



Feasibility Study: Expansion of K9 Finance DAO's Liquid Staking to Polygon (knPOL)

Prepared by K9 Finance DAO in partnership with Agent IX

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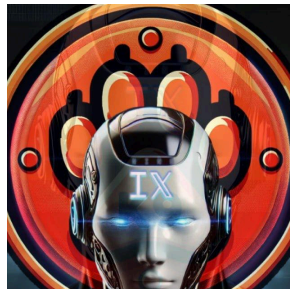


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Objective: Evaluate the feasibility of extending K9 Finance’s liquid staking solution from Ethereum/Shibarium (knBONE) to Polygon, introducing **knPOL** as an LSD for POLYGON. This study examines technical compatibility, financial viability, market conditions on Polygon post-Lido, strategic fit with K9/Shibarium, operational needs, funding avenues, marketing strategy, risks, and a deployment roadmap. Key findings and sources are cited throughout.

1. Technical Compatibility with Polygon PoS

Smart Contract & Network Compatibility: K9’s existing LSD contracts (for BONE on Shibarium/Ethereum) are Solidity-based and should be largely compatible with Polygon’s EVM-based PoS chain. Polygon’s staking mechanism relies on an Ethereum mainnet **StakeManager** contract and validator-specific “share” tokens for delegators

docs.polygon.technology. This is analogous to Shibarium’s delegation framework – K9 already delegates BONE across Shibarium validators via smart contracts. Thus, **knPOL** contracts can integrate with Polygon’s staking system with only moderate adaptations (e.g. pointing to Polygon’s stake manager and handling MATIC/POL tokens). Notably, Polygon currently limits active validators to 105 slots. K9 may need to either **secure a validator slot** or partner with an existing validator for staking access. A minimum of **10,000 POL** (the upgraded Polygon token) must be staked to run a validator, which is a manageable threshold, though initial Polygon economics envisioned ~1.5M POL for validator slots [polygon.technology](https://docs.polygon.technology). K9’s prior experience (e.g. forking Polygon’s open-source monitoring tools for Shibarium) indicates strong technical preparedness to operate on Polygon. Overall, no insurmountable incompatibilities were found – Polygon remains an EVM chain, so K9’s Solidity contracts can be redeployed with minor modifications for MATIC/POL logic and integration with Polygon’s staking contracts.

Changes Since March 2024: Polygon’s architecture has evolved with the **Polygon 2.0** initiative, including a token upgrade from MATIC to **POL** in late 2024. The core PoS mechanism remains, but upcoming changes—such as **restaking layers** and the launch of multi-chain **AggLayer** networks—mean LSD protocols must be adaptable. In mid-2025, Polygon’s first AggLayer-connected chain (**Katana Network**) entered private mainnet as a DeFi-focused “liquidity hub,” underscoring that POL staking will secure and provide liquidity across multiple chains. This trajectory strengthens the case for knPOL to be designed with cross-chain composability in mind, ensuring it can participate in and benefit from emerging AggLayer-based opportunities. Importantly, **Polygon’s share tokens are currently non-transferrable ERC-20s**, lacking `approve()` functionality, which forced previous LSD solutions (Lido, Stader, etc.) to use complex custody or validator takeover models. This has been identified as a hurdle to DeFi composability. In late July 2025, this proposal advanced to **Polygon Improvement Proposal 69 (PIP-69, draft status)**, which would enable full ERC-20 functionality for validator share tokens. Once enacted, it will **significantly simplify knPOL’s design**, allowing K9 to wrap native share tokens instead of managing validators directly, improving security and composability. Until PIP-69 is formally adopted, K9 should still plan to use the existing delegation approach (likely by running or whitelisting a K9-controlled validator to gather POL stakes, as Lido and others did). Polygon’s validator delegation mechanism otherwise remains similar to early 2024, aside from the token migration to POL and a raised minimum stake. No major breaking infrastructure

changes since March 2024 were found beyond the **MATIC→POL token upgrade** (effective Sept 2024) and ongoing improvements in staking contracts.

Infrastructure & Tooling: Essential tooling for an LSD on Polygon is readily available:

- **RPC Providers:** Polygon PoS is widely supported by providers (Alchemy, Infura, QuickNode, etc.), ensuring K9 can access reliable RPC endpoints for on-chain operations.
- **Oracles:** Price feeds for MATIC/POL (in USD and vs ETH) are provided by Chainlink and others on Polygon, which can aid in any required valuation of knPOL or for dynamic fee calculations. Oracles for BONE (if needed for cross-chain yield routing) also exist on Ethereum/Shibarium or could be deployed.
- **Subgraphs:** The Graph Protocol supports Polygon; K9 can deploy subgraphs to index staking data and knPOL contract events. Given K9 already runs analytics (e.g. a Dune dashboard for knBONE), similar tracking can be built for knPOL.
- **Bridges:** Polygon's canonical bridges (POS Bridge and Plasma Bridge) facilitate transfers between Ethereum and Polygon. K9 can leverage these for **moving assets cross-chain** – for example, allowing deposits/withdrawals via Ethereum mainnet if needed (Lido's stMATIC accepted ERC20 MATIC on Ethereum for staking). If K9 follows its knBONE model (where users stake on Ethereum and receive the LSD on Shibarium), a similar flow could be implemented: users deposit POL via Ethereum (or Polygon directly), and knPOL tokens can be minted on Polygon. Bridging knPOL to Shibarium is more complex – no native Shibarium–Polygon bridge exists yet, but third-party bridges (Router Protocol, Celer, etc.) might support Shibarium, but would likely be subject to an integration fee, which would likely be the responsibility of K9 DAO to pay. Such a bridge would allow knPOL to move to Shibarium for use in Shibarium's DeFi, aligning with K9's cross-chain vision. This is **feasible but introduces trust risk** (see Risk Assessment). For the core operations, **Polygon's own bridges and cross-chain messaging are robust**, and K9 can operate without building custom bridge tech initially (besides perhaps using the Ethereum–Polygon bridge for any mainnet interactions).
- **Other Tooling:** Polygon's ecosystem offers block explorers (PolygonScan), validator monitoring (e.g. Polygon's official dashboard or tools like Tenderduty), and dev libraries (Web3.js, ethers) fully compatible with K9's stack. K9 Finance DAO's background (as demonstrated by their Google Cloud grant and technical documentation) suggests they have the capacity to integrate these tools. No critical tooling gaps were identified.

