FIGURE 1: DIAGRAM OF CARBON ACCOUNTING PROCESSES

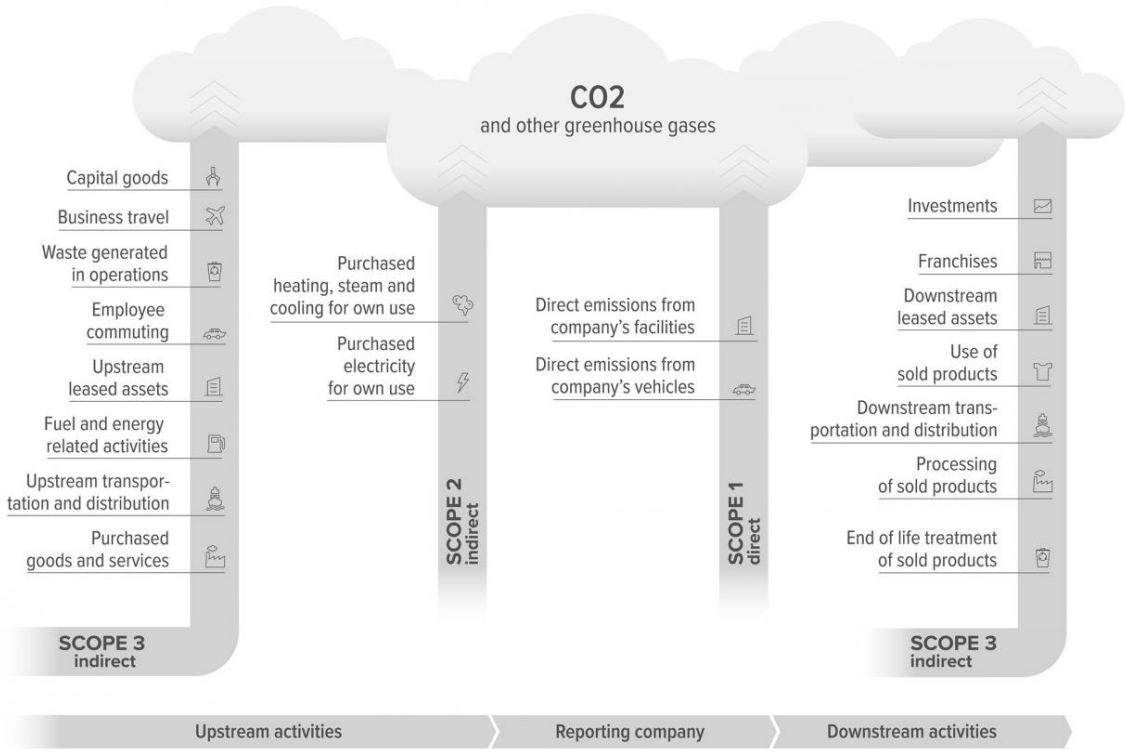

FIGURE 2: DIAGRAM OF GHG PROTOCOL DEFINITION OF SCOPE 1, 2, AND 3 ACCOUNTING

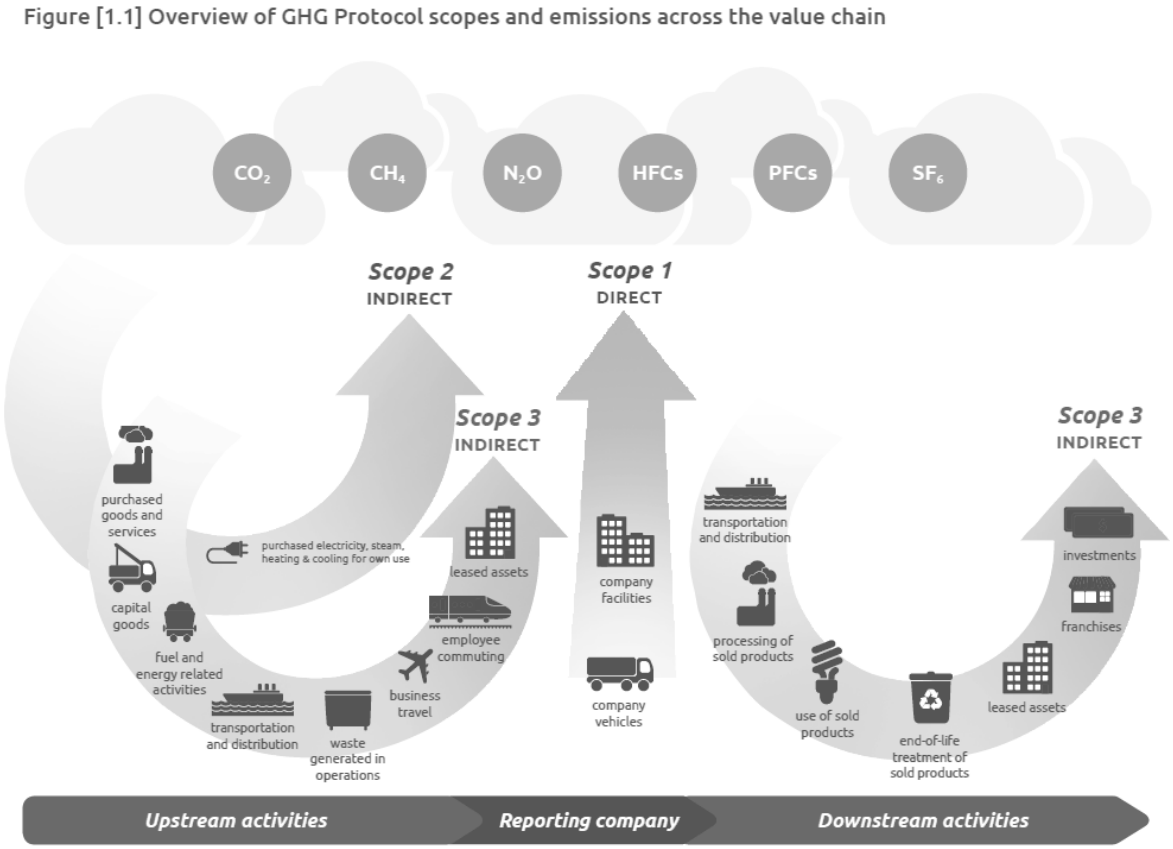

FIGURE 3: DIAGRAM OF DIGITAL MONITORING, REPORTING, AND VERIFICATION

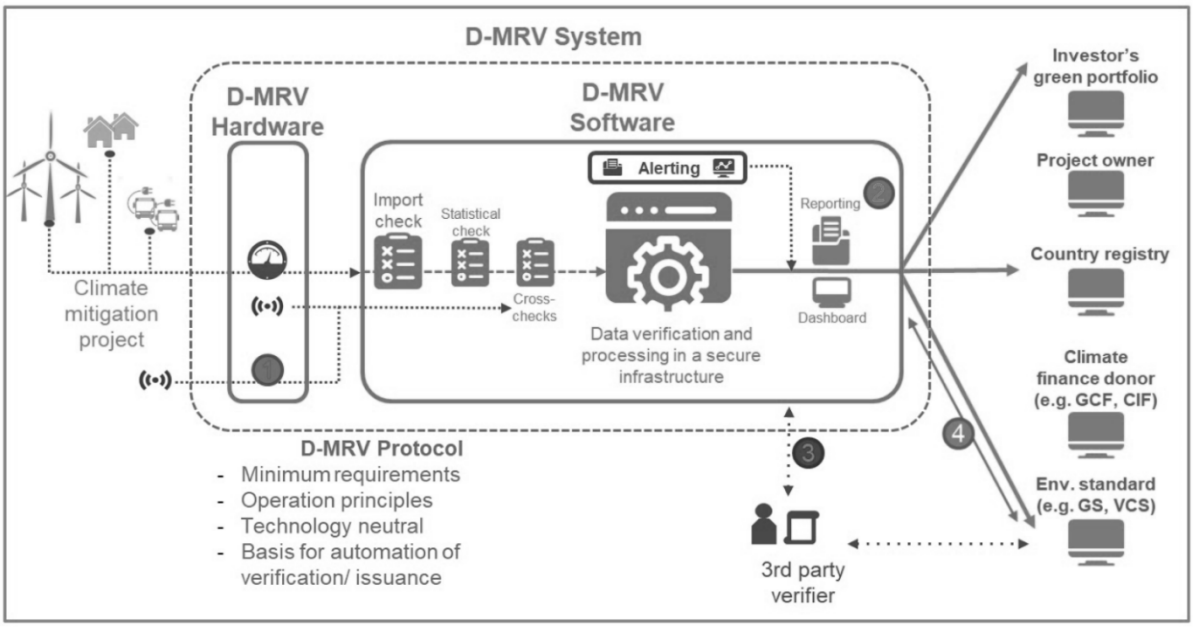

FIGURE 4: DIGITAL MRV AS PROPOSED BY THE WORLD BANK CLIMATE WAREHOUSE

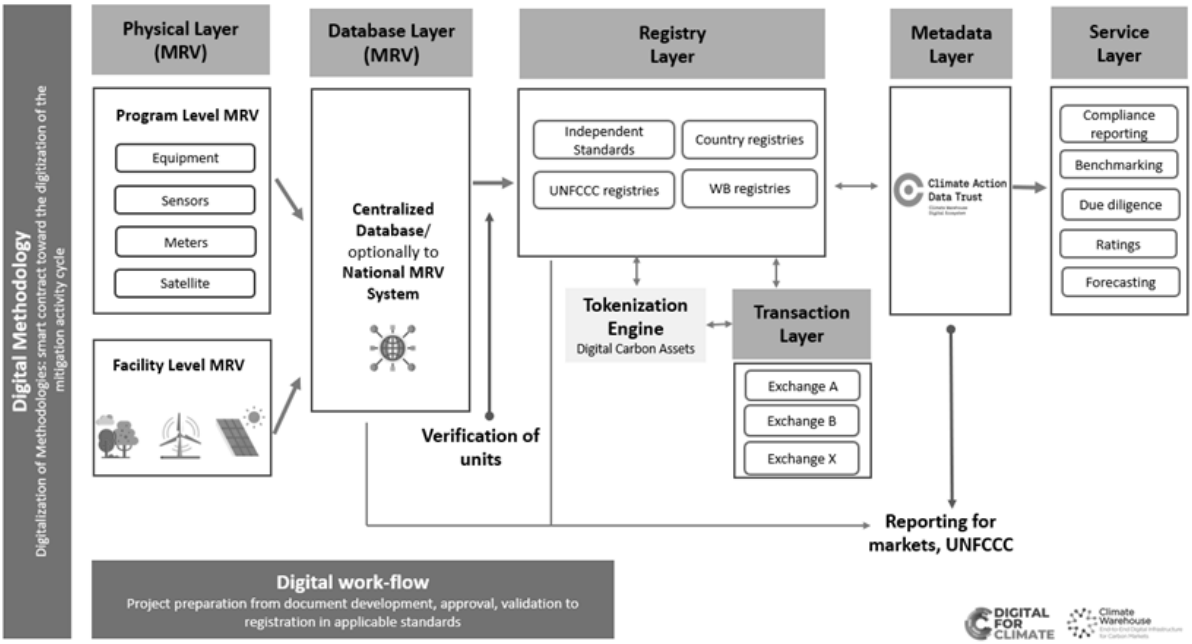

FIGURE 5: COMPARISON OF DeFED BANK TO TRADITIONAL BANK (JP MORGAN)

Comparison Chart

JP Morgan Bank	DeFED Bank
Deposits are transactions	Deposits are not transactions
Rehypothecation / Reuse at will	Rehypothecation / Reuse fully waived
Title transfer required	Title transfer avoided
Bank owns deposited assets	Customer owns deposited assets
Liability fully on customer	Liability fully on bank
No FDIC insurance guarantee	Full FDIC insurance guarantee
No yield generation on deposits	10-20% compounding yield on deposits
Customer can't utilize assets	Customer can utilize assets
Bank charges fees	Bank doesn't charge any fees
Bank hours 9am – 4pm weekdays	Bank is always open

