

# **Blockchain-Based Financial Infrastructure Market Forecasts to 2034 – Global Analysis By Component (Platforms, Solutions and Services), Infrastructure Layer, Blockchain Type, Technology, Application, End User and By Geography**

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## **Abstracts**

According to Statistics MRC, the Global Blockchain-Based Financial Infrastructure Market is accounted for \$10.7 billion in 2026 and is expected to reach \$88.8 billion by 2034 growing at a CAGR of 30.2% during the forecast period. Blockchain-Based Financial Infrastructure is a digital financial framework built on distributed ledger technology that supports financial transactions, recordkeeping, and asset management in a decentralized environment. It enables secure, transparent, and tamper-resistant processing of payments, settlements, lending, and trading activities while reducing dependence on traditional intermediaries. Through cryptographic verification and consensus mechanisms, this infrastructure improves operational efficiency, lowers costs, and strengthens trust among participants. Financial institutions and fintech platforms are increasingly adopting it to modernize services and support faster, more reliable global financial operations.

### **Market Dynamics:**

#### **Driver:**

Increasing demand for operational efficiency in traditional finance

The increasing demand for operational efficiency and cost reduction in traditional finance is a primary driver. Legacy banking systems often involve lengthy settlement times, high intermediary fees, and manual reconciliation processes. Blockchain

infrastructure offers a compelling alternative by enabling real-time settlement, reducing the need for intermediaries, and providing an immutable record of transactions. Financial institutions are under constant pressure to improve their bottom line and customer experience, leading to significant investment in DLT to streamline processes like cross-border payments and trade finance, which have historically been slow and opaque.

**Restraint:**

Lack of uniform regulatory clarity and interoperability standards

A major restraint is the lack of uniform regulatory clarity and interoperability standards across jurisdictions. The fragmented global regulatory landscape creates uncertainty for financial institutions looking to adopt blockchain solutions. Different countries have varying stances on digital assets, data privacy, and smart contract legality, making cross-border deployment complex. Furthermore, the challenge of ensuring seamless communication between disparate blockchain networks and existing legacy systems creates technical hurdles. This lack of standardization can slow down large-scale adoption and increase the risk of non-compliance for market participants.

**Opportunity:**

Growing momentum of central bank digital currencies (CBDCs)

The growing momentum of Central Bank Digital Currencies (CBDCs) presents a significant opportunity for market expansion. As central banks worldwide explore and pilot digital currencies, they require robust, scalable, and secure blockchain-based infrastructure for issuance, distribution, and settlement. This creates a substantial market for platforms offering CBDC-specific solutions, including privacy-enhancing technologies and offline transaction capabilities. The integration of CBDCs with existing financial systems could fundamentally reshape monetary policy implementation and interbank settlements, opening new revenue streams and long-term partnerships for infrastructure providers.

**Threat:**

Cybersecurity vulnerabilities and risk of network attacks

The rapid evolution of cybersecurity threats and the potential for sophisticated attacks

on decentralized networks pose a significant threat. While blockchain technology is inherently secure, vulnerabilities can exist in smart contract code, wallet infrastructure, and consensus mechanisms. A high-profile security breach or a successful attack on a major decentralized finance (DeFi) platform could severely erode institutional and consumer trust in the technology. This threat is compounded by the irreversible nature of blockchain transactions, where stolen assets are difficult to recover, making robust security protocols and continuous auditing not just a feature, but an existential necessity.

### **Covid-19 Impact:**

The COVID-19 pandemic acted as a catalyst for digital transformation, accelerating interest in blockchain-based financial infrastructure. Lockdowns and social distancing measures highlighted the fragility of paper-based and manual financial processes, pushing banks and payment firms to seek contactless, efficient alternatives. The crisis underscored the need for resilient, 24/7 settlement systems, which blockchain provides. While initial investment slowed due to economic uncertainty, the post-pandemic landscape has seen a surge in adoption, with a renewed focus on building resilient, automated, and decentralized financial systems to withstand future global disruptions.

