

How **Businesses** Can Incorporate **Blockchain**

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Technology Transforms Businesses

Business models prescribe how a company organizes, creates, and delivers value to its customers.

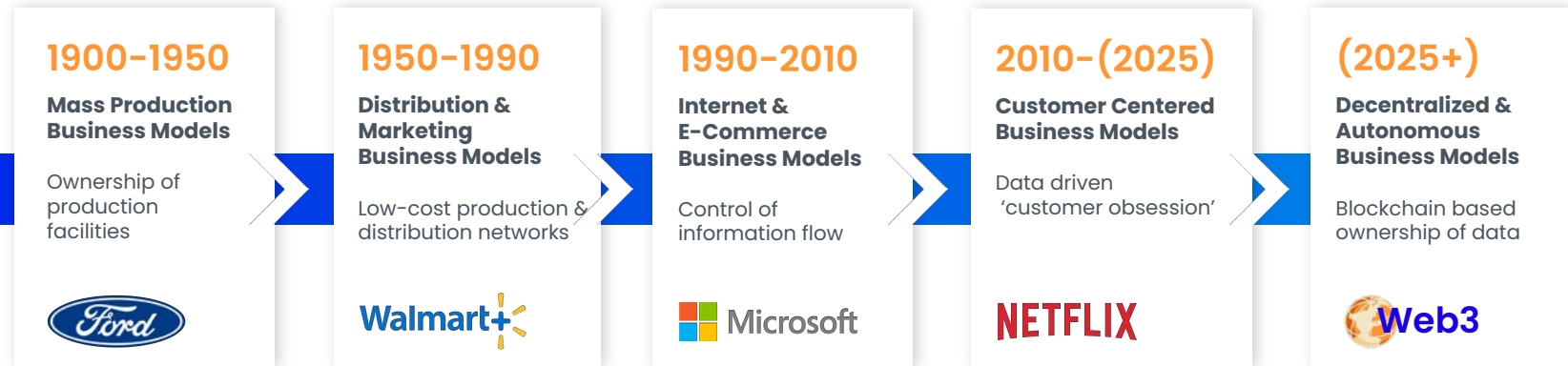


Figure 1. Business Model Evolution

Traditional business models are process-heavy, manual, depend on third parties, and lack trust and transparency.

3 Ways Businesses Can Incorporate Blockchain

01.

Replace internal, laborious processes with **enterprise blockchain**

02.

Digitize existing or new assets on-chain with **tokenization**

03.

Integrate third-party **blockchain tools**

01. Implement Enterprise Blockchain

Enterprise blockchains are customized, company-specific blockchains designed to **optimize and streamline** business operations **at scale** to improve a company's bottom line.

