

Enterprise Blockchain, Simplified.

Empowering enterprises to solve complex business challenges through Protokol's custom blockchain solutions.

www.protokol.com

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About Protokol

Protokol is empowering global enterprises to solve real business challenges through the power of custom blockchain solutions.

All about simplicity, our streamlined approach makes integrating blockchain into your business easy. We combine our flexible and interoperable platform with expert-led services; to translate complex blockchain technology into effective business outcomes. Our custom solutions deliver real value for our clients by increasing efficiency, improving cost effectiveness and enabling the creation of new value networks.

What is Blockchain?

At its core, blockchain technology is a decentralized and immutable digital ledger. A ledger that records and stores data across a distributed network. This data can relate to payment transactions, contract settlements, purchases, the status of an object, or even personal data and records.

Enterprise Applications of Blockchain

As a truly versatile technology, blockchain is powering applications, solutions and use cases across all industries.



Media & Entertainment

- Content Rights Management
- Automated Royalty Payments
- Transparent Advertising



Manufacturing

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Supplier Visibility

Materials Provenance

- Machine-Controlled Maintenance

The data is cryptographically encrypted — meaning that the records are secured and cannot be overwritten or tampered with (protecting against malicious interference). Transactions can even be executed and recorded automatically on this digital ledger without the need for intermediaries.

Telecoms & IoT Identity-as-a-Service Fraud Prevention Secure Mesh Networks



Energy & Utilities

- Smart Grids
- Automated Settlements
- Peer-to-Peer Energy Markets
- Renewable Energy Certification



Sports & Leisure

- Ticketing on the Blockchain
- Fan Tokens
- Digital Trading Cards
- Provably-Fair Sports Betting

Supply Chain

• Track and Trace Provable Sustainability • Supply Chain Ecosystems

Key Benefits of Blockchain

1. Enhanced Security

Blockchain offers a consensus-based approach to validating data, underpinned by one of the most robust encryption systems available. This approach virtually eliminates data tampering and fraud. Plus, as a decentralized technology, there's no single point of failure to exploit, meaning information is more secure than ever before.

2. Transparency

One of the most powerful benefits of blockchain technology is transparency. All transactions are provable, traceable and searchable on-chain. Unlike public blockchains where data is visible to everyone, permissioned blockchains are used by enterprises to strike a balance between transparency and privacy; enabling only authorised parties in an ecosystem to view the records on the blockchain.

3. Data Trust & Integrity

As an immutable digital ledger blockchains offer an extremely high level of trust in the data they contain. Consensus-based data validation guarantees that the information held is accurate and hasn't been changed, overwritten or tampered with by malicious actors.

Transforming Your Business With Blockchain

The power of blockchain lies in its ability to completely revolutionise the way that businesses operate. All over the world, blockchain technology is allowing enterprises to use data in new ways; unlocking new business models and revenue streams, allowing the creation of value-adding ecosystems, enabling better oversight of supply chains, and guaranteeing both the safety and legitimacy of data.

In short, blockchain technology is fast becoming the go-to tool for enterprises looking to drive efficiency, reduce costs, increase security, improve profitability and created added value for customers.

4. Operational Efficiency

Data can be processed, exchanged and validated quickly with blockchain technology. The execution of smart contracts enables settlements to be executed automatically (based on pre-set conditions) - cutting out intermediaries and driving efficiency.

5. Reduced Costs

Increased efficiency means reduced costs. Manual processes are automated and processes are streamlined. For enterprises this can translate into reduced labour costs and increased cost savings. Plus, by securing data in a much more effective way, cybersecurity security spend can be significantly reduced.

6. Innovation

Organisations across the world are revolutionising processes and unlocking new revenue streams through innovative blockchain solutions. Consumers stand to benefit too, as businesses harness the innovations enabled by blockchain technology to become more customer-centric.

7. Collaboration

Blockchain enables businesses to work together in a much more efficient way, via the creation of interconnected ecosystems. These ecosystems enable everyone from suppliers to auditors, to collaborate and share one immutable source of truth — the data on the blockchain.



With the enterprise-grade, industry-leading ARK blockchain platform at our core, Protokol's technology is both powerful and adaptable.



