



The Future of Digital Banking: Universally Connected Smart Contracts

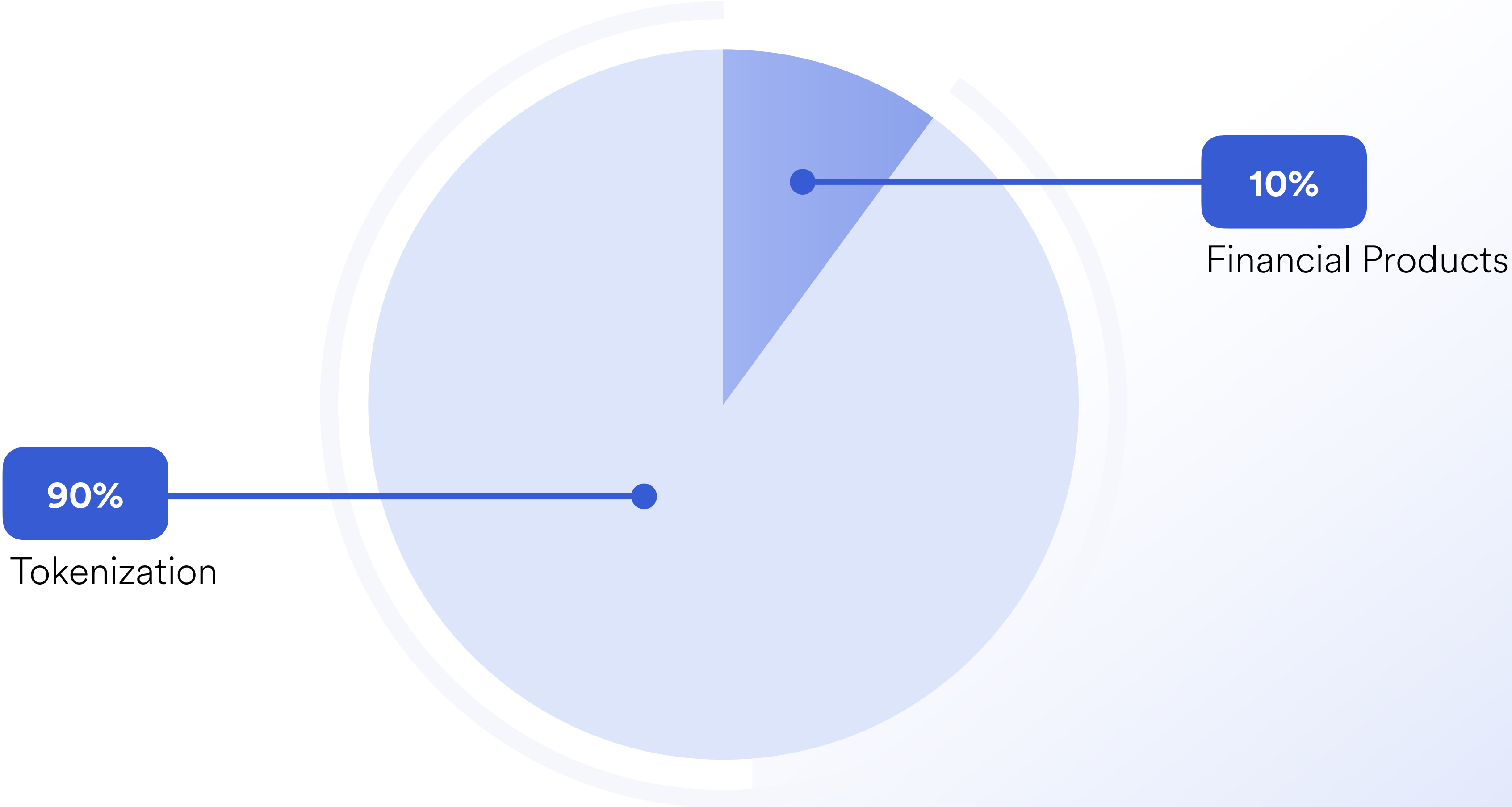
Decentralized Finance is Rapidly Growing in Value

Total Value Locked (USD) in DeFi

TVL (USD)