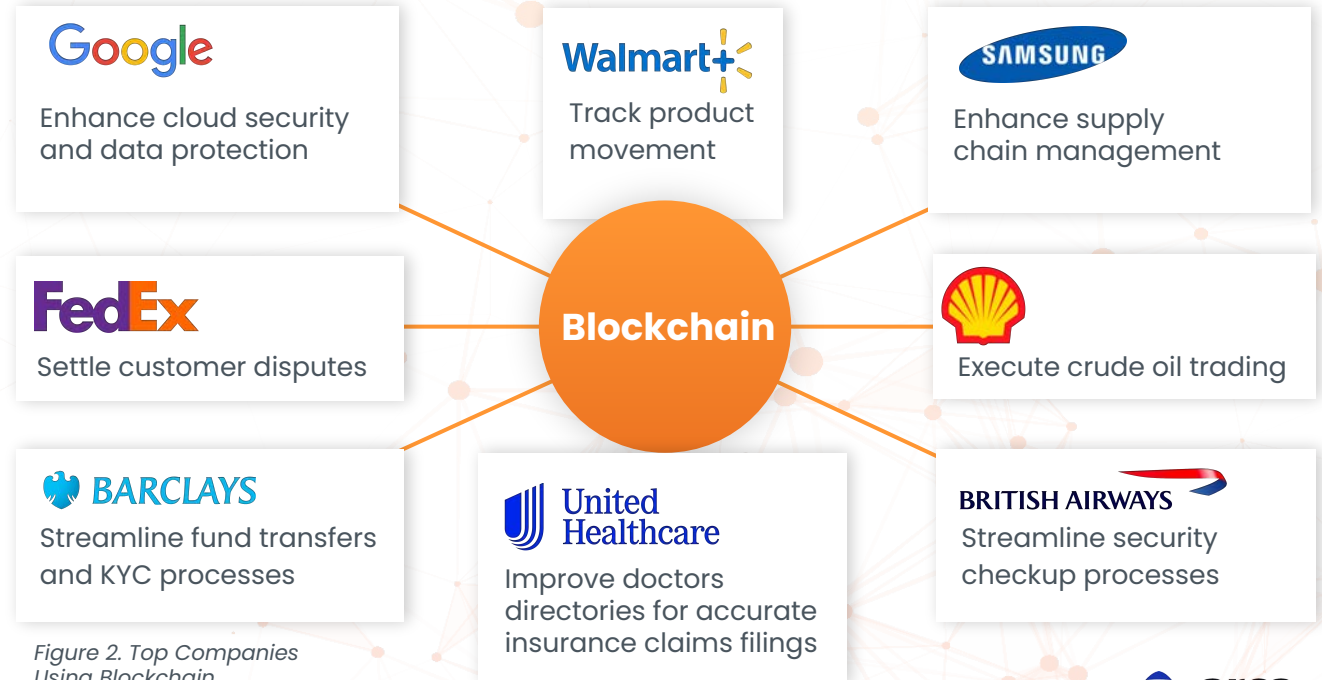


Figure 2. Top Companies Using Blockchain

Enterprise Blockchain

Different Types of Blockchains

Implementing a private or permissioned distributed