FIGURE 6: DIAGRAM OF ALL 17 SUSTAINABLE DEVELOPMENT GOALS

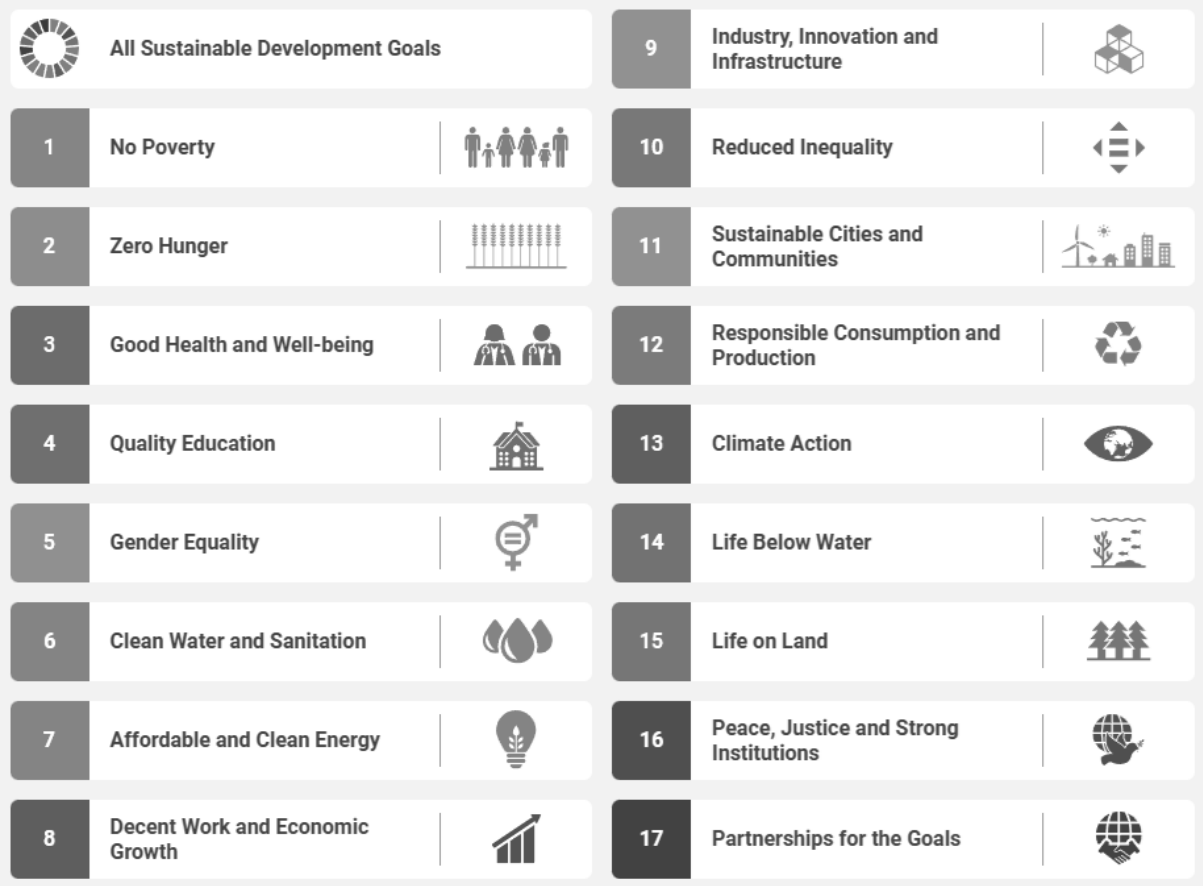

FIGURE 7: DEPOSIT TOKEN PROCESS

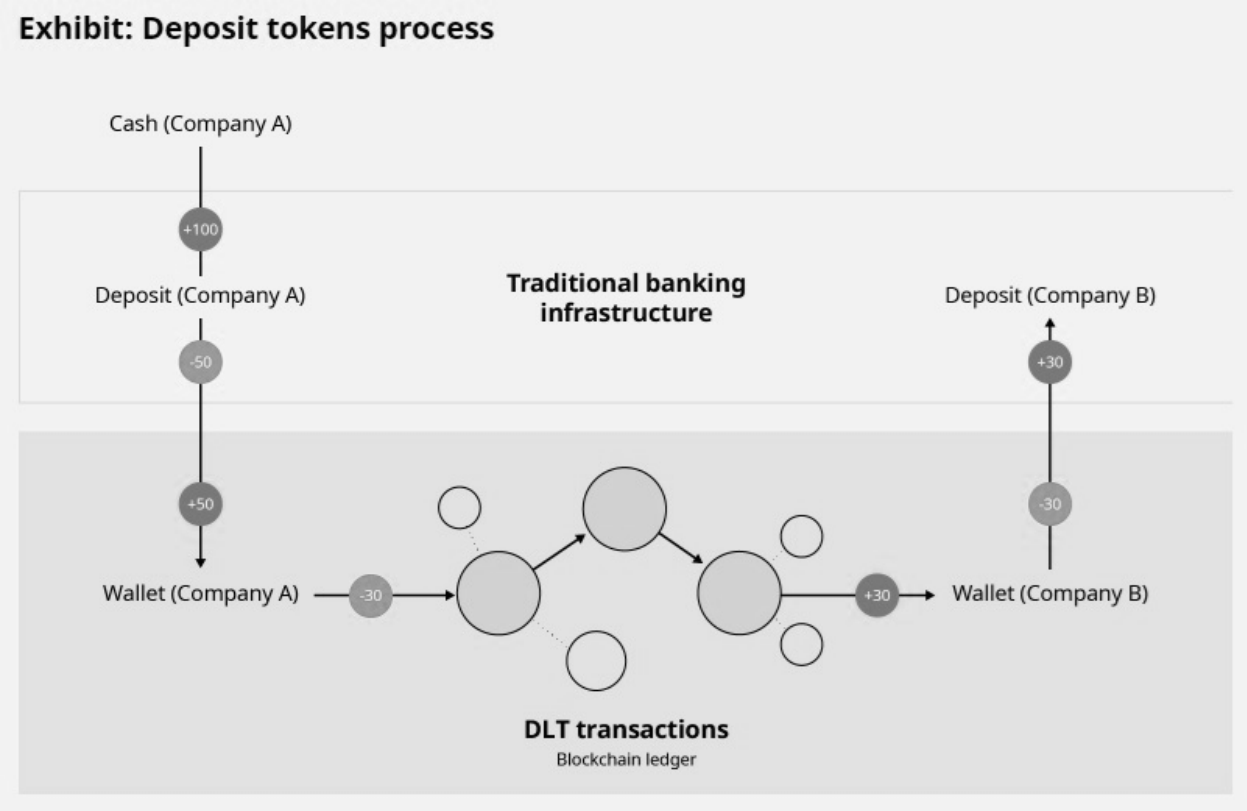

FIGURE 8: BANK SERVICES AND MENU OUTLINE

DEFED Web4 Banking Dashboard Design

Key Features of the DEFED Banking Dashboard:

1. **Modern Web4 Design**
   - Dark theme with gradient accents for a futuristic feel
   - Clean layout with intuitive navigation
2. **Digital Wallet Section**
   - Shows all requested cryptocurrencies with prices and amounts:
     - PARYS Carbon RWA ($142.75, 350.25 tokens)
     - PARYS Mining RWA ($87.40, 120.50 tokens)
     - PARYS Real Estate RWA ($210.30, 85.75 tokens)
     - REMIT ($0.85, 42,500 tokens)
     - REPAY ($1.25, 15,000 tokens)
   - Each wallet card displays price, amount, value, and 24h change
   - Buy/Sell actions for each cryptocurrency
3. **Comprehensive Service Menu**
   - Deposit
   - Withdraw
   - Transfer
   - Payments
   - Personal Loans
   - Commercial Loans
4. **Dashboard Overview**
   - Total balance card ($87,430.25)
   - Transactions card ($12,450.00)
   - Loan balance card ($45,000.00)
5. **Responsive Design**
   - Adapts to different screen sizes
   - Collapsible sidebar for mobile view
6. **Interactive Elements**
   - Active state indicators for menu items
   - Hover effects on cards and buttons
   - Notification system