Verdict: Technically feasible. K9's LSD contracts can be ported to Polygon with minor adjustments, and required infrastructure (oracles, RPC, subgraphs) is in place. Polygon's upcoming improvements (POL token, share-token transferability) are positive developments, not blockers – though K9 should design knPOL to accommodate these changes. Ensuring a

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validator slot and bridging solution are the main technical challenges, but both are addressable. The architecture differences since early 2024 (token upgrade, plans for Polygon 2.0) do not fundamentally prevent an LSD deployment, though they **may necessitate a contract upgrade or re-audit when Polygon 2.0 goes live** research.lido.fi.

2. Financial and Liquidity Viability

Validator Staking Requirements and Operational Costs

To launch knPOL, K9 must either run a Polygon validator or delegate to one. **Operating a validator** entails two primary costs: **staking capital** and **infrastructure/maintenance**. The minimum self-stake to activate a validator is **10,000 POL tokens** (equivalent to 10,000 MATIC pre-upgrade). At recent market prices (~\$0.30 per POL), this is roughly **\$3,000** – a low barrier compared to other networks. However, securing one of the 105 active validator slots may require a larger stake or coordination with the Polygon foundation (slots open when a validator unbonds or if the set is expanded). There are currently 102 validators on Polygon which means room for 3 more exists <https://staking.polygon.technology/>. In practice, many Polygon validators have *far higher* stake (the total staked POL is ~3.7 billion, averaging ~35 million per validator), though there are smaller community-run nodes as well. **Ideal stake:** To be safe, K9 could target at least **50k–100k POL** self-staked (if available) to signal commitment and possibly attract delegations – though this is not strictly required to start.

Operational costs include server infrastructure, monitoring, and personnel: running a Polygon validator requires maintaining a high-uptime Linux server (or cluster) running a Heimdall (Tendermint) node and Bor (block producer) node docs.polygon.technology. This can be hosted on cloud instances with redundancy. Estimated cost for a robust setup is **\$300–\$500 per month** (approximately **\$4,000–\$6,000 per year above and beyond current cloud expenses**). This covers cloud fees, monitoring services, and occasional maintenance. Notably, K9 has a \$200k Google Cloud credit which can offset infrastructure costs for a significant time, making validator hosting financially negligible in the short term, but the first year of this grant (which covers all expenses up to ~\$100,000) expires in March. After March, the grant only gives a 20% discount on cloud costs. Validators also need a small amount of ETH for checkpoint transactions (Polygon recommends keeping 0.5–1 ETH for gas on the signer address) – at current gas prices, this might be a few hundred USD per year in costs for submitting Polygon checkpoints (which are partially reimbursed by rewards) polygon.technology polygon.technology.

Beyond the validator, **smart contract deployment and maintenance** on Polygon have minimal direct cost (transaction fees on Polygon are very low – fractions of a cent). K9 may need to **seed a liquidity pool** for knPOL (discussed below) and fund ongoing operations (developers, community support). These are variable costs but can be budgeted from the DAO treasury or future revenue.

Audit and Security Costs: A critical upfront expense is auditing the knPOL contracts. Even if K9 reuses much of its knBONE code, any modifications for Polygon and any bridging

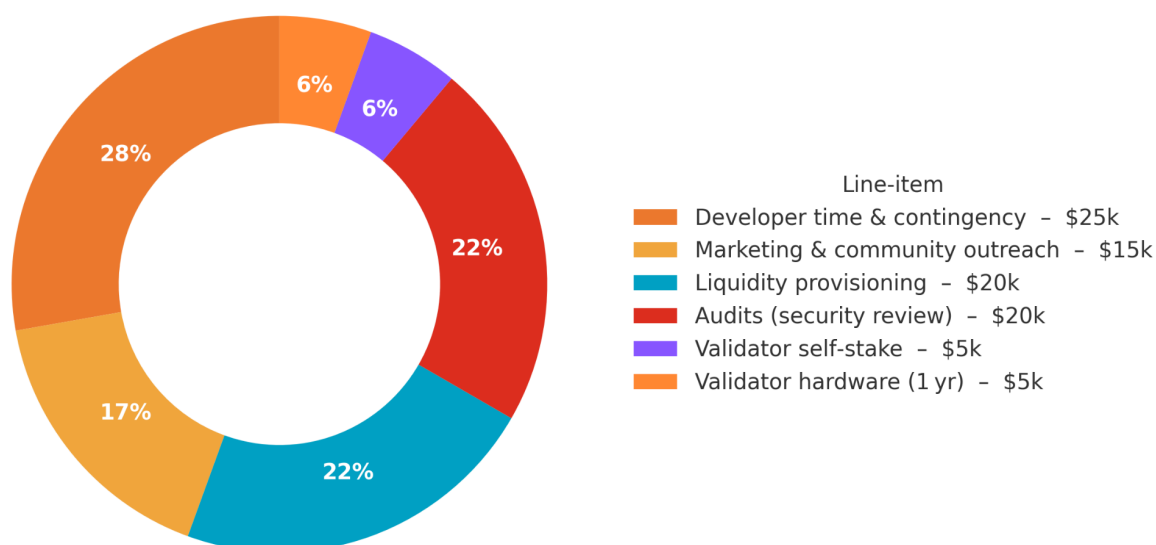
components should be audited by reputable third parties. Given that Polygon's LSD logic must handle delegation, reward accrual, unbonding periods, and cross-chain token issuance, a full security review is needed. Typical audit costs for a project of this scope are in the **\$40,000–\$80,000** range per audit from firms like Certik, Quantstamp, or OpenZeppelin, possibly higher if the codebase is unfamiliar to auditors. Since Polygon's architecture has some nuances (e.g. stakeManager contract, potential future POL changes), auditors will need to spend time understanding these, which could increase cost. However, K9 using existing tech that has been audited likely leads to a lower audit cost. We estimate **~\$20k** for an initial audit. If Polygon 2.0 changes require a rewrite later, another audit might be needed (Lido projected ~\$1.5M for a full Polygon 2.0 upgrade of their middleware research.lido.fi, but K9's leaner approach should cost far less). It may be wise to budget **\$75k–\$100k total** for multiple audit rounds and remediation. This could potentially be grant-funded (Polygon grants often cover audit expenses for ecosystem projects), but these additional audits can happen over time. The initial requirement is at minimum \$20k via grant support. It is worth noting that contact with the Polygon CEO was made and he indicated in a casual conversation that their grants are focused primarily on payment solutions right now only.