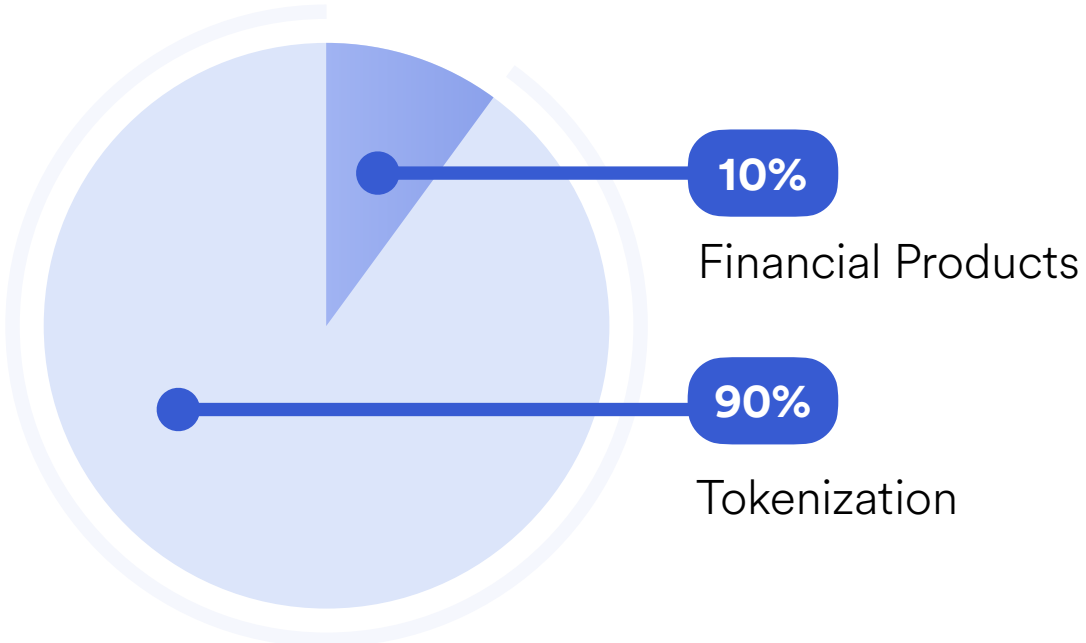


Smart Contracts Have Historically Provided Tokenization



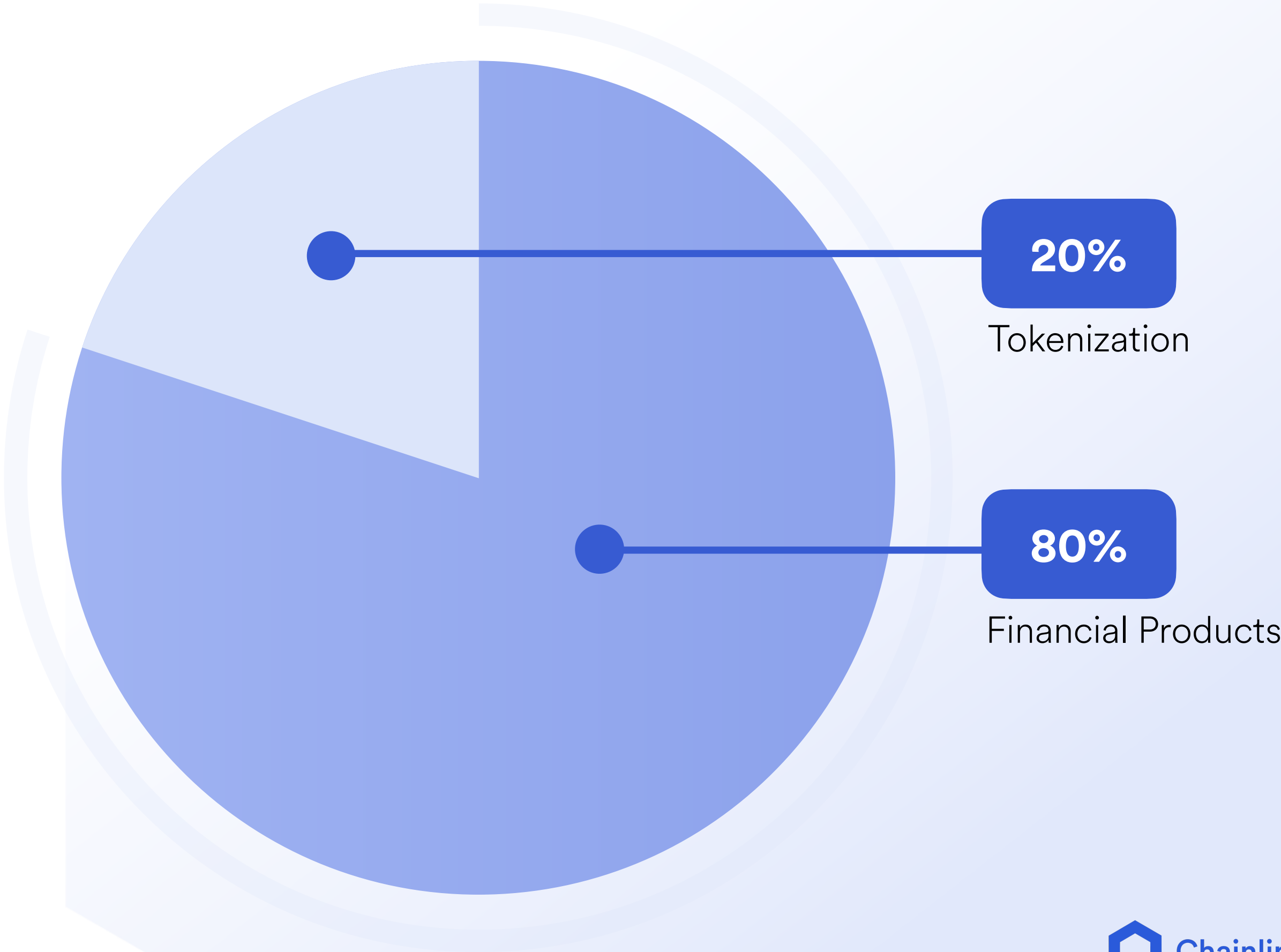
The Smart Contract Market is Rapidly Growing

Current Distribution of Smart Contract Transaction Volume and Value Secured

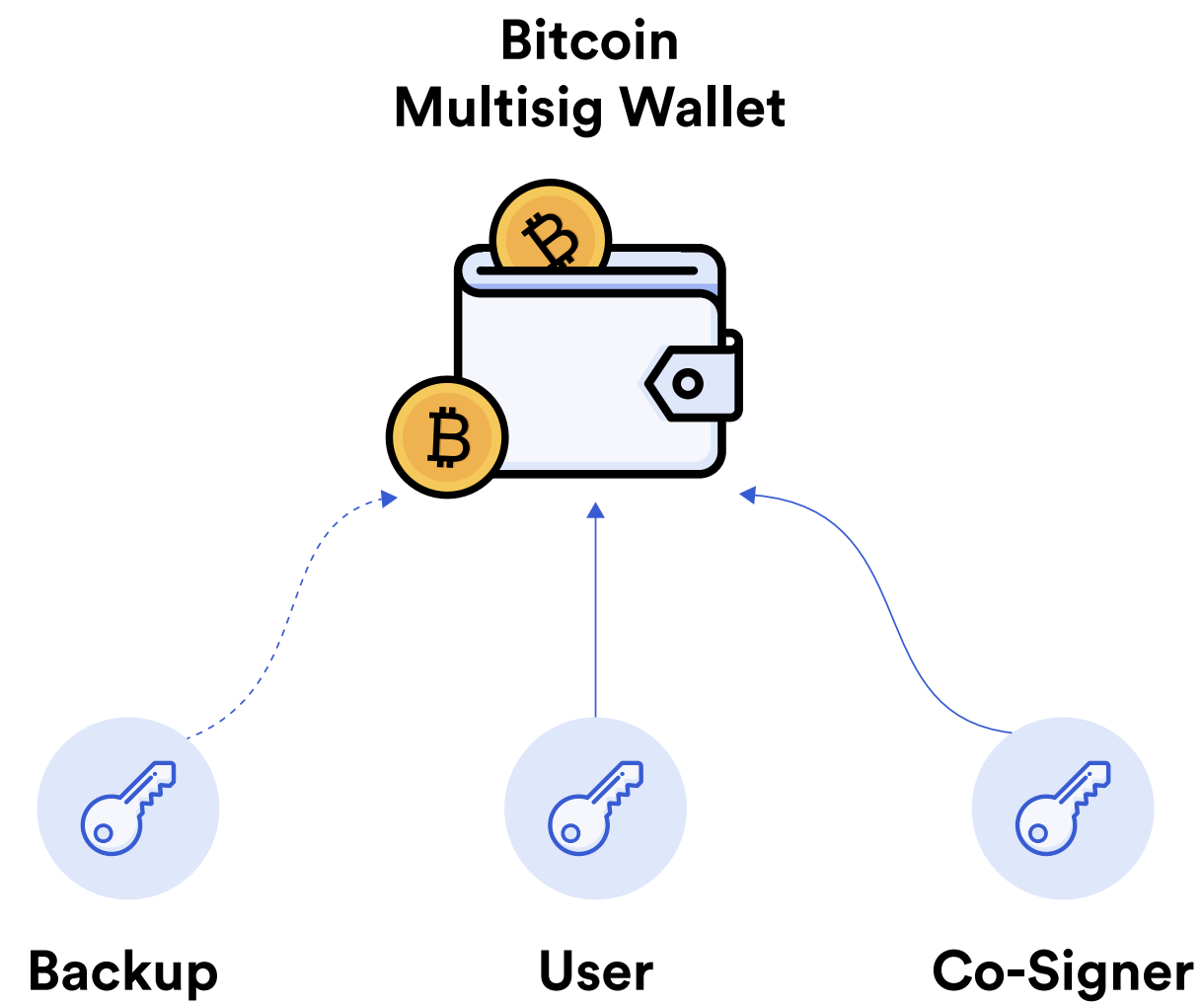


Universally Connected Smart Contracts

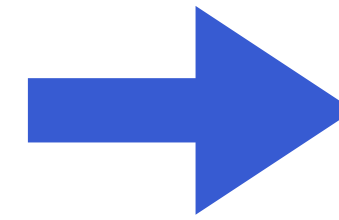
Future Distribution and 1000%+ Growth of Transaction Volume and Value Secured



