Deutsche Bank
Technology, Data and Innovation

AI and Stablecoins for Future Finance

With deep dedication.

09-Oct-2025, Amsterdam, Peter Hung
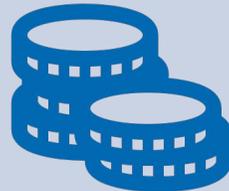
Agenda

AI and stablecoins
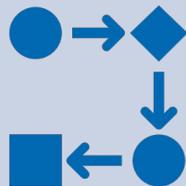
Use cases (3)

Opportunities

Challenges

Conclusions

AI and Stablecoins

AI and agentic AI - capability to perform tasks and processes without being explicitly programmed
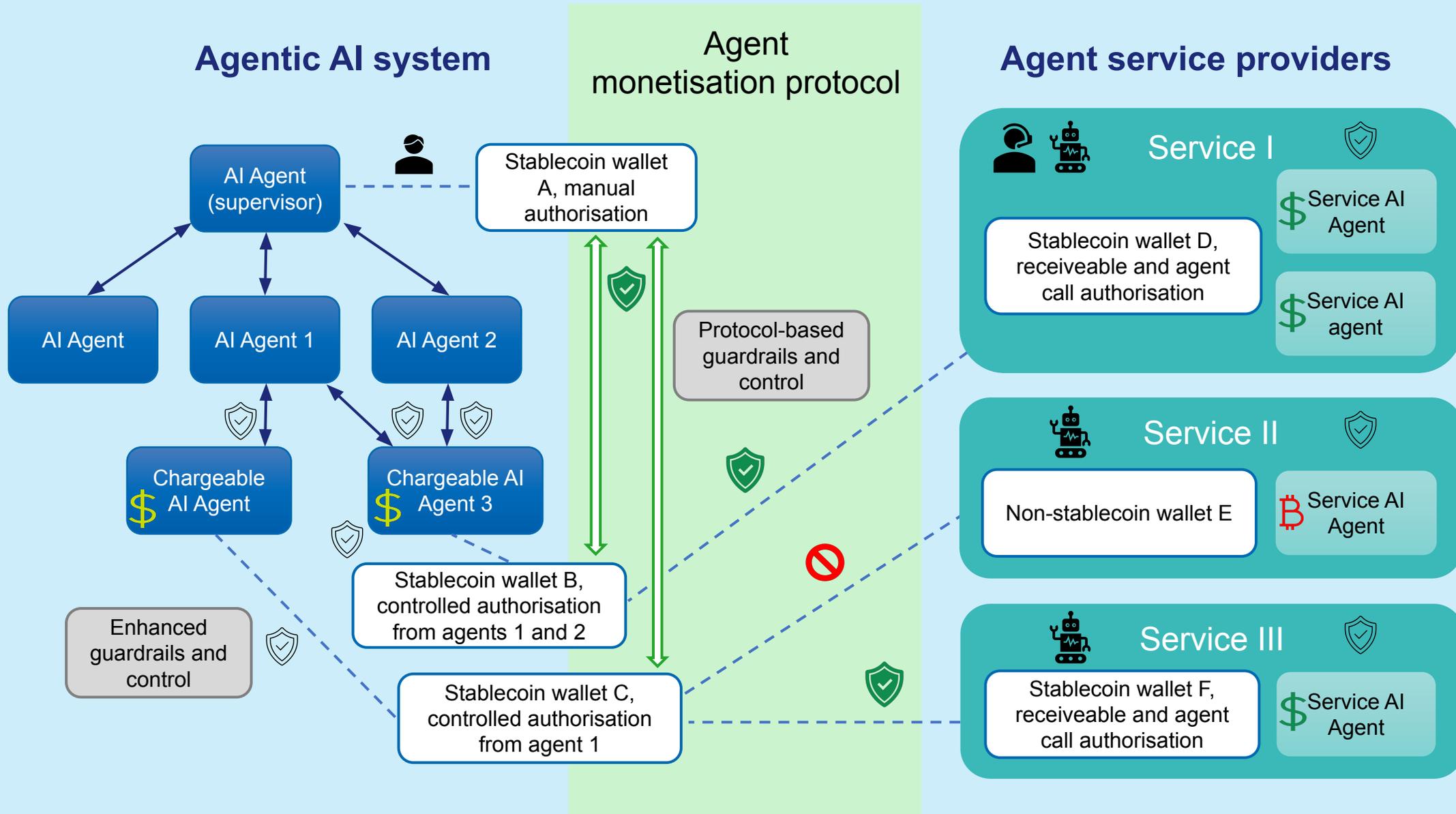
Stablecoins – cryptocurrency whose value is designed to be relatively 'stable' by being pegged with an asset such