FIGURE 9: DIGITAL BEARER INSTRUMENT MODEL OF PRIVATE TOKENIZED MONEY

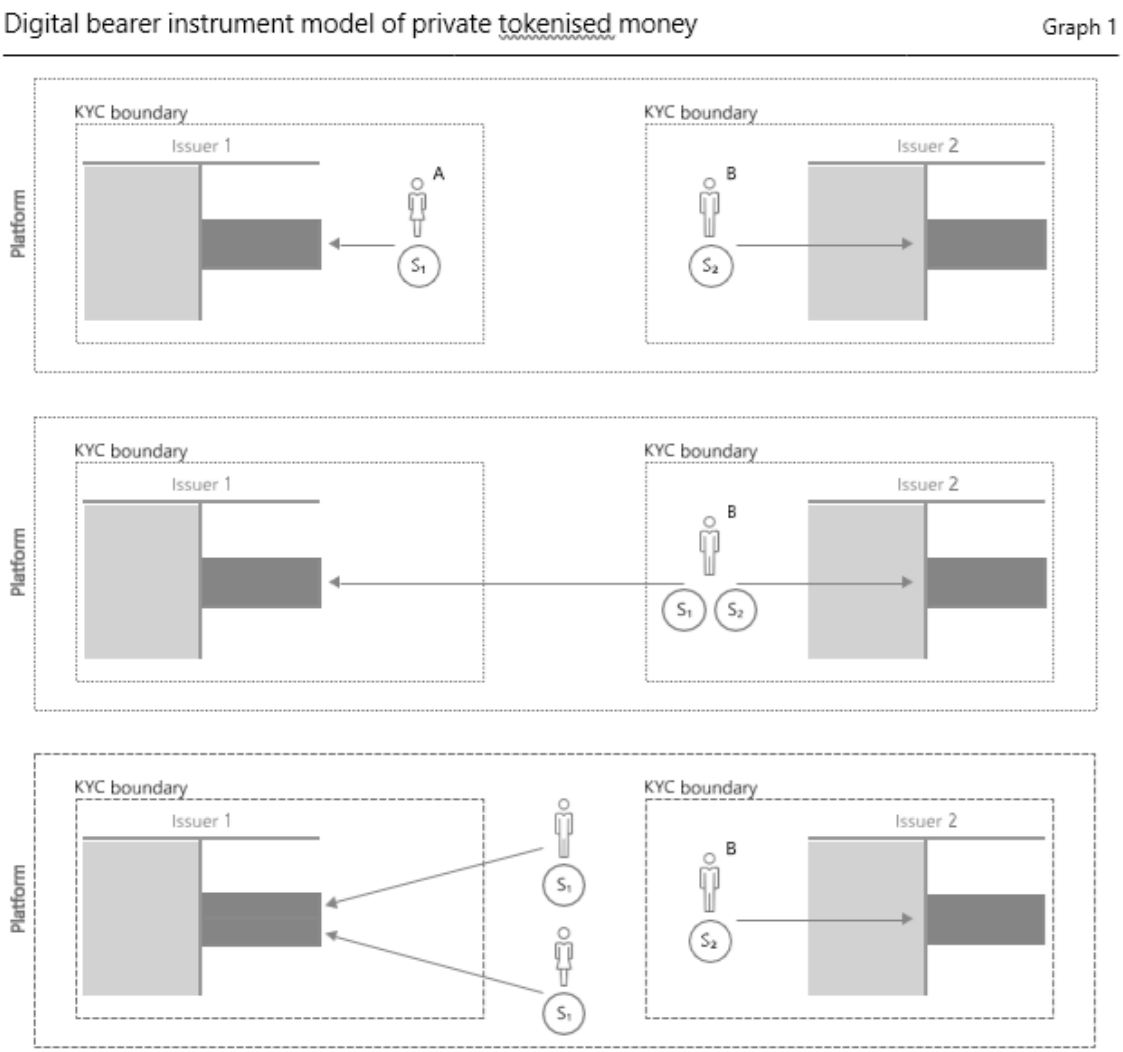

FIGURE 10: BURN/ISSUE MODEL OF PRIVATE TOKENIZED MONEY

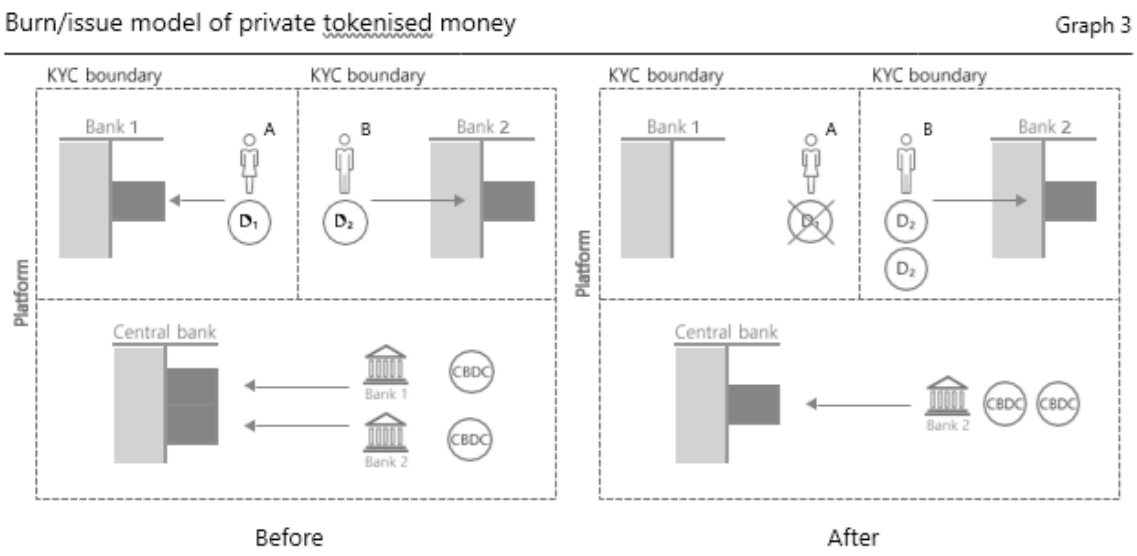

FIGURE 11: DIAGRAM: AGENTIC SYSTEMS CN ACCESS TOOLS FOR DISCOVERY AND EXECUTION, AND CAN PLAN GOALS TO ACHIEVE REAL-WORLD EVENTS.

