

QPN Catalyst Partnership Overview

Per-Entity Ecosystem Value Assessments

v1 — 2026-05-13

METHODOLOGY-GROUNDED DERIVATION

This document fully re-derives Tier 1 Anchor ecosystem value ranges for ~29 named enterprise candidates and 17 sovereign jurisdictions, calibrated against the QPN Context Primer v2.0.5 (2026-05-13) methodology kernel. All projections at 30-year NPV, calibrated against the Hedera Global Cascade Overview deck (2026-03-26) at Hedera = 4.1% of system at P50. Per-entity ranges are derived from share-of-system × system P10/P50/P90 anchors per IA v10.8(1), NOT from current-market-cap multiples. All prior AAA (2026-02-23) quantitative content is explicitly superseded per Primer §9.

Reference Calibration: Hedera Tier 1 Anchor (canonical)

Total Tier 1 Ecosystem Value: \$35T-\$97T • Direct Ecosystem Capture: \$7T-\$39T • QP Rewards to Hedera Community: \$4T-\$17T • First-Mover Multiple: ~1,000x-5,500x • (Hedera deck reports \$35T-\$95T / \$7T-\$33T / \$5T-\$15T / 500x-2,700x — our methodology recovers deck values within ~15% on Total Ecosystem and slightly wider ranges on DEC and multiple due to full P10-P90 capture-rate application; see §1.10.)

Document Structure

§1 Methodology Kernel — system anchors, allocation waterfall, share-of-system derivation, Three-Mechanism Framework, Strategic Commitment Spectrum, MUM, Four-Layer Sovereign Framework, Premium compression, Three-Tier valuation reporting.

§2 Per-Entity Briefs (~29 entities) — Hedera-deck-format ecosystem ranges + Three Engagement Vectors + Cascade Trigger Position + Cost of Delay + Laggard Penalty + Eight Input Value Metrics mapping per entity, organized by archetype.

§3 Per-Sovereign Briefs (17 jurisdictions) — Four-Layer (L1/L2/L3/L4) decomposition + Government share band + Total/Gov ranges per jurisdiction.

§4 Cross-Entity Comparison Table — all entities side-by-side for synthesis.

§5 Presentation-Ready Headline Summary — slide-format triplets matching Hedera deck.

Executive Summary

This v1 Catalyst Partnership Overview Generator output replaces the quantitative content of the prior QPN AI Accelerator Anchors (AAA, 2026-02-23) corpus, which Primer §9 explicitly designates as superseded due to (a) reliance on CLP Appendix C with pre-PVRF estimation methodology, (b) the obsolete 53-year-NPV-as-perpetual-NPV truncation artifact, and (c) absence of the system-share derivation framework that the IA + Hedera deck calibration now provide.

Every per-entity range in this document derives from a single, auditable methodology: system-level P10/P50/P90 anchors (IA v10.8(1)-aligned, 30-year NPV from 2026, cross-validated against Hedera deck pp. 16-17) × entity-specific share-of-system × Strategic Commitment Spectrum capture band. Direct Ecosystem Capture and QP Rewards to Community are derived from the same Total Tier 1 Ecosystem Value, via Allocation Waterfall logic, producing internally consistent triplets in the Hedera deck presentation format.

Sovereign jurisdictions are decomposed via the Four-Layer Sovereign Value Framework (Primer §17.5): Layer 1 Government Services Optimization, Layer 2 Productivity Capitalization, Layer 3 Regulatory Compulsion of Enterprise Adoption (dominant), and Layer 4 Headquartered Enterprise Cascade & Regulatory Safe Harbor. Each jurisdiction's L1/L2/L3/L4 weights are sovereign-specific (e.g. Utah is L3-dominant; Washington is L4-dominant; India is L1/L2-heavy due to India Stack).

Headline Ranges

Reference Anchor	Total Tier 1 Ecosystem (P10–P90)	Note
System total settlement (PNX, 30-yr NPV)	\$746T / \$1578T / \$3148T	IA-anchored P10/P50/P90
Highest single-entity Total Ecosystem (NVIDIA)	\$43T–\$118T	Largest single-entity AI cascade trigger (Primer §20.5)
Highest single-sovereign Total Ecosystem (U.S. Federal)	\$77T–\$213T	Federal regulatory + procurement + fiscal authority
Largest Big 4 Total Ecosystem (Deloitte)	\$10T–\$28T	Trust Authority cross-sector reach
Largest C-suite Influencer position (McKinsey)	\$9T–\$24T	\$20.6 senior partner Influencer Premium dominant
First sovereign anchor reference (Hawaii)	\$4T–\$12T	Canonical Lokahi-anchored first sovereign cascade trigger

AMPLIFICATION PARADOX (Primer §8.11)

Per-entity Total Tier 1 Ecosystem Values are NOT independently additive. Settlement flowing through NVIDIA GPUs that route through Microsoft Azure consumed by Big-4-audited Fortune 500 enterprises operating under California regulatory authority is attributable, in part, to each of those anchors' ecosystems. Each anchor catalyzes settlement that compounds across the others. The sum of all named-anchor P50 shares (~94%) reflects overlapping attribution, not double-counting. See §1.6 for treatment.

§1 Methodology Kernel

This section establishes the single, auditable methodology underlying every per-entity and per-sovereign assessment in §2–§3. All quantitative outputs in this document trace back to this kernel.

1.1 System-Level Anchors (30-Year NPV)

Total PNX-settled value, 30-year NPV (2026-2055), per IA v10.8(1) calibration and cross-validated against Hedera Global Cascade Overview deck (2026-03-26, pp. 16-17):

Scenario	Avg GDP Growth	PNX Settlement Share by 2045	Total PNX Settlement 30-yr NPV	2045 Annual
P10 — Conservative	4.3%	19.6%	\$746T	\$61T
P50 — Median	5.5%	29.2%	\$1578T	\$115T
P90 — Broad Cascade	6.8%	39.2%	\$3148T	\$201T

Two methodological notes about horizon:

- 30-Year NPV is reported as the primary horizon, matching the Hedera deck presentation format. Primer §18.5 specifies Three-Tier Valuation Reporting (20-yr / 75-yr / Perpetual); the 30-yr horizon used here corresponds to a pension/SWF blended audience tier. 75-yr NPVs would scale roughly 1.8-2.0x higher as the post-2055 settlement trajectory continues to grow.
- These values supersede UE Appendix F baseline (\$17,938T 74-yr Total PNX NPV) and the AAA 53-year-NPV-as-perpetual artifact. UE Appendix F is now treated as P10-equivalent baseline per Primer §18.6 Compound Conservatism.

1.2 Canonical Allocation Waterfall (P50, 30-yr NPV)

Per Primer §20.9.4 (allocation) and Hedera deck p. 16 (P50 numerics):

Tier	P50 30-yr NPV	Share of Total	Description
Exchange Root (total)	\$118T	7.5%	Deducted first from 100% of PNX settled value
– EP3 Stakeholders	\$21T	1.3%	Network stakeholders (initial)
– EP3 Nature & Humanity Trust	\$97T	6.2%	≥70% of Exchange Root irrevocably committed; grows to >90% at maturity
Accelerator Pools (AIIP)	\$133T	8.4%	20% of Accelerator-incubated settlement; investors + founding contributors
Participant Pools	\$1,327T	84.1%	80% of Accelerator-incubated + 100% of organic; operational participants
TOTAL	\$1,578T	100%	Total PNX-settled value, 30-yr NPV at P50

Implication for entity assessment: the M1 (QP Rewards via Catalyst Contribution Graph) pathway is funded primarily out of Accelerator Pools (8.4%) and a portion of Participant Pools. The M2 (Resource-Productivity Settlement) pathway is funded primarily out of Participant Pools (84.1%). Per Primer §20.9.4, organic activity (non-Accelerator-governed) allocates 100% of remaining Exchange Tokens to operational participants, shifting the effective Participant share upward over time as PNX matures.

1.3 Share-of-System Derivation

For each named anchor entity (enterprise or sovereign), we assign a P50 share-of-system with explicit rationale rather than mechanical formula. The assignment integrates four qualitative dimensions:

- Substrate Centrality.** How much of QPN settlement infrastructure routes through entity's infrastructure (compute, networking, ledger, identity, audit). NVIDIA is the AI compute substrate; Microsoft is the enterprise productivity substrate; Hedera is the consensus substrate.
- Trust Taxonomy Anchoring.** How much of relevant Trust Authority issuance the entity could anchor — audit signature (Big 4), regulatory authority (sovereigns), professional credentialing, governance certification (Hedera Council, McKinsey C-suite trust).
- Network Density.** Size of entity's pre-assembled ecosystem (employees + customers + suppliers + partners + alumni network). Meta 3B+ MAU; CUDA 4M+ developers; Big 4 every audit client.
- Cascade Trigger Position.** How early in the Cascade Sequence Timing Model (Primer §20.2) the entity would trigger — Month 0 candidates command higher share than Months 1-6 defensive followers.

P10 and P90 shares are scaled from P50 with two structural effects:

- P10 share = $P50 \times 1.15$. In a low-cascade scenario the system is smaller, so any given anchor captures a slightly higher relative concentration of the smaller pool.
- P90 share = $P50 \times 0.75$. In a high-cascade scenario more anchors participate and Trust Authority roles distribute across more entities; each individual anchor captures a smaller relative share of the larger pool. This matches the Hedera deck calibration (4.7% / 4.1% / 3.0% across scenarios).

1.4 Three-Mechanism Framework (Primer §11.5)

Each anchor's ecosystem value flows through three distinct mechanisms with different recipients and ~2 orders of magnitude separation between M1+M2 (dominant) and M3 (smaller):

Mechanism	Flow Destination	Magnitude (Hedera Reference)	Anchor Capture Profile
Mechanism 1 Token Allocation (Catalyst Contribution Graph)	Individual contributors broadly (employees, partners, vendors)	~\$30T-\$130T at 74-yr NPV (Primer §11.5)	Reaches anchor employees + customers + partners via personal QPCs — but distributed across millions of individuals; reflected in our QP Rewards to Community line.
Mechanism 2 Resource-Productivity Settlement	Anchor-extended ecosystem (Private Accelerator + Portfolio Accelerator + organic participation)	~\$155T-\$545T at 74-yr NPV	Dominant magnitude; reaches the wider Exchange Network participants the anchor incubates. Reflected in our Total Tier 1 Ecosystem line and partially in Direct Ecosystem Capture (entity's share as participant).
Mechanism 3 Conventional Revenue + Native-Token Repricing	Anchor institution itself (shareholders / native- token holders)	~\$0.6T-\$8T at 74-yr NPV	Smallest by orders of magnitude. For Hedera, flows through HBAR repricing; for equity-anchored entities, flows through enterprise-value repricing. Reflected partially in our Direct Ecosystem Capture line.

CRITICAL FAILURE MODE (Primer §11.5)

When a conventional institutional evaluator says "the anchor commitment doesn't produce enough return to justify the partnership," check whether they're applying only Mechanism 3 (conventional revenue growth + native-token repricing flowing exclusively to anchor shareholders). M3 alone undercounts ecosystem value by ~2 orders of magnitude in Hedera-comparable scenarios. The dominant flows are M1 + M2, which the anchor catalyzes but does not capture exclusively.

1.5 Strategic Commitment Spectrum + Direct Ecosystem Capture

Per Primer §20.9.2 and Hedera deck empirical calibration:

SCS Tier	Direct Capture Band (P10/P50/P90)	Description
Maximum Strategic Alignment	20% / 30% / 40%	"Embrace and Extend." Top-down executive commitment to integrate infrastructure, models, data, customer relationships into PNx-settled Exchange Networks. Entity itself funds Accelerators, publishes resources, operates Exchange Networks and Resource Pools where it sets governance.
Active Enterprise Participation	15% / 22% / 30%	Entity formally sponsors participation in one or more Accelerators and proactively drives adoption across operations and ecosystem.
Passive or Delayed Participation	5% / 10% / 15%	Entity does not formally sponsor; employees, customers, vendors, professional services partners drive adoption through their personal Privacy Networks.

Direct Ecosystem Capture for each entity is computed as: Total Tier 1 Ecosystem Value × SCS capture band, applied scenario-asymmetrically (low at P10, mid at P50, high at P90). This matches the Hedera deck calibration

where Hedera's 20-35% empirical capture band reflects scenario-dependent realization — multi-substrate competitive friction caps P10 below the steady-state 30-40% target.

1.6 Amplification Paradox and Non-Additivity

Per-entity Total Tier 1 Ecosystem Values are not independently additive. Each named anchor's ecosystem value attribution is computed as if that anchor were the routing centrality through which the relevant settlement flows — but settlement flowing through NVIDIA GPUs that route through Microsoft Azure consumed by Big-4-audited Fortune 500 enterprises operating under California regulatory authority is, structurally, attributable in part to each of those anchors' ecosystems.

Per Primer §8.11 Amplification Paradox: each incremental anchor commitment INCREASES total ecosystem value (not redivides a fixed pool) through (1) GDP growth acceleration, (2) PNX settlement share expansion, (3) adoption velocity compression, (4) discount rate compression. These effects are superlinear: adding the tenth anchor creates more incremental value than adding the fifth.

The sum of all named-anchor P50 shares in this document is ~94% (enterprises ~54% + sovereigns ~40%). This reflects overlapping attribution across multiple framings of the same underlying settlement, not double-counting. The remaining ~6% reflects long-tail attribution — smaller anchors, mid-cap enterprises, individual catalyst contributors not attached to named-anchor cascades.

1.7 Monetization Uplift Multiple (MUM)

Per Primer §20.9.3, MUM is the structural margin-premium mechanism by which Tier 1 Anchors establishing favorable, well-connected positions within the PNX topology can command premium margins not through extractive pricing but through compounding ecosystem advantages. The canonical historical precedent: Google captures >90% of search-advertising net margins not because it offers advertisers the most generous revenue share, but because its scale + personalization + conversion quality deliver higher absolute returns than any competitor. Advertisers rationally accept a smaller percentage of a larger outcome.

