Blockchain Platform Comparison & Recommendations

Comparison Table

Blockchain Name	Type	Consensus Mechanism Used	Permission Model	Speed / Throughput	Smart Contract Support	Token Support	Typical Use Case	Notable Technical Feature
Ethereum	Public Blockchain	Proof of Stake (Ethereum 2.0)	Open	~15–30 TPS (L1), thousands on L2	Yes (Solidity, Vyper)	Yes (Native - ETH, ERC tokens)	Decentralized apps (DeFi, NFTs, DAOs)	EVM-compatible, supports rollups
Hyperledger Fabric	Private Blockchain	Pluggable (Raft, Kafka)	Permissioned	~1,000+ TPS	Yes (Go, JavaScript, Java)	No native token	Enterprise data sharing, private workflows	Modular, channel-based privacy
Quorum	Consortium Blockchain	Istanbul BFT, Raft	Permissioned	~100–2,000 TPS	Yes (Solidity, EVM compatible)	Yes (Optional token models)	Banking, inter-org coordination	Private transactions & contracts

Short Report: Comparing Blockchain Platforms

Each blockchain platform serves different needs depending on the level of trust, transparency, and control required.

Ethereum is a public blockchain known for its openness and strong developer community. It’s perfect for decentralized apps (dApps) like DeFi platforms or NFT marketplaces because it supports smart contracts and has a global, permissionless network. While its base speed is limited, Layer 2 solutions help it scale effectively.

Hyperledger Fabric, on the other hand, is designed for private enterprise use. It offers high speed, fine-grained access control, and strong privacy features through channels. It's not suitable for public apps or cryptocurrencies but is ideal for internal systems like supply chain tracking where participants are known and trusted.

Quorum sits in the middle as a consortium blockchain. It blends Ethereum’s smart contract capabilities with added privacy and speed—making it a solid choice for industries like banking, where organizations need to collaborate securely without exposing data to the public.

Platform Recommendations:

For a decentralized app → Go with Ethereum for its openness and smart contract ecosystem.

For a supply chain among known partners → Choose Hyperledger Fabric for its privacy and performance.

For an inter-bank financial app → Use Quorum due to its balance of privacy, speed, and smart contract support.

In short, the best choice depends on who’s involved and what level of transparency or privacy is needed.