Summary of Capital Requirements: *(Estimated initial costs to deploy knPOL)*

Item	Estimated Amount (USD)	Notes
Validator self-stake (MATIC/POL)	\$5,000 (min) up to ~\$50,000	10k POL minimum (~\$5k). More stake (up to 100k POL) ideal for stability.
Validator hardware (1 year)	\$5,000	Cloud servers, monitoring, backup. Could be offset by GCP credits.
Audits (security review)	\$20,000	Third-party audit(s) of contracts and integrations.
Liquidity provisioning	\$20,000 (initial)	To seed knPOL-POL liquidity pool (must be covered by grants or be voted explicitly from treasury reserves ; without this, net cash burn exceeds \$75k before first revenue.).
Marketing & community outreach	\$15,000	Initial budget for marketing campaigns, community incentives.
Developer time & contingency	\$25,000	Internal cost budget for development (the feasibility study itself was budgeted at \$1k/week). This would cover 2x additional resources to meet the resourcing requirements for 8-10 weeks

Note: Many costs (node infra, dev time) are covered by existing resources or grants, so the out-of-pocket expenditure for K9 may be limited to audits and liquidity seeding. **Total initial funding needed is on the order of \$75k–\$150k**, much of which K9 intends to seek via grants (see Section 6).

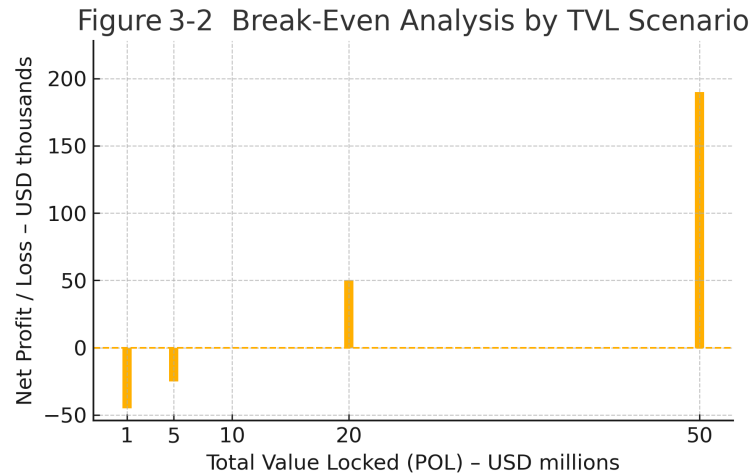
Capital Requirements



Revenue Model and Break-Even Analysis

K9's revenue from knPOL will derive from **staking rewards and fees**. Polygon's staking rewards come from an inflationary allocation of POL (12% of total supply reserved for staking incentives) plus transaction fees. The current **staking APY on Polygon is ~4–5%** for delegators (varies with total staked and validator commission). For modeling, we assume an average **5% annual yield** on POL. Liquid staking protocols typically charge a fee on staking rewards – Lido charged 10% (split between DAO and node operators) on Polygon. K9 could implement a similar fee (e.g. **10% of rewards**), which effectively means **0.5% of the staked assets' value per year** (10% of a ~5% yield) accrues to the DAO as revenue.

Breakeven analysis: The table below models annual revenue vs. costs for various TVL (Total Staked POL) scenarios, assuming a 5% reward yield and 10% fee. We compare this to an estimated \$50k/year operating cost (node + minimal DAO overhead, excluding one-time audit). Amounts are in USD for illustration:



\$10M staked TVL would be required to operate at break even

Staked POL TVL (USD)	Annual Rewards @5%	K9 Fee (10% of rewards)	Annual Revenue	Annual Ops Cost	Net Profit/Loss
\$1 million	\$50,000	\$5,000	\$5,000	\$50,000	-\$45,000
\$5 million	\$250,000	\$25,000	\$25,000	\$50,000	-\$25,000
\$10 million	\$500,000	\$50,000	\$50,000	\$50,000	\$0 (even)
\$20 million	\$1,000,000	\$100,000	\$100,000	\$50,000	+\$50,000
\$50 million	\$2,500,000	\$250,000	\$250,000	\$60,000 (scaled)*	+\$190,000

*(Assumes some cost increase at very high TVL, e.g. extra nodes or support.)

Interpretation: K9 needs roughly **\$10M in POL staked** to cover a \$50k/yr expense baseline purely from protocol fees. This breakeven TVL is modest – about **<1% of Polygon’s current staked supply** (\$670M total staked POL). In user terms, if the average user stakes \$2,500 of POL, ~4,000 users are needed to reach \$10M TVL (fewer if some whales stake larger amounts). By comparison, Lido on Polygon had ~\$86M TVL at its peak, so capturing ~12% of Lido’s former user base could suffice for K9 to break even. After breakeven, additional TVL becomes surplus revenue that can fund DAO initiatives or incentivize users.

Notably, **successful expansion hinges on winning external grant funding to cover all one-time costs—smart-contract audit, validator stake, and initial LP seeding. Absent at least \$75 k in grants, the protocol would run at an estimated –\$45 k to –\$25 k net loss during year 1 and would need ≈ \$20 M TVL just to break even, a milestone the current market makes unlikely within the first 12 months.** If those funds are secured, GCP credits

can absorb infra spend and the DAO treasury can bridge any short-lived cash burn while TVL ramps.