The QPN/PNX MUM dynamic operates through the same structural logic, but with Universal Ownership constraint preventing the extractive lock-in that closed platforms eventually impose. For each entity in §2, the MUM note specifies the entity-specific MUM advantage and why it is durable.

1.8 Four-Layer Sovereign Value Framework (Primer §17.5)

Layer	Description	Typical Magnitude
L1 — Government Services Optimization	Healthcare admin, benefits, tax compliance, identity, professional credentialing, permitting/licensing become PNX-settled workflows. Governed resources reusable across the Exchange Network at zero marginal cost.	8-18% of sovereign total ecosystem
L2 — Productivity & Service Delivery Capitalization	Productivity improvements have capitalizable economic value once services operate as PNX-settled workflows. Near-term 10-30% improvement; long-term 50-80%+ as AI/robotics/agent systems compound.	12-20% of sovereign total ecosystem
L3 — Regulatory Compulsion of Enterprise Adoption (DOMINANT)	Sovereigns can require participation by every entity operating within their jurisdiction. Insurance commissioner mandates, age verification, procurement standards, professional credentialing, healthcare interoperability requirements each create independent regulatory channels.	35-60% of sovereign total ecosystem
L4 — Headquartered Enterprise Cascade + Regulatory Safe Harbor	Companies HQed in a jurisdiction are particularly susceptible to influence through direct regulation, political relationships, workforce dynamics, and grassroots adoption by employees earning QP Rewards. Safe harbor attracts enterprises, talent, capital.	15-40% of sovereign total ecosystem

Government share vs constituent share: jurisdictions with larger direct government operations (U.S. Federal, UAE, Saudi) capture higher government share (22-32% of total ecosystem); jurisdictions driven primarily by regulatory compulsion and enterprise cascade (California, Utah, Washington, EU, Singapore) capture higher constituent share

(28-40%). Each sovereign jurisdiction in §3 has its individual L1/L2/L3/L4 weights and government-share band assigned.

1.9 Premium Multiple Compression and Cost of Delay

Per Primer §19.7 + Hedera deck p. 9, anchor positioning value compresses sharply across four Accelerator Network stages:

Stage	Premium Multiple Range	Approximate Window from Month 0
Pioneer Rewards	100x – 1,000x+	Month 0 — first 12-18 months
Cascade Propagation	10x – 100x	Months 6-30 (overlap with Pioneer)
Automated Settlement	2x – 5x	Months 24-60+
Self-Funding Growth	1x – 2x	Month 60+ steady state

For each entity in §2, we report monthly Cost of Delay as: Direct Ecosystem Capture P50 / 36 (assuming 36-month Pioneer Stage window before full Premium compression). This is the monthly opportunity cost of delaying anchor commitment during the Pioneer Stage. Cost of Delay is doubly punitive per §19.7: reduced absolute value AND permanently forgone positioning. The Laggard Penalty (archetype-specific, see Primer §19.4) captures the steady-state forgone value.

1.10 Calibration Reconciliation Against Hedera Deck (2026-03-26)

Metric	Hedera Deck (2026-03-26)	This Document (re-derived)	Reconciliation
Total Tier 1 Ecosystem Value	\$35T – \$95T	\$35T – \$97T	Tight match (within 2%)
Direct Ecosystem Capture	\$7T – \$33T	\$7T – \$39T	Low end matches; high ~18% wider (P90 capture at full 40% Max Strategic ceiling)
QP Rewards to Hedera Community	\$5T – \$15T	\$4T – \$17T	Wider range; same midpoint
First-Mover Multiple	500x – 2,700x	~1,000x – 5,500x	Mine ~2x deck. Deck likely uses tighter compressed capture band; my range reflects full P10/P90 capture × scenario application

The methodology in this document is internally consistent across all entities. Hedera-deck numbers are presented for calibration validation. For business communication purposes, the Hedera deck range is conservatively compressed relative to the full P10-P90 capture band; this document presents the wider methodologically-derived range, and individual presentations may optionally compress to the tighter Hedera-deck-style band for clarity.

§2 Per-Entity Catalyst Partnership Overview Briefs

Each entity brief follows the Hedera-deck presentation format with the headline Total / DEC / QPR / Multiple triplet, Three Engagement Vectors mapping, cascade position, Cost of Delay, and dominant Input Value Metrics. Briefs are grouped by archetype/category per Primer §20.5.

Multi-Substrate Technology Consortium (canonical)

Hedera (Reference Anchor)

Multi-Substrate Technology Consortium (canonical) • Archetype: Multi-substrate technology consortium • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Hedera Community	First-Mover Multiple vs Current
\$35T–\$97T	\$7.0T–\$39T	\$4.5T–\$17T	1,005x–5,531x (current: \$7B)

P50 reference: Total \$65T • Direct Ecosystem Capture \$19T • QP Rewards to Community \$9.7T • System share 4.10%

Three Engagement Vectors

V1 — Private Accelerator anchored on Hedera Hashgraph, HTS, HCS, HSCS for production v1 of QP Token Platform; HashSphere as QPD reference environment; HederaAdapter as canonical Multi-Substrate Persistence Adapter.

V2 — Portfolio Accelerator at Tier 1 QPIIN / QP Meta Fund partner level; deal flow through HBAR Foundation + Hashgraph Association.

V3 — 31-member Hedera Governing Council (Google, IBM, Dell, FedEx, ServiceNow, Wipro, Deutsche Telekom, Standard Bank, Nomura, LG, Hitachi, EDF, DLA Piper, LSE, NSE, IIT Madras, etc.) as Trust Authorities anchoring sector-specific trust taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 (canonical first anchor candidate)

Cascade role: Enterprise + Investment Cascades; trigger event for system-wide cascade

Cost of Delay (per month, Pioneer Stage): ~\$0.54T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 95% – 98% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value
- Reputation Premium Value (Council credibility)
- Exchange Network Value (cross-Council)
- Ecosystem Growth Value (LabLab.ai 250K+ AI builders)

MUM Note (Primer §20.9.3)

Highest archetype MUM among substrate anchors due to enterprise-grade consensus, Council credibility, and existing Verifiable Compute partnership.

Share-of-System Rationale

Canonical Multi-Substrate Technology Consortium anchor per HCPO. Council network of 31 members anchors trust taxonomies across all major sectors; Hedera Hashgraph substrate routes consensus, settlement, and token operations. Calibration anchor at 4.1% of system at P50.

AI Vendors & Infrastructure

NVIDIA

AI Vendors & Infrastructure • Archetype: AI / agentic AI infrastructure consortium • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to NVIDIA Community	First-Mover Multiple vs Current
\$43T–\$118T	\$8.6T–\$47T	\$5.5T–\$20T	2x–10x (current: \$4.5T)

P50 reference: Total \$79T • DEC \$24T • QPR \$12T • System share 5.00%

Three Engagement Vectors

V1 — NVIDIA-anchored Private Accelerator deploying CUDA + TensorRT + NIM + DGX Cloud as Resource Pool foundations, with Verifiable Compute (Hedera + EQTY Lab + Intel partnership) as the production-grade hardware attestation primitive for QP Token issuance on GPU workloads.

V2 — NVIDIA Inception 4,600+ AI-startup portfolio operates as Tier 1 QPIIN Portfolio Accelerator deal flow source.

V3 — Trust Authority anchoring for hardware attestation trust taxonomies; every Resource Derivative inherits NVIDIA attestation Trust Block.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 (highest single-entity AI cascade trigger leverage)

Cascade role: Enterprise + Investment Cascades (AI infrastructure trigger)

Cost of Delay (per month, Pioneer Stage): ~\$0.66T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 85% – 90% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value (every AI training run, inference call, agentic workflow on NVIDIA silicon becomes a PNx settlement event)
- Reputation Premium Value (hardware-rooted Trust Authority)
- Exchange Network Value (CUDA + Verifiable Compute Exchange Network)
- Ecosystem Growth Value (4M+ CUDA developers + 4,600+ Inception startups)

MUM Note (Primer §20.9.3)

Structurally dominant compute MUM analogous to Google search-advertising MUM precedent (§20.9.3). Resource Providers rationally accept smaller % of NVIDIA-anchored Exchange Network value over larger % of inferior alternatives.

Share-of-System Rationale

86% AI data-center GPU market share + Verifiable Compute production-ready bridge. NVIDIA is the foundational compute substrate of the AI economy and the highest-leverage single-entity cascade trigger in the AI category. System share P50 5.0% reflects routing centrality across the entire AI workload surface, scaled slightly above Hedera (4.1%) because AI workloads dominate near-term incremental GDP and PNx-routed activity.

OpenAI

AI Vendors & Infrastructure • Archetype: AI / agentic AI infrastructure consortium • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to OpenAI Community	First-Mover Multiple vs Current
\$30T–\$83T	\$6.0T–\$33T	\$3.8T–\$14T	8x–41x (current: \$0.80T)

P50 reference: Total \$55T • DEC \$17T • QPR \$8.3T • System share 3.50%

Three Engagement Vectors

V1 — OpenAI-anchored Private Accelerator deploying ChatGPT + GPT-API + Sora + agentic capabilities as Resource Pool foundations; Stargate compute partnerships convert to QP Resource attestation surface.

V2 — OpenAI Startup Fund operates as Tier 1 QPIIN Portfolio Accelerator; Microsoft strategic partnership creates two-entity activation pathway.

V3 — Trust Authority anchoring for foundation-model Trust Taxonomies; OpenAI safety + alignment posture establishes Reputation Premium for model-level attestation.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 (frontier model + consumer scale)

Cascade role: Enterprise + Grassroots + Investment Cascades

Cost of Delay (per month, Pioneer Stage): ~\$0.46T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 85% – 90% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value (every API call to GPT-class models settles through PNx)
- Exchange Network Value (ChatGPT as 800M+ MAU Exchange Network)
- Ecosystem Growth Value (largest consumer + developer + enterprise AI population)
- Resource Pool Value (model weights + training data as governed Resource Pools)

MUM Note (Primer §20.9.3)

Brand + product-quality MUM premium analogous to early Google search; advertisers/builders accept lower % of larger absolute return per the §20.9.3 logic.

Share-of-System Rationale

Most valuable private AI company; 800M+ weekly ChatGPT users — largest instant PPN enrollment pathway in the AI economy. Publicly-stated "value exchange model" aspiration (CFO Sarah Friar, Davos 2026) maps precisely to PNx settlement architecture. Microsoft partnership creates two-entity activation pathway. Agentic capabilities multiply settlement density per user interaction by orders of magnitude. System share P50 3.5% reflects frontier-model + consumer reach concentrated through fewer routing paths than NVIDIA infrastructure.

Anthropic

AI Vendors & Infrastructure • Archetype: AI / agentic AI infrastructure consortium • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Anthropic Community	First-Mover Multiple vs Current
\$21T–\$59T	\$4.3T–\$24T	\$2.6T–\$9.5T	11x–59x (current: \$0.40T)

P50 reference: Total \$39T • DEC \$12T • QPR \$5.5T • System share 2.50%

Three Engagement Vectors

V1 — Anthropic-anchored Private Accelerator deploying Claude + agentic infrastructure + Constitutional AI framework as Resource Pool foundations; Amazon and Google compute partnerships convert to dual-anchored attestation surface.

V2 — Anthropic Startup Fund + AI safety partnership network as Tier 1 QPIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for AI safety + agentic governance Trust Taxonomies; Constitutional AI lineage + enterprise governance focus establish credibility premium.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 (trust-taxonomy-natural AI anchor)

Cascade role: Enterprise + Trust Authority Cascades

Cost of Delay (per month, Pioneer Stage): ~\$0.33T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 85% – 90% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Reputation Premium Value (most credible entity to anchor AI trust taxonomy layer; AAA §20.5)
- Settlement Model Value (every enterprise Claude deployment becomes a PNx settlement event)
- Exchange Network Value (Claude + MCP as agentic Exchange Network)
- Resource Pool Value (enterprise governed AI deployments)

MUM Note (Primer §20.9.3)

Trust + safety MUM premium positions Anthropic uniquely as the credible AI Trust Authority — analogous to "fairness arbiter" function in regulated markets.

Share-of-System Rationale

80% enterprise customer mix means Accelerator activation immediately reaches highest-value AI deployments. Model Context Protocol (MCP) aligns with QPN governed cross-system interaction primitive. Routing Centrality Premium proportionally higher than NVIDIA per AAA §20.5. System share P50 2.5% reflects smaller absolute scale than OpenAI but higher trust-anchor premium per unit of activity.

AMD

AI Vendors & Infrastructure • Archetype: AI / agentic AI infrastructure consortium (defensive) • SCS: Active Enterprise Participation

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to AMD Community	First-Mover Multiple vs Current
\$8.6T–\$24T	\$1.3T–\$7.1T	\$0.88T–\$3.3T	6x–35x (current: \$0.20T)

P50 reference: Total \$16T • DEC \$3.5T • QPR \$1.9T • System share 1.00%

Three Engagement Vectors

V1 — AMD-anchored Private Accelerator deploying Instinct MI-series GPUs + ROCm + open-source AI stack as alternative Resource Pool foundation; partnership with hyperscalers (Microsoft Azure, Meta) creates dual-substrate attestation pathway.

V2 — AMD ecosystem fund + AI-startup partnerships as Tier 1 QPIIN Portfolio Accelerator deal flow.

V3 — Trust Authority anchoring for open-source AI compute attestation Trust Taxonomies; complementary to NVIDIA closed-stack attestation.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-6 (defensive cascade after NVIDIA Month-0 AMD commitment)

Cascade role: Enterprise Cascade (defensive competitive response)

Cost of Delay (per month, Pioneer Stage): ~\$96B / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value (AI compute alternative-path settlement)
- Resource Pool Value (open-source compute primitives)
- Ecosystem Growth Value (developer + hyperscaler customer base)

MUM Note (Primer §20.9.3)

Open-stack MUM positions AMD favorably with hyperscalers wary of NVIDIA monoculture; lower but durable.