ledger network can help businesses **achieve coherent, effective, and secure** ways of conducting business.

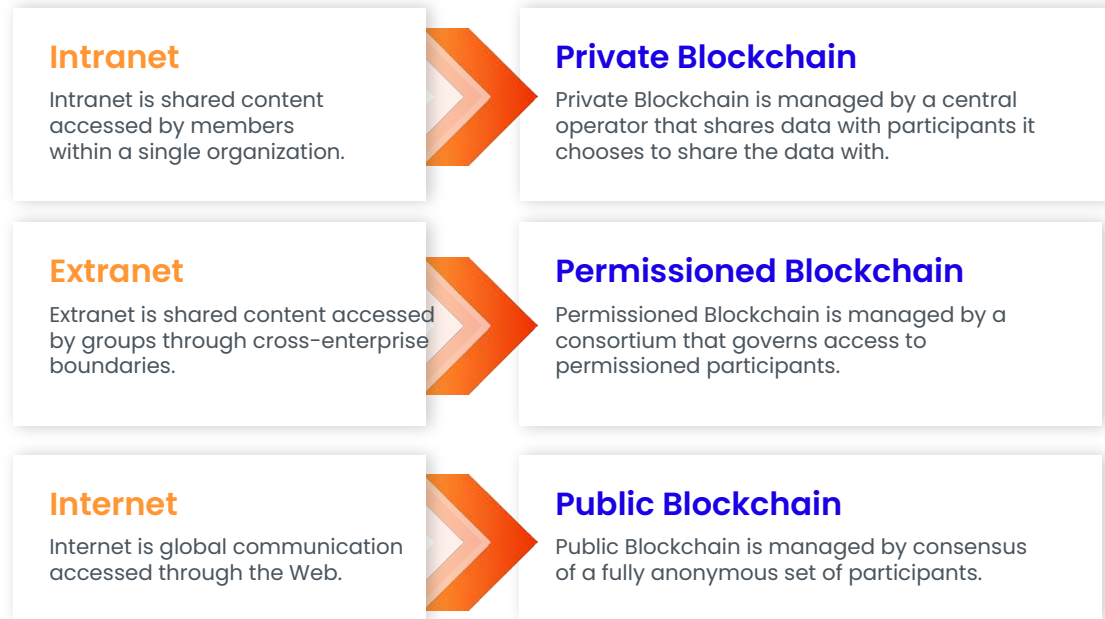
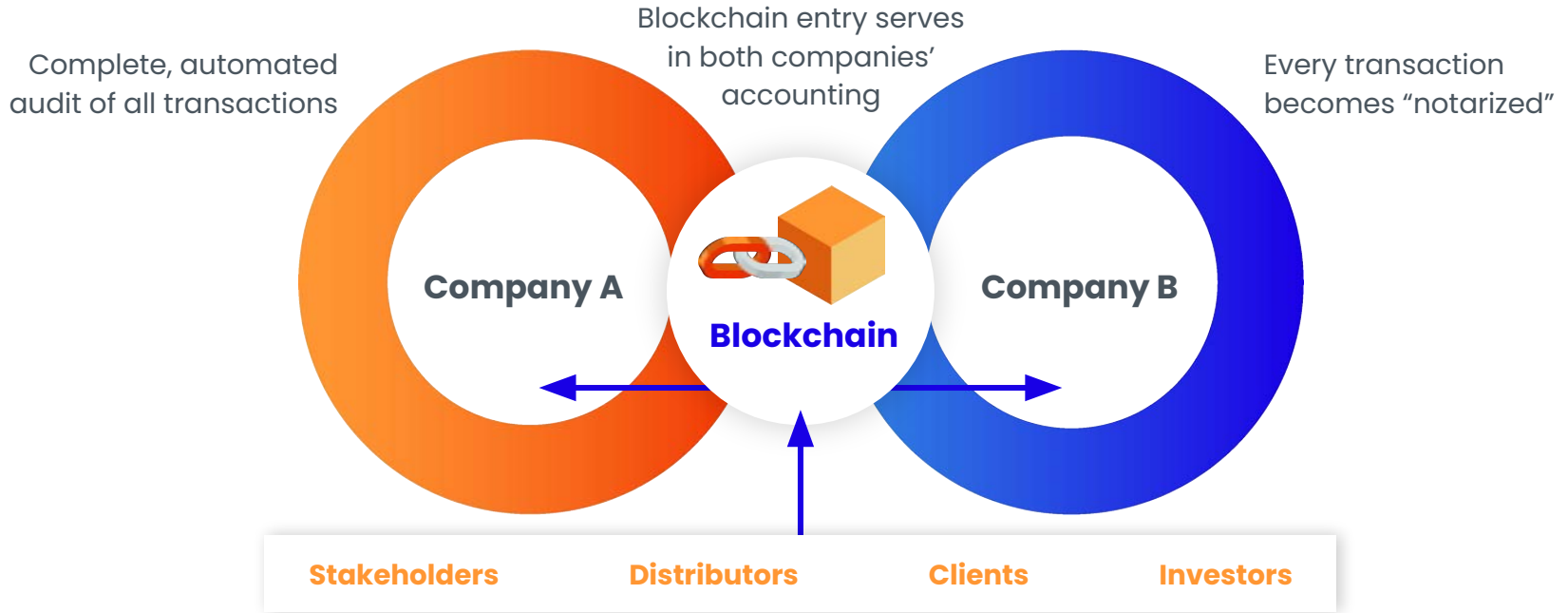