as fiat currency (e.g. USD) and a basket of assets
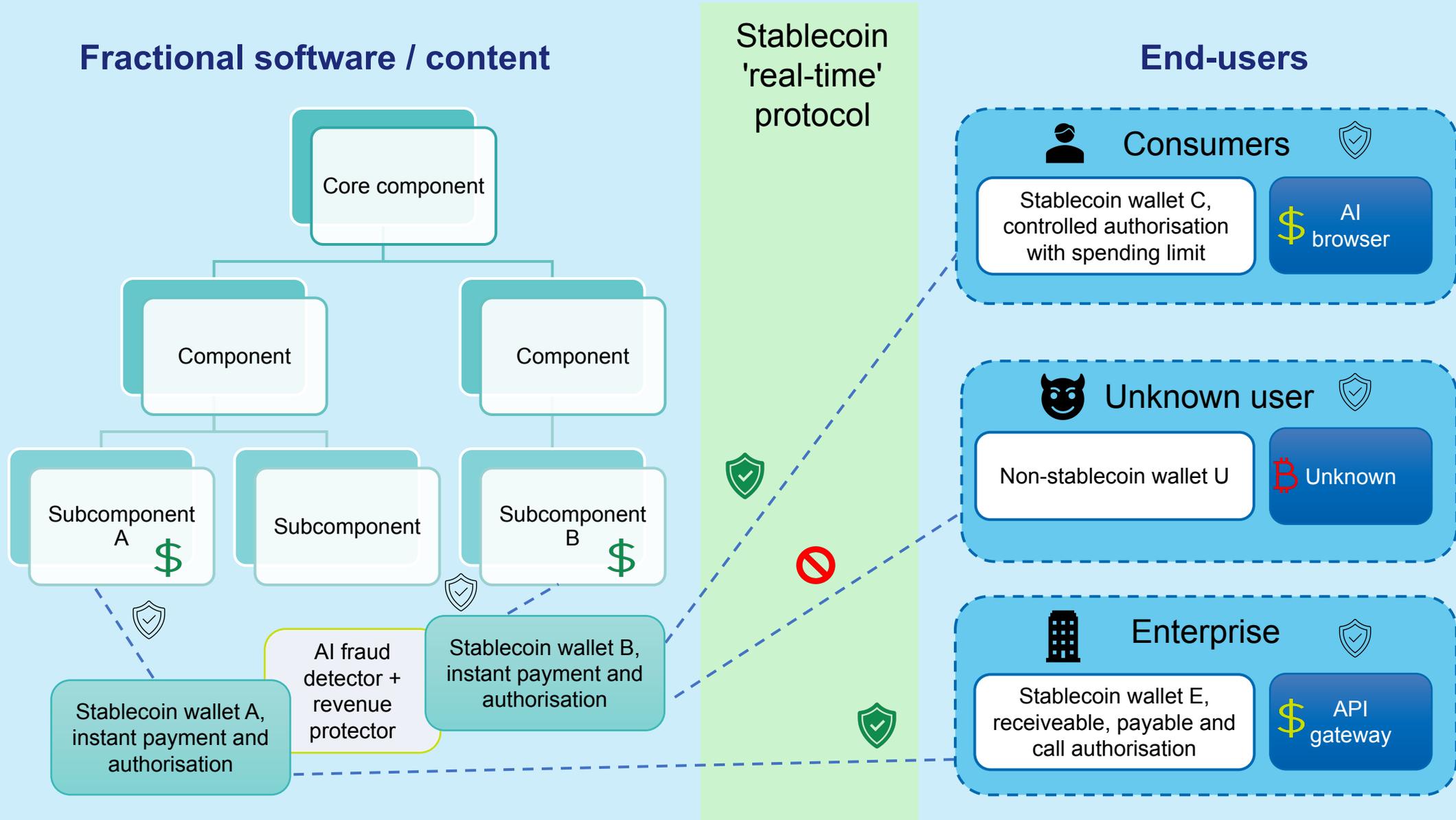
Convergence – How to make the best of both? Symbiotic relationship? Risks and challenges?
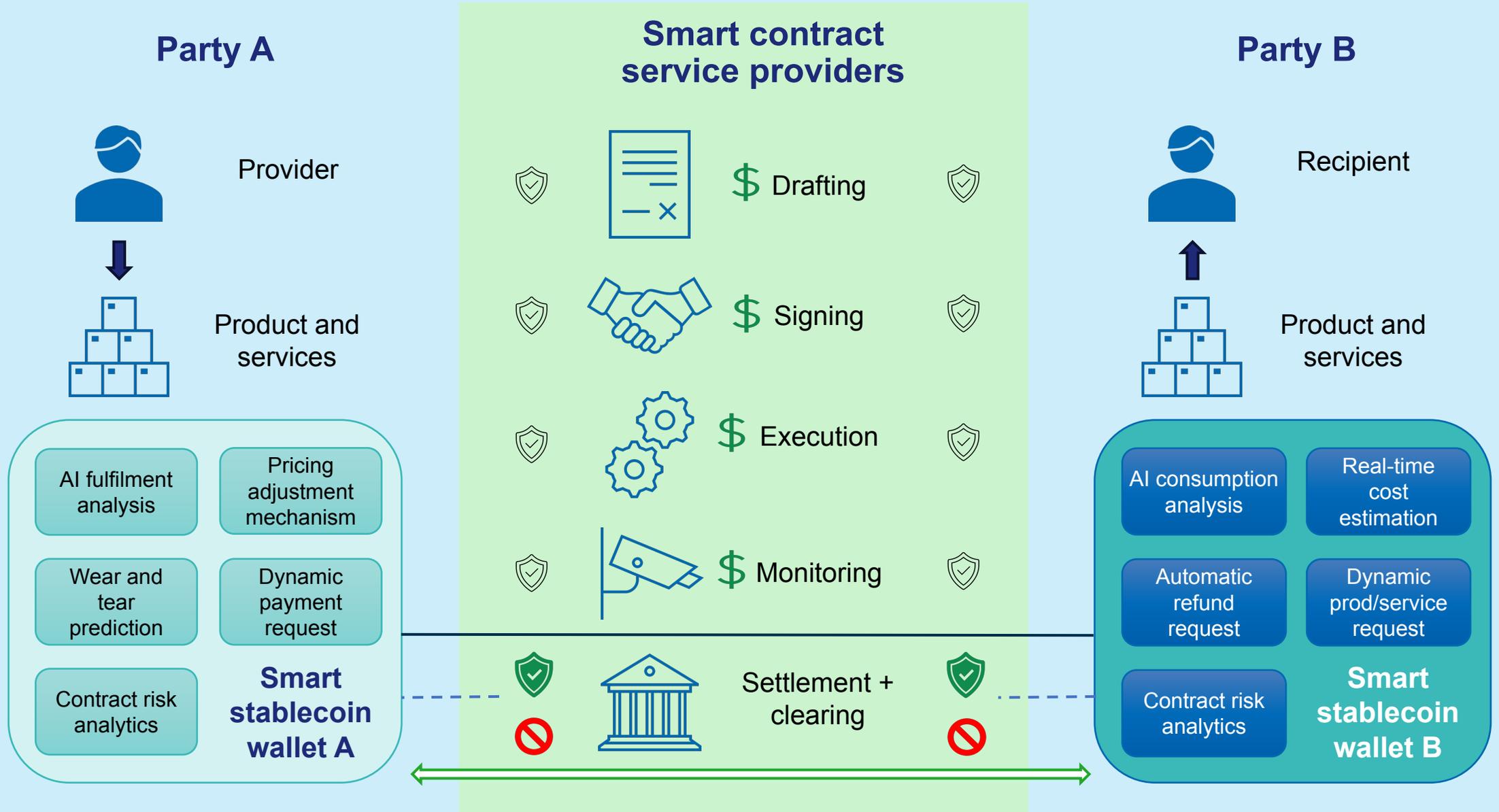
Use case 1: machine to machine payment activity using stablecoin