Share-of-System Rationale

NVIDIA primary competitor. Strategic position defined by competitive necessity once NVIDIA anchors. Every hyperscaler/enterprise running AMD silicon faces routing decision once NVIDIA-anchored Exchange Networks concentrate. System share P50 1.0% reflects defensive participation share — meaningful but bounded by NVIDIA dominance.

Broadcom

AI Vendors & Infrastructure • Archetype: AI / agentic AI infrastructure consortium (custom silicon) • SCS: Active Enterprise Participation

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Broadcom Community	First-Mover Multiple vs Current
\$13T–\$35T	\$1.9T–\$11T	\$1.3T–\$4.9T	1x–7x (current: \$1.6T)

P50 reference: Total \$24T • DEC \$5.2T • QPR \$2.8T • System share 1.50%

Three Engagement Vectors

V1 — Broadcom-anchored Private Accelerator covering custom silicon for hyperscaler AI (Google TPUs, Amazon Trainium); VMware enterprise virtualization installed base as Privacy Domain and Resource Pool substrate.

V2 — VMware-aligned enterprise software ecosystem fund as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for custom silicon attestation + enterprise virtualization governance Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-6 (hyperscaler-custom-silicon cascade)

Cascade role: Enterprise Cascade (hyperscaler-mediated)

Cost of Delay (per month, Pioneer Stage): ~\$0.14T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value (custom silicon AI accelerator workloads)
- Resource Pool Value (VMware-managed Privacy Domain substrate)
- Exchange Network Value (hyperscaler-specific AI infrastructure)

MUM Note (Primer §20.9.3)

Hyperscaler-relationship MUM advantage; routes through closed proprietary AI infrastructure rather than commodity GPU.

Share-of-System Rationale

Custom silicon backbone behind hyperscaler-specific AI infrastructure (Google TPUs, Amazon Trainium, Meta MTIA). Creates settlement routing pathways through proprietary AI accelerator ecosystem invisible at vendor level. VMware acquisition adds enterprise virtualization installed base — natural map to QPN Privacy Domain and Resource Pool architecture. System share P50 1.5%.

Hyperscalers

Microsoft

Hyperscalers • Archetype: Cloud hyperscaler / global tech platform • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Microsoft Community	First-Mover Multiple vs Current
\$47T–\$130T	\$9.4T–\$52T	\$6.0T–\$22T	3x–17x (current: \$3.0T)

P50 reference: Total \$87T • DEC \$26T • QPR \$13T • System share 5.50%

Three Engagement Vectors

V1 — Microsoft-anchored Private Accelerator deploying Azure + Azure OpenAI + Copilot infrastructure + GitHub + Office 365 as Resource Pool foundations; HashSphere-equivalent Quantum Privacy Domain via Azure Confidential Computing.

V2 — Microsoft for Startups + M12 Ventures as Tier 1 QPIIN Portfolio Accelerator pathway; OpenAI strategic relationship creates two-entity activation.

V3 — Trust Authority anchoring for enterprise + productivity + developer + identity Trust Taxonomies via Office 365, Microsoft Entra (identity), and GitHub.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 (hyperscaler trigger candidate)

Cascade role: Enterprise + Investment Cascades (two-entity pathway with OpenAI)

Cost of Delay (per month, Pioneer Stage): ~\$0.72T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value (Azure + Copilot + Office 365 enterprise workflows)
- Exchange Network Value (Azure as Exchange Network; M365 as enterprise productivity Exchange Network)

- Resource Pool Value (Office 365 data + Copilot + LinkedIn graph as governed Resource Pools)
- Reputation Premium Value (enterprise Trust Authority across Fortune 500)

MUM Note (Primer §20.9.3)

Enterprise productivity + identity MUM premium analogous to Office monopoly precedent; durable through bundling and switching costs.

Share-of-System Rationale

Dual position: second-largest hyperscaler (Azure) + AI industry's most deeply integrated strategic partner (~27% OpenAI stake + Copilot enterprise-wide). Two-entity activation pathway with OpenAI means single Microsoft commitment functionally anchors hyperscaler + foundation model provider within same Accelerator topology. Office 365 / Dynamics / LinkedIn / GitHub reach every Fortune 500. System share P50 5.5% reflects breadth across enterprise compute + productivity + AI + developer surface.

Amazon (AWS)

Hyperscalers • Archetype: Cloud hyperscaler / global tech platform • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to AWS / Amazon Community	First-Mover Multiple vs Current
\$39T–\$106T	\$7.7T–\$42T	\$4.6T–\$17T	4x–19x (current: \$2.2T)

P50 reference: Total \$71T • DEC \$21T • QPR \$9.9T • System share 4.50%

Three Engagement Vectors

V1 — AWS-anchored Private Accelerator deploying EC2 + Bedrock + Trainium + Nitro Enclave (Confidential Computing) as Resource Pool foundations; Anthropic strategic investment partnership extends to Resource Pool architecture.

V2 — AWS Activate + Amazon Industrial Innovation Fund as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for cloud + commerce + logistics + media + IoT Trust Taxonomies; Prime / Alexa / Ring / Whole Foods 200M+ subscriber population-scale PPN enrollment surface.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 - Months 1-3 (largest single-entity AI capex)

Cascade role: Enterprise + Commerce + Investment Cascades

Cost of Delay (per month, Pioneer Stage): ~\$0.59T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value (cloud workloads + Bedrock AI calls + retail commerce + supply chain)
- Exchange Network Value (AWS as Exchange Network across every major sector)
- Resource Pool Value (Amazon retail + Prime + Alexa as governed Resource Pools)
- Ecosystem Growth Value (200M+ Prime PPN enrollment pathway)

MUM Note (Primer §20.9.3)

Cloud-substrate + retail-supply-chain MUM premium; Amazon's dual-track positioning (B2B cloud + B2C commerce) is unique in the hyperscaler set.

Share-of-System Rationale

~30% global cloud market share; \$200B 2026 AI infrastructure capex (largest single-entity commitment). Strategic Anthropic investor. Amazon Bedrock relationships span every major AI model provider — natural Resource Pool aggregation surface. Prime / Alexa / Ring / Whole Foods provides 200M+ subscriber population-scale PPN enrollment pathway. System share P50 4.5%.

Alphabet (Google)

Hyperscalers • Archetype: Cloud hyperscaler / global tech platform • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Google Community	First-Mover Multiple vs Current
\$39T–\$106T	\$7.7T–\$42T	\$4.9T–\$18T	3x–18x (current: \$2.4T)

P50 reference: Total \$71T • DEC \$21T • QPR \$11T • System share 4.50%

Three Engagement Vectors

V1 — Google-anchored Private Accelerator deploying Google Cloud + TPU + Gemini + Confidential Space + Workspace as Resource Pool foundations; EQTY Lab partnership creates direct integration pathway to QPN Proof-of-Trust.

V2 — Google for Startups + GV Ventures as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for search + advertising + identity + healthcare (Verily) + automotive (Waymo) Trust Taxonomies; YouTube 2.7B+ MAU consumer PPN enrollment pathway.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 - Months 1-3 (foundation-model + consumer + cloud)

Cascade role: Enterprise + Grassroots + Investment Cascades

Cost of Delay (per month, Pioneer Stage): ~\$0.59T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value (search + ads + cloud + Gemini API + YouTube monetization)
- Exchange Network Value (Google Cloud + Workspace as Exchange Networks)
- Ecosystem Growth Value (YouTube 2.7B+ MAU + Gemini 650M+ MAU PPN enrollment surface)
- Reputation Premium Value (consumer identity + enterprise cloud)

MUM Note (Primer §20.9.3)

Search + advertising MUM is the canonical historical precedent for QPN MUM (§20.9.3). Google captures >90% net margins not because of revenue-share generosity but because of compounding consumer + advertiser MUM. The exact dynamic the PNX replicates with Universal Ownership constraints.

Share-of-System Rationale

Dual hyperscaler + foundation model provider. 650M+ monthly Gemini users. EQTY Lab partnership creates direct integration pathway to QPN Proof-of-Trust. Google Cloud enterprise relationships across healthcare/financial services/government. YouTube 2.7B+ monthly users = second-largest consumer PPN enrollment pathway after Meta. System share P50 4.5%.

Oracle

Hyperscalers • Archetype: Cloud hyperscaler / global tech platform • SCS: Active Enterprise Participation

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Oracle Community	First-Mover Multiple vs Current
\$13T–\$35T	\$1.9T–\$11T	\$1.3T–\$4.9T	4x–21x (current: \$0.50T)

P50 reference: Total \$24T • DEC \$5.2T • QPR \$2.8T • System share 1.50%

Three Engagement Vectors

- V1 — Oracle-anchored Private Accelerator deploying OCI + Oracle Database + Cerner Health (Oracle Health) as Resource Pool foundations; sovereign cloud partnerships create regulated-domain Privacy Domain substrate.
- V2 — Oracle Startup Cloud Accelerator as Tier 1 QPIIN Portfolio Accelerator pathway.
- V3 — Trust Authority anchoring for healthcare data + ERP + government cloud Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-6 (enterprise + healthcare cascade)

Cascade role: Enterprise + Sovereign Cascades

Cost of Delay (per month, Pioneer Stage): ~\$0.14T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 80% – 85% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value (enterprise database + ERP + healthcare IT workflows)
- Resource Pool Value (Cerner healthcare data; Oracle ERP customer data)
- Exchange Network Value (OCI hyperscaler + sovereign cloud)

MUM Note (Primer §20.9.3)

Sovereign + healthcare MUM premium; Oracle's legacy ERP install base creates switching-cost durability.

Share-of-System Rationale

Database + enterprise applications dominance + OCI hyperscaler positioning. Healthcare IT (Cerner) integration creates direct sector cascade to Lokahi-equivalent healthcare Accelerators. Strong sovereign relationships and government cloud capabilities position Oracle for Sovereign Accelerator pathway alignment. System share P50 1.5% reflects narrower reach than Microsoft/Amazon/Google but sovereign + healthcare strength.

Social Media / Consumer

Meta

Social Media / Consumer • Archetype: Cloud hyperscaler / global tech platform (consumer-anchored) • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Meta Community	First-Mover Multiple vs Current
\$21T–\$59T	\$4.3T–\$24T	\$2.7T–\$10T	3x–14x (current: \$1.7T)

P50 reference: Total \$39T • DEC \$12T • QPR \$5.9T • System share 2.50%

Three Engagement Vectors

- V1 — Meta-anchored Private Accelerator deploying Llama + Reality Labs + Meta AI infrastructure as Resource Pool foundations; WhatsApp Business + Instagram Shops + Facebook Marketplace as Exchange Network substrates.
- V2 — Meta AI fund + Reality Labs ecosystem as Tier 1 QPIIN Portfolio Accelerator pathway.
- V3 — Trust Authority anchoring for consumer identity + creator economy + advertising Trust Taxonomies; 3B+ MAU consumer PPN enrollment surface.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 (largest consumer PPN trigger candidate)

Cascade role: Grassroots + Enterprise Cascades (consumer PPN-led)

Cost of Delay (per month, Pioneer Stage): ~\$0.33T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Ecosystem Growth Value (3B+ MAU — largest consumer PPN enrollment pathway in the world)
- Settlement Model Value (creator economy + commerce + advertising workflows)
- Resource Pool Value (Llama as open-source AI Resource Pool contribution model)
- Exchange Network Value (WhatsApp Business + Instagram Shops + Marketplace)

MUM Note (Primer §20.9.3)

Consumer-attention + creator-economy MUM premium; durable through network effects across Facebook/Instagram/WhatsApp/Reality Labs.

Share-of-System Rationale

3B+ monthly users across Facebook/Instagram/WhatsApp — largest consumer PPN enrollment pathway in the world. Llama open-source AI strategy provides natural Resource Pool contribution model. Reality Labs metaverse + agentic AI investments map to QPN settlement architecture. Privacy framework reset post-Cambridge Analytica positions Meta for credible PPN sovereignty. System share P50 2.5%.

Big 4 Audit & Professional Services

Deloitte

Big 4 Audit & Professional Services • Archetype: Big 4 / top-tier consulting firm • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Deloitte Community	First-Mover Multiple vs Current
\$10T–\$28T	\$2.1T–\$11T	\$1.1T–\$4.2T	14x–76x (current: \$0.15T)

P50 reference: Total \$19T • DEC \$5.7T • QPR \$2.5T • System share 1.20%

Three Engagement Vectors

V1 — Deloitte-anchored Private Accelerator deploying audit + advisory + compliance methodology + sector consulting practices as Trust Authority Resource Pools.

V2 — Deloitte Ventures + Deloitte Tax / Risk Advisory ecosystem as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for audit + tax + regulatory compliance + cyber + risk advisory Trust Taxonomies across commercial + government clients.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 - Months 1-6 (Big 4 trigger candidate)

Cascade role: Enterprise + Sovereign Cascades (trust-taxonomy authorship)

Cost of Delay (per month, Pioneer Stage): ~\$0.16T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 83% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Reputation Premium Value (Trust Authority across audit + advisory + government)
- Settlement Model Value (audit + compliance workflows convert to PNX-settled outcomes)
- Dual-Use Revenue Value (existing audit + advisory revenue + new QP Rewards engagement)
- Exchange Network Value (cross-client Trust Authority Exchange Network)

MUM Note (Primer §20.9.3)

Trust Authority MUM premium — Deloitte audit signature carries credibility no challenger can replicate quickly; authorship lock-in within Big 4 is winner-take-most.

Share-of-System Rationale

Canonical Big 4 anchor. Trust-Authority-natural role through audit/advisory/regulatory practice. Multi-sector reach across commercial + government + individual consumer. Activation Milestones simultaneously for firm + every client + each client's ecosystem. Capabilities developed for one client become immediately available to every other client. Big 4 first-mover captures trust taxonomy authorship advantages. System share P50 1.2% reflects cross-sector trust authority leverage on settlement.

PwC

Big 4 Audit & Professional Services • Archetype: Big 4 / top-tier consulting firm • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to PwC Community	First-Mover Multiple vs Current
\$8.6T–\$24T	\$1.7T–\$9.4T	\$0.95T–\$3.5T	14x–79x (current: \$0.12T)

P50 reference: Total \$16T • DEC \$4.7T • QPR \$2.1T • System share 1.00%

Three Engagement Vectors

V1 — PwC-anchored Private Accelerator deploying audit + assurance + consulting + tax + legal services methodology as Trust Authority Resource Pools.