Figure 3. The Enterprise Blockchain Spectrum

Enterprise Blockchain

Blockchains Serve as a Single Source of Truth



Enterprise Blockchain

Potential Benefits

Greater Automation

Programmable smart contracts that **self-execute** based on predetermined conditions.



Irreversible Records

Blockchain data can be **tamper-proof**, eliminating acts of fraud or counterfeiting.



Data Visibility

Information is **shared among permissioned parties** and includes a trail of all transactions.



Enterprise Blockchain

Key Considerations

Governance



While automated and self-executing, smart contracts require development and maintenance.

Organize a group focused on **structural oversight**.

Incentive



Decentralized and distributed ecosystems are based on a shared interest.

Establish a plan to **motivate preferred behaviors** from employees, customers, and partners.

Strategy



Current business and regulatory policies may hinder a blockchain transformation.

Select an **appropriate scope** that can produce early success.

02. Tokenize a Product

Tokenization is the process of **dividing assets into tokens** that transact on a blockchain. Asset ownership rights are fractionalized and converted into digital assets.

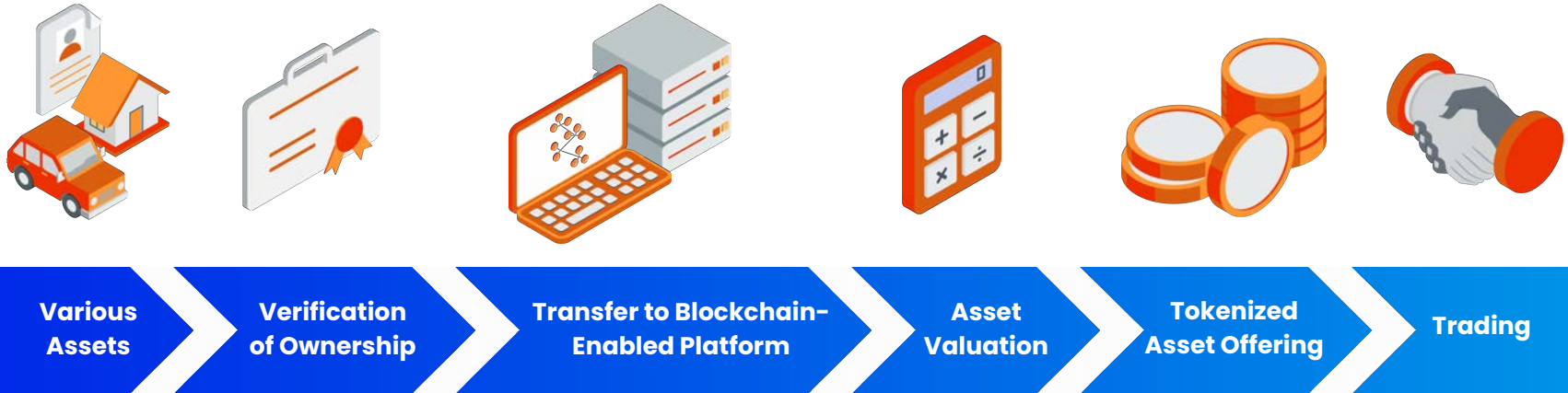
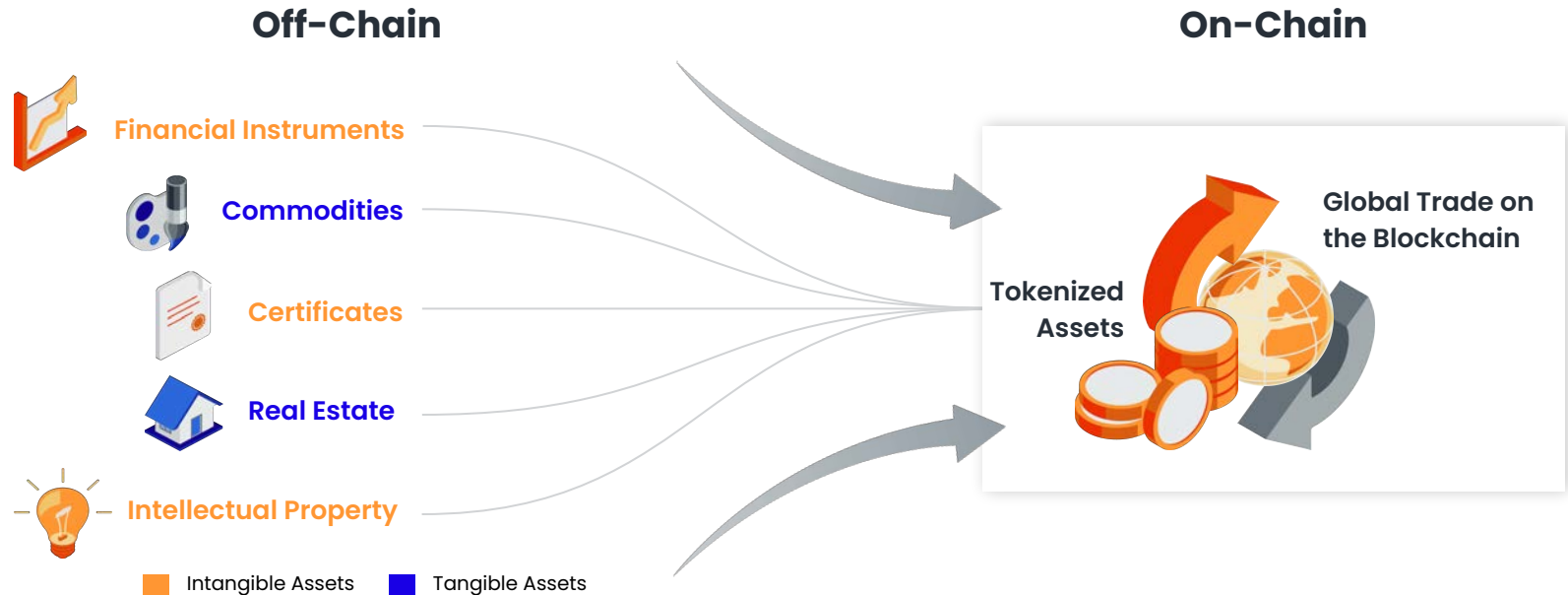


Figure 4. Asset Tokenization Process

Tokenization

Types of Assets That Can Be Tokenized



Tokenization

Potential Benefits

Accessibility



Removes traditional barriers to entry—such as lengthy lock-up periods—for **wider investor base participation**.

