### Comparison Table

| **Blockchain Name** | **Type** | **Consensus Mechanism** | **Permission Model** | **Speed / Throughput** | **Smart Contract Support** | **Token Support** | **Typical Use Case** | **Notable Technical Feature** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Ethereum** | Public | Proof of Stake (PoS) | Open | 30-45 TPS | Yes (Solidity) | Native | Decentralized applications (DApps) | High decentralization, security |
| **Hyperledger Fabric** | Private | Practical Byzantine Fault Tolerance (PBFT) | Permissioned | 3,000+ TPS | Yes (Chaincode) | Native | Enterprise use, supply chain management | Modular architecture, privacy |
| **Quorum** | Consortium | Istanbul Byzantine Fault Tolerance (IBFT) | Permissioned | 1,500 TPS | Yes (Solidity) | Native | Financial applications, interbank settlements | Transaction privacy, high throughput |

### Short Report (150-200 words)

**Comparison of Technical Capabilities**

* **Ethereum** is a public blockchain that uses the Proof of Stake (PoS) consensus mechanism. It supports open permissions and has moderate throughput (30-45 TPS). Ethereum is well-known for decentralized applications (DApps), which are written in Solidity. Its token support is native (ETH), and its notable technical feature is high decentralization and security, ensuring that no single entity controls the network.
* **Hyperledger Fabric** is a private blockchain that uses PBFT as its consensus mechanism. It's a permissioned network, allowing for high throughput (3,000+ TPS), making it ideal for enterprise applications. It supports smart contracts written in Chaincode and has native token support. Its key feature is a modular architecture, enabling privacy and flexible consensus mechanisms tailored to business needs.
* **Quorum** is a consortium blockchain, designed primarily for financial institutions, using IBFT for consensus. It has a throughput of 1,500 TPS and supports smart contracts in Solidity. As a permissioned blockchain, it offers transaction privacy, making it suitable for inter-bank applications.

**Platform Selection:**

* For **decentralized apps**, **Ethereum** would be ideal due to its decentralized nature and widespread adoption for building DApps.
* For a **supply chain network among known partners**, **Hyperledger Fabric** is a great choice because of its privacy features, high throughput, and modular design.
* For an **inter-bank financial application**, **Quorum** is the best option, offering high throughput, privacy, and consensus mechanisms specifically tailored for financial institutions.