to probe at $1.22 a scan.

AI compliance engine at the protocol layer

Screening and policy enforcement run at machine speed on every transaction: continuous defence, rather defence, rather than a launch-day audit that ages out.

Public-permissioned architecture

Auditable like a public chain, governed like a private one. Issuer-controlled policy rules, with no open contract surface exposed to automated exploitation.

Sources: Anthropic / NIST disclosure, 28 July 2026; Anthropic red-team smart-contract study; CertiK Hack3d H1 2026.

WHERE WE STAND

Live now. Not a roadmap.

The cryptographic resilience deadline is before 2030, but Quantum Chain is operational today.
Mainnet has been live since 2025 and the core product suite is in production while the rest of the market is still scoping migration.

LIVE

Mainnet operational since 2025, core product suite in production

ISO 20022

Native messaging compliance

6+

Jurisdictions in regulatory engagement

2

Quantum-secure CBDC sandboxes awaiting start — QMYR and QPHP

Regulated client integrations underway · Live commercial tender with a Tier-1 bank · Quantum Dollar (QUSD) deployed in test · Four productised pilot tracks open

PRODUCTS

Six interoperable products.

Each deployable standalone or as part of a complete stack.

Messaging & Settlement

ISO 20022-compliant quantum-secure financial financial messaging. Real-time cross-border settlement and a quantum-safe alternative to SWIFT SWIFT and legacy rails.

Tokenization of Financial Assets

Issuance, lifecycle management and secondary trading of bonds, funds, equities and ESG instruments under issuer-controlled governance.

Quantum-Stables

Infrastructure for licensed issuers to operate fiat-referenced digital value instruments. Issuer-controlled mint and burn, policy rules and supervisory reporting.

Quantum Payments Infrastructure

Payment rails for licensed providers to operate digital wallet services and cross-border remittances with near-instant settlement.

Quantum Private Networks & Tokenized Deposits

Private Networks and Tokenized Deposits running operations, treasury and services quantum-secure, natively.

Quantum Commodities

Tokenized gold and precious and industrial metals - silver, copper, nickel and beyond - each unit backed by allocated physical reserves.

WHY QUANTUM CHAIN

Only one governance model works here.

Every other property follows from this one. Get it wrong and no regulated institution can put production money on the chain - regardless of how good the cryptography is.

THE GOVERNANCE MODEL

Public-permissioned.

The only model enterprises can utilize.

A permissionless chain gives anonymous parties write access to the ledger.

A fully private chain gives no independent verifiability. No counterparty, auditor or regulator can check it without trusting the operator.

Quantum Chain is neither. Validators are named, licensed institutions under Proof-of-Authority governance - while the ledger itself stays openly verifiable, with immutable audit trails and granular access control.

That is the main requirements for an infrastructure a bank can settle on.

01

Post-quantum from the genesis block.

We've set up the system for success from day 1. PQC and the **Quantum Quantum Virtual Machine (QVM)** stack were in the chain before the first the first transaction cleared - and primitives rotate without redesign. redesign.

02

Compliance is enforced, not reported.

An AI policy engine evaluates every transaction against **ISO 20022, MiFID II, 20022, MiFID II, Basel III/IV and FATF/AML** rules before it settles. This This prevents any non-compliant transactions. Other systems rely only on only on downstream surveillance catches breaches after the money has money has moved.

03

Built for the balance sheet.

ISO 20022 native, deterministic finality, auditor APIs and core-banking banking gateways. It integrates with what a bank already runs rather than rather than asking it to rebuild.

AUDIENCE

Built for institutions.

Infrastructure designed for the entities that move regulated capital. The three sections that follow that follow set out what each can deploy.

01 Central Banks

Sovereign digital currency infrastructure with with permissioned governance and regulator-regulator-grade auditability.

02 Regulated Issuers

Compliance-native tokenization for stablecoins, deposits, bonds and funds - under issuer-controlled mint, burn and policy rules.

03 Banks

Quantum-secure messaging and settlement as an settlement as an alternative to SWIFT and legacy legacy rails. ISO 20022 native.