The DAO should still calibrate its performance fee to balance competitiveness with sustainability: 10 % of staking rewards is industry standard (Lido, Stader), but K9 could open with a 5 % “early-mover” promotional rate and step up to 10 % once TVL passes the \$20 M break-even. A tiered schedule—say 5 % on the first \$10 M, 7.5 % on the next tranche, then 10 %—keeps onboarding friction low while ensuring long-term revenue adequacy.

In addition to fee revenue, K9 might earn indirectly through its **own delegated stake**. If the DAO stakes some of its funds in the knPOL validator (as self-stake beyond the 10k minimum), that stake earns the full ~5% APY (minus no fee since it's the validator). For example, if K9 stakes 100k POL of treasury, that yields 5k POL/year (\$2.5k) to the DAO – a small but not trivial offset to costs.

Liquidity and Exit Liquidity Considerations

Launching knPOL requires ensuring users can **enter and exit** the stake smoothly. Two mechanisms exist: **on-chain withdrawals** (unstaking) and **secondary market liquidity**.

- **Unstaking Mechanism:** Polygon has an unbonding period (currently ~3–5 days for POL unstaking). K9's contract will need to handle unstaking requests, likely by issuing a **claim voucher (NFT)** or a pending withdrawal record (K9 already uses an NFT voucher system for knBONE withdrawals after the unbonding period). Users who unstake knPOL will have to wait the required period to receive POL back. This illiquidity can deter some users if not mitigated by liquid markets.
- **Liquidity Pool (LP) Launch:** To provide **instant liquidity**, K9 should bootstrap an AMM pool for **knPOL:POL**. This pool lets users swap knPOL for POL at market price without waiting for unbonding. It also establishes a **price peg** for knPOL. A deep pool reduces slippage and increases user confidence in exiting. K9 can seed this pool with initial liquidity – for example, contributing say **\$20k of value** (in POL from treasury or a grant) paired with the equivalent knPOL. Additional liquidity can come from the community; to attract LPs, K9 might offer incentives (e.g., distribute some \$KNINE tokens or a portion of fees to LPs).

LP Bootstrapping Strategies: Options include:

- **DAO-Seeded Liquidity:** Use a portion of K9 treasury (or raised funds) to seed Uniswap v3 or QuickSwap pool on Polygon. Even \$20k-\$50k initial liquidity can be effective if the pool is incentivized to grow.
- **Liquidity Mining Incentives:** Allocate K9's native token (KNINE) or a share of POL rewards to LP providers for a limited time. This was common in Lido's rollout; Lido spent

significant LDO incentives on Polygon liquidity. K9 should be cautious – Lido’s Polygon incentives (over 2.1M LDO, ~\$3.4M) far outweighed revenues, a **poor ROI** that K9 wants to avoid. A more modest incentive program (worth, say, \$10k-\$20k over a few months) could bootstrap liquidity without draining resources.

- **Partnership with DEXs:** K9 can seek support from Polygon DEXes (QuickSwap, Balancer) or yield optimizers (Beefy) to co-sponsor liquidity. QuickSwap’s community has supported new projects via dual incentives in the past. Additionally, Polygon’s own incentive programs (if any active) could be tapped – though currently Polygon’s focus is more on grants than direct liquidity mining rewards.

Grant Dependence Scenarios: If K9 secures a Polygon grant, a portion can be earmarked for these liquidity efforts. For example, a \$75k grant could allocate \$15k to audit, \$20k to liquidity, \$15k to marketing, and 25k for development. If **no grant materializes**, K9 would rely on its DAO treasury or strategic partners. The DAO might decide to bootstrap more gradually – e.g., start with smaller liquidity and grow it through organic means (encouraging knPOL use as collateral on platforms, etc.). It’s important that K9 **does not overspend incentives** in pursuit of growth; the model should be sustainable with moderate TVL (as shown by the relatively low break-even point).

Sustainability and ROI: The financial viability ultimately hinges on achieving sufficient adoption without excessive incentive spend. Lido’s experience is instructive: Lido on Polygon made only ~\$167k/year in fees while spending millions on incentives and operations, leading to negative ROI and a decision to exit. K9’s model is leaner – minimal ongoing costs and potentially community-driven growth – so even capturing a small fraction of the market can sustain it. Additionally, any **grants or venture funding** obtained (Section 6) would greatly improve financial feasibility, effectively subsidizing the expansion until it achieves self-sufficiency.

Conclusion (Financial): With prudent management, expanding to Polygon is financially **viable** for K9. The upfront costs (validator stake, audit) are modest relative to potential funding sources, and break-even TVL is low (~\$10M). The key is to avoid the pitfalls of previous efforts (overspending on liquidity incentives and underestimating maintenance costs). If K9 secures external funding and steadily grows knPOL’s user base, the Polygon expansion can become self-funding while also providing value (yield) to the community.

3. Market Opportunity and Post-Lido Context

Polygon’s liquid staking market in 2025 presents a unique opportunity: **the exit of Lido Finance** – formerly the largest LSD provider – has left a service gap that K9 could fill. Below is an analysis of Lido’s Polygon experience and the current market landscape:

Additionally, in July 2025 Polygon launched an “AggLayer Breakout” initiative that provides **airdrops to POL stakers** from new ecosystem projects. The first announced distribution will

grant Katana Network tokens to eligible stakers. For knPOL, this creates an extra yield layer beyond base staking rewards and DeFi opportunities, offering a built-in marketing advantage: users could gain exposure to ecosystem token drops simply by holding knPOL. This aligns with Polygon's active push to increase staking participation and could help accelerate early adoption.