The Initial Leap Forward for Smart Contracts



**Bitcoin Multi-signature as
“Programmable Money”**

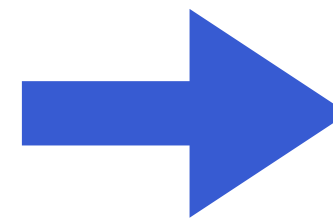


**Protocol Smart Contracts =
Smart Contracts 1.0**

The Scriptable Leap Forward for Smart Contracts



**Protocol Smart Contracts =
Smart Contracts 1.0**



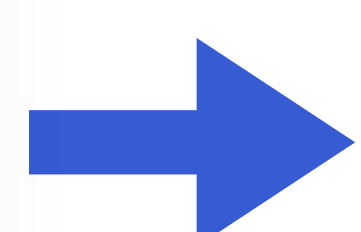
```
1 pragma solidity ^0.4.16;
2
3 contract MyToken {
4     // This creates an array with all balances
5     mapping (address => uint256) public balanceOf;
6
7     // Initializes contract with initial supply tokens to t
8     function MyToken (
9         uint256 initialSupply
10    ) payable {
11         balanceOf[msg.sender] = initialSupply;
12     }
13
14     // Send coins
15    function transfer(address _to, uint256 _value) payable
16        require(balanceOf[msg.sender] >= _value);
17        require(balanceOf[_to] + _value >= balanceOf[_to]);
18        balanceOf[msg.sender] -= _value;
19        balanceOf[_to] += _value;
20    }
```