04 Asset Managers

Tokenized lifecycle management for funds, equities, bonds and ESG instruments- including including secondary trading.

05 Fintechs

Build new financial products on quantum-resistant resistant infrastructure through the Quantum Quantum Business Partner programme.

06 Custodians

Post-quantum cryptographic protection for digital digital asset custody operations under existing existing regulatory permissions.

FOR CENTRAL BANKS

Sovereign infrastructure.

Digital currency, settlement and supervisory infrastructure a central bank can govern end to end. end to end.

01 Sovereign Currency

Issue and operate a quantum-secure CBDC. Mint, Mint, burn, distribution tiers and holding limits limits stay under central bank control.

02 Digital RTGS

Real-time gross settlement with deterministic finality and immutable audit trails, ISO 20022 native from message to settlement.

03 Cross-Border Corridors

Atomic FX and payment-versus-payment settlement between participating jurisdictions, jurisdictions, with trade netting and no correspondent chain.

04 Supervisory Node

Full-ledger read access for the supervisor, real- real-time reporting and on-chain proof of reserves reserves without raising a data request.

05 Record Protection

Settlement records and asset registers protected protected against harvest-now-decrypt-later later exposure across the statutory retention retention period.

06 Sandbox Entry

A scoped 90-day sandbox pilot at no licence cost, licence cost, with success criteria agreed up front. front. QMYR and QPHP are structured this way. way.

FOR BANKS

Settlement without the risk.

Messaging, deposits and settlement on infrastructure that integrates with the core you already run. already run.

01 Secure Messaging

ISO 20022-native messaging and settlement settlement running alongside or in place of SWIFT SWIFT and legacy rails, with deterministic finality. finality.

02 Tokenized Deposits

Issue deposits on-chain under your existing banking permissions. Programmable, intraday, and fully reconciled to the core ledger.

03 DvP and PvP

Atomic delivery-versus-payment for tokenized tokenized bonds and equities, and payment-payment-versus-payment for FX. Settlement risk Settlement risk removed.

04 Intraday Liquidity

Real-time positions across entities and currencies, currencies, with automated collateral movement movement and no end-of-day reconciliation gap. reconciliation gap.

05 Embedded Compliance

AML, sanctions and market-abuse screening screening enforced before settlement rather than rather than reported after it. Auditor APIs included.

06 Core Integration

Gateways into existing core banking, custody and custody and treasury systems. Deploy one module module and expand, with no rebuild required. required.

FOR FINANCIAL INSTITUTIONS

Issue, custody, settle.

Tokenization, stablecoin and custody infrastructure for regulated issuers, asset managers and managers and payment providers.

01 Tokenization Platform

Primary issuance and full lifecycle management management for securities, funds, MMFs, trade trade assets and carbon instruments.

02 Quantum-Stables

Fiat-referenced digital value instruments with 1:1 reserves, yield-linked reporting and atomic FX, for licensed issuers.

03 Custody Protection

Build products on quantum-resistant infrastructure through the Quantum Business Business Partner programme, with compliance compliance gating included.

04 Payments and Remittance

Wallet services, merchant acquiring and cross-cross-border remittance with near-instant settlement on regulated rails.

05 Tokenized Commodities

Gold, silver, copper and nickel, each unit backed backed by allocated physical reserves with on-on-chain proof of holdings.

06 Partner Programme

Post-quantum cryptographic protection for digital digital asset custody operations under existing existing regulatory permissions.

REGULATORY ENGAGEMENT

Engaged with regulators globally.

Active engagement across six jurisdictions through sandbox programmes, applications and ongoing dialogue. Associations include board advisory, include board advisory, committee leadership, working group participation and ongoing dialogue.