Lido's Historical Performance on Polygon: Lido (via partner Shard Labs) launched **stMATIC** in 2021 with high hopes. By Oct 2023, it amassed 151 million MATIC in TVL (\$80–\$90M), capturing about 3–4% of Polygon's staked MATIC market. User adoption, however, lagged expectations – Polygon was only Lido's 5th largest network by TVL (far behind Ethereum, Solana, etc.). Lido spent heavily to incentivize usage on Polygon: **over 2.13 million LDO tokens** (worth ~\$3.4M) were distributed in about a year (Oct 2022–Oct 2023) to grow stMATIC's market share. Despite these incentives, the revenues were meager – on the order of **\$167k per year** in protocol fees. This translates to a deeply negative ROI for Lido's DAO (spending \$3.4M to earn \$0.17M/year). Even after factoring in any integrator partnerships, the Polygon deployment remained **underutilized and unprofitable**. Furthermore, Lido faced technical incidents – e.g., a withdrawal bug paused stMATIC withdrawals for 25 days in 2023 – which, while resolved, highlighted maintenance burdens and potential reputational risk.

Lido's Decision to Sunset: In late 2024, following extensive governance debates, Lido's community voted to discontinue Lido on Polygon. The stated reasons were a combination of **limited adoption, poor economics, and strategic refocus**. Specifically, Lido cited: *"limited user adoption, insufficient rewards [relative to costs], high-resource maintenance requirements, and evolving ecosystem dynamics"* as factors. Polygon's growth stagnation in DeFi was noted – competition from newer chains (e.g. Layer2s like Arbitrum, zkEVMs) meant Polygon PoS didn't see the DeFi boom needed to justify ongoing support. Additionally, **Polygon's technical roadmap** (the move to POL token and Polygon 2.0) would have required Lido to rewrite and re-audit their Polygon solution at an estimated cost of ~\$1.5M research.lido.fi. Given that Lido DAO chose to prioritize Ethereum and liquid staking on L2s, maintaining a costly Polygon deployment with low return did not align with their strategy. Thus, Lido began phasing out in Dec 2024, halting new deposits and urging users to unstake by June 2025. As of mid-2025, stMATIC is effectively winding down, and Lido is **fully exiting Polygon**.

Post-Lido Landscape: Lido's exit leaves only a couple of **incumbent LSD providers** on Polygon: namely **Stader Labs (MaticX)** and **Ankr (ankrMATIC/POL)**, among possibly a few smaller projects. None have achieved dominant traction. In fact, all third-party Polygon LSDs struggled to gain usage; as a Polygon Improvement Proposal draft notes, *"multiple providers (Stader's MaticX, Ankr, Lido's stMATIC, etc.) launched... but these saw limited adoption. In fact, Lido decided to sunset stMATIC in June 2025 due to low usage."* Stader's MaticX, launched in 2022, had some success but even Stader severely cut incentives by 75% due to stagnation. By 2024, the overall LSD penetration on Polygon was low – roughly **35% of POL supply is staked** (which is healthy) but those are mostly direct stakes; only a small fraction was liquid-staked. This means **hundreds of millions of dollars of staked MATIC remain illiquid**, an untapped market that a new LSD could target.

Opportunity for K9 – Filling the Gap: With Lido (the market leader in LSD elsewhere) gone, **no single LSD dominates Polygon now**. This presents an opening for K9's knPOL: a nimble, community-driven protocol could capture users who still want liquidity for their staked POL. The potential market size is significant – even capturing 5-10% of the staked POL (which is ~\$670M total) would mean \$33–\$67M TVL for knPOL, far above our break-even point. Importantly, K9 can learn from Lido's pitfalls: **a leaner cost structure and targeted niche** could succeed where a large generic approach did not. K9's niche advantages include:

- **Shibarium Ecosystem Integration:** K9 is the official LSD of Shibarium (BONE), which means it has a built-in community of Shiba Inu ecosystem followers. By connecting Polygon's yield opportunities to Shibarium (for instance, allowing knPOL holders to participate in Shibarium DeFi or routing some rewards to Shibarium projects), K9 offers a differentiator that pure-Polygon projects lack. This cross-ecosystem angle can attract Shibarium enthusiasts to use knPOL and vice versa. Competitors like Stader or Ankr don't serve Shibarium at all.
- **Lower Incentive Dependence:** K9 can pursue growth without the massive liquidity mining spend that Lido undertook. The K9 DAO likely cannot (and should not) spend millions in token incentives; instead it can leverage community loyalty and Polygon's grant support to grow more organically. While this might mean slower initial growth than Lido's subsidy-fueled spurt, it ensures sustainability. The **post-Lido user base may be more value-driven** (seeking a long-term solution now that quick incentive farms are gone), which aligns with K9's approach of moderate, real yield ("real yield" being a focus in K9's Shibarium strategy).
- **Technical Simplicity & Timing:** If Polygon implements PIP-**ERC20 share tokens** in the coming months, launching around that time could give K9 a big advantage. It would simplify knPOL's design (potentially no whitelisting or complex validator custody needed). K9 can position itself as a **second-wave LSD protocol** that benefits from Polygon's improved staking architecture, unlike Lido which was built under older constraints. Essentially, K9 could market knPOL as a "new and improved stMATIC" that is easier to integrate into DeFi (thanks to transferable shares) and aligned with **POL** (emphasizing that K9 is here for the new Polygon era, not the old MATIC era). This messaging can resonate after Lido's sunset.
- **Untapped User Segments:** Lido's marketing mainly targeted DeFi users on Polygon. K9 can target both *DeFi users* and *community users*. For example, Polygon's large gaming/NFT user base (who might not use Lido but could stake via an easy DAO interface) or Shib holders who also hold POL. Also, any users disillusioned by Lido's exit might welcome an alternative to avoid having to self-stake or use CeFi staking.

Competitive Analysis: The main competitor now is **Stader (MaticX)**. Stader is a solid multi-chain staking platform, but it has scaled back efforts on Polygon. If MaticX still operates, it likely has some market share; however, Stader doesn't have special incentives now and might

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also face the same structural challenges Lido did (needing to run their own validators, limited adoption). **Ankr** offers liquid staking (ankrMATIC), but Ankr's solution usually involves a custodial element and has seen limited DeFi integration. Smaller players (e.g., ClayStack's csMATIC in the past) never gained traction. There is also a possibility Polygon's community itself could launch an LSD (especially if share tokens become transferable, someone might create a simple wrapper). K9 should be prepared to compete on **fees (could be lower or equal to Stader's), community engagement, and integration**. For instance, K9 could try to integrate knPOL with **Polygon DeFi protocols** early: lending markets (Aave on Polygon originally listed stMATIC; perhaps knPOL could seek listing), yield aggregators, etc. Each integration increases utility and moat.