**Scriptable Smart Contracts =
Tokenization/Smart Contracts 2.0**

The Connectivity Leap Forward for Smart Contracts

```
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```

**Scriptable Smart Contracts =
Tokenization/Smart Contracts 2.0**



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100



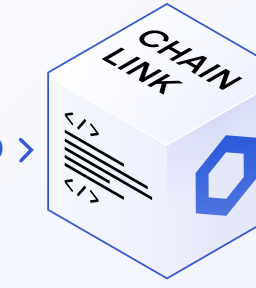
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**Universally Connected Smart Contracts =
All Other Dapps/Smart Contracts 3.0**

The “Oracle Problem” for Smart Contracts

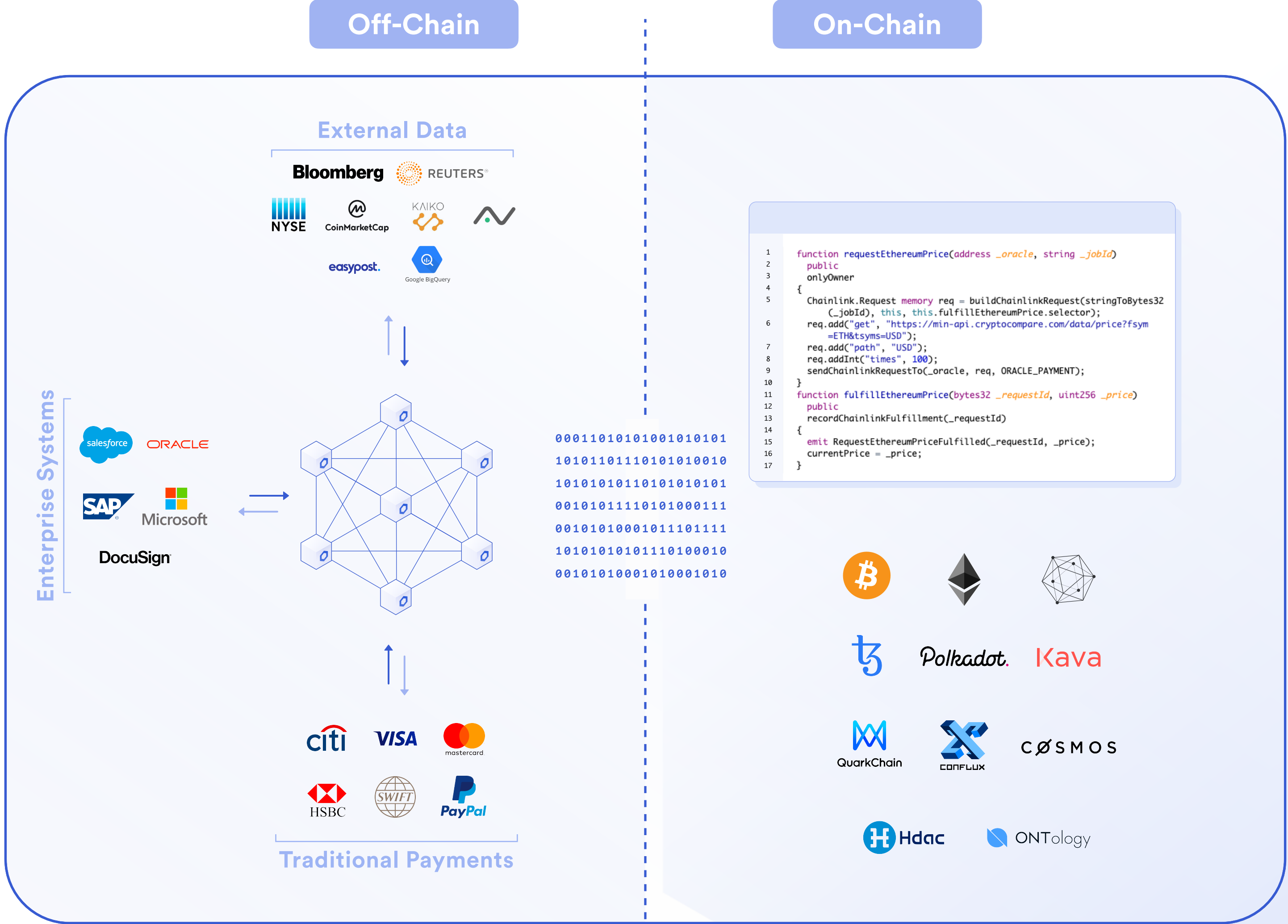
Smart Contracts are unable to connect with external systems, data feeds, APIs, existing payment systems or any other off-chain resources on their own.