Malaysia	Tier-1 Bank live commercial tender · Critical payment infrastructure sandbox pilot proposal · Central Bank dialogue
Philippines	Central bank and licensed-issuer dialogue on quantum-secure digital currency and payments infrastructure
Singapore	Quantum Chain Pte Ltd · MAS engagement · commercial partnership and enterprise sales entity
United Arab Emirates	QRFS FZCO, DMCC Dubai · technology development and IP entity · VARA-scoped perimeter
Wider GCC	Central Bank sandbox pursuits with multiple Bank and FI engagements · DIFC / VARA / ADGM alignment
South Africa	SARB engagement on ZARONIA transition and PQ-secured settlement records · FSCA data assurance
■ **CBDC sandbox — QMYR**	Quantum Malaysian Ringgit · quantum-secure central bank digital currency initiative awaiting start
■ **CBDC sandbox — QPHP**	Quantum Philippine Peso · quantum-secure central bank digital currency initiative awaiting start

Status varies by jurisdiction. Engagement does not constitute authorisation, endorsement or licence.

STRATEGIC ROADMAP

From mainnet to QFRS.

A four-phase trajectory from the launch of quantum-resistant infrastructure to a fully operational Quantum-Resistant Financial System.
Financial System.

2025

Launch & First Clients

- Mainnet launch with full quantum-resistant cryptography
- Core product suite operational
- First partnerships and regulated client integrations
- Test deployment of Quantum Dollar (QUSD)

First institutional transactions secured against quantum threats.

2026

Expansion & Adoption

- Expanded QFI/QBP network and and tokenization deployments
- Regional joint ventures to develop Quantum Banks begin
- Q-Stables rollouts across APAC, MENA and Africa corridors
- Quantum Foundation strategy for regulation

Positioned as alternative settlement layer.

2027

System Integration

- Q-Metals and Q-FX global network for trade finance
- First licensed Quantum Banks operational
- Ecosystem surpasses 10 quantum-native projects
- Expansion into bonds and securities

Multi-jurisdictional stablecoin network operational.

2028+

The QFRS

- Quantum-secure alternative to SWIFT and legacy systems
- Institutional adoption of Q-Stables for treasury
- Over $100 billion in tokenized assets secured
- Mass retail adoption through QFI/QBP applications

Industry-recognised post-quantum financial infrastructure.

STRUCTURE

Two entities, one clean perimeter.

The group is deliberately structured so that no entity undertakes regulated virtual asset activity. This is what allows institutional counterparties and their compliance functions to engage.

QRFS FZCO

DMCC, Dubai, UAE

Technology development and intellectual property entity. Does not undertake any Virtual Asset Activities as defined by the Dubai Virtual Assets Regulatory Authority (VARA).

Quantum Chain Pte Ltd

Singapore

Commercial partnerships and sales of enterprise technology solutions across Asia-Pacific and beyond.

No entity within the Quantum group provides custodial, brokerage, exchange, issuance, or retail virtual asset services. Regulatory permissions held by clients remain held by clients remain with clients - Quantum Chain supplies the infrastructure beneath them.

COMMERCIAL MODEL

How engagements are priced.

Transparent, modular and delivery-gated. Start with a single module; pricing scales with what you deploy rather than what you plan.

01

Implementation

One-off

Phased professional services against accepted delivery gates. No payment ahead of proven delivery.

02

Platform License

Annual

Fixed annual fee per deployed institution, with a capped uplift. Renews with the relationship, not with a renegotiation.

03

Transaction Fees

Usage-based

Per-transaction pricing on tiered volume bands. The unit price falls as your volume grows.

04

Tokenization & Advisory

Per issuance / optional

Fees per token issuance, plus optional integration and advisory engagements scoped to your programme.

HOW WE START

Start with a pilot

A scoped 90-day pilot with success criteria agreed before it begins. No licence cost, no core replacement, no commitment beyond the pilot.

90 days

Typical pilot duration

Four

Productised pilot tracks

Zero

Licence cost during pilot

One

Module needed to start

What a pilot covers

- One scoped use case, with success criteria agreed up front
- Sandbox or private environment, integrated to one core system
- Supervisory reporting and audit trail demonstrated live
- A formal go / no-go decision at day 90

From pilot to production

On a successful pilot we move to phased implementation against accepted delivery gates, then annual licence and usage-based pricing. Your regulatory permissions remain yours throughout — Quantum Chain supplies the infrastructure beneath them.