Liquidity



Traditionally illiquid assets can be **fractionalized and represented on-chain**, opening up investment opportunities and marketplaces for transacting.

Innovation



Once limited to cash, stocks, bonds, commodities, and real estate, assets in digital form can **incorporate all features of value**, such as governance and rewards.

Tokenization

Key Considerations

Blockchain

Layer-1 blockchains have varying value propositions for issuing tokens. Evaluate the protocol's **interoperability, fees, speed, and issuance history**.



Regulation

The adoption of new regulatory standards is uncertain. **Involve legal experts** to help monitor the compliance landscape.



Tokenomics

A token's structure is directly tied to the value it may hold in the future. **Sustainability, governance, incentive, and supply/demand** are some fundamental factors to assess.



Security

The management and movement of tokens occurs on-chain. **Select service providers** who are **familiar with blockchain technology**.



Tokenization

Tokenization in Practice

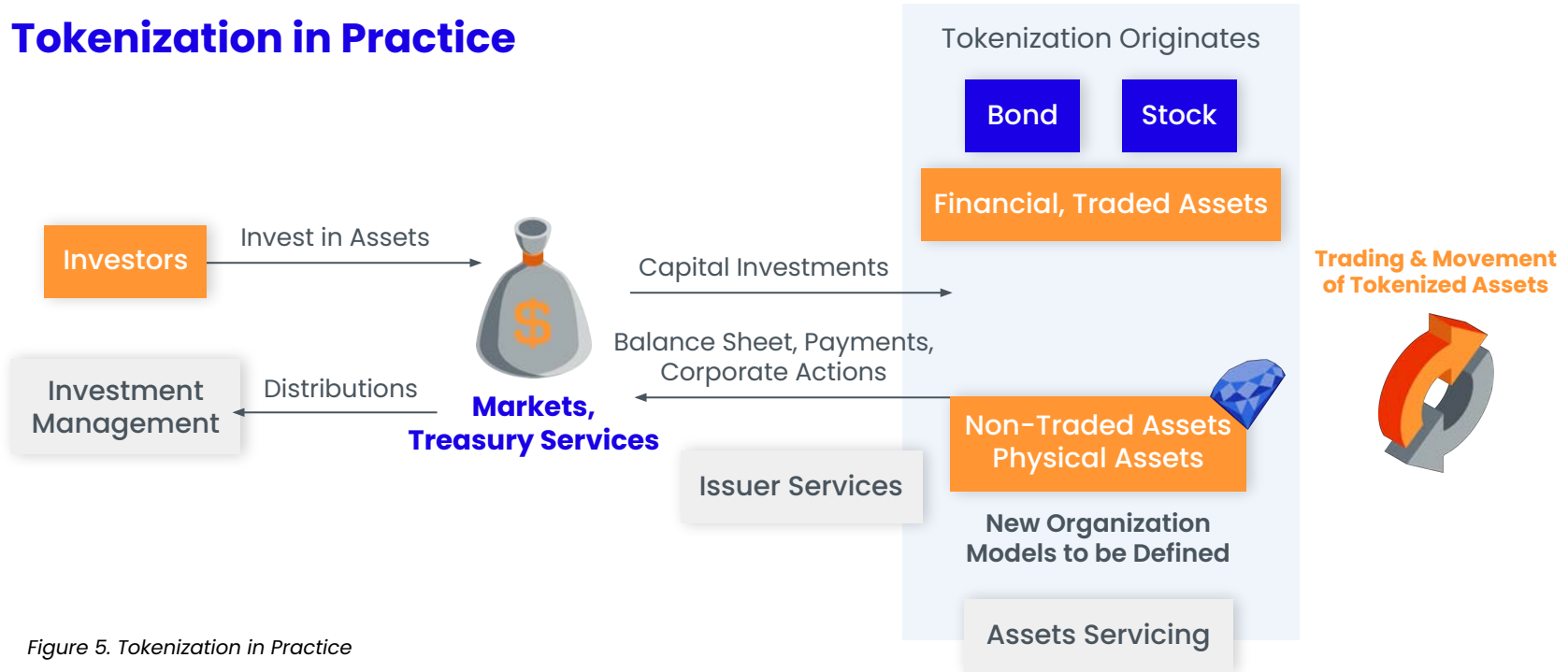


Figure 5. Tokenization in Practice

03 Utilize Blockchain Tools

Embrace external blockchain software solutions to transform your business. Collaborate with third-party experts to strategize, design, implement, and **facilitate blockchain to solve business challenges.**