Real World Data and Events

Blockchains

The “Oracle Problem” for Smart Contracts

Smart Contracts Consist of Two Equally Important Parts



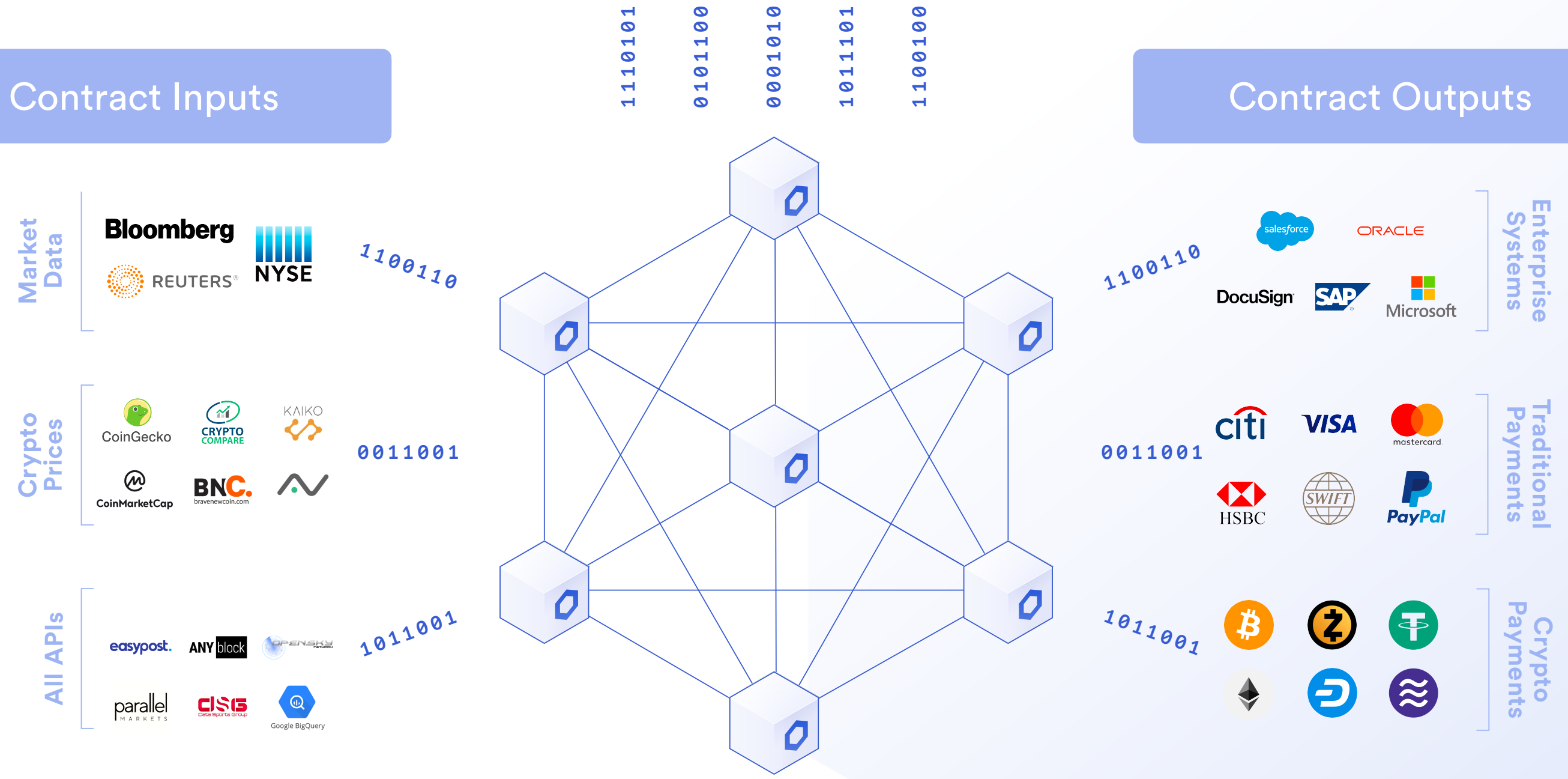
Connecting Smart Contracts to All Inputs and Outputs

Smart Contracts & Blockchains



Contract Inputs

Contract Outputs



DeFi is the Beginning of Redefining Smart Contracts

Total Value Locked (USD) in DeFi

TVL (USD)



SYNTHETIX

AAVE

bZx

Nexus Mutual



An Increase in Services from National & Digital Banks

coindesk

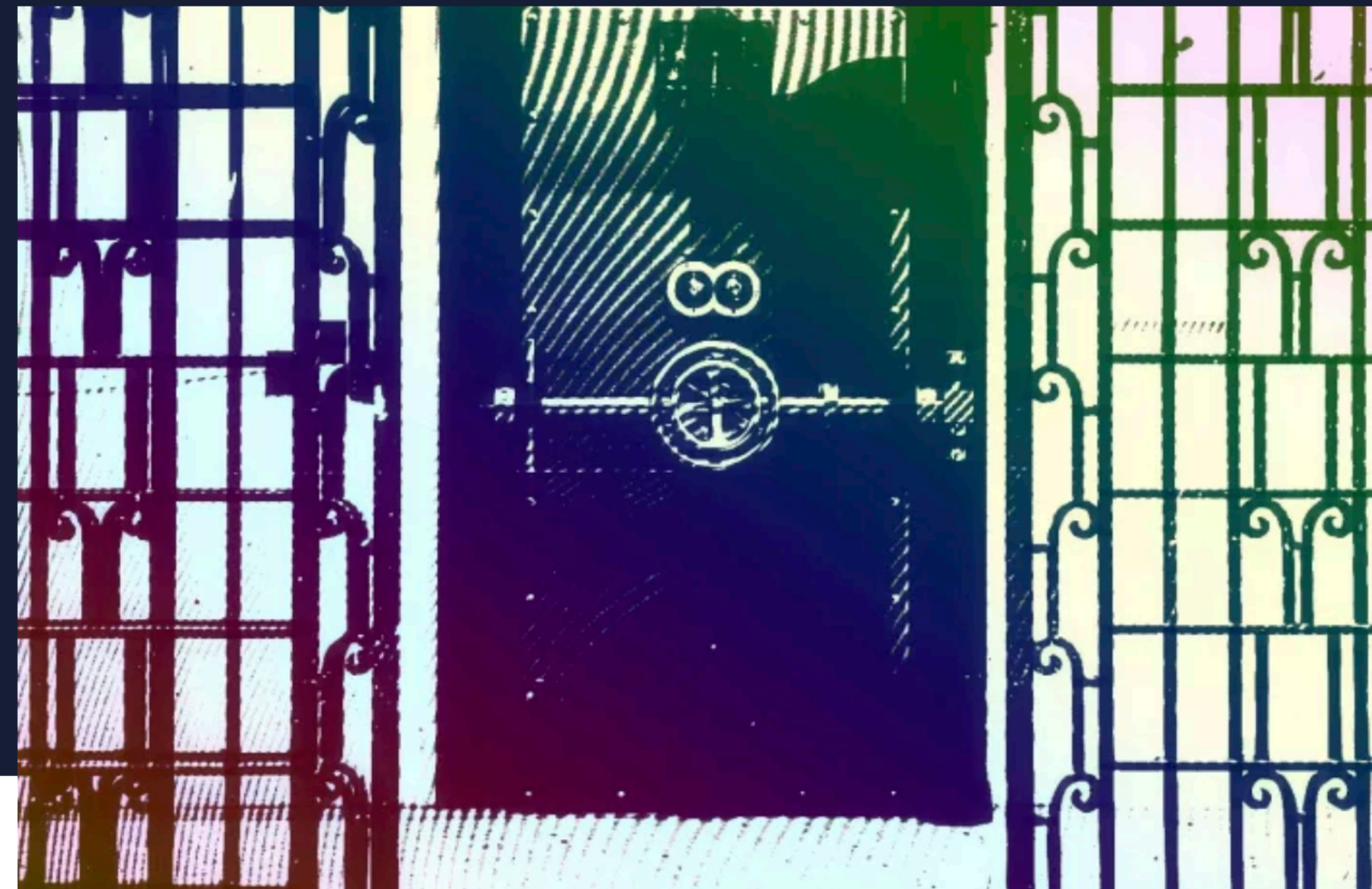
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Story from **Policy & regulation** →

Banks in US Can Now Offer Crypto Custody Services, Regulator Says