Why K9's Model Can Succeed Post-Lido: Lido on Polygon failed largely due to high overhead and insufficient usage. K9's DAO-driven, community approach inherently has lower overhead (no profit-maximizing company behind it needing large compensation). Moreover, any revenue flows back to DAO/community incentives, which could further drive adoption. K9 can also be more patient in growth – it doesn't need to justify a huge VC investment or token price; it can focus on sustainable growth, which might align better with Polygon's current phase (Polygon is relatively mature now, so users prefer stable solutions over mercenary yield farming).

Finally, it's worth noting **Polygon's stance**: Polygon's team and community appear supportive of new liquid staking solutions. The draft PIP explicitly aims to *"unlock liquidity for hundreds of millions of dollars of staked POL"* and calls the opportunity *"huge untapped"*. They even acknowledge the complexity that hampered Lido (validators had to cede node ownership, etc.). By addressing those, Polygon is effectively inviting a "next-gen Lido" to emerge. K9 can position itself as exactly that – an agile, Polygon-aligned LSD provider that capitalizes on Lido's departure. In summary, **market conditions are favorable**: there's a vacuum in Polygon's LSD market and an explicitly "blessed" need to fill it, which K9 is well-suited to exploit.

4. Strategic Alignment with K9/Shibarium Ecosystem

Expanding to Polygon with knPOL should not be viewed in isolation – it can actively **strengthen K9's core mission and the Shibarium ecosystem**. With proper design, this can actually benefit Shibarium more than it does Polygon. Several strategic benefits and alignments are identified (listed below). Even with these benefits, it is important to note that **Shibarium users have expressed significant resistance to moving to other chains**, or anyone who builds on Shibarium developing solutions outside of the ecosystem.

- **Cross-Chain Value Flow:** By entering Polygon, K9 can channel value back to Shibarium. For instance, a portion of the yield earned from POL staking could be used to **buy BONE or other Shibarium assets** as rewards for K9's Shibarium stakers. This concept of *"routing yield to Shibarium"* means Polygon's POS rewards (denominated in MATIC/POL) are converted to bolster Shibarium's DeFi (perhaps distributed to knBONE holders or used to fund Shibarium validator operations). Such a feedback loop increases utility for Shibarium tokens and creates a narrative of collaboration (Polygon yields

feeding Shibarium growth). It effectively turns knPOL into a vehicle that indirectly **benefits Shibarium's decentralization and liquidity** – aligning with K9's goal of supporting Shibarium. This kind of synergy can also win political points: Shibarium's community may be more supportive of the Polygon expansion if they see tangible benefits flowing home.

- **Onboarding Funnel:** knPOL can act as an **onboarding funnel** for users between ecosystems:
 - **Polygon → Shibarium:** Polygon users who start using knPOL (perhaps attracted by a new LSD) will inevitably learn about K9's Shibarium offerings (knBONE, etc.). K9 can design the user journey such that Polygon stakers are encouraged to explore Shibarium (for example, offering extra yield if they also stake BONE, or running cross-promotions). If knPOL is bridged to Shibarium, Polygon users might follow their assets there to earn additional rewards or participate in Shibarium yield farms. This could drive new traffic and liquidity into Shibarium, which is crucial for a nascent chain. Essentially, knPOL could serve as a **"Trojan horse"** bringing Polygon DeFi users into the Shibarium realm. Rewards could also be captured on Shibarium only if deemed appropriate.
 - **Shibarium → Polygon:** Conversely, Shibarium-centric users (Shiba Inu community) who may not have engaged with Polygon might be enticed to stake POL through K9 since it's within a DAO they trust. This expands their exposure to Polygon and could make them active in Polygon DeFi as well. K9 becomes a bridge between communities, expanding its brand across chains.
- **Ecosystem Diversification:** From a DAO perspective, adding Polygon staking diversifies K9's revenue and influence. It reduces reliance on Shibarium alone and shows that K9 is a **multi-chain DeFi player**, not just tied to one meme ecosystem. This can strengthen the DAO by exposing it to more opportunities (grants, partnerships in Polygon's domain) and hedging against any single-chain risks. Also, any improvements or features developed for Polygon (e.g. better staking UIs, monitoring tools) can potentially be applied to Shibarium as well.
- **Competitive Positioning:** On Polygon, K9 will position knPOL as a **community-first, lean alternative** to bigger protocols. While Stader and Ankr are more corporate, K9 can emphasize decentralization and community governance of the DAO. Moreover, K9's **"Shibarium connection"** is a unique differentiator – it can be marketed as *"the liquid staking solution bridging Polygon and Shibarium"*. This narrative sets knPOL apart from purely Polygon-focused tokens like MaticX. Additionally, K9 can tout features like **lower fees** (if chosen), or **"Real Yield"** (if K9 shares a portion of protocol revenue back to knPOL holders or KNINE stakers, that could attract users who prefer LSDs with native yield boost). By being nimble, K9 might also integrate faster with trending Polygon DeFi

apps than larger competitors can.

- **Shibarium Ecosystem Boost:** Bringing Polygon into the fold could increase the total value locked and activity in Shibarium indirectly:
 - K9 could allow **knPOL as collateral in Shibarium protocols** (if a lending market or DEX on Shibarium lists knPOL, it effectively imports Polygon liquidity into Shibarium).
 - If knPOL gains popularity, K9's success on Polygon can reflect positively on Shibarium's narrative (showing that a Shibarium-born DAO can compete on big chains). This **cross-chain success story** might encourage more projects to build on Shibarium, knowing they can expand outwards.
 - K9 might also explore using some of the Polygon grant funding or revenue to support Shibarium initiatives (like educational content, joint hackathons), further strengthening ties.