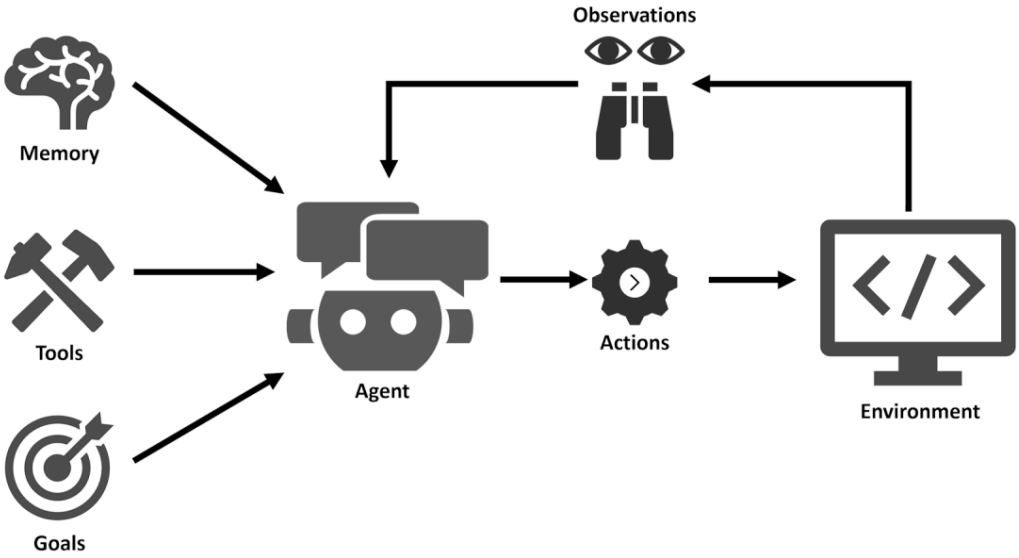

FIGURE 12: USING LOCAL LLMS WITH LOCAL DATA

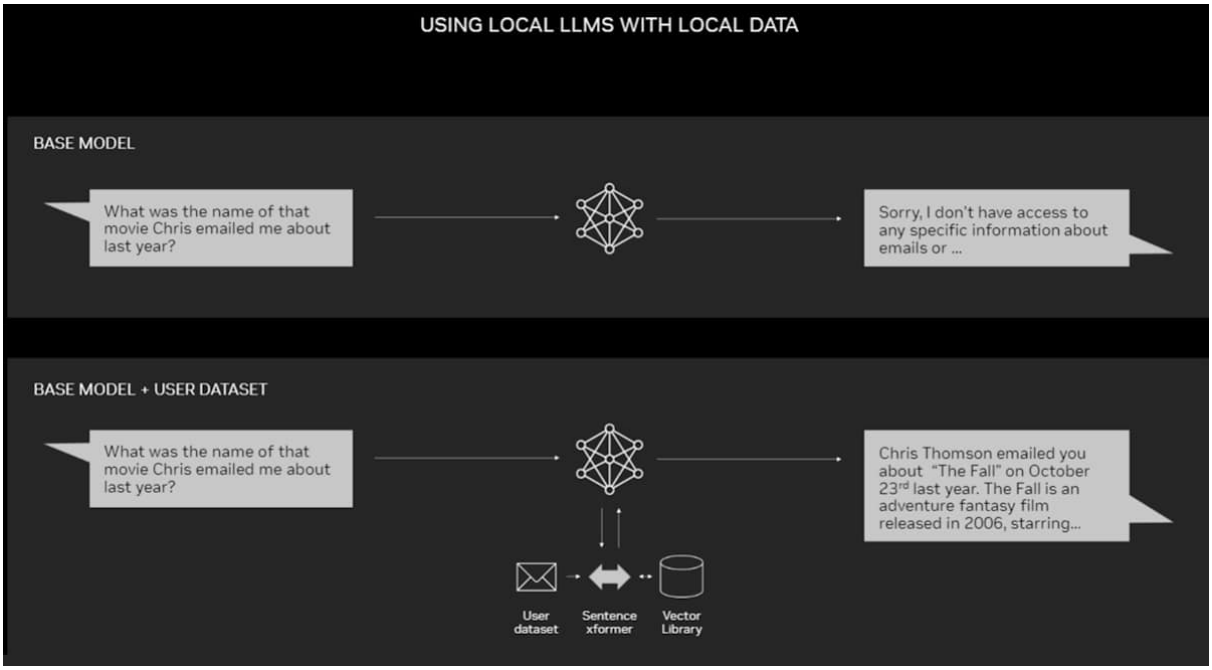

FIGURE 13: RETRIEVAL-AUGMENTED GENERATION SEQUENCE DIAGRAM THAT COMBINES LLMS WITH EMBEDDING MODELS AND VECTOR DATABASES.

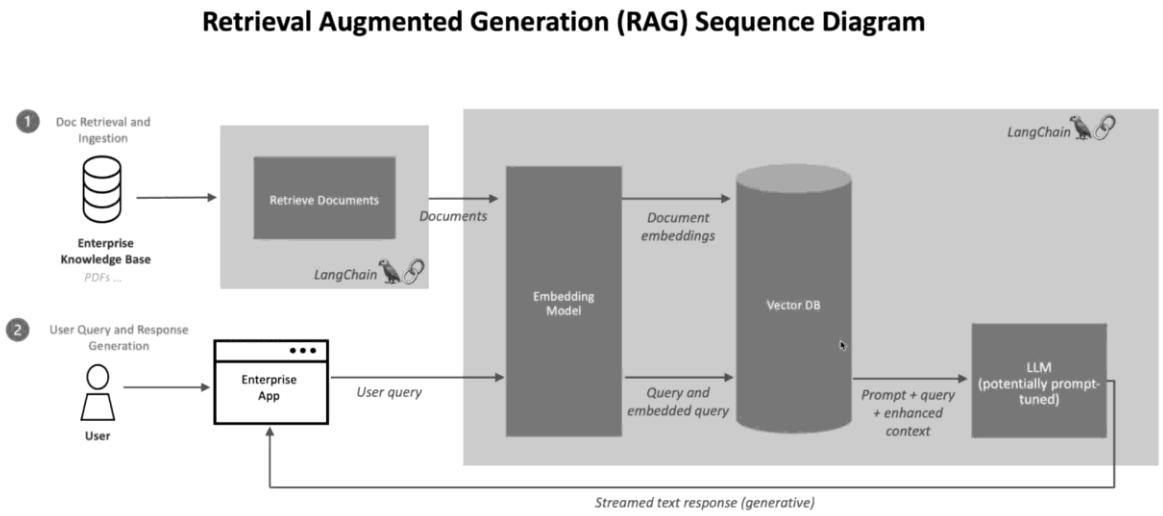

FIGURE 14: RETRIEVAL-AUGMENTED GENERATION FLOW CHART COMBINES LLMS WITH EMBEDDING MODELS AND VECTOR DATABASES.