Jul 22, 2020 at 17:00 UTC - Updated Jul 22, 2020 at 17:50 UTC

🐦 f in



Bank vault (State Library of New South Wales, modified by CoinDesk using PhotoMosh)

The Office of the Comptroller of the Currency (OCC) is letting all nationally chartered banks in the U.S. provide custody services for cryptocurrencies.

<https://www.coindesk.com/banks-in-us-can-now-offer-crypto-custody-services-regulator-says>

In a public letter dated July 22, Senior Deputy Comptroller and Senior Counsel Jonathan Gould wrote that any national bank can hold onto the unique cryptographic keys for a cryptocurrency wallet, clearing the way for national banks to hold digital assets for their clients.

The letter marks a major development for the crypto industry. Previously, custody was the province of



“JPMorgan Chase is one such national bank that provides banking services to crypto companies, having provided support to Gemini and Coinbase earlier this year.”

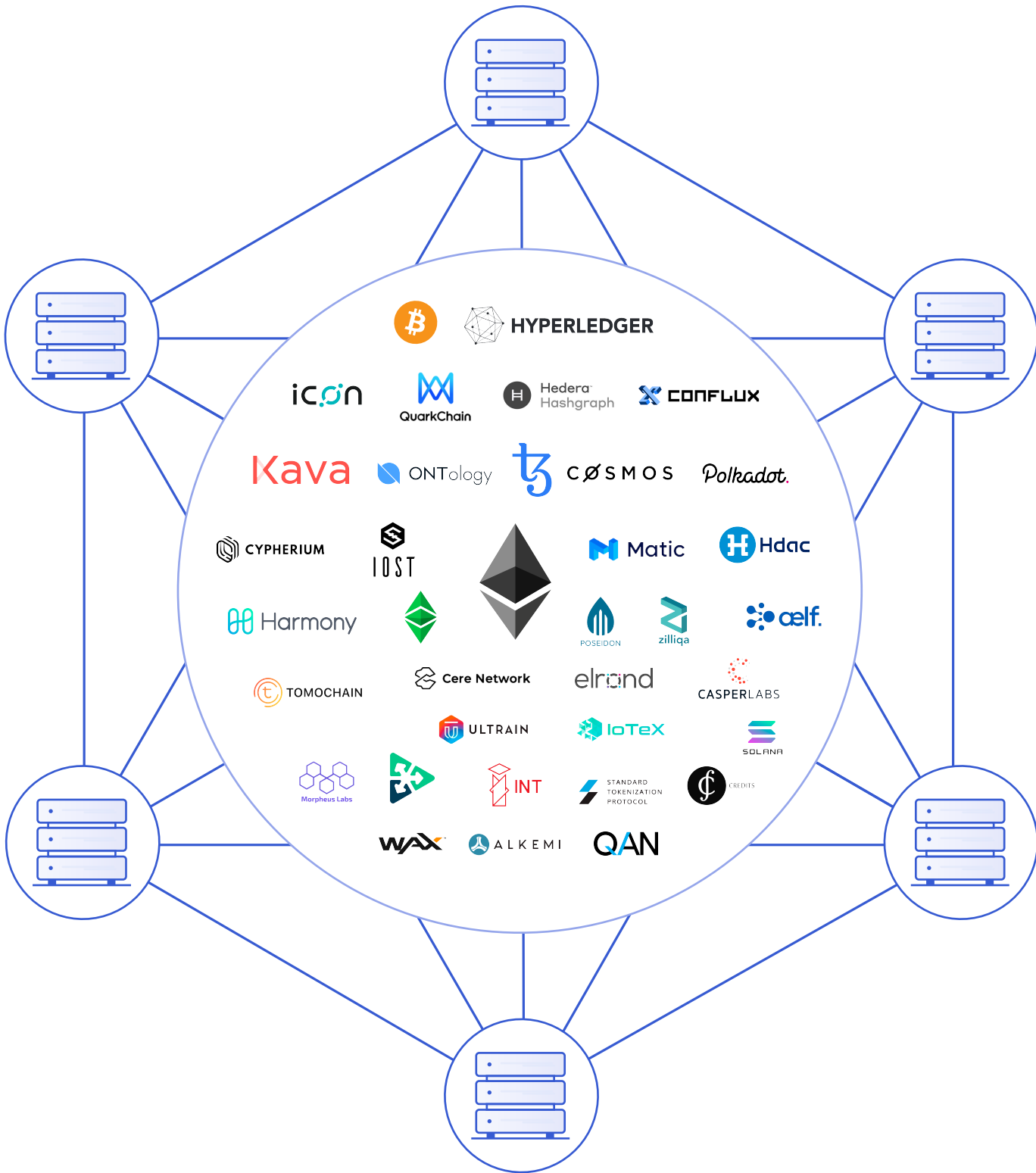


Nikhilesh De



Providing Access to DeFi Products For Existing Users

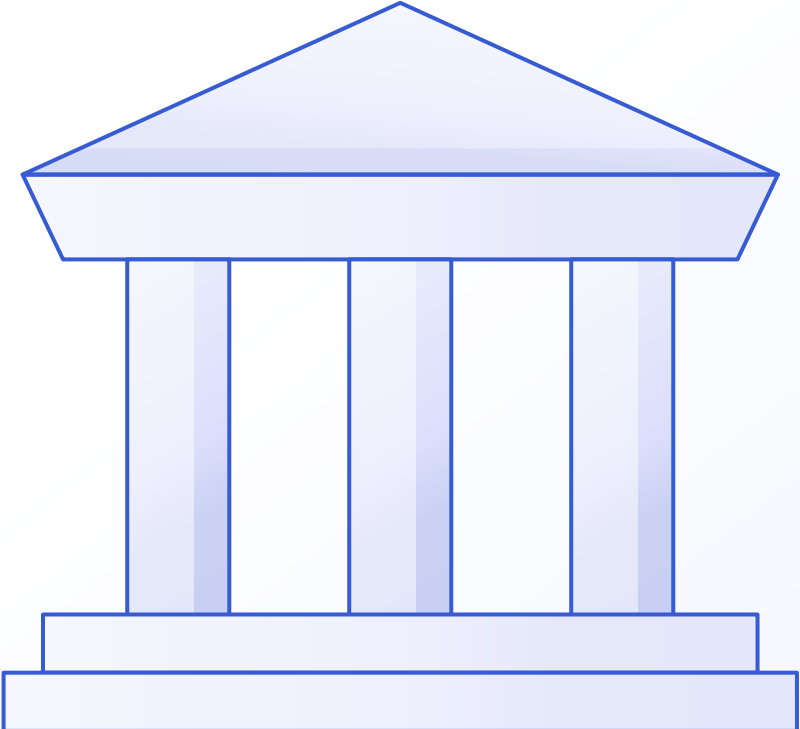
Existing DeFi Smart Contracts



Blockchain Middleware



Bank



Bank Users

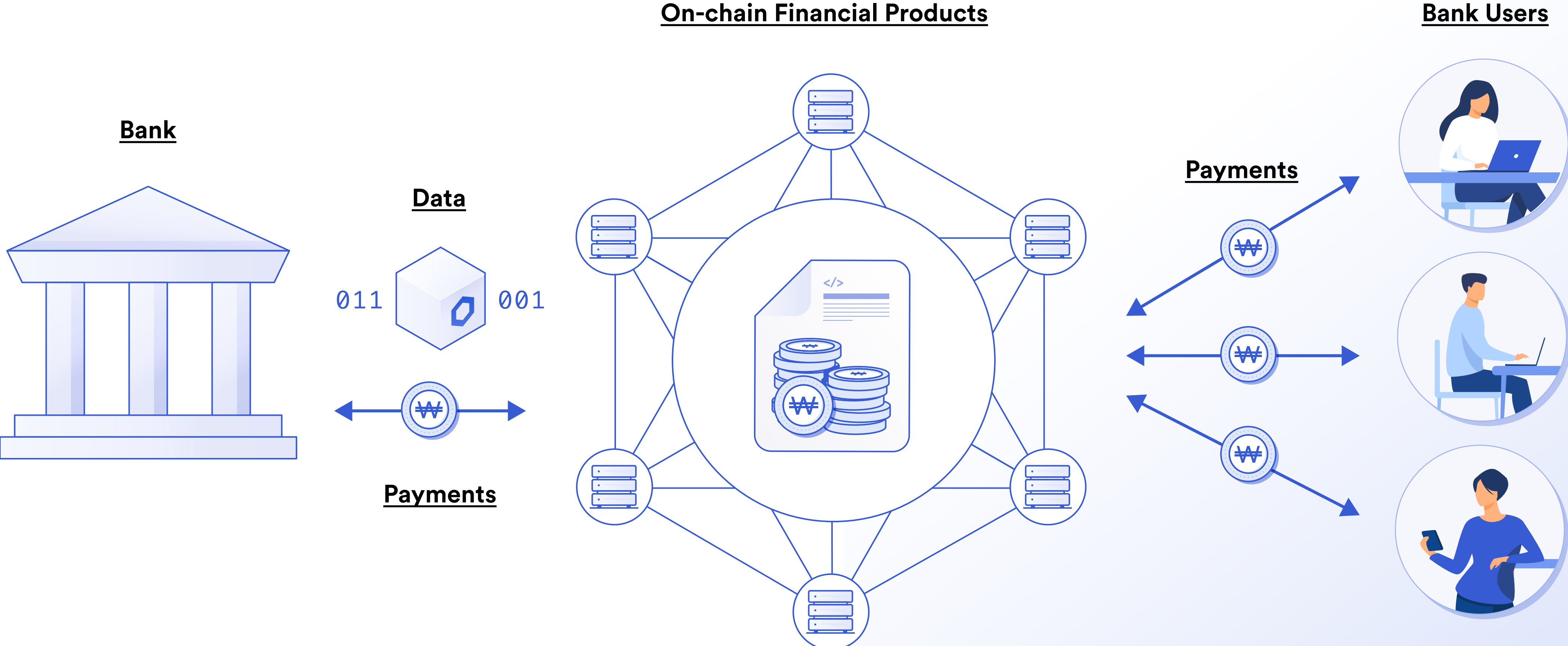


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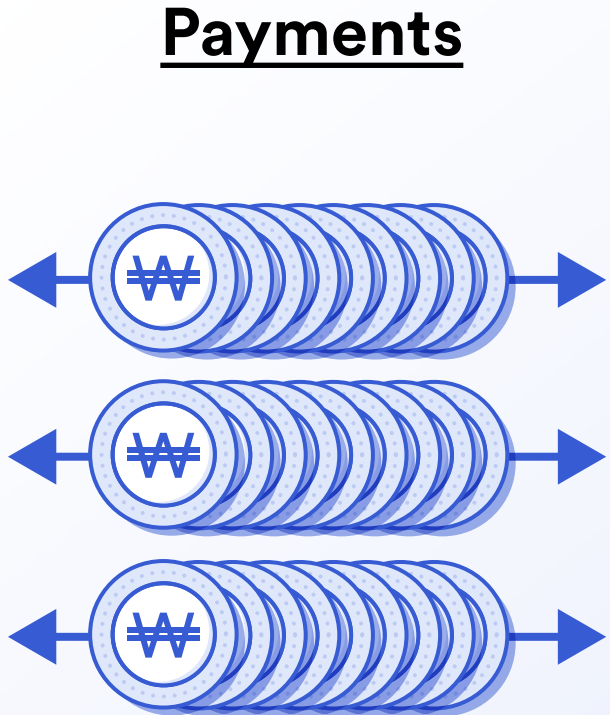
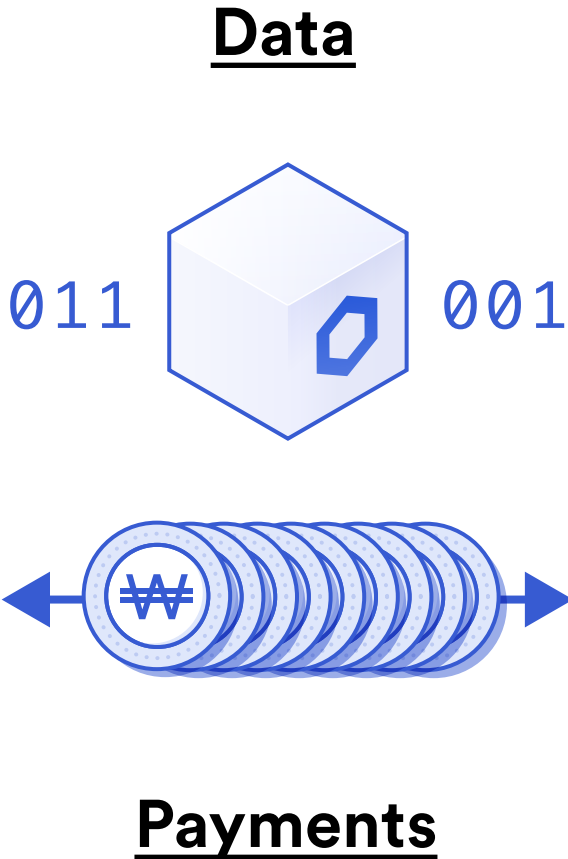
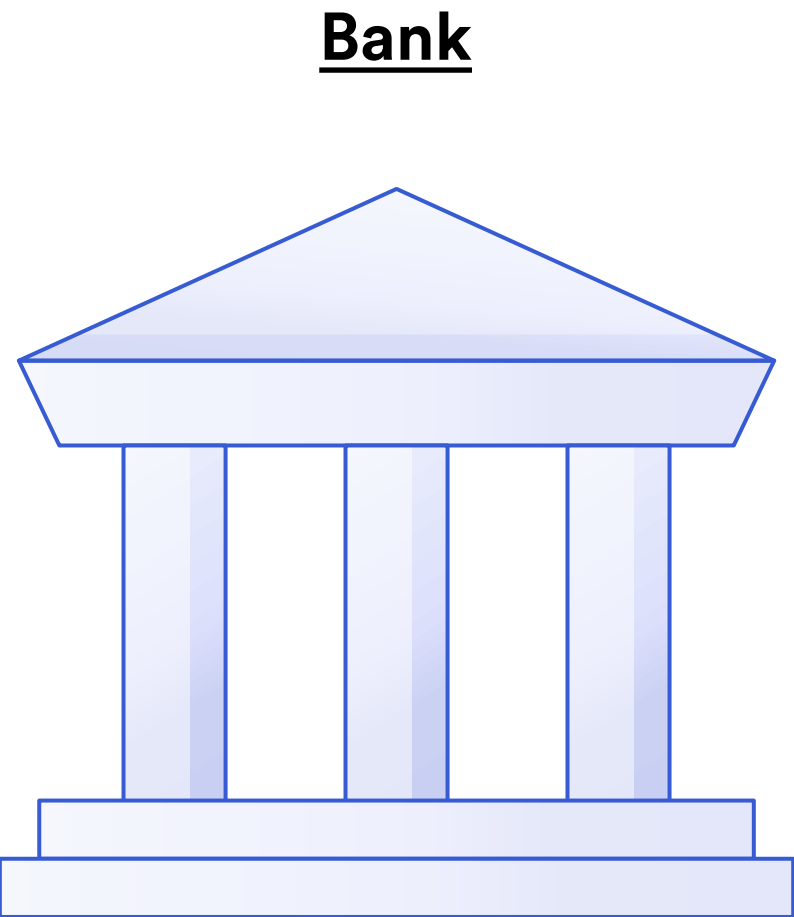