Agentic AI system

Agent monetisation protocol

Agent service providers

- AI Agent (supervisor)
- Stablecoin wallet A, manual authorisation
- AI Agent
- AI Agent 1
- AI Agent 2
- Chargeable AI Agent
- Chargeable AI Agent 3
- Enhanced guardrails and control
- Stablecoin wallet B, controlled authorisation from agents 1 and 2
- Stablecoin wallet C, controlled authorisation from agent 1
- Protocol-based guardrails and control

Service I
- Stablecoin wallet D, receiveable and agent call authorisation
- Service AI Agent
- Service AI agent

Service II
- Non-stablecoin wallet E
- Service AI Agent

Service III
- Stablecoin wallet F, receiveable and agent call authorisation
- Service AI Agent

Use case 2: purchase of fractional software compute, capabilities or content

Fractional software / content

Stablecoin 'real-time' protocol

End-users

Core component

Component

Component

Subcomponent A $

Subcomponent

Subcomponent B $

AI fraud detector + revenue protector

Stablecoin wallet A, instant payment and authorisation

Stablecoin wallet B, instant payment and authorisation

Consumers

Stablecoin wallet C, controlled authorisation with spending limit

$ AI browser

Unknown user

Non-stablecoin wallet U

₿ Unknown

Enterprise

Stablecoin wallet E, receiveable, payable and call authorisation

$ API gateway

Use case 3: 'smarter' contracts for counter parties with real-time settlement + clearing

Party A

Provider

Product and services

Smart stablecoin wallet A

- AI fulfilment analysis
- Pricing adjustment mechanism
- Wear and tear prediction
- Dynamic payment request
- Contract risk analytics

Smart contract service providers

- $ Drafting
- $ Signing
- $ Execution
- $ Monitoring

Settlement + clearing

Party B

Recipient

Product and services

Smart stablecoin wallet B

- AI consumption analysis
- Real-time cost estimation
- Automatic refund request
- Dynamic prod/service request
- Contract risk analytics

Opportunities   Challenges

- **Real-time transactions with lower transaction cost**

- **More "intelligent" product offerings**

- **Decentralised cross-border transactions**

- **Smarter contracts with intelligent settlement + clearing**

- **AI and stablecoin relationship / convergence is strengthened by**
  - advancement of AI technologies (e.g. LLM, multi-GPU)
  - announcement of industry protocols (e.g. MCP, A2A, AP2)
  - availability of AI governance framework (e.g. NIST, CSA)
  - new regulations (e.g. the US GENIUS Act, the EU AI Act)

- **AI opportunities**
  - novel techniques required processing, analysis and fraud detection for tokenised transactions
  - rapidly evolving AI technological landscape
  - incorporation of mechanism for remediation

- **Regulatory considerations**
  - stablecoin stability
  - investor/user protection
  - scams

Conclusions

AI and stablecoin has a symbiotic relationship in multiple use cases

Examples
- AI monetisation
- Fractional software and content distribution
- Smart contract real-time intelligent settlement and clearing

Convergence of AI-Stablecoin potentially creates new modes of future finance

The relationship / convergence is strengthened by, among others, regulations

Examples
- AI / agentic economy
- new product categories (a la carte digital consumption)
- more automatic supply and demand adjustment (reduced market friction)

A shift from a human-centric finance to a product-oriented one where the product becomes "intelligent"

Disclaimer