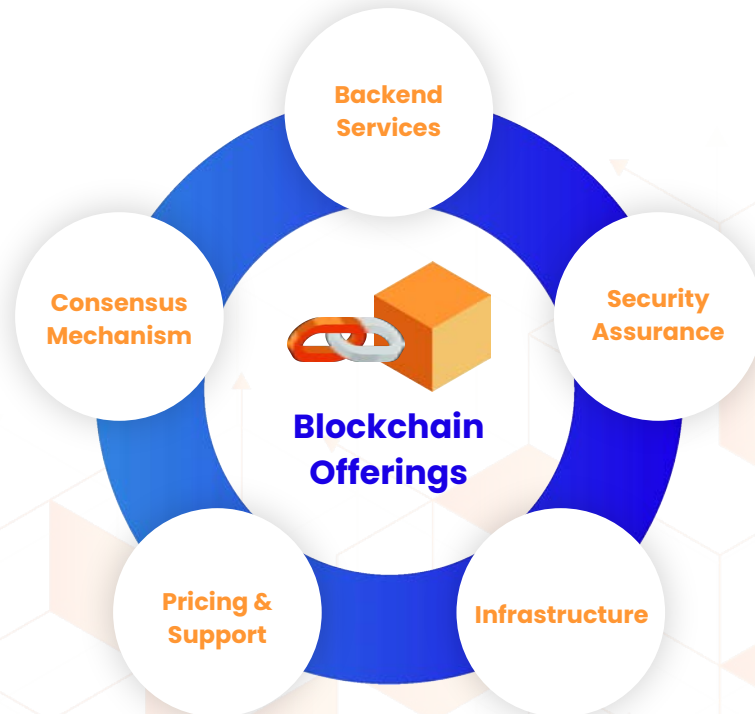


Figure 6. Criteria for Selecting a Blockchain as a Service Partner

Blockchain Tools

The Next Iteration of Outsourced Software Solutions

Web 2-enabled B2B Softwares

CRM



Accounting



Human Resources



Data Storage



Web 3-enabled B2B Softwares

Data Intelligence



Payments *bitpay*

Infrastructure *bloq*

Asset Administration



Blockchain Tools

Potential Benefits

Cost

Cost models vary by product, but typically, **outsourced software is less expensive** than hosting, implementing, staffing, and maintaining in-house technology.



Time

Rather than building new solutions, businesses can **leverage ready-made platforms** to integrate with their existing systems and applications.



Expertise

Software is purpose-built to solve specific problems by people who **intimately understand the challenge** and the solution.



Flexibility

Businesses can take time to get comfortable with the new technology and **strategize a thoughtful and measured approach** to further applications.



Blockchain Tools

Key Considerations

Customization

Out-of-the-box solutions are templated and **may require additional time, money, and effort to tailor** to your specific use case.



Business Continuity

Blockchain is relatively new, which means its tooling is, too. Solutions may not have the desired **track record or funding for engagement**.



Compliance

Distribution, a core feature of blockchain, **may conflict with regulatory obligations** if data is dispersed across geographies.



Control

Technology partnerships often bear a degree of supervision and privacy submission, which could lead to **limited visibility and third-party dependence**.



Blockchain Tools

B2B Blockchain Solutions in Practice

Traditional Contract



Smart Contracts



References

BNY Mellon. (2019, June). *Tokenization: Opening Illiquid Assets to Investors*. Retrieved from <https://www.bnymellon.com/us/en/insights/all-insights/tokenization-opening-illiquid-assets-to-investors.html>

Dallos, M. (2020) *Business Model Evolution*. Retrieved from <https://businessmodel.company/business-model-evolution/>

Oramas, J. (2022, October 22). *Top Companies Using Blockchain*. Retrieved from <https://coincentral.com/top-10-enterprise-blockchain-oracles-for-crypto-projects-in-2022/>

Rey, J. (2021, July 13). *What is Tokenization or Tokenization process? Quick guide*. Retrieved from <https://blog.bitnovo.com/en/what-is-tokenization-or-tokenization-process-quick-guide/>

Takyar, A. (2019, June 3) *A Beginner's Guide To Blockchain As A Service*. Retrieved from <https://www.leewayhertz.com/guide-to-blockchain-as-a-service/>

VMware Blockchain Group. (2020, August 12). *The Enterprise Blockchain Spectrum: Private, Permissioned, and Private to Permissioned*. Retrieved from <https://octo.vmware.com/the-blockchain-spectrum/>

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