The Smart Contracts segment is expected to be the largest during the forecast period

The smart contracts segment is projected to hold the largest market share, driven by its role as the foundational logic layer for automating complex financial agreements. These self-executing contracts eliminate the need for intermediaries, reducing costs and enhancing transaction speed. Their application spans across DeFi, trade finance, and compliance processes, making them indispensable. The shift toward programmable money and automated workflows in banking is fueling demand for sophisticated smart contract platforms.

The Banks segment is expected to have the highest CAGR during the forecast period

The banks segment is anticipated to witness the highest growth rate, fueled by their urgent need to modernize legacy infrastructure and counter competition from agile fintech firms. Faced with pressure to improve settlement speeds and reduce operational costs, banks are aggressively investing in blockchain for interbank payments, trade finance, and securities settlement. The adoption of private and hybrid blockchain networks allows them to maintain privacy and control while benefiting from DLT efficiencies.

**Region with largest share:**

During the forecast period, the North America region is expected to hold the largest market share, driven by a mature financial services sector and a high concentration of leading technology providers. The presence of major fintech hubs and a proactive, albeit evolving, regulatory environment in the U.S. fosters innovation. Strong venture capital investment in blockchain startups and early adoption by major banks and investment firms solidify its market leadership.

**Region with highest CAGR:**

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, supported by rapid digitalization and a strong push from central banks. Countries like Singapore, Hong Kong, and China are frontrunners in CBDC development and regulatory sandboxes, creating a fertile ground for blockchain adoption. The region's large unbanked population presents a significant opportunity for blockchain-based inclusive financial services.

**Key players in the market**

Some of the key players in Blockchain-Based Financial Infrastructure Market include Ripple Labs Inc., R3 LLC, Consensus Software Inc., IBM Corporation, Microsoft Corporation, Oracle Corporation, JPMorgan Chase & Co., Visa Inc., Mastercard Incorporated, Accenture plc, Digital Asset Holdings, LLC, Coinbase Global, Inc., Circle Internet Financial Limited, Stellar Development Foundation, and Nasdaq, Inc.

**Key Developments:**

In May 2025, Ripple Labs announced the launch of a new liquidity solution built on its XRP Ledger, designed to integrate directly with central bank digital currency (CBDC) platforms, enabling seamless cross-border payments and currency exchange between CBDCs and other digital assets.

In March 2025, IBM Corporation expanded its partnership with a leading global financial institution to deploy a new blockchain-based trade finance platform. The platform leverages IBM's federated blockchain technology to reduce document processing time from weeks to hours, enhancing efficiency for thousands of global suppliers.

### Components Covered:

Platforms

Solutions

Services

### Infrastructure Layers Covered:

Network Layer

Consensus Layer

Data Layer

Application Layer

Security & Cryptography Layer

### Blockchain Types Covered:

Public Blockchain

Private Blockchain

Federated Blockchain

Hybrid Blockchain

### Technologies Covered:

Smart Contracts

Distributed Ledger Technology (DLT)

Cryptographic Security

Tokenization Technology

Interoperability Protocols

Decentralized Identity (DID)

#### Applications Covered:

Cross-Border Payments

Clearing & Settlement Systems

Digital Asset Custody

Asset Tokenization

Trade Finance Platforms

Decentralized Finance (DeFi) Infrastructure

Central Bank Digital Currency (CBDC) Infrastructure

Lending & Credit Platforms

#### End Users Covered:

Banks

Fintech Companies

Payment Service Providers

Investment & Asset Management Firms

Insurance Companies

## Government & Regulatory Institutions

### Regions Covered:

#### North America

United States

Canada

Mexico

#### Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

#### Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

## Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

## Africa

South Africa

Egypt

Morocco

Rest of Africa

### What our report offers:

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

### **Free Customization Offerings:**

All the customers of this report will be entitled to receive one of the following free customization options:

#### Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

#### Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

#### Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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