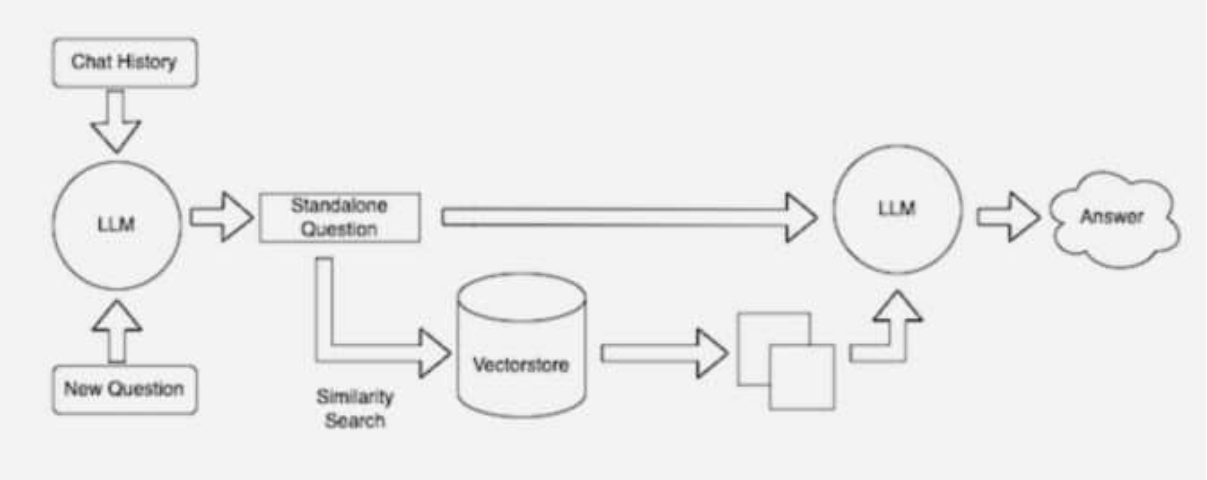

FIGURE 15: TOKENIZED LTV RISK TOLERANCE FORMULA PER BASEL III / IV

Parisii-adapted formula (enforced on-chain via smart contracts):

$$\text{LTV}_{\text{Parisii}} = \left(\frac{\text{REMIT™ Loan Amount (or leveraged position)}}{\text{Oracle-valued PARYS™ RWA Collateral (current market value)}} \right) \times 100$$

Recommended Basel-style conservative baselines for Parisii:

RWA Type	Recommended Max LTV (Parisii Policy)	"Prime / Low-Risk" Target LTV	Liquidation Threshold (Automated)	Rationale
Gold / Precious Metals	≤ 75%	≤ 65%	80–85%	Highly liquid, low volatility
Energy (PARYS Energy RWA)	≤ 70%	≤ 60%	75–80%	Commodity price volatility; oracle-based
Water / Carbon / Land	≤ 65%	≤ 55%	70–75%	Lower liquidity, higher storage/valuation risk
Mixed RWA Basket	≤ 70%	≤ 60%	75%	Diversified but still conservative

Parisii-specific advantages that allow tighter (safer) LTVs than a normal bank:

- Collateral is tokenized and held in **isolated bankruptcy-remote sub-pools** → immediate on-chain liquidation possible.
- Real-time oracle pricing + embedded accounting functions → no delayed appraisals.
- Smart-contract enforcement of Hypothecation rules → automatic margin calls and liquidation at predefined LTV thresholds.

FIGURE 16: TOKENIZED EXPECTED LOSS FORMULA PER BASEL III / IV

Parisii uses the same **Expected Loss (EL)** framework as Basel banks, but with materially lower risk parameters because of on-chain automation and over-collateralization.

$$\text{Expected Loss (EL)} = \text{PD} \times \text{LGD} \times \text{EAD}$$

Parisii-adapted baseline values (calibrated to tokenized RWA model):

Parameter	Traditional Bank Baseline	Parisii RWA / Hypothecation Baseline	Reason for Improvement
PD (Probability of Default)	0.5–5% (retail/commercial)	**0.2–1.5%**	Real-time collateral monitoring + automated margin calls reduce default likelihood
LGD (Loss Given Default)	20–60% (secured)	**5–25%**	1:1 reserves + instant on-chain liquidation + no rehypothecation → high recovery
EAD (Exposure at Default)	Balance + potential drawdown	**~100% of current REMIT™ position**	Smart contracts enforce fixed exposure; no undrawn commitments beyond pledged collateral

Net effect: Parisii's **EL is typically 60–80% lower** than a conventional bank for equivalent collateral because:

- LGD is dramatically reduced by automated liquidation.
- PD is lowered by continuous AI bot swarm oversight and reserve attestations.
- The entire process is auditable on-chain (monthly GAAP/IFRS + public disclosures).

FIGURE 17: TOKENIZED LTV BASELINES PER BASEL III / IV

These are **Parisii-recommended conservative baselines** (tighter than many traditional banks due to on-chain automation and no rehypothecation).

PARYS RWA Type	Max Policy LTV	Prime / Low-Risk Target LTV	Automated Liquidation Trigger	Expected LGD (Parisii)	Traditional Bank Equivalent LGD	Key Rationale for Parisii
Gold	75%	≤ 65%	80–82%	8–15%	20–40%	Highest liquidity, stable oracle pricing, physical backing
Energy (PARYS Energy RWA)	70%	≤ 60%	75–78%	12–22%	30–55%	Moderate volatility; energy markets can move quickly, but tokenized and oracle-driven
Water / Carbon / Land	65%	≤ 55%	70–73%	15–28%	35–60%	Lower liquidity, higher valuation & regulatory risk; still benefits from isolation

FIGURE 18: TOKENIZED RWA LTV HIARCUT FOR LOAN VALUE PER BASEL III / IV

Parisii Baseline Parameters (long-run conservative averages):

Parameter	Gold RWA	Energy RWA	Water/Carbon/Land RWA	Traditional Bank Baseline (Secured)
PD (1-year)	0.3 – 1.0%	0.5 – 1.5%	0.8 – 2.0%	0.5 – 5.0%
LGD	8 – 15%	12 – 22%	15 – 28%	20 – 60%
EAD	100% of current REMIT™ position	100% of current REMIT™ position	100% of current REMIT™ position	Balance + potential drawdown (often >100%)