Potential Scenarios of Integration:

- **Use Case:** A DeFi user on Polygon stakes 1000 POL via K9, receiving 1000 knPOL. They earn ~5% APY. K9 takes a fee and perhaps converts a slice of that (~0.5% APY) into BONE distributed to xKNINE lockers (hypothetically). The user, now aware of K9's Shibarium presence, decides to move some knPOL to Shibarium to farm additional yield in a Shibarium pool. They become active in Shibarium, adding TVL there. Meanwhile, K9's DAO treasury accumulates POL fees, some of which are swapped for BONE (supporting BONE price) or used to spin up another Shibarium validator. This way, **Polygon's expansion reinforces Shibarium's growth** rather than distracting from it.
- **Governance Alignment:** Any Polygon expansion will still be governed by K9 DAO (presumably on Ethereum or Shibarium via KNINE token). This means Shibarium community members get a say in Polygon operations. Rather than splitting focus, it could increase overall engagement – more proposals, more voters interested as the DAO's scope grows. It's crucial, however, to ensure **core Shibarium operations remain solid** (knPOL should not monopolize attention or resources to the detriment of knBONE). The feasibility study's approach of careful evaluation first already reflects the DAO's caution.

In conclusion, expanding to Polygon strongly aligns with K9's mission: it **amplifies K9's impact** across ecosystems, leverages the unique Shibarium connection as a competitive edge, and creates synergies that can benefit both Polygon users and the Shibarium community. K9 stands to become a *cross-chain DeFi connector*, using knPOL as both a revenue source and a tool to **onboard users into Shibarium and Ethereum DeFi** (since K9 also has an ETH liquid staking

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component in its roadmap). Such strategic positioning could elevate K9 from a Shibarium-specific project to a recognized name in multi-chain liquid staking, but not without the risks of distraction /

5. Operational Requirements and Resource Assessment

Launching knPOL on Polygon will introduce new operational considerations for K9 DAO in terms of governance, technical infrastructure, and DAO resources. This section outlines those requirements:

DAO Governance & Decision-Making: K9 Finance DAO will need to incorporate Polygon expansion into its governance process. Initial steps (like this feasibility study funding) have been put to a DAO vote. Going forward, major actions – deploying contracts on Polygon, allocating treasury funds for staking or liquidity, applying for grants – should be presented as governance proposals for approval. This ensures community buy-in and transparency. Additionally, the DAO may consider establishing a **Polygon Committee or Working Group** to oversee the expansion (perhaps a few core contributors specialized in Polygon). Governance documents may need updates to include Polygon-related parameters (e.g. if adding a new revenue stream, how fees are split, or if creating a multi-sig on Polygon, who controls it). The cross-chain nature means **secure communication channels** between Shibarium and Polygon operations – e.g., a process for bridging any DAO-owned assets (like if the DAO treasury on Ethereum needs to send POL to Polygon). A multi-signature wallet on Polygon (Gnosis Safe) controlled by DAO signers would likely be set up to manage funds on that network.

Validator Operations & Monitoring: If K9 runs its own Polygon validator, operational excellence is crucial. This includes:

- **Node maintenance:** Ensuring ~100% uptime, applying upgrades from Polygon promptly, and managing keys securely. Polygon slashing for downtime is relatively mild, but double-signing can be severely penalized – so K9 must follow best practices to avoid any slashing events.
- **Monitoring:** K9 already forked **matic-jagar** (a Polygon validator monitoring suite) for Shibarium, indicating they have tooling to monitor validator performance (uptime, consensus participation, etc.). This can likely be repurposed directly for a Polygon node, given matic-jagar was originally built for Polygon. Alerts should be set so if the node goes down or lags in signing checkpoints, the DAO is notified immediately (protecting funds and reputation).
- **Delegation management:** K9 might accept delegations from the public (if they run an open validator with commission). They'd need to handle any support queries from delegators (e.g. users delegating via the official Polygon staking UI to K9's validator). While this isn't too involved, maintaining a good validator reputation (uptime, fair

commission, helpful communication) is important for community trust.

- **Upgrades & Keys:** With Polygon 2.0 on the horizon, the validator might need to migrate or update. K9 should stay connected to Polygon's validator community and announcements (e.g. via the official forum and discord). This ensures any changes (like PIP-4 raising min stake or share token contract upgrades) are anticipated. The DAO should also plan for **key management** – ideally using a hardware security module or secure enclave for signing, to mitigate key compromise risk.

Infrastructure Scaling: Beyond the validator node, K9 will deploy smart contracts (for knPOL token, staking logic, etc.) on Polygon. These contracts need reliable **RPC endpoints** to interact with (for the dApp UI and any automation like reward compounding). Using multiple RPC providers or a load-balanced service will be wise to avoid downtime if one endpoint fails. K9 may also run their own Polygon archive node for analytics, given their data-heavy approach (e.g., Dune dashboards). The cost of running a Polygon full/archive node could be considered, but many teams rely on hosted services instead.

Bridging Infrastructure: If K9 implements cross-chain bridging (say, to move knPOL to Shibarium or allow Ethereum deposits), it introduces operational components:

- **Bridge contracts** on each chain.
- **Bridge relayers or oracles** to verify cross-chain messages.
- Likely a multi-sig or permissioned contract to manage the bridge (unless using a third-party bridge).
K9 must decide whether to build a custom bridge (complex and risky) or leverage existing solutions (with due diligence on their security). If using an existing bridge like Router or Multichain (though Multichain had issues in 2023–24), K9 would integrate and monitor those. If custom, the DAO would have to run or incentivize relayer nodes. Given the overhead, a prudent path is to **minimize custom bridging initially** – perhaps start by treating knPOL as Polygon-native and only later consider bridging once the core product is stable.