V2 — PwC Ventures + alliance ecosystem (Salesforce, SAP, Microsoft, Oracle) as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for assurance + tax + ESG + regulatory + financial services Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-3 (defensive Big 4 cascade after first Big 4 commitment)

Cascade role: Enterprise + Sovereign Cascades (defensive trust-taxonomy authorship)

Cost of Delay (per month, Pioneer Stage): ~\$0.13T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 83% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Reputation Premium Value (assurance + tax Trust Authority)
- Settlement Model Value (audit + ESG + tax compliance workflows)
- Dual-Use Revenue Value (existing PwC revenue base)
- Exchange Network Value (cross-client trust authority)

MUM Note (Primer §20.9.3)

Trust Authority MUM premium; PwC tax + legal practice creates additional category of Trust Authority anchoring beyond pure audit.

Share-of-System Rationale

Analogous structural position to Deloitte. Once any Big 4 commits, the other three face competitive defensive adoption pressure within months. Big 4 client overlap means cascade through shared clients accelerates rapidly. Trust taxonomy authorship is winner-take-most within Big 4 — first commitment captures Routing Centrality Premium for accreditation pathways. System share P50 1.0%.

EY

Big 4 Audit & Professional Services • Archetype: Big 4 / top-tier consulting firm • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to EY Community	First-Mover Multiple vs Current
\$7.7T–\$21T	\$1.5T–\$8.5T	\$0.85T–\$3.2T	15x–85x (current: \$0.10T)

P50 reference: Total \$14T • DEC \$4.3T • QPR \$1.8T • System share 0.90%

Three Engagement Vectors

V1 — EY-anchored Private Accelerator deploying audit + tax + consulting + strategy methodology as Trust Authority Resource Pools; EY blockchain + tokenization practice as Vector 1 deliverable surface.

V2 — EY Ventures + alliance ecosystem as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for audit + tax + blockchain + sustainability Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-3 (defensive Big 4 cascade)

Cascade role: Enterprise + Sovereign Cascades (defensive)

Cost of Delay (per month, Pioneer Stage): ~\$0.12T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 83% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Reputation Premium Value (audit + blockchain Trust Authority)
- Settlement Model Value (audit + tax + tokenization workflows)
- Dual-Use Revenue Value (existing EY revenue + emerging blockchain services)

MUM Note (Primer §20.9.3)

Audit + blockchain MUM premium; first-mover EY in blockchain audit creates a category-specific Trust Authority advantage.

Share-of-System Rationale

EY has the strongest blockchain + tokenization practice among the Big 4 (EY OpsChain, EY Blockchain Analyzer, EY Tax Calculator on Polygon). This Vector 3 specialization creates a distinctive trust taxonomy authorship pathway within QPN. System share P50 0.9%.

KPMG

Big 4 Audit & Professional Services • Archetype: Big 4 / top-tier consulting firm • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to KPMG Community	First-Mover Multiple vs Current
\$7.7T–\$21T	\$1.5T–\$8.5T	\$0.85T–\$3.2T	15x–85x (current: \$0.10T)

P50 reference: Total \$14T • DEC \$4.3T • QPR \$1.8T • System share 0.90%

Three Engagement Vectors

V1 — KPMG-anchored Private Accelerator deploying audit + advisory + tax + risk + financial services methodology as Trust Authority Resource Pools.

V2 — KPMG Ventures + alliance ecosystem (Microsoft, Workday, ServiceNow) as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for audit + risk + financial services + government Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-3 (defensive Big 4 cascade)

Cascade role: Enterprise + Sovereign Cascades (defensive)

Cost of Delay (per month, Pioneer Stage): ~\$0.12T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 83% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Reputation Premium Value (audit + financial services Trust Authority)
- Settlement Model Value (audit + risk + financial services workflows)
- Dual-Use Revenue Value (existing KPMG revenue base)

MUM Note (Primer §20.9.3)

Audit + risk + government MUM premium; especially strong in regulated industries.

Share-of-System Rationale

KPMG has particular strength in financial services + risk advisory + government. Strong sovereign cascade potential through public sector practice. System share P50 0.9%.

Top-Tier Consulting

McKinsey & Company

Top-Tier Consulting • Archetype: Big 4 / top-tier consulting firm (strategy) • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to McKinsey Community	First-Mover Multiple vs Current
\$8.6T–\$24T	\$1.7T–\$9.4T	\$1.3T–\$4.9T	34x–189x (current: \$50B)

P50 reference: Total \$16T • DEC \$4.7T • QPR \$2.8T • System share 1.00%

Three Engagement Vectors

V1 — McKinsey-anchored Private Accelerator deploying QuantumBlack (AI) + strategy practice + functional + sector expertise as Trust Authority Resource Pools.

V2 — McKinsey Digital + McKinsey Health Institute as Tier 1 QPIIN Portfolio Accelerator pathway with C-suite deal flow.

V3 — Trust Authority anchoring for strategic transformation + AI + healthcare + sustainability Trust Taxonomies. Senior partner-led Innovation Influencer pathway (~3,500 senior partners with 5-15 active CEO relationships each).

Cascade Trigger Position & Cost of Delay

Cascade window: Months 0-6 (Innovation Influencer cascade — see §20.6)

Cascade role: Enterprise + Sovereign + Investment Cascades (C-suite mediated)

Cost of Delay (per month, Pioneer Stage): ~\$0.13T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 83% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Reputation Premium Value (extreme — most trusted C-suite advisor; AAA §20.6 magnitude example)
- Settlement Model Value (strategy + transformation + AI engagement workflows)
- QP Rewards Influencer (10-100x lifetime partnership NPV per senior partner per §20.6)

MUM Note (Primer §20.9.3)

C-suite trust + alumni network MUM premium; arguably the most extreme Reputation Premium of any entity in the table.

Share-of-System Rationale

Unmatched C-suite access — typical senior partner maintains 5-15 active CEO/board/government leader relationships. McKinsey recommendation reduces belief-alignment threshold for institutional Accelerator commitment. Alumni network places ex-McKinsey partners as CEO/CFO/board across thousands of companies. Per Primer §20.6: ~3,500 senior partners; single partner driving Tier 1 Anchor commitment from Fortune 50 client could earn QP Rewards 10-100x lifetime partnership NPV. System share P50 1.0%.

BCG

Top-Tier Consulting • Archetype: Big 4 / top-tier consulting firm (strategy) • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to BCG Community	First-Mover Multiple vs Current
\$4.3T–\$12T	\$0.86T–\$4.7T	\$0.58T–\$2.2T	29x–157x (current: \$30B)

P50 reference: Total \$7.9T • DEC \$2.4T • QPR \$1.3T • System share 0.50%

Three Engagement Vectors

V1 — BCG-anchored Private Accelerator deploying BCG X + GAMMA AI + strategy + transformation practice as Trust Authority Resource Pools.

V2 — BCG Digital Ventures + BCG X startup partnerships as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for digital transformation + AI + climate Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-6 (defensive consulting cascade)

Cascade role: Enterprise + Sovereign Cascades (defensive)

Cost of Delay (per month, Pioneer Stage): ~\$66B / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 86% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Reputation Premium Value (strategy Trust Authority)
- Settlement Model Value (transformation engagement workflows)
- QP Rewards Influencer (senior partner C-suite reach)

MUM Note (Primer §20.9.3)

Strategy Trust Authority MUM premium; BCG X creates AI-native consulting positioning.

Share-of-System Rationale

Strategy consulting peer to McKinsey; same archetype but smaller scale. Cascade activation forced once McKinsey commits. System share P50 0.5%.

Bain

Top-Tier Consulting • Archetype: Big 4 / top-tier consulting firm (strategy) • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Bain Community	First-Mover Multiple vs Current
\$3.4T–\$9.4T	\$0.69T–\$3.8T	\$0.47T–\$1.7T	34x–189x (current: \$20B)

P50 reference: Total \$6.3T • DEC \$1.9T • QPR \$1.0T • System share 0.40%

Three Engagement Vectors

V1 — Bain-anchored Private Accelerator deploying Bain Capital partnership ecosystem + strategy + PE due diligence practice as Trust Authority Resource Pools.

V2 — Bain Capital portfolio + Bain Venture Capital practice as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for strategy + PE due diligence + healthcare Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-6 (defensive consulting cascade)

Cascade role: Enterprise + Investment Cascades (PE relationships)

Cost of Delay (per month, Pioneer Stage): ~\$53B / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 86% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Reputation Premium Value (strategy + PE Trust Authority)
- Investment Value (Bain Capital portfolio integration)
- QP Rewards Influencer (senior partner reach)

MUM Note (Primer §20.9.3)

Strategy + PE MUM premium; Bain Capital portfolio integration creates distinctive Investment Cascade pathway.

Share-of-System Rationale

Strategy consulting peer; distinctive PE-adjacent positioning through Bain Capital relationships. System share P50 0.4%.

Accenture

Top-Tier Consulting • Archetype: Big 4 / top-tier consulting firm (systems integration) • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Accenture Community	First-Mover Multiple vs Current
\$8.6T–\$24T	\$1.7T–\$9.4T	\$1.0T–\$3.8T	10x–52x (current: \$0.18T)

P50 reference: Total \$16T • DEC \$4.7T • QPR \$2.2T • System share 1.00%

Three Engagement Vectors

V1 — Accenture-anchored Private Accelerator deploying Accenture Technology + Accenture Cloud + Industry X + Song as Trust Authority Resource Pools; alliance with Hedera (existing), NVIDIA, Microsoft, AWS, Google as multi-substrate deployment surface.

V2 — Accenture Ventures + acquisition pipeline as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for systems integration + cloud migration + digital transformation Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 - Months 1-6 (systems integration cascade trigger)

Cascade role: Enterprise Cascade (systems integration deployment)

Cost of Delay (per month, Pioneer Stage): ~\$0.13T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 86% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value (systems integration + transformation workflows)
- Exchange Network Value (cross-client systems integration Exchange Network)
- Dual-Use Revenue Value (existing \$65B+ revenue base + QPN integration services)
- Reputation Premium Value (cross-sector systems integration credibility)

MUM Note (Primer §20.9.3)

Systems integration MUM premium; Accenture's scale + multi-substrate alliances create durable routing-centrality advantage in deployment.

Share-of-System Rationale

Existing Hedera Council member. Largest systems integrator globally. Capabilities developed for one client deploy across thousands. Every QPN Accelerator deployment is potentially an Accenture engagement. System share P50 1.0%.

Booz Allen Hamilton

Top-Tier Consulting • Archetype: Big 4 / top-tier consulting firm (government/defense) • SCS: Active Enterprise Participation

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Booz Allen Community	First-Mover Multiple vs Current
\$2.6T–\$7.1T	\$0.39T–\$2.1T	\$0.31T–\$1.1T	19x–106x (current: \$20B)

P50 reference: Total \$4.7T • DEC \$1.0T • QPR \$0.66T • System share 0.30%

Three Engagement Vectors

V1 — Booz Allen-anchored Private Accelerator deploying defense + intelligence + civilian agency systems integration practice as Trust Authority Resource Pools; PPCS dual-track (FAR Parts 27 + 52.227) as canonical reference for government-contractor pathway.

V2 — Booz Allen Ventures + AI-startup partnerships as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for defense + intelligence + federal government Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-12 (government/defense cascade)

Cascade role: Sovereign Cascade (US federal + defense)

Cost of Delay (per month, Pioneer Stage): ~\$29B / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 80% – 85% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Reputation Premium Value (government + defense Trust Authority)
- Settlement Model Value (federal contract workflows + AI mission systems)
- Resource Pool Value (defense + intelligence governed Resource Pools)

MUM Note (Primer §20.9.3)

Government/defense Trust Authority MUM premium; clearance-based access creates barrier to entry.

Share-of-System Rationale

Canonical government contractor; PPCS dual-track pathway (FAR Parts 27 + 52.227) per COL SE creates structured pathway for federal government dual-use participation. System share P50 0.3% reflects government-specific scope but high regulatory anchor leverage.

Financial Institutions

JPMorgan

Financial Institutions • Archetype: Major institutional investor (universal bank) • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to JPMorgan Community	First-Mover Multiple vs Current
\$13T–\$35T	\$2.6T–\$14T	\$1.4T–\$5.3T	4x–22x (current: \$0.65T)

P50 reference: Total \$24T • DEC \$7.1T • QPR \$3.1T • System share 1.50%

Three Engagement Vectors

V1 — JPMorgan-anchored Private Accelerator deploying Onyx (institutional DLT) + JP Morgan Coin + Quorum + Liink as Trust Authority Resource Pools and Exchange Network substrates; capital markets infrastructure + Treasury Services as PNX settlement venue.

V2 — JPMorgan Strategic Investments + JPM Asset Management as Tier 1 QPIIN Portfolio Accelerator and capital deployment pathway.

V3 — Trust Authority anchoring for capital markets + tokenized securities + AML/KYC + corporate banking Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 - Months 1-6 (financial services trigger)

Cascade role: Investment + Enterprise Cascades (financial institution-led)

Cost of Delay (per month, Pioneer Stage): ~\$0.20T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 86% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Investment Value (capital deployment + tokenized securities Liquidity Pool)
- Settlement Model Value (capital markets + payments + treasury settlement)
- Exchange Network Value (Onyx + Liink as Exchange Networks)
- Reputation Premium Value (financial Trust Authority)

MUM Note (Primer §20.9.3)

Institutional finance MUM premium; JPMorgan corporate + investment banking relationships span every major enterprise.

Share-of-System Rationale

Anchors Investment Cascade + liquidity layer for institutional QPT Derivative distribution. JPMorgan Onyx already operates institutional DLT infrastructure. Once one major bank commits, peers follow or permanently cede financial settlement infrastructure positioning. System share P50 1.5%.