FIGURE 19: PQC PROTOCOL LEVEL ENCRYPTION SCHEME

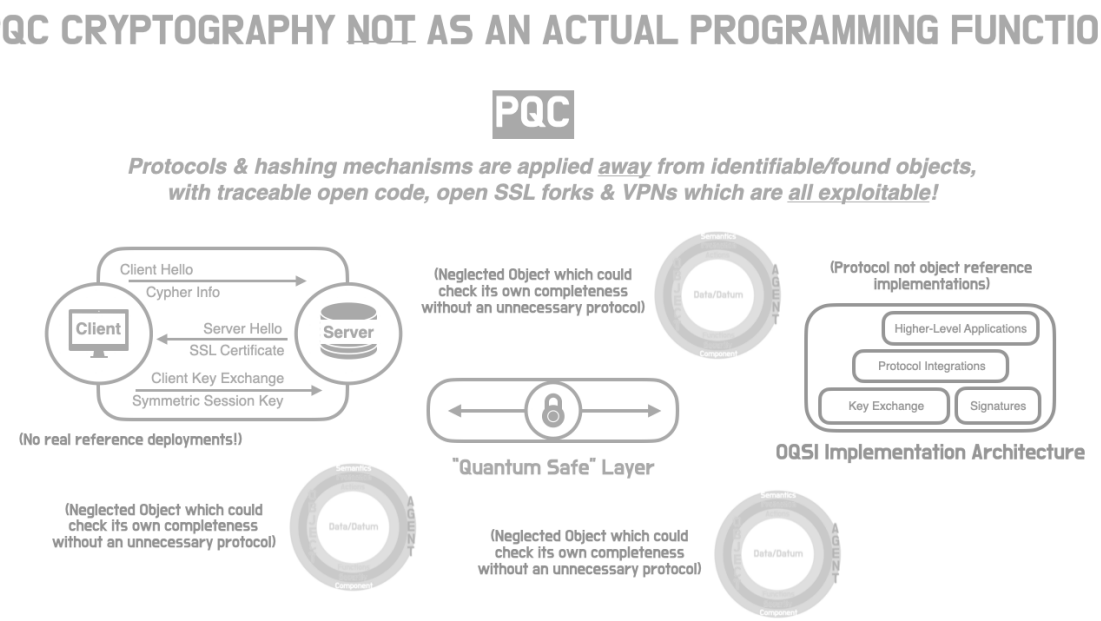

FIGURE 20: W4S OBJECT-LEVEL ENCRYPTION SCHEME

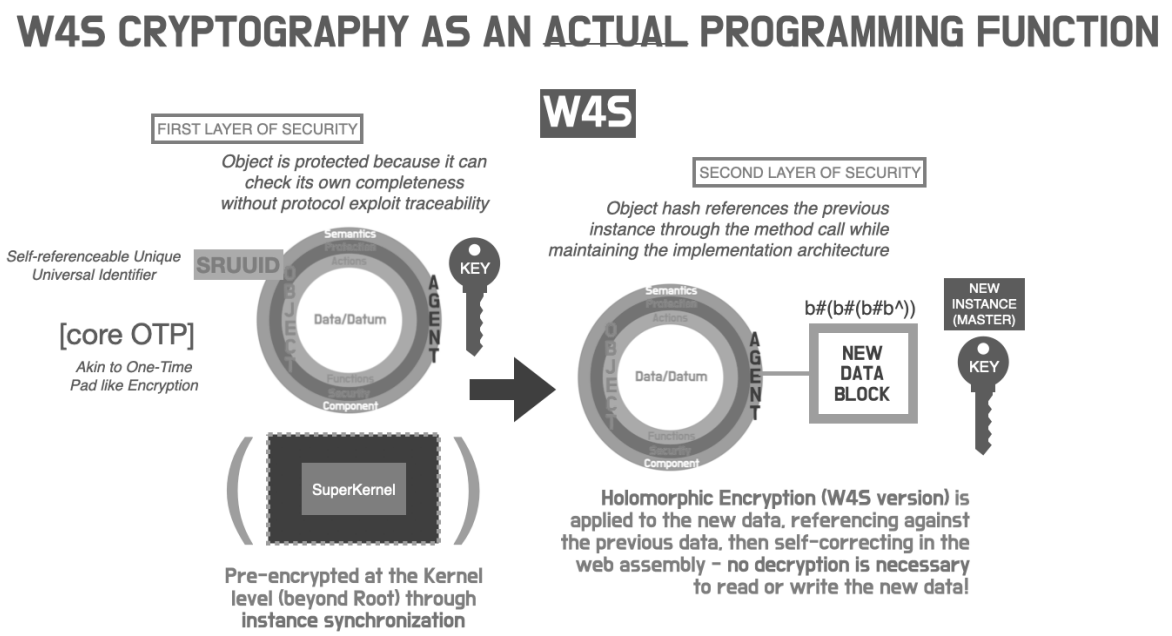

FIGURE 21: OVERALL BANK, TOKENIZATION, STAKING AND LOOPING ARCHITECTURE

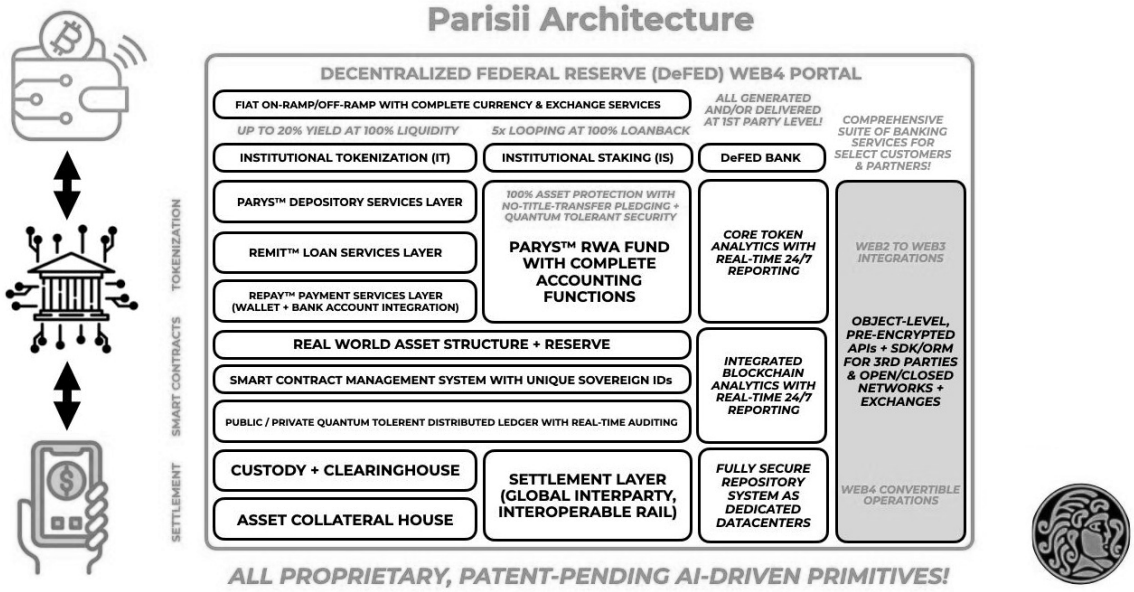