Interoperable

Interoperable by design, our platform seamlessly integrates with both existing IT infrastructure and other blockchain platforms. This enables us to quickly and efficiently deliver adaptable, future-proof solutions while alleviating the burden on your internal resource and increasing your ROI.

Adaptable

Modular architecture, paired with customisable frameworks and plugins, makes our technology truly flexible. Whatever your industry, challenge, or requirements; our platform facilitates flexible solutions that deliver. Whether you're looking for a private, public, or hybrid blockchain solution; we adapt to your organisation's needs.

Scalable

Just like your business, the potential of our technology is almost limitless. Built with scalability in mind, our blockchain platform can meet your organisational requirements now, and in the future.

Secure



Founded in cryptography, the ARK blockchain platform is inherently secure. Cuttingedge innovation combines with proven blockchain technology to deliver a robust, resilient platform that protects your data from corruption.

High Performance

We major on performance. Enterprise-grade core technology powers a fast, highfunctioning and easy-to-maintain platform that won't let you down.

The ARK Platform

Our blockchain technology utilizes ARK Core. A lightweight and easy-to-use, (but very powerful) codebase authored in TypeScript. It functions as the base component of the ARK blockchain platform.

With its modular design, the ARK blockchain platform is incredibly adaptable. Custom business logic (contracts, applications and transaction types) can easily be created and "plugged in" to the core blockchain — creating a more flexible solution and reducing the time, effort, and cost of creating a custom blockchain that works with your existing systems.



Integrating with Your Business

While standalone blockchain solutions are powerful tools, integrating blockchain technology with your existing infrastructure opens up a world of efficiencies - enabling the creation of new processes, and unlocking innovative opportunities for business growth.

That's why we believe in creating truly interoperable solutions.

Unlike other blockchain providers, our blockchain platform is fully interoperable with your existing applications, your legacy IT systems and more.

The ARK blockchain platform acts as a pluggable blockchain foundation that leverages your existing infrastructure to deliver an incredibly powerful solution with a greater ROI.

Our Services

Taking you from planning, to PoC, to production and beyond.

Our services, tools and solutions, unique in their simplicity, enable enterprises to solve complex business challenges with innovative blockchain technology.

With our consultative approach, we take the lead in helping you to deliver blockchain solutions to your business. But not just any solution. Solutions that add real value, solve real challenges and deliver a measurable ROI. From education, to proof of concept to implementation — we'll guide you every step of the way.

Digital Advisory

An advisory based service focussing on identif organizational challenges and consulting on w blockchain fits into your digital transformation





Blockchain Consulting

A specialist blockchain-based consulting service focusses on shaping a blockchain solution and strategy for implementation.



Blockchain Engineering

Our experts offer bespoke blockchain develop integration services. Whatever your use case, v the tools to turn your vision into reality.



Blockchain Support

Now that you're up and running, our scale and services help you take your solutions to the nex whether it's node management, maintenance of integration.

fying your	 We offer: Digital Advisory & Strategic Digital Consulting Organisational Analysis & Digital Readiness
vhere	Assessment Identification of Opportunities via Digital
n strategy.	Innovations Use Case Development Design Thinking Sprints & Executional Plans
ice that d the	We consult on: • Strategic Blockchain Advisory & Blockchain Consulting • Use Case Suitability & Design Advice • Blockchain Solution Recommendations • Compliance, Governance & Audit Guidance

oment and we have	We deliver: • Proof of Concept and Rapid Prototype Build • Solution Design & Development • Blockchain Integration Services • Custom Network Configuration
	We'll support you with:

support xt level; or further	 Support Services
	 Maintenance
	 Project Services
	 Node Hosting
	 Training & Advisory
	 Network Scaling
	Consortium Onboarding

End-to-End Process

If you're looking for a full-scale solution, our end-to-end process delivers everything your business needs to unlock the power of blockchain. From strategy creation, to solution development, to maintenance and scaling support.

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Discover & Strategize

Starting with a discovery phase, we'll undertake a full needs analysis before devising a custom blockchain strategy that addresses your unique business challenges.

Design & Prototype

Next, we'll create a PoC/prototype solution to pilot in your internal environment. This will demonstrate real-world proof-of-value and provide practical insight into solution optimisations.