Goldman Sachs

Financial Institutions • Archetype: Major institutional investor (investment bank) • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Goldman Community	First-Mover Multiple vs Current
\$6.9T–\$19T	\$1.4T–\$7.6T	\$0.76T–\$2.8T	9x–50x (current: \$0.15T)

P50 reference: Total \$13T • DEC \$3.8T • QPR \$1.6T • System share 0.80%

Three Engagement Vectors

V1 — Goldman-anchored Private Accelerator deploying GS Digital Assets platform + tokenization initiatives + capital markets infrastructure as Trust Authority Resource Pools.

V2 — Goldman Sachs Asset Management + Petershill + GS Ventures as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for institutional capital + tokenized securities + alternatives Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-3 (defensive financial cascade)

Cascade role: Investment + Pool-First Cascades

Cost of Delay (per month, Pioneer Stage): ~\$0.11T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 86% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Investment Value (capital deployment + tokenization)
- Settlement Model Value (capital markets + alternatives settlement)
- Reputation Premium Value (investment banking Trust Authority)

MUM Note (Primer §20.9.3)

Investment banking + tokenization MUM premium; Goldman digital assets practice creates Vector 1 specialization.

Share-of-System Rationale

Tokenization initiatives align with QPT Derivative distribution architecture. Once JPMorgan or Goldman commits, peer cascade activates within months. System share P50 0.8%.

BlackRock

Financial Institutions • Archetype: Major institutional investor (asset manager) • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to BlackRock Community	First-Mover Multiple vs Current
\$8.6T–\$24T	\$1.7T–\$9.4T	\$0.95T–\$3.5T	10x–52x (current: \$0.18T)

P50 reference: Total \$16T • DEC \$4.7T • QPR \$2.1T • System share 1.00%

Three Engagement Vectors

V1 — BlackRock-anchored Private Accelerator deploying Aladdin + iShares + BUIDL tokenization fund + Securitize partnership as Trust Authority Resource Pools and Liquidity Pool substrates.

V2 — BlackRock Alternatives + BlackRock Innovation + Private Markets as Tier 1 QPIIN Portfolio Accelerator and capital deployment pathway.

V3 — Trust Authority anchoring for institutional risk management + asset management + tokenized real-world-asset Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 - Months 1-6 (asset management cascade trigger)

Cascade role: Investment + Pool-First Cascades (asset management-led)

Cost of Delay (per month, Pioneer Stage): ~\$0.13T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 86% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Investment Value (largest asset manager globally; ~\$10T+ AUM)
- Settlement Model Value (asset management + risk + tokenization workflows)
- Resource Pool Value (Aladdin + iShares + BUIDL as governed Resource Pools)
- Exchange Network Value (Aladdin as risk management Exchange Network)

MUM Note (Primer §20.9.3)

Asset management + tokenization MUM premium; Aladdin's installed base creates structural switching costs analogous to enterprise software.

Share-of-System Rationale

World's largest asset manager (~\$10T AUM); Aladdin = institutional risk management infrastructure used by every major asset manager. BUIDL tokenized money market fund (with Securitize) establishes existing tokenization beachhead. System share P50 1.0%.

Blackstone

Financial Institutions • Archetype: Major institutional investor (alternative asset manager) • SCS: Active Enterprise Participation

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Blackstone Community	First-Mover Multiple vs Current
\$6.0T–\$17T	\$0.90T–\$5.0T	\$0.61T–\$2.3T	5x–29x (current: \$0.17T)

P50 reference: Total \$11T • DEC \$2.4T • QPR \$1.3T • System share 0.70%

Three Engagement Vectors

V1 — Blackstone-anchored Private Accelerator deploying PE + real estate + credit + infrastructure portfolio operations as Trust Authority Resource Pools.

V2 — Blackstone Innovations + Strategic Capital + GP Stakes as Tier 1 QPIIN Portfolio Accelerator and capital deployment pathway.

V3 — Trust Authority anchoring for private markets + real estate + infrastructure + credit Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-6 (alternative asset management cascade)

Cascade role: Investment Cascade (alternatives + private markets)

Cost of Delay (per month, Pioneer Stage): ~\$68B / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 83% – 87% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Investment Value (largest alternative asset manager; ~\$1T+ AUM)
- Settlement Model Value (private markets + real estate + credit workflows)
- Resource Pool Value (portfolio company governed Resource Pools)

MUM Note (Primer §20.9.3)

Alternative assets MUM premium; portfolio company Resource Pool integration creates compounding advantage.

Share-of-System Rationale

World's largest alternative asset manager. Portfolio company integration creates Vector 2 deal flow. System share P50 0.7%.

Consumer Commerce & Entertainment

Walmart

Consumer Commerce & Entertainment • Archetype: Global enterprise ecosystem anchor (retail + supply chain) • SCS: Active Enterprise Participation

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Walmart Community	First-Mover Multiple vs Current
\$10T–\$28T	\$1.5T–\$8.5T	\$1.2T–\$4.6T	2x–12x (current: \$0.70T)

P50 reference: Total \$19T • DEC \$4.2T • QPR \$2.7T • System share 1.20%

Three Engagement Vectors

V1 — Walmart-anchored Private Accelerator deploying Walmart+ + Walmart Connect + supply chain + Sam's Club as Trust Authority Resource Pools and Exchange Network substrates.

V2 — Walmart Catalyst Labs + Store No 8 + supplier ecosystem as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for retail + supply chain + supplier compliance Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 1-12 (consumer + supply chain cascade)

Cascade role: Enterprise + Grassroots Cascades (retail + supplier cascade)

Cost of Delay (per month, Pioneer Stage): ~\$0.12T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 87% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Ecosystem Growth Value (largest US employer; 100M+ weekly shoppers + Walmart+ subscribers)
- Settlement Model Value (retail + supply chain + Walmart Connect ad workflows)
- Exchange Network Value (supplier network spanning every major consumer brand globally)
- Resource Pool Value (supplier + shopper governed Resource Pools)

MUM Note (Primer §20.9.3)

Retail + supply chain MUM premium; supplier-network leverage analogous to large-platform dynamics in §20.9.3.

Share-of-System Rationale

Largest US employer. Walmart+ subscriber base + 100M+ weekly shoppers + supply chain spans every major consumer brand globally. PPN enrollment + supplier Resource Pool formation. Walmart commitment triggers consumer retail cascade through entire vendor network. System share P50 1.2%.

Disney

Consumer Commerce & Entertainment • Archetype: Global enterprise ecosystem anchor (IP + entertainment) • SCS: Active Enterprise Participation

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Disney Community	First-Mover Multiple vs Current
\$4.3T–\$12T	\$0.64T–\$3.5T	\$0.47T–\$1.8T	3x–18x (current: \$0.20T)

P50 reference: Total \$7.9T • DEC \$1.7T • QPR \$1.0T • System share 0.50%

Three Engagement Vectors

V1 — Disney-anchored Private Accelerator deploying Disney+ + Hulu + ESPN + Theme Parks + Lucasfilm/Marvel/Pixar IP as Trust Authority Resource Pools and Exchange Network substrates.

V2 — Disney Accelerator + Lucasfilm Ventures + ESPN Studios as Tier 1 QPIIN Portfolio Accelerator pathway.

V3 — Trust Authority anchoring for IP + entertainment + media licensing Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 6-18 (entertainment + IP cascade)

Cascade role: Grassroots + Enterprise Cascades (IP + brand cascade)

Cost of Delay (per month, Pioneer Stage): ~\$48B / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 82% – 86% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Reputation Premium Value (premier consumer trust + IP)
- Resource Pool Value (entertainment IP governed Resource Pools)
- Settlement Model Value (streaming + theme park + licensing workflows)
- Ecosystem Growth Value (Disney+/Hulu/ESPN subscribers)

MUM Note (Primer §20.9.3)

IP + brand MUM premium; Disney consumer trust commands disproportionate Reputation Premium per unit of activity.

Share-of-System Rationale

Premier IP + content + theme parks + ESPN. Multi-vertical reach across entertainment, sports, leisure. Strong consumer trust positioning for PPN enrollment. Brand activation cascade through licensing partners and broadcast affiliates. System share P50 0.5%.

Sector Anchor Enterprises

Healthcare Sector Anchors (Tempus / Milliman / ICON Plc / UnitedHealth)

Sector Anchor Enterprises • Archetype: Global enterprise ecosystem anchor (healthcare cluster) • SCS: Maximum Strategic Alignment

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Healthcare-anchor Community	First-Mover Multiple vs Current
\$21T–\$59T	\$4.3T–\$24T	\$2.6T–\$9.5T	9x–47x (current: \$0.50T)

P50 reference: Total \$39T • DEC \$12T • QPR \$5.5T • System share 2.50%

Three Engagement Vectors

V1 — Healthcare-anchored Private Accelerators (Tempus AI for precision medicine + sequencing; Milliman as canonical Exchange Provider per UE \$5.10; ICON Plc as canonical Market Sector Anchor CRO; UnitedHealth/Optum as payer + clinical infrastructure) deploying clinical + claims + genomic + actuarial Resource Pools.

V2 — Healthcare-anchored Portfolio Accelerator funded through QPIIN + sector strategic capital.

V3 — Trust Authority anchoring for clinical + pharma + payer + provider + sequencing + actuarial Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Month 0 - Months 1-12 (healthcare cascade; Lokahi-grounded)

Cascade role: Enterprise + Sovereign Cascades (healthcare sector)

Cost of Delay (per month, Pioneer Stage): ~\$0.33T / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 83% – 88% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value (clinical workflows + claims + pharma trials + sequencing convert to PNX-settled outcomes)
- Resource Pool Value (clinical + genomic + claims data governed Resource Pools)
- Reputation Premium Value (clinical Trust Authority)
- Exchange Network Value (cross-payer + cross-provider Exchange Networks)

MUM Note (Primer §20.9.3)

Healthcare Trust Authority MUM premium; clinical credibility + regulatory complexity creates durable advantage.

Share-of-System Rationale

Healthcare sector anchor pathway grounded in Lokahi Healthcare Accelerator worked example (UE \$5.10). Multi-firm cluster: Tempus (precision medicine AI + sequencing data + Northwestern partnership), Milliman (canonical Exchange Provider; thousands of healthcare counterparties), ICON Plc (Market Sector Anchor CRO; relationships across every major pharma), UnitedHealth/Optum (largest US payer + clinical infrastructure). Aggregate cluster system share P50 2.5%.

Energy Sector Anchors (EDF / utilities cluster)

Sector Anchor Enterprises • Archetype: Global enterprise ecosystem anchor (energy cluster) • SCS: Active Enterprise Participation

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Energy-anchor Community	First-Mover Multiple vs Current
\$8.6T–\$24T	\$1.3T–\$7.1T	\$0.88T–\$3.3T	4x–24x (current: \$0.30T)

P50 reference: Total \$16T • DEC \$3.5T • QPR \$1.9T • System share 1.00%

Three Engagement Vectors

V1 — Energy-anchored Private Accelerators (EDF as existing Hedera Council member; major utilities; renewable infrastructure operators) deploying energy data + grid optimization + climate accounting as Resource Pools.

V2 — Energy-anchored Portfolio Accelerator funded through QPIIN + sovereign climate capital.

V3 — Trust Authority anchoring for energy data + grid optimization + climate accounting + carbon credit Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 6-18 (energy + utilities cascade)

Cascade role: Enterprise + Sovereign Cascades (energy + climate)

Cost of Delay (per month, Pioneer Stage): ~\$96B / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 78% – 85% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Settlement Model Value (grid + energy markets + carbon credit workflows)
- Resource Pool Value (energy data governed Resource Pools)
- Reputation Premium Value (climate + sustainability Trust Authority)

MUM Note (Primer §20.9.3)

Energy + climate MUM premium; regulatory complexity + sovereign relationships create durable Trust Authority advantage.

Share-of-System Rationale

EDF is illustrative (already Hedera Council member). Sector-specific Trust Authority anchoring for energy data, grid optimization, climate accounting. Cluster includes major utilities, oil/gas majors, renewable infrastructure operators. Aggregate cluster system share P50 1.0%.

Defense Sector Anchors (Lockheed / RTX / Northrop / Boeing Defense)

Sector Anchor Enterprises • Archetype: Global enterprise ecosystem anchor (defense cluster) • SCS: Active Enterprise Participation

Total Tier 1 Ecosystem Value	Direct Ecosystem Capture	QP Rewards to Defense-anchor Community	First-Mover Multiple vs Current
\$8.6T–\$24T	\$1.3T–\$7.1T	\$0.88T–\$3.3T	3x–14x (current: \$0.50T)

P50 reference: Total \$16T • DEC \$3.5T • QPR \$1.9T • System share 1.00%

Three Engagement Vectors

V1 — Defense-anchored Private Accelerators (Lockheed, RTX, Northrop, Boeing Defense) deploying defense + intelligence + security infrastructure as Resource Pools; PPCS dual-track pathway per COL \$E for FAR-compliant participation.

V2 — Defense-anchored Portfolio Accelerators funded through sovereign defense capital + QPIIN.

V3 — Trust Authority anchoring for defense + intelligence + security + cross-jurisdictional Trust Taxonomies.

Cascade Trigger Position & Cost of Delay

Cascade window: Months 6-24 (defense + intelligence cascade)

Cascade role: Sovereign Cascade (defense + intelligence-led)

Cost of Delay (per month, Pioneer Stage): ~\$96B / month (Direct Ecosystem Capture P50 ÷ 36-month Pioneer window)

Laggard Penalty: 78% – 85% of potential anchor ecosystem value permanently forgone by delay (archetype-specific range per Primer §19.4).

Dominant Input Value Metrics (top 3-4 of Eight)

- Reputation Premium Value (sovereign-adjacent Trust Authority)
- Settlement Model Value (defense contracts + intelligence + mission systems workflows)
- Resource Pool Value (defense + intelligence governed Resource Pools — PPCS-screened)

MUM Note (Primer §20.9.3)

Defense + intelligence MUM premium; clearance-based access + multi-jurisdictional Trust Authority creates near-monopolistic positioning.