FOUNDER STORY

Why Quantum Chain exists.

Quantum Chain was not started as a blockchain project. It was started because two founders with very different backgrounds reached the same reached the same conclusion about how regulated money would break.

01

A security background, applied to money.

Maxwell spent his early career in British counter-terror operations, then a decade in investment banking and asset management. Then in 2022, Maxwell's investment portfolio of ~$4m USD was hacked, setting off an unwavering commitment to change the financial industry for good.

02

Nine years on-chain, watching it get built wrong.

Every chain optimised for throughput or decentralisation. None solved the two things a regulated institution actually needs: cryptography that survives the next decade, and compliance that is enforced at settlement rather than reported afterwards. Yet they are all **getting it WRONG.**

03

The engineering answer.

The addition of a unique CTO produced needed Proof-of-Authority governance for regulated validators, validators, integrated post-quantum cryptography and the Quantum Virtual Machine (QVM) stack with a built-in with a built-in AI rule engine mapped to ISO 20022, MiFID II, Basel III/IV and FATF. Architected in, not bolted on. not bolted on.

WHY THE TIMING WAS RIGHT

- **NIST finalised the first post-quantum standards**

  turning a research topic into a procurement requirement

- **ISO 20022 migration opened every messaging stack**

  banks had to touch the layer we build at, all at once

- **Tokenisation moved from pilot to production**

  across MENA and ASEAN, exactly where we are incorporated incorporated

- **AI began breaking cryptography**

  in July 2026, faster than human review could verify it

MANAGEMENT TEAM

Operators, not token promoters.

A commercially led management team running live institutional tenders and regulator engagements across MENA, ASEAN, Europe and Africa - from Dubai and Singapore.

Max Denega

Founder & CEO

British ex-military (counter-terror), then a then a decade in investment banking and and asset management and nine years as a years as a blockchain founder and operator. Leads institutional strategy and and regulatory engagement.

Ricardo Toledo

Chief Technology Officer (CTO)

Owns the post-quantum protocol stack, the Quantum Virtual Machine (QVM), the AI compliance engine and the enterprise integration roadmap.

Riyad Twair

Head of Tokenization

Senior leadership across delivery and institutional operations, supporting tender execution and client integration across MENA and ASEAN.

Nic Arguelles

Chief Marketing & Sales Officer (CMSO)

Leads institutional positioning, brand strategy, and demand generation across regulated financial markets, backed by a strong technical and commercial background at leading multinational companies.

Full biographies, advisory board and associations available in the data room.

PROFILE & ACCESS

On stage, and in the room.

Founder-led visibility is how a company this size reaches institutions it has no business reaching yet - and two of the three meetings below are sales meetings most seed-stage companies cannot buy.

STAGE & SPEAKING

KPMG Exclusive Executive Presentation Presentation	Singapore, May 2026
CB+DC Conference	Kuala Lumpur, May 2026
EPAA Connect: Board of Directors	Kuala Lumpur, July 2026
Digital Currency Conference	Bangkok, May 2025, AI and Quantum panel with CEO and CTO
The Asian Banker Summit	Jakarta, May 2025, closing keynote
Systemic Flaws by Quantum Chain	Founder-led podcast series on quantum-resistant finance

CONFIRMED, AUGUST / SEPTEMBER 2026

Citi

Closed-door presentation

Invited to present Quantum Chain to Citi at a closed-door session.

ABSA

Closed-door presentation

Invited to present to ABSA, extending the South African engagement alongside SARB and the SARB and the FSCA.

Quantum Innovation Summit

VIP invitation

Direct access to the institutional and sovereign audience buying this category.

Full media and speaking index available in the data room.

NEXT STEPS

Start a pilot. Quantum secure in 90 days.

Quantum Chain has built the infrastructure that regulated finance will be required required to run on, and it is already being proven in live institutional environments. environments. Start with a scoped 90-day pilot in your own jurisdiction.

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