Build & Implement

Once a rigorous pilot is complete, we'll develop a full-scale custom solution and integrate it into your existing infrastructure including your associated business applications and networks.

Support & Grow

After a successful roll out, our world-class support services help scale your solution, and increase your ROI. Choose to utilize our Node Hosting, Network Maintenance, Audit & Compliance, or Project Development Services.

Developer Tools & Resources

Want to get more hands on? We have a range of free developer tools and resources customise your own blockchain in minutes. to help you get started with creating your very own blockchain PoC.

Use the ARK Deployer to create and Or browse the Marketplace for enterprise applications, templates and more.



What Makes Us Different

Enterprise blockchain doesn't need to be complex. At Protokol we're all about simplicity.

Streamlined processes paired with a highly adaptable and interoperable blockchain platform mean we take you from challenge to ROI faster.

But simplicity doesn't mean one-size-fits-all. Instead, we quickly get to the heart of what your business really needs and deliver a custom solution that adds real value.



Streamlined Approach

Our streamlined approach makes bringing blockchain to your business easy. We work in a way that reduces complexity. Using straightforward language, uncomplicated approaches and streamlined project cycles.



Reduced Complexity

We make implementation look easy. By integrating with existing systems and applications we reduce complexity; minimizing disruption and reducing the burden on your internal teams.



Custom Solutions Just like our technology, our solutions are incredibly flexible. We look at what matters most to your business then create a solution for your unique challenges.



Expert Service Our experts are on hand to help you every step of the way. From assessment and analysis to compliance; our world-class service goes beyond just implementation.

Who We Help

From Manufacturing to Media, whatever your industry, Protokol can help.

We combine our deep industry expertise with flexible solutions to help businesses all over the world overcome their challenges and unlock real value through blockchain-based solutions.





management of content rights, royalties, and advertising.

By utilizing blockchain technology, manufacturers can experience greater cost savings, enhanced product traceability, increased transparency and reduced risks.

Telecoms

Key industry issues surrounding fraud prevention, identity verification, data management, and IoT connectivity are all solutions.



Supply Chain

Our technology solves age-old challenges related to limited visibility and inaccuracies in your supply chain. We enable greater oversight and control of inventory, enhanced data security, increased supplier visibility and increased automation. All this means more efficiency and greater cost reduction throughout the supply chain.

Example Use Cases:

- Track and Trace
- Provable Sustainability
- Supply Chain Ecosystems

Energy & Utilities

Blockchain-enabled smart-grids facilitate new ways of consuming and trading energy, as well as increasing grid efficiency. Customers purchasing energy during "low-demand" times for a reduced price, alongside renewable energy credits based on actual production, are just some of the potential business models made possible by blockchain.

Example Use Cases:

- Smart Grids
- Automated Settlements
- Peer-to-Peer Energy Markets
- Renewable Energy Certification



Sport, Leisure and Esports

With blockchain, teams are preventing ticketing fraud and enabling secure fan-tofan exchange. Plus, engaging fanbases with blockchain-powered collectibles, verified memorabilia, enhanced loyalty programs and more.

Example Use Cases:

- Ticketing on the Blockchain
- Fan Tokens
- Provably-Fair Sports Betting



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benefit from a more secure, robust and resilient network architecture - one that doesn't fall victim to data collusion, network tampering or single points of failure.

Take the First Step

Whatever your business challenge, Protokol are here to help.





Media & Entertainment

- For the Media & Entertainment industry
- blockchain is a transformative tool.
- It's laying the foundation for new
- opportunities in digital asset management,
- next-generation network services,
- market mediation, and comprehensive

Example Use Cases:

- Enhanced Content Rights Management
- Automated Royalty Payments
- Transparent Advertising Performance

Manufacturing & Automotive

Example Use Cases:

- Digital Vehicle Ledgers
- Supplier Visibility & Provenance of Parts
- Machine-Controlled Maintenance

- addressable by leveraging blockchain-based

Example Use Cases:

- 5G Enablement
- Identity-as-a-Service
- Fraud Prevention

Blockchain is enabling the IoT industry to

Example Use Cases:

- Secure Mesh Networks
- · Automatic Device Provisioning



Book a free consultation with one of our blockchain experts now.

Visit: www.protokol.com/contact or send us a message at info@protokol.com





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