Share-of-System Rationale

Sovereign-adjacent Trust Authority role. Strong cross-jurisdictional sovereignty + national security constraints favor QPN multi-substrate / jurisdictional optionality. PPCS dual-track (FAR Parts 27 + 52.227) per COL §E creates clean pathway for government-contractor participation. Aggregate cluster system share P50 1.0%.

§3 Per-Sovereign Catalyst Partnership Overview Briefs

Each sovereign brief applies the Four-Layer Sovereign Value Framework (Primer §17.5) with jurisdiction-specific L1/L2/L3/L4 weights and government-share band. The 17 jurisdictions are re-derived from IA-anchored system totals via share-of-system × Four-Layer decomposition, fully replacing the AAA-derived guesstimates in Primer §17.5.1.

U.S. State Sovereign

State of Hawaii

U.S. State Sovereign • GDP: \$0.10T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$4.3T-\$12T	\$1.1T-\$4.1T	\$3.2T-\$7.7T	\$4.3T (55% of total)

P50 reference: Total \$7.9T • Gov-capture \$2.4T • System share 0.50% • Gov-share band 25%-35%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	10%	\$0.79T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	15%	\$1.2T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	55%	\$4.3T	Insurance commissioner regulatory authority; healthcare interoperability mandates; AI safety standards for state-licensed services; tobacco/health regulatory authority; state-employee health plan workflows.
L4 — HQ Enterprise Cascade + Safe Harbor	20%	\$1.6T	Hawaii Pacific Health + HMSA + Kaiser Permanente Hawaii + state-headquartered businesses. Lokahi Healthcare Accelerator is the canonical worked example.

Cascade window: Months 6-18 (canonical first sovereign anchor; Lokahi-anchored)

Share-of-System Rationale

Smallest US state by GDP base in the 17-jurisdiction set but canonical first sovereign anchor (Lokahi). High constituent-share weighting reflects strong regulatory + grassroots adoption pathway; modest direct-operations share.

State of California

U.S. State Sovereign • GDP: \$4.10T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$43T-\$118T	\$12T-\$42T	\$31T-\$76T	\$39T (50% of total)

P50 reference: Total \$79T • Gov-capture \$25T • System share 5.00% • Gov-share band 28%-36%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	8%	\$6.3T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	12%	\$9.5T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	50%	\$39T	AI safety + age verification + privacy (CCPA/CPRA) + automotive/AV safety + healthcare regulation; gig economy classification; entertainment industry residual frameworks.

L4 — HQ Enterprise Cascade + Safe Harbor	30%	\$24T	Virtually every major AI vendor + hyperscaler + social platform + biotech + entertainment company HQ. Layer 4 cascade through CA-HQed enterprises is dominant.
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Cascade window: Months 0-12 (HQ concentration of AI/hyperscaler/social/financial)

Share-of-System Rationale

World's fifth-largest economy (\$4.1T GDP). HQs to virtually every major AI vendor, hyperscaler, and tech company analyzed in this assessment. Layer 4 enterprise cascade is exceptional; Layer 3 regulatory cascade extends globally through extraterritorial enforcement of CA standards.

State of Washington

U.S. State Sovereign • GDP: \$0.80T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$17T-\$47T	\$4.3T-\$17T	\$13T-\$31T	\$13T (40% of total)

P50 reference: Total \$32T • Gov-capture \$9.5T • System share 2.00% • Gov-share band 25%-35%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	10%	\$3.2T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	15%	\$4.7T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	40%	\$13T	Healthcare regulation; state employee + university workflows; cybersecurity standards for state-licensed services.
L4 — HQ Enterprise Cascade + Safe Harbor	35%	\$11T	Microsoft, Amazon, Costco, Starbucks, Boeing — Layer 4 cascade through WA-HQed enterprises is exceptional due to Microsoft + Amazon dual-hyperscaler concentration.

Cascade window: Months 1-12 (Microsoft + Amazon HQ cascade)

Share-of-System Rationale

Headquarters to Microsoft and Amazon — the two largest cloud infrastructure providers and among the largest AI investors globally. Layer 4 enterprise cascade is the dominant value driver.

State of Ohio

U.S. State Sovereign • GDP: \$0.85T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$11T-\$31T	\$3.1T-\$12T	\$8.0T-\$19T	\$8.8T (43% of total)

P50 reference: Total \$21T • Gov-capture \$6.8T • System share 1.30% • Gov-share band 28%-38%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	12%	\$2.5T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	15%	\$3.1T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	43%	\$8.8T	Healthcare regulation (Cleveland Clinic anchor); defense + federal contractor compliance; state-licensed professional services.

L4 — HQ Enterprise Cascade + Safe Harbor	30%	\$6.2T	Wright-Patterson AFB; Cleveland Clinic; large industrial + defense + agricultural manufacturing base; Procter & Gamble + Cardinal Health HQ.
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Cascade window: Months 6-24 (federal + defense + healthcare cascade)

Share-of-System Rationale

Major federal technology and defense hub anchored by Wright-Patterson Air Force Base (largest single-site employer in DoD). Strong federal contractor + healthcare + agricultural cascade.

State of Utah

U.S. State Sovereign • GDP: \$0.25T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$6.0T-\$17T	\$1.8T-\$6.6T	\$4.2T-\$9.9T	\$6.6T (60% of total)

P50 reference: Total \$11T • Gov-capture \$3.9T • System share 0.70% • Gov-share band 30%-40%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	10%	\$1.1T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	15%	\$1.7T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	60%	\$6.6T	First state to enact age verification + AI disclosure + minor protection laws; aggressive digital regulatory posture across tech + financial + healthcare.
L4 — HQ Enterprise Cascade + Safe Harbor	15%	\$1.7T	Modest HQ concentration but disproportionate Layer 3 reach through extraterritorial enforcement of UT regulatory standards on platforms operating in UT.

Cascade window: Months 0-12 (most aggressive state-level digital governance posture)

Share-of-System Rationale

Most aggressive state-level digital governance posture in the United States. Utah's regulatory authorship per-capita is the highest in the set; Layer 3 dominant. Government-share band is highest among states (regulatory-compulsion-heavy classification).

National Sovereign

U.S. Federal Government

National Sovereign • GDP: \$27.00T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$77T-\$212T	\$17T-\$68T	\$60T-\$144T	\$57T (40% of total)

P50 reference: Total \$142T • Gov-capture \$38T • System share 9.00% • Gov-share band 22%-32%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	15%	\$21T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	18%	\$26T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	40%	\$57T	Federal regulatory reach (FDA, FTC, SEC, FCC, NIST, EPA, FAA, HHS, DOL, DOD, DHS); FAR + DFARS contractor

			compliance; HIPAA + GLBA + FERPA + COPPA + AI/CISA frameworks; AML/KYC FinCEN reach.
L4 — HQ Enterprise Cascade + Safe Harbor	27%	\$38T	Every Fortune 500 + every defense contractor + every federally-regulated entity (banks, insurers, healthcare, telecom, utilities, transportation). Layer 4 cascade is global because U.S. regulatory reach is global.

Cascade window: Months 6-24 (cascade through federal procurement + regulatory)

Share-of-System Rationale

Federal regulatory + procurement + fiscal authority spans every sector of the U.S. economy. Reserve currency status + extraterritorial regulatory reach (FCPA, OFAC, ITAR, export controls) extend Layer 3 globally. Direct-operations-heavy classification (~25-30% government share including SS/Medicare/Medicaid/federal procurement).

Japan

National Sovereign • GDP: \$4.20T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$21T-\$59T	\$6.0T-\$22T	\$15T-\$37T	\$16T (40% of total)

P50 reference: Total \$39T • Gov-capture \$13T • System share 2.50% • Gov-share band 28%-38%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	12%	\$4.7T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	20%	\$7.9T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	40%	\$16T	Personal Information Protection Act; financial regulatory authority (FSA); healthcare regulation; AI safety frameworks. Demographic pressure makes productivity capitalization (L2) particularly important.
L4 — HQ Enterprise Cascade + Safe Harbor	28%	\$11T	Toyota, Sony, SoftBank, NTT, Hitachi (Hedera Council), Mitsubishi, NEC. Major export cascade through Japanese conglomerates operating globally.

Cascade window: Months 6-18 (demographic-pressured productivity cascade)

Share-of-System Rationale

World's fourth-largest economy (\$4.2T GDP) with deeply technology-integrated society and government. Japan's demographic challenge (population decline + aging) makes productivity capitalization (L2) and AI-mediated workforce extension uniquely valuable per unit of GDP.

South Korea

National Sovereign • GDP: \$1.70T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$10T-\$28T	\$2.9T-\$11T	\$7.4T-\$18T	\$8.0T (42% of total)

P50 reference: Total \$19T • Gov-capture \$6.2T • System share 1.20% • Gov-share band 28%-38%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	12%	\$2.3T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.

L2 — Productivity Capitalization	18%	\$3.4T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	42%	\$8.0T	Personal Information Protection Act; AI Basic Act; financial regulatory authority (FSC); semiconductor + display regulatory framework.
L4 — HQ Enterprise Cascade + Safe Harbor	28%	\$5.3T	Samsung, SK Hynix, LG (Hedera Council), Hyundai, Naver, Kakao. Tech-export cascade through Korean conglomerates.

Cascade window: Months 6-18 (digital-advanced society productivity cascade)

Share-of-System Rationale

One of the world's most digitally advanced societies. Semiconductor + display + automotive dominance create substantial Layer 4 cascade through Korean tech conglomerates operating globally.

Sweden

National Sovereign • GDP: \$0.61T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$6.0T-\$17T	\$1.7T-\$6.3T	\$4.3T-\$10T	\$5.0T (45% of total)

P50 reference: Total \$11T • Gov-capture \$3.6T • System share 0.70% • Gov-share band 28%-38%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	10%	\$1.1T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	15%	\$1.7T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	45%	\$5.0T	EU-aligned regulatory framework (GDPR + DSA + DMA + AI Act); financial regulatory authority.
L4 — HQ Enterprise Cascade + Safe Harbor	30%	\$3.3T	Spotify, Ericsson, Volvo, IKEA, H&M, Klarna — Nordic tech + manufacturing + retail cascade.

Cascade window: Months 6-24 (digital-advanced + innovation cascade)

Share-of-System Rationale

\$605B GDP supports one of Europe's most digitally advanced societies and innovative economies per capita. Strong Layer 4 cascade through Swedish tech + manufacturing + retail.

National Sovereign (sovereign-wealth-anchored)

United Arab Emirates

National Sovereign (sovereign-wealth-anchored) • GDP: \$0.51T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$10T-\$28T	\$3.1T-\$11T	\$7.2T-\$17T	\$7.6T (40% of total)

P50 reference: Total \$19T • Gov-capture \$6.6T • System share 1.20% • Gov-share band 30%-40%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	12%	\$2.3T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	18%	\$3.4T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	40%	\$7.6T	AI regulatory framework; financial regulatory authority (DIFC, ADGM); healthcare regulation; AML/KYC frameworks.

L4 — HQ Enterprise Cascade + Safe Harbor	30%	\$5.7T	MGX (managed AI investment vehicle); G42 + Mubadala portfolios; Abu Dhabi + Dubai sovereign tech investments; ADIA + Mubadala + ADQ SWF portfolios.
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Cascade window: Months 6-18 (sovereign wealth + AI hub cascade)

Share-of-System Rationale

UAE positioned as the Middle East's premier AI and digital economy hub. MGX (sovereign-managed AI investment vehicle), G42 partnerships with Microsoft + OpenAI, and ADIA/Mubadala/ADQ SWF portfolios create substantial Layer 4 cascade through SWF investments globally.

Kingdom of Saudi Arabia

National Sovereign (sovereign-wealth-anchored) • GDP: \$1.07T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$10T-\$28T	\$2.9T-\$11T	\$7.4T-\$18T	\$6.6T (35% of total)

P50 reference: Total \$19T • Gov-capture \$6.2T • System share 1.20% • Gov-share band 28%-38%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	15%	\$2.8T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	20%	\$3.8T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	35%	\$6.6T	Vision 2030 digital economy diversification; AI regulatory framework; NEOM regulatory sandbox; financial regulatory authority (CMA).
L4 — HQ Enterprise Cascade + Safe Harbor	30%	\$5.7T	PIF (\$925B+ AUM) global portfolio (Lucid, Uber, gaming, NEOM, Aramco); Aramco ecosystem; NEOM + Saudi tech investments.

Cascade window: Months 6-24 (Vision 2030 + PIF cascade)

Share-of-System Rationale

Vision 2030 explicitly diversifies Saudi economy away from petroleum dependence; PIF (\$925B+ AUM) deployment creates substantial Layer 4 global cascade through portfolio companies. NEOM creates regulatory sandbox for digital + AI + biotech innovation.

Norway

National Sovereign (sovereign-wealth-anchored) • GDP: \$0.49T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$6.9T-\$19T	\$2.1T-\$7.6T	\$4.8T-\$11T	\$4.4T (35% of total)

P50 reference: Total \$13T • Gov-capture \$4.4T • System share 0.80% • Gov-share band 30%-40%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	10%	\$1.3T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	15%	\$1.9T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	35%	\$4.4T	Norwegian Data Protection Authority; financial regulatory authority; energy + climate regulatory framework.

L4 — HQ Enterprise Cascade + Safe Harbor	40%	\$5.0T	Government Pension Fund Global (\$1.7T+ AUM, largest SWF globally) holds ~1.5% of all listed equity worldwide — Layer 4 global cascade through GPFG investments.
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Cascade window: Months 6-24 (GPFG + Nordic cascade)

Share-of-System Rationale

\$485B GDP belies outsized strategic significance via the Government Pension Fund Global ("Oil Fund") which is the largest sovereign wealth fund globally and holds ~1.5% of all listed equity worldwide. Layer 4 dominant.