FIGURE 22: COMPLIANCE TO TECH STACK MAP

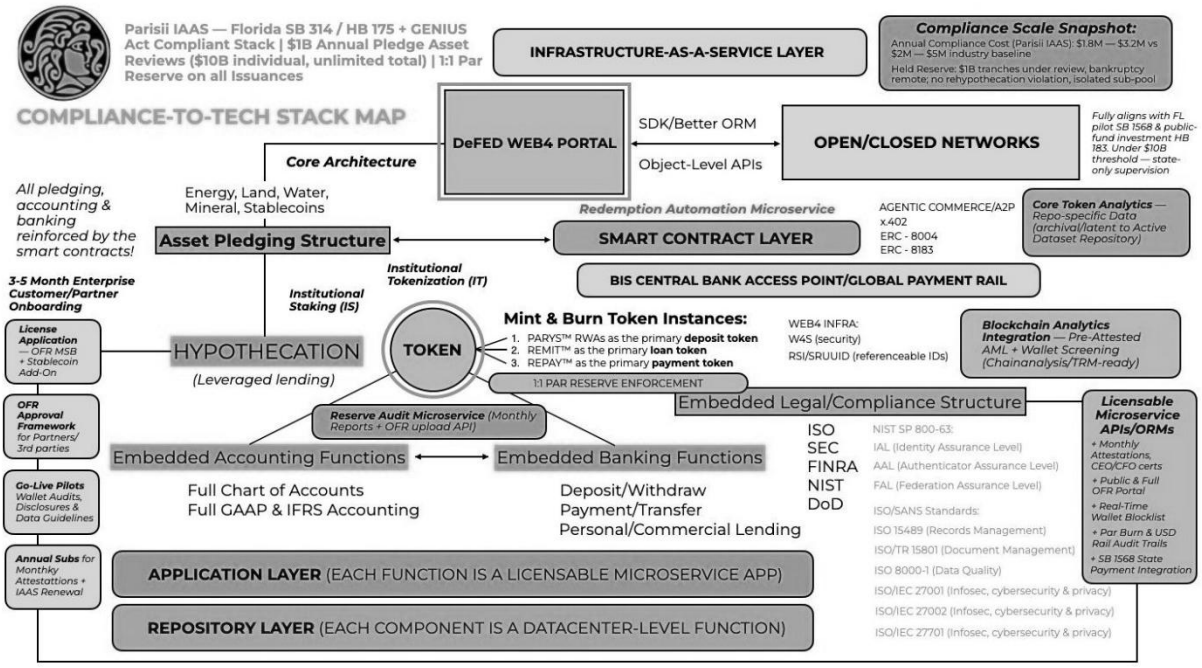

FIGURE 23: WEB4 INFORMATICS GRAPH

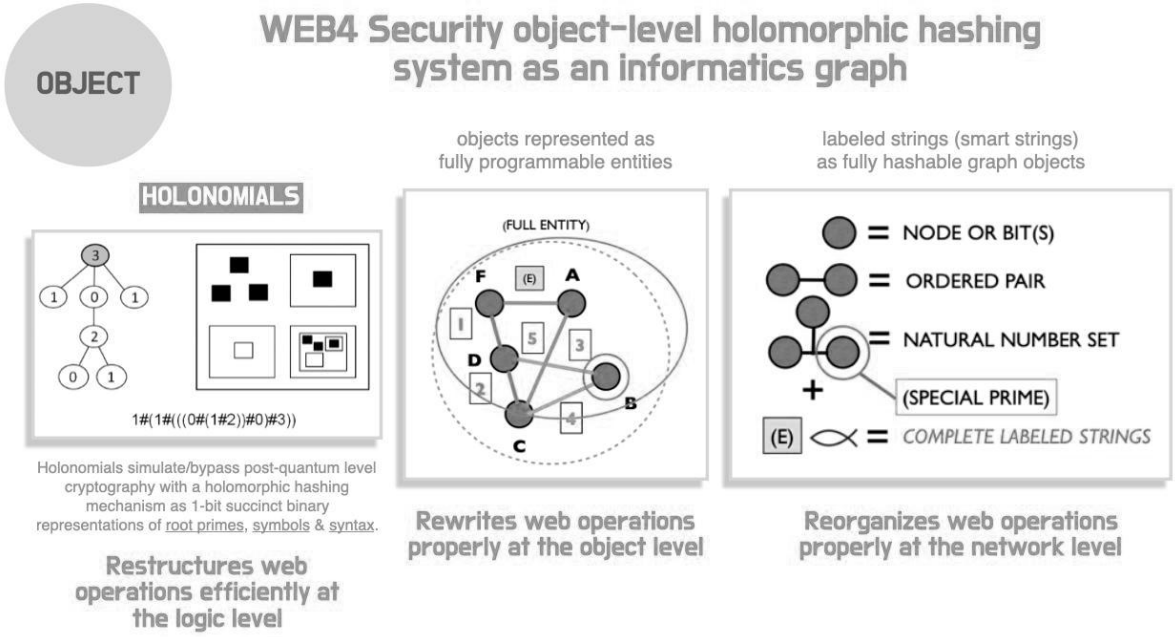

FIGURE 24: WEB4 INFORMATICS HIERARCHY

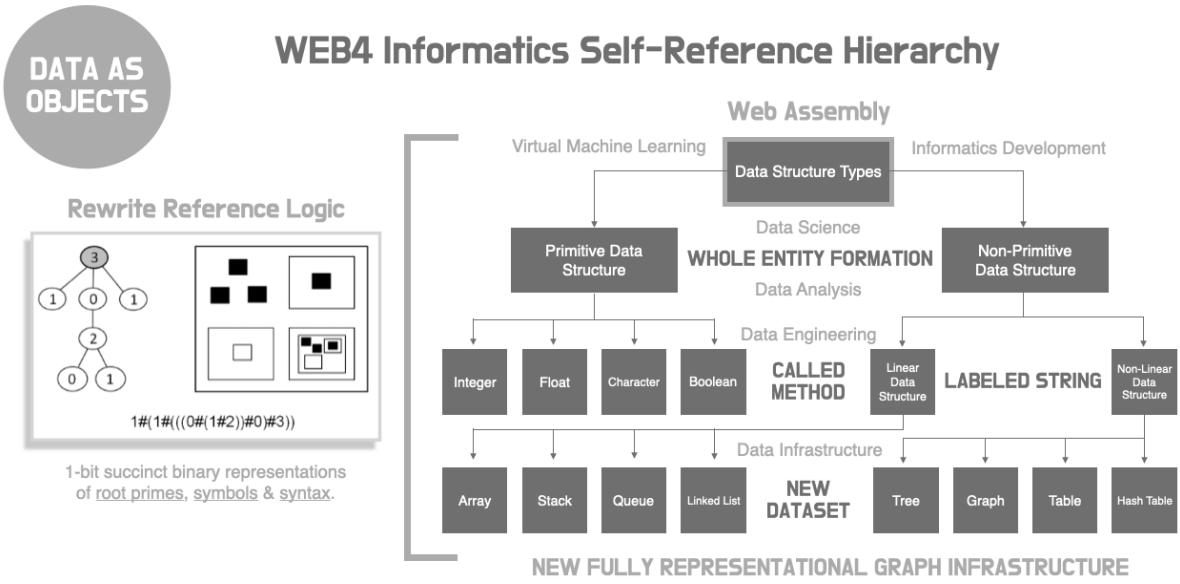

FIGURE 25: WEB4 INFORMATICS STRUCTURAL INDEX