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Creating New DeFi Products for the Crypto Markets

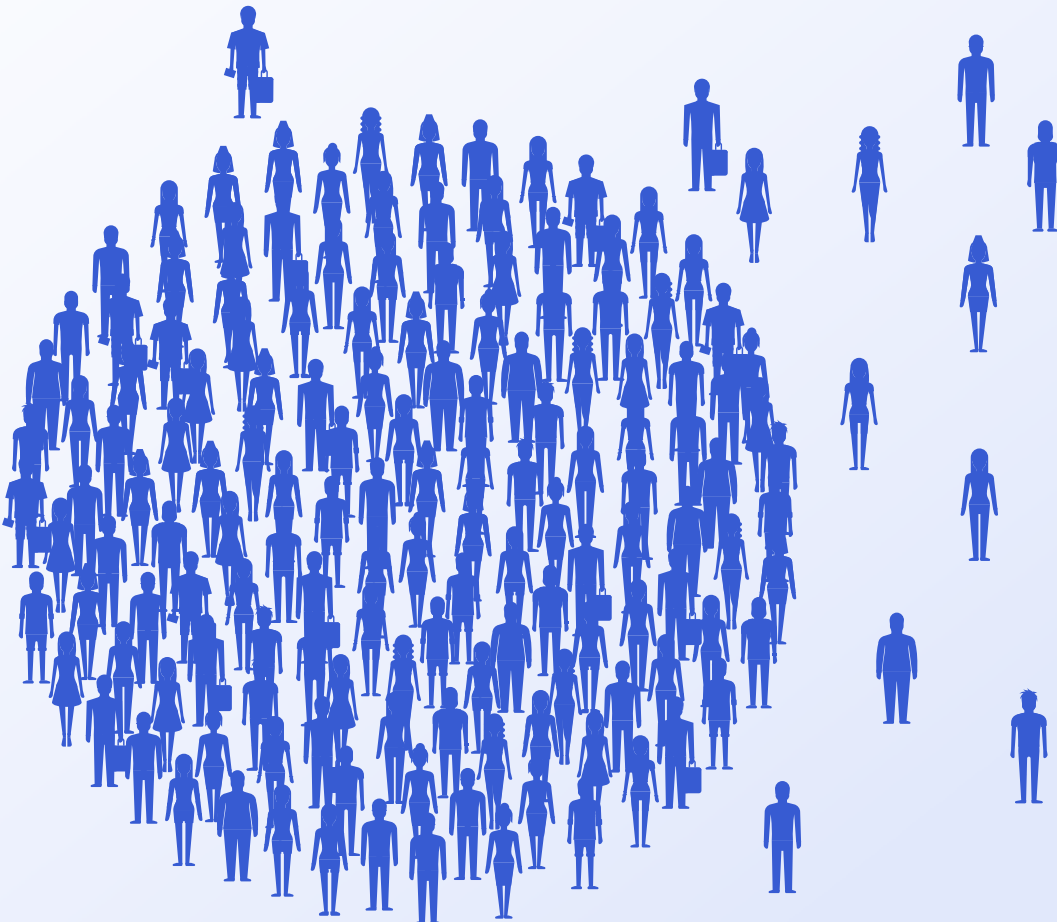


Creating New DeFi Products for the Crypto Markets

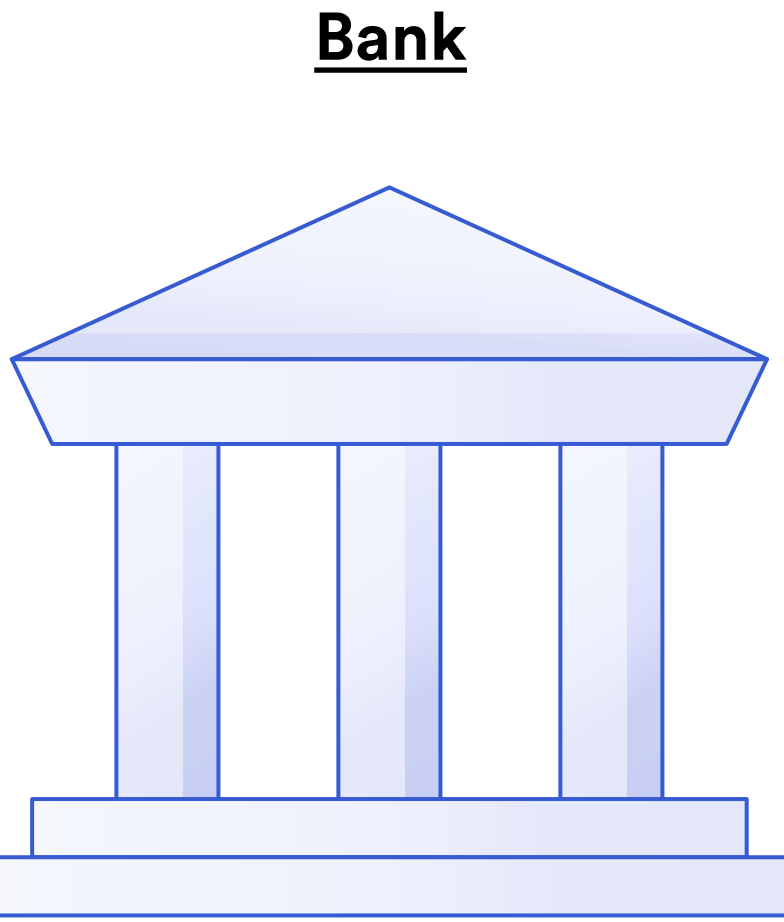
On-chain Financial Products



Market Wide Adoption



Providing Data and Services to DeFi Smart Contracts



FX Data
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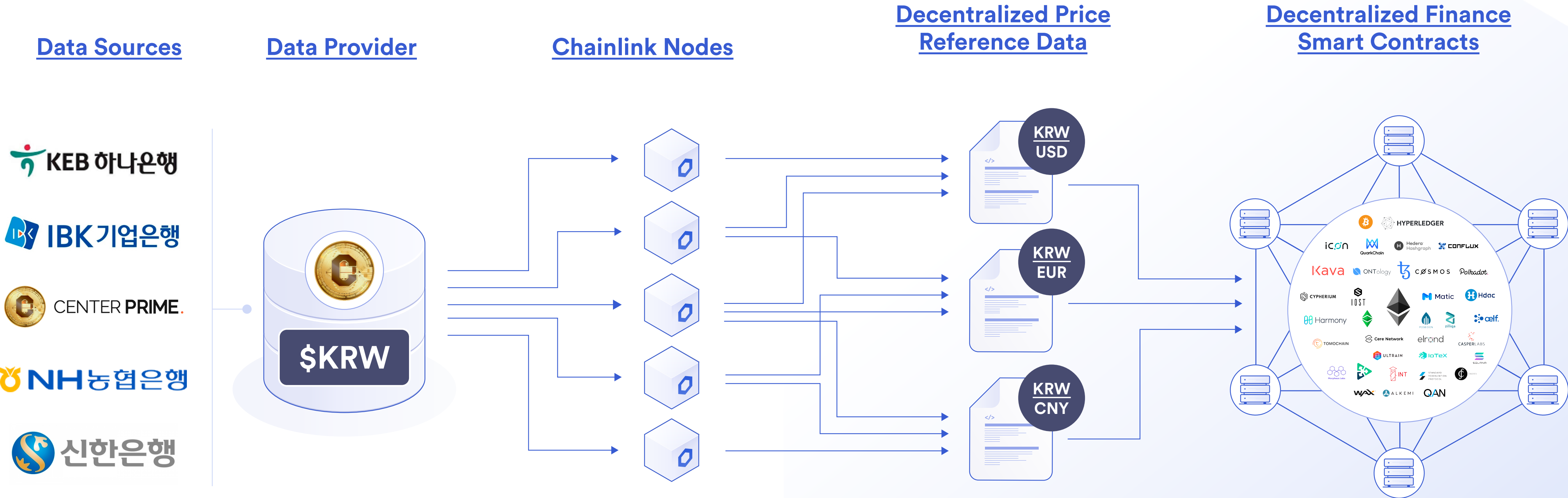


FX Data
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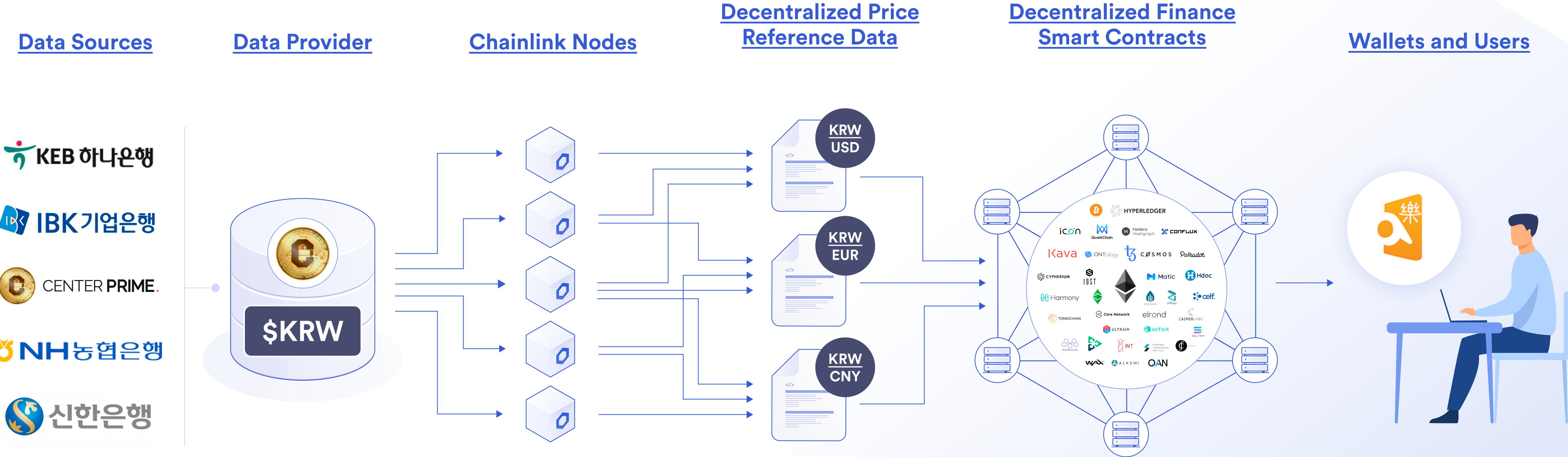
Smart Contract Networks



Leading Banks Generate KRW Reference Data for DeFi



Leading Banks Generating KRW Reference Data for DeFi



Thank You

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