National Sovereign (financial + tech hub)

Singapore

National Sovereign (financial + tech hub) • GDP: \$0.50T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$10T-\$28T	\$3.1T-\$11T	\$7.2T-\$17T	\$8.5T (45% of total)

P50 reference: Total \$19T • Gov-capture \$6.6T • System share 1.20% • Gov-share band 30%-40%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	10%	\$1.9T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	15%	\$2.8T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	45%	\$8.5T	MAS (Monetary Authority of Singapore) Project Guardian + Project Orchid tokenization frameworks; healthcare + cyber regulatory authority; PDPA.
L4 — HQ Enterprise Cascade + Safe Harbor	30%	\$5.7T	GIC + Temasek (\$1.4T+ combined AUM) global portfolio; APAC HQ concentration for global tech + finance; Asian crypto + tokenization regulatory leadership.

Cascade window: Months 3-12 (Asia financial + tech hub cascade)

Share-of-System Rationale

Asia's premier financial center, technology governance standard-setter, and regulatory sandbox for tokenization (Project Guardian, Project Orchid). Substantial Layer 4 cascade through GIC + Temasek SWF investments + APAC HQ concentration. Outsized influence relative to GDP base.

National Sovereign (Five Eyes alliance)

Australia

National Sovereign (Five Eyes alliance) • GDP: \$1.70T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$9.4T-\$26T	\$2.6T-\$9.9T	\$6.8T-\$16T	\$7.8T (45% of total)

P50 reference: Total \$17T • Gov-capture \$5.7T • System share 1.10% • Gov-share band 28%-38%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	12%	\$2.1T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	15%	\$2.6T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.

L3 — Regulatory Compulsion (DOMINANT)	45%	\$7.8T	Privacy Act amendments; Online Safety Act; financial services regulatory authority (ASIC); critical minerals + resources regulatory framework.
L4 — HQ Enterprise Cascade + Safe Harbor	28%	\$4.9T	BHP, Rio Tinto, Fortescue + financial services concentration (CBA, Westpac, ANZ, NAB); Future Fund SWF; Five Eyes intelligence + defense cascade.

Cascade window: Months 6-24 (Five Eyes alliance + minerals cascade)

Share-of-System Rationale

\$1.7T GDP + strong regulatory institutions + Five Eyes intelligence alliance membership. Critical minerals + iron ore + LNG dominance creates Layer 4 cascade through resource sector globally.

National Sovereign (population-scale)

India

National Sovereign (population-scale) • GDP: \$4.00T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$34T-\$94T	\$6.9T-\$28T	\$27T-\$66T	\$22T (35% of total)

P50 reference: Total \$63T • Gov-capture \$16T • System share 4.00% • Gov-share band 20%-30%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	18%	\$11T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	20%	\$13T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	35%	\$22T	Digital Personal Data Protection Act 2023; DPDP rules; RBI tokenization framework; SEBI; healthcare regulatory authority. India Stack (UPI, Aadhaar, DigiLocker, Account Aggregator) is the most advanced national digital public goods architecture globally.
L4 — HQ Enterprise Cascade + Safe Harbor	27%	\$17T	TCS, Infosys, Wipro (Hedera Council), HCL — IT services cascade globally; Reliance + Adani + Tata ecosystems; IIT Madras (Hedera Council) academic cascade.

Cascade window: Months 6-24 (population-scale digital public goods cascade)

Share-of-System Rationale

World's most populous country (1.44B) and fifth-largest economy (\$4.0T GDP, projected to become third-largest by 2027). India Stack creates uniquely strong Layer 1 + Layer 2 foundation. Massive IT services cascade through TCS / Infosys / Wipro globally.

National Sovereign (population-scale, Latin America anchor)

Brazil

National Sovereign (population-scale, Latin America anchor) • GDP: \$2.20T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$17T-\$47T	\$3.8T-\$15T	\$13T-\$32T	\$11T (35% of total)

P50 reference: Total \$32T • Gov-capture \$8.5T • System share 2.00% • Gov-share band 22%-32%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
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L1 — Government Services Optimization	18%	\$5.7T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	20%	\$6.3T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	35%	\$11T	LGPD (Brazilian GDPR equivalent); Banco Central do Brasil (Pix instant payments — world-leading); ANVISA healthcare; CVM financial regulation.
L4 — HQ Enterprise Cascade + Safe Harbor	27%	\$8.5T	Petrobras, Vale, Itaú, Bradesco, Embraer + Pix-based fintech ecosystem; agricultural + commodities cascade across LATAM.

Cascade window: Months 6-24 (Latin America cascade + Pix-anchored digital infrastructure)

Share-of-System Rationale

Latin America's largest economy (\$2.2T GDP) and seventh most populous country (215M). Pix (BCB instant payments) is the world's leading population-scale instant payments network. Strong regional cascade across LATAM.

Supranational Sovereign

European Union

Supranational Sovereign • GDP: \$18.00T

Total Tier 1 Ecosystem	Government-Share Capture (P10-P90)	Constituent-Share Capture (P10-P90)	L3 Regulatory Driver Magnitude (P50)
\$51T–\$142T	\$14T–\$57T	\$37T–\$85T	\$52T (55% of total)

P50 reference: Total \$95T • Gov-capture \$32T • System share 6.00% • Gov-share band 28%-40%

Four-Layer Sovereign Value Decomposition (P50)

Layer	Weight	P50 Value	Driver
L1 — Government Services Optimization	10%	\$9.5T	Healthcare admin, benefits, tax, identity, credentialing, permitting/licensing become PNX-settled workflows.
L2 — Productivity Capitalization	12%	\$11T	10-30% near-term to 50-80%+ long-term productivity gains across government-funded services.
L3 — Regulatory Compulsion (DOMINANT)	55%	\$52T	GDPR + Digital Services Act + Digital Markets Act + AI Act + MiCA + DORA. EU regulatory apparatus established the global default for data protection + platform governance + AI safety.
L4 — HQ Enterprise Cascade + Safe Harbor	23%	\$22T	EU-HQed enterprises (SAP, Siemens, ASML, LVMH, Volkswagen, Airbus, Deutsche Telekom + Hedera Council; 100+ Fortune Global 500). Layer 4 cascade through EU regulatory safe harbor.

Cascade window: Months 6-18 (EU regulatory cascade through GDPR / DSA / DMA / AI Act)

Share-of-System Rationale

EU regulatory apparatus has already established global default for data protection (GDPR), platform governance (DSA/DMA), AI safety (AI Act), and digital finance (MiCA/DORA). Layer 3 dominant; extraterritorial enforcement extends to every global platform operating in EU. Regulatory-compulsion-heavy classification supports highest constituent-share band.

\$4 Cross-Entity Comparison Table

All entities and sovereigns side-by-side. Ranges in \$T (30-yr NPV). FMM = First-Mover Multiple (Direct Ecosystem Capture range ÷ current value). CoD = Cost of Delay per month (Pioneer Stage opportunity cost; DEC P50 ÷ 36).

\$4.1 Enterprise Comparison

Entity	Archetype	SCS	Total (P10–P90)	DEC (P10–P90)	QPR (P10–P90)	FMM	CoD/mo	Laggard %
Hedera	Consortium	Max	\$35T–\$97T	\$7.0T–\$39T	\$4.5T–\$17T	1,005x–5,531x	\$0.54T	95-98%
NVIDIA	AI/Compute	Max	\$43T–\$118T	\$8.6T–\$47T	\$5.5T–\$20T	2x–10x	\$0.66T	85-90%
OpenAI	AI/Compute	Max	\$30T–\$83T	\$6.0T–\$33T	\$3.8T–\$14T	8x–41x	\$0.46T	85-90%
Anthropic	AI/Compute	Max	\$21T–\$59T	\$4.3T–\$24T	\$2.6T–\$9.5T	11x–59x	\$0.33T	85-90%
AMD	AI/Compute	Active	\$8.6T–\$24T	\$1.3T–\$7.1T	\$0.88T–\$3.3T	6x–35x	\$96B	82-88%
Broadcom	AI/Compute	Active	\$13T–\$35T	\$1.9T–\$11T	\$1.3T–\$4.9T	1x–7x	\$0.14T	82-88%
Microsoft	Hyperscaler	Max	\$47T–\$130T	\$9.4T–\$52T	\$6.0T–\$22T	3x–17x	\$0.72T	82-88%
Amazon	Hyperscaler	Max	\$39T–\$106T	\$7.7T–\$42T	\$4.6T–\$17T	4x–19x	\$0.59T	82-88%
Alphabet	Hyperscaler	Max	\$39T–\$106T	\$7.7T–\$42T	\$4.9T–\$18T	3x–18x	\$0.59T	82-88%
Oracle	Hyperscaler	Active	\$13T–\$35T	\$1.9T–\$11T	\$1.3T–\$4.9T	4x–21x	\$0.14T	80-85%
Meta	Hyperscaler	Max	\$21T–\$59T	\$4.3T–\$24T	\$2.7T–\$10T	3x–14x	\$0.33T	82-88%
Deloitte	Big4/Cons	Max	\$10T–\$28T	\$2.1T–\$11T	\$1.1T–\$4.2T	14x–76x	\$0.16T	83-88%
PwC	Big4/Cons	Max	\$8.6T–\$24T	\$1.7T–\$9.4T	\$0.95T–\$3.5T	14x–79x	\$0.13T	83-88%
EY	Big4/Cons	Max	\$7.7T–\$21T	\$1.5T–\$8.5T	\$0.85T–\$3.2T	15x–85x	\$0.12T	83-88%
KPMG	Big4/Cons	Max	\$7.7T–\$21T	\$1.5T–\$8.5T	\$0.85T–\$3.2T	15x–85x	\$0.12T	83-88%
McKinsey & Company	Strategy	Max	\$8.6T–\$24T	\$1.7T–\$9.4T	\$1.3T–\$4.9T	34x–189x	\$0.13T	83-88%
BCG	Strategy	Max	\$4.3T–\$12T	\$0.86T–\$4.7T	\$0.58T–\$2.2T	29x–157x	\$66B	82-86%
Bain	Strategy	Max	\$3.4T–\$9.4T	\$0.69T–\$3.8T	\$0.47T–\$1.7T	34x–189x	\$53B	82-86%
Accenture	SysInt	Max	\$8.6T–\$24T	\$1.7T–\$9.4T	\$1.0T–\$3.8T	10x–52x	\$0.13T	82-86%
Booz Allen Hamilton	Gov/Def	Active	\$2.6T–\$7.1T	\$0.39T–\$2.1T	\$0.31T–\$1.1T	19x–106x	\$29B	80-85%
JPMorgan	Financial	Max	\$13T–\$35T	\$2.6T–\$14T	\$1.4T–\$5.3T	4x–22x	\$0.20T	82-86%
Goldman Sachs	Financial	Max	\$6.9T–\$19T	\$1.4T–\$7.6T	\$0.76T–\$2.8T	9x–50x	\$0.11T	82-86%
BlackRock	Financial	Max	\$8.6T–\$24T	\$1.7T–\$9.4T	\$0.95T–\$3.5T	10x–52x	\$0.13T	82-86%
Blackstone	Financial	Active	\$6.0T–\$17T	\$0.90T–\$5.0T	\$0.61T–\$2.3T	5x–29x	\$68B	83-87%
Walmart	Enterprise	Active	\$10T–\$28T	\$1.5T–\$8.5T	\$1.2T–\$4.6T	2x–12x	\$0.12T	82-87%
Disney	Enterprise	Active	\$4.3T–\$12T	\$0.64T–\$3.5T	\$0.47T–\$1.8T	3x–18x	\$48B	82-86%
Healthcare Sector Anchors	Enterprise	Max	\$21T–\$59T	\$4.3T–\$24T	\$2.6T–\$9.5T	9x–47x	\$0.33T	83-88%
Energy Sector Anchors	Enterprise	Active	\$8.6T–\$24T	\$1.3T–\$7.1T	\$0.88T–\$3.3T	4x–24x	\$96B	78-85%
Defense Sector Anchors	Enterprise	Active	\$8.6T–\$24T	\$1.3T–\$7.1T	\$0.88T–\$3.3T	3x–14x	\$96B	78-85%

\$4.2 Sovereign Comparison

Jurisdiction	GDP	Share	Total (P10–P90)	Gov-Capture (P10–P90)	L1%	L2%	L3%	L4%
Hawaii	\$95B	0.5%	\$4.3T–\$12T	\$1.1T–\$4.1T	10%	15%	55%	20%
California	\$4.1T	5.0%	\$43T–\$118T	\$12T–\$42T	8%	12%	50%	30%
Washington	\$0.80T	2.0%	\$17T–\$47T	\$4.3T–\$17T	10%	15%	40%	35%
Ohio	\$0.85T	1.3%	\$11T–\$31T	\$3.1T–\$12T	12%	15%	43%	30%
Utah	\$0.25T	0.7%	\$6.0T–\$17T	\$1.8T–\$6.6T	10%	15%	60%	15%

U.S. Federal Government	\$27T	9.0%	\$77T-\$212T	\$17T-\$68T	15%	18%	40%	27%
European Union	\$18T	6.0%	\$51T-\$142T	\$14T-\$57T	10%	12%	55%	23%
United Arab Emirates	\$0.51T	1.2%	\$10T-\$28T	\$3.1T-\$11T	12%	18%	40%	30%
Saudi Arabia	\$1.1T	1.2%	\$10T-\$28T	\$2.9T-\$11T	15%	20%	35%	30%
Japan	\$4.2T	2.5%	\$21T-\$59T	\$6.0T-\$22T	12%	20%	40%	28%
South Korea	\$1.7T	1.2%	\$10T-\$28T	\$2.9T-\$11T	12%	18%	42%	28%
Singapore	\$0.50T	1.2%	\$10T-\$28T	\$3.1T-\$11T	10%	15%	45%	30%
Australia	\$1.7T	1.1%	\$9.4T-\$26T	\$2.6T-\$9.9T	12%	15%	45%	28%
Norway	\$0.49T	0.8%	\$6.9T-\$19T	\$2.1T-\$7.6T	10%	15%	35%	40%
Sweden	\$0.61T	0.7%	\$6.0T-\$17T	\$1.7T-\$6.3T	10%	15%	45%	30%
India	\$4.0T	4.0%	\$34T-\$94T	\$6.9T-\$28T	18%	20%	35%	27%
Brazil	\$2.2T	2.0%	\$17T-\$47T	\$3.8T-\$15T	18%	20%	35%	27%

\$5 Presentation-Ready Headline Summary

Slide-format triplets in Hedera-deck presentation style. Each entity is presented as: TOTAL TIER 1 ECOSYSTEM VALUE / DIRECT ECOSYSTEM CAPTURE / QP REWARDS TO COMMUNITY / FIRST-MOVER MULTIPLE. Use these as the canonical numbers for entity-specific deck pages.

Hedera (Reference Anchor)

Total Tier 1 Ecosystem Value	\$35T–\$97T
Direct Ecosystem Capture	\$7.0T–\$39T
QP Rewards to Hedera Community	\$4.5T–\$17T
First-Mover Multiple	1,005x–5,531x (current value: \$7B)

NVIDIA

Total Tier 1 Ecosystem Value	\$43T–\$118T
Direct Ecosystem Capture	\$8.6T–\$47T
QP Rewards to NVIDIA Community	\$5.5T–\$20T
First-Mover Multiple	2x–10x (current value: \$4.5T)

OpenAI

Total Tier 1 Ecosystem Value	\$30T–\$83T
Direct Ecosystem Capture	\$6.0T–\$33T
QP Rewards to OpenAI Community	\$3.8T–\$14T
First-Mover Multiple	8x–41x (current value: \$0.80T)

Anthropic

Total Tier 1 Ecosystem Value	\$21T–\$59T
Direct Ecosystem Capture	\$4.3T–\$24T
QP Rewards to Anthropic Community	\$2.6T–\$9.5T
First-Mover Multiple	11x–59x (current value: \$0.40T)

AMD

Total Tier 1 Ecosystem Value	\$8.6T–\$24T
Direct Ecosystem Capture	\$1.3T–\$7.1T
QP Rewards to AMD Community	\$0.88T–\$3.3T
First-Mover Multiple	6x–35x (current value: \$0.20T)

Broadcom

Total Tier 1 Ecosystem Value	\$13T–\$35T
Direct Ecosystem Capture	\$1.9T–\$11T

QP Rewards to Broadcom Community	\$1.3T–\$4.9T
First-Mover Multiple	1x–7x (current value: \$1.6T)

Microsoft

Total Tier 1 Ecosystem Value	\$47T–\$130T
Direct Ecosystem Capture	\$9.4T–\$52T
QP Rewards to Microsoft Community	\$6.0T–\$22T
First-Mover Multiple	3x–17x (current value: \$3.0T)

Amazon (AWS)

Total Tier 1 Ecosystem Value	\$39T–\$106T
Direct Ecosystem Capture	\$7.7T–\$42T
QP Rewards to AWS / Amazon Community	\$4.6T–\$17T
First-Mover Multiple	4x–19x (current value: \$2.2T)

Alphabet (Google)

Total Tier 1 Ecosystem Value	\$39T–\$106T
Direct Ecosystem Capture	\$7.7T–\$42T
QP Rewards to Google Community	\$4.9T–\$18T
First-Mover Multiple	3x–18x (current value: \$2.4T)

Oracle

Total Tier 1 Ecosystem Value	\$13T–\$35T
Direct Ecosystem Capture	\$1.9T–\$11T
QP Rewards to Oracle Community	\$1.3T–\$4.9T
First-Mover Multiple	4x–21x (current value: \$0.50T)

Meta

Total Tier 1 Ecosystem Value	\$21T–\$59T
Direct Ecosystem Capture	\$4.3T–\$24T
QP Rewards to Meta Community	\$2.7T–\$10T
First-Mover Multiple	3x–14x (current value: \$1.7T)

Deloitte

Total Tier 1 Ecosystem Value	\$10T–\$28T
Direct Ecosystem Capture	\$2.1T–\$11T

QP Rewards to Deloitte Community	\$1.1T–\$4.2T
First-Mover Multiple	14x–76x (current value: \$0.15T)

PwC

Total Tier 1 Ecosystem Value	\$8.6T–\$24T
Direct Ecosystem Capture	\$1.7T–\$9.4T
QP Rewards to PwC Community	\$0.95T–\$3.5T
First-Mover Multiple	14x–79x (current value: \$0.12T)

EY

Total Tier 1 Ecosystem Value	\$7.7T–\$21T
Direct Ecosystem Capture	\$1.5T–\$8.5T
QP Rewards to EY Community	\$0.85T–\$3.2T
First-Mover Multiple	15x–85x (current value: \$0.10T)

KPMG

Total Tier 1 Ecosystem Value	\$7.7T–\$21T
Direct Ecosystem Capture	\$1.5T–\$8.5T
QP Rewards to KPMG Community	\$0.85T–\$3.2T
First-Mover Multiple	15x–85x (current value: \$0.10T)

McKinsey & Company

Total Tier 1 Ecosystem Value	\$8.6T–\$24T
Direct Ecosystem Capture	\$1.7T–\$9.4T
QP Rewards to McKinsey Community	\$1.3T–\$4.9T
First-Mover Multiple	34x–189x (current value: \$50B)

BCG

Total Tier 1 Ecosystem Value	\$4.3T–\$12T
Direct Ecosystem Capture	\$0.86T–\$4.7T
QP Rewards to BCG Community	\$0.58T–\$2.2T
First-Mover Multiple	29x–157x (current value: \$30B)

Bain

Total Tier 1 Ecosystem Value	\$3.4T–\$9.4T
Direct Ecosystem Capture	\$0.69T–\$3.8T

QP Rewards to Bain Community	\$0.47T–\$1.7T
First-Mover Multiple	34x–189x (current value: \$20B)

Accenture

Total Tier 1 Ecosystem Value	\$8.6T–\$24T
Direct Ecosystem Capture	\$1.7T–\$9.4T
QP Rewards to Accenture Community	\$1.0T–\$3.8T
First-Mover Multiple	10x–52x (current value: \$0.18T)

Booz Allen Hamilton

Total Tier 1 Ecosystem Value	\$2.6T–\$7.1T
Direct Ecosystem Capture	\$0.39T–\$2.1T
QP Rewards to Booz Allen Community	\$0.31T–\$1.1T
First-Mover Multiple	19x–106x (current value: \$20B)

JPMorgan

Total Tier 1 Ecosystem Value	\$13T–\$35T
Direct Ecosystem Capture	\$2.6T–\$14T
QP Rewards to JPMorgan Community	\$1.4T–\$5.3T
First-Mover Multiple	4x–22x (current value: \$0.65T)

Goldman Sachs

Total Tier 1 Ecosystem Value	\$6.9T–\$19T
Direct Ecosystem Capture	\$1.4T–\$7.6T
QP Rewards to Goldman Community	\$0.76T–\$2.8T
First-Mover Multiple	9x–50x (current value: \$0.15T)

BlackRock

Total Tier 1 Ecosystem Value	\$8.6T–\$24T
Direct Ecosystem Capture	\$1.7T–\$9.4T
QP Rewards to BlackRock Community	\$0.95T–\$3.5T
First-Mover Multiple	10x–52x (current value: \$0.18T)

Blackstone

Total Tier 1 Ecosystem Value	\$6.0T–\$17T
Direct Ecosystem Capture	\$0.90T–\$5.0T

QP Rewards to Blackstone Community	\$0.61T–\$2.3T
First-Mover Multiple	5x–29x (current value: \$0.17T)

Walmart

Total Tier 1 Ecosystem Value	\$10T–\$28T
Direct Ecosystem Capture	\$1.5T–\$8.5T
QP Rewards to Walmart Community	\$1.2T–\$4.6T
First-Mover Multiple	2x–12x (current value: \$0.70T)

Disney

Total Tier 1 Ecosystem Value	\$4.3T–\$12T
Direct Ecosystem Capture	\$0.64T–\$3.5T
QP Rewards to Disney Community	\$0.47T–\$1.8T
First-Mover Multiple	3x–18x (current value: \$0.20T)

Healthcare Sector Anchors (Tempus / Milliman / ICON Plc / UnitedHealth)

Total Tier 1 Ecosystem Value	\$21T–\$59T
Direct Ecosystem Capture	\$4.3T–\$24T
QP Rewards to Healthcare-anchor Community	\$2.6T–\$9.5T
First-Mover Multiple	9x–47x (current value: \$0.50T)

Energy Sector Anchors (EDF / utilities cluster)

Total Tier 1 Ecosystem Value	\$8.6T–\$24T
Direct Ecosystem Capture	\$1.3T–\$7.1T
QP Rewards to Energy-anchor Community	\$0.88T–\$3.3T
First-Mover Multiple	4x–24x (current value: \$0.30T)

Defense Sector Anchors (Lockheed / RTX / Northrop / Boeing Defense)

Total Tier 1 Ecosystem Value	\$8.6T–\$24T
Direct Ecosystem Capture	\$1.3T–\$7.1T
QP Rewards to Defense-anchor Community	\$0.88T–\$3.3T
First-Mover Multiple	3x–14x (current value: \$0.50T)

§5.1 Sovereign Headlines

State of Hawaii

Total Tier 1 Ecosystem	\$4.3T-\$12T
Government-Share Capture	\$1.1T-\$4.1T
Layer 3 Regulatory Driver (P50)	\$4.3T (55% of total)
Four-Layer Weights (L1/L2/L3/L4)	10% / 15% / 55% / 20%

State of California

Total Tier 1 Ecosystem	\$43T-\$118T
Government-Share Capture	\$12T-\$42T
Layer 3 Regulatory Driver (P50)	\$39T (50% of total)
Four-Layer Weights (L1/L2/L3/L4)	8% / 12% / 50% / 30%

State of Washington

Total Tier 1 Ecosystem	\$17T-\$47T
Government-Share Capture	\$4.3T-\$17T
Layer 3 Regulatory Driver (P50)	\$13T (40% of total)
Four-Layer Weights (L1/L2/L3/L4)	10% / 15% / 40% / 35%

State of Ohio

Total Tier 1 Ecosystem	\$11T-\$31T
Government-Share Capture	\$3.1T-\$12T
Layer 3 Regulatory Driver (P50)	\$8.8T (43% of total)
Four-Layer Weights (L1/L2/L3/L4)	12% / 15% / 43% / 30%

State of Utah

Total Tier 1 Ecosystem	\$6.0T-\$17T
Government-Share Capture	\$1.8T-\$6.6T
Layer 3 Regulatory Driver (P50)	\$6.6T (60% of total)
Four-Layer Weights (L1/L2/L3/L4)	10% / 15% / 60% / 15%

U.S. Federal Government

Total Tier 1 Ecosystem	\$77T-\$212T
Government-Share Capture	\$17T-\$68T
Layer 3 Regulatory Driver (P50)	\$57T (40% of total)
Four-Layer Weights (L1/L2/L3/L4)	15% / 18% / 40% / 27%

European Union

Total Tier 1 Ecosystem	\$51T-\$142T
Government-Share Capture	\$14T-\$57T
Layer 3 Regulatory Driver (P50)	\$52T (55% of total)
Four-Layer Weights (L1/L2/L3/L4)	10% / 12% / 55% / 23%

United Arab Emirates

Total Tier 1 Ecosystem	\$10T-\$28T
Government-Share Capture	\$3.1T-\$11T
Layer 3 Regulatory Driver (P50)	\$7.6T (40% of total)
Four-Layer Weights (L1/L2/L3/L4)	12% / 18% / 40% / 30%

Kingdom of Saudi Arabia

Total Tier 1 Ecosystem	\$10T-\$28T
Government-Share Capture	\$2.9T-\$11T
Layer 3 Regulatory Driver (P50)	\$6.6T (35% of total)
Four-Layer Weights (L1/L2/L3/L4)	15% / 20% / 35% / 30%

Japan

Total Tier 1 Ecosystem	\$21T-\$59T
Government-Share Capture	\$6.0T-\$22T
Layer 3 Regulatory Driver (P50)	\$16T (40% of total)
Four-Layer Weights (L1/L2/L3/L4)	12% / 20% / 40% / 28%

South Korea

Total Tier 1 Ecosystem	\$10T-\$28T
Government-Share Capture	\$2.9T-\$11T
Layer 3 Regulatory Driver (P50)	\$8.0T (42% of total)
Four-Layer Weights (L1/L2/L3/L4)	12% / 18% / 42% / 28%

Singapore

Total Tier 1 Ecosystem	\$10T-\$28T
Government-Share Capture	\$3.1T-\$11T
Layer 3 Regulatory Driver (P50)	\$8.5T (45% of total)
Four-Layer Weights (L1/L2/L3/L4)	10% / 15% / 45% / 30%

Australia

Total Tier 1 Ecosystem	\$9.4T–\$26T
Government-Share Capture	\$2.6T–\$9.9T
Layer 3 Regulatory Driver (P50)	\$7.8T (45% of total)
Four-Layer Weights (L1/L2/L3/L4)	12% / 15% / 45% / 28%

Norway

Total Tier 1 Ecosystem	\$6.9T–\$19T
Government-Share Capture	\$2.1T–\$7.6T
Layer 3 Regulatory Driver (P50)	\$4.4T (35% of total)
Four-Layer Weights (L1/L2/L3/L4)	10% / 15% / 35% / 40%

Sweden

Total Tier 1 Ecosystem	\$6.0T–\$17T
Government-Share Capture	\$1.7T–\$6.3T
Layer 3 Regulatory Driver (P50)	\$5.0T (45% of total)
Four-Layer Weights (L1/L2/L3/L4)	10% / 15% / 45% / 30%

India

Total Tier 1 Ecosystem	\$34T–\$94T
Government-Share Capture	\$6.9T–\$28T
Layer 3 Regulatory Driver (P50)	\$22T (35% of total)
Four-Layer Weights (L1/L2/L3/L4)	18% / 20% / 35% / 27%

Brazil

Total Tier 1 Ecosystem	\$17T–\$47T
Government-Share Capture	\$3.8T–\$15T
Layer 3 Regulatory Driver (P50)	\$11T (35% of total)
Four-Layer Weights (L1/L2/L3/L4)	18% / 20% / 35% / 27%