Developer & DAO Resources: Expanding to Polygon effectively adds another product line for the K9 DAO to manage. Based on this study's findings, the DAO should plan developer allocation:

- **Smart Contract Developers:** to modify and deploy the knPOL contracts, and later handle upgrades or bug fixes. Likely 1-2 solidity devs for a few weeks for initial work, and part-time thereafter.

- **Frontend/Full-stack Developer:** to update K9's dApp interface to support the Polygon network (network switching, displaying knPOL balances, etc.). K9's UI is already multi-network (Ethereum and Shibarium) docs.k9finance.com, so adding Polygon is straightforward but requires testing. This developer will also integrate any bridging UX (if users can deposit on one chain and receive on another).
- **DevOps Engineer:** to set up and maintain the validator and any needed nodes, as well as ensure monitoring and alerts. Security hardening of the validator environment is a must. This could be a role filled by an existing DAO member familiar with running Shibarium validators.
- **Community/Support:** more users and a new chain mean more support queries (how to stake, how to unstake, troubleshooting transactions). K9 should ensure community mods or support staff are educated on Polygon specifics. Possibly produce documentation specific to knPOL (like FAQs, user guides) akin to their existing docs.
- **Business Development:** forging partnerships in the Polygon ecosystem (with DEXs, wallets, etc.) requires outreach. K9 DAO members (or ambassadors) should allocate time to network with Polygon projects and attend Polygon community calls/events. This will help in integrations and maybe smoothing the validator onboarding (personal connections with Polygon validators or the foundation can help get whitelisted faster). This is likely the area where the DAO would need the most improvement as there are few DAO members with contacts in the Polygon ecosystem and Business Development can be a time consuming endeavour.

The DAO's **operations budget** needs to cover these human resource efforts. Some of this can be grant-supported (Polygon grants sometimes provide funding for hiring or specific development milestones). Internally, K9 had budgeted \$1k/week for the feasibility study work; for implementation, costs will be higher (developers might need market rates, which could be a few thousand per week). However, if core DAO members are token-incentivized or already on payroll, it might not drastically increase short-term cash outflow.

Validator Whitelisting / Timeline: A practical consideration is **how quickly K9 can obtain a validator slot on Polygon**. Officially, anyone can apply to become a Polygon validator via a form, but acceptance depends on slot availability. There are 105 slots; if they're full, one must wait for an exit or lobby for an expansion. Alternatively, K9 could start by partnering with an existing validator (one with good performance but maybe low delegation, who might agree to run K9's staking operations in exchange for a share of fees). This could be a short-term solution if getting their own slot takes too long. The feasibility study timeframe suggests K9 is aiming to decide and possibly deploy within months, so contacting Polygon's validator coordination team is crucial early on. If a **grant is obtained**, Polygon's team might be inclined to facilitate K9's validator onboarding as part of supporting the project. Realistically, securing a slot could take **a few weeks to a couple of months** of process (including setting up and staking). It should be factored into the roadmap (see Section 9).

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Security and Risk Management: Operationally, K9 should implement robust security for the new deployment:

- Multisig control of critical contracts (to avoid single point of failure if an admin key is needed for upgrades).
- Thorough testing on Polygon's testnet (Mumbai) before mainnet launch.
- A plan for emergency response: e.g., if a critical bug is found, have a pause mechanism or a way to alert users (Lido's 25-day withdrawal halt shows the need for clear comms and contingency plans).
- Compliance and legal: While DeFi is open, K9 operating on Polygon (and possibly involving multiple jurisdictions of users) might consider any legal implications, though likely minimal as a decentralized DAO with no custody of funds beyond smart contracts.

Conclusion (Operational): K9 has a roadmap to handle operational demands: governance is supportive (initial proposals passed with community enthusiasm), technical operations can leverage existing expertise (Polygon's DNA is in Shibarium's design, and K9 already runs complex infra), which are both positive. However, K9 DAO **requires** grant support for validator onboarding, development work, audits, and LP seed; absent that support, scaling is deferred. The main requirements are to maintain focus and not overstretch – adding Polygon is like adding a new wing to a building; it needs its own support beams. Proper monitoring, enough DAO assignment to Polygon expansion tasks, and coordination between Shibarium and Polygon efforts will ensure the expansion doesn't compromise K9's reliability or reputation.

6. Grants and Incentives for Polygon Expansion

Expanding to Polygon can be significantly de-risked with external funding. Polygon's ecosystem has several grant and investment programs that K9 can tap into. This section outlines relevant programs, recent grant trends, key contacts, and expected funding amounts.

Polygon Community Grants Program: Polygon has a robust Community Treasury and grants initiative (announced with Polygon 2.0). In 2024-2025, they allocated up to **35 million POL per round** for grants focused on ecosystem growth. Within this program, funding is tiered by project stage:

- *Ideation Stage:* 10k–20k POL grants (\$3.5k–\$7k at \$0.35/POL) for very early projects or proofs of concept.
- *MVP Stage:* ~25k–40k POL (\$8.75k–\$14k) for projects that have a minimum viable product.

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- *Early Traction:* ~50k POL (\$17.5k) for projects with some users or traction.

A liquid staking protocol like K9 would likely qualify at least as MVP or Traction stage by the time of application (since K9 can show an MVP on testnet or actual code, plus existing traction on Shibarium). Thus, an initial grant in the range of **25k–50k POL** (~\$10k–\$17k) is a realistic ask. This might sound small relative to needs, but K9 could combine multiple grants or use it specifically for certain costs (e.g., an audit). The Community Grants are rolling; the **mid-2025 round** ran June–Aug 2025 with decisions on a rolling basis. Funding is typically disbursed in **Q3–Q4** following the window.

Mandatory Funding Target: The DAO must raise ≥\$90k+ and our recommendation is to only move forward if this target is reached.

Encode Club x Polygon Grants: In early 2025, Polygon partnered with Encode Club to run specialized grant tracks (AI, DeFi, etc.). DeFi projects (which K9 certainly is) can get similar amounts (10k–50k POL depending on stage). Encode Club’s process might involve pitching to judges and showing an innovative angle. If K9 can highlight something novel (for example, using AI for yield optimization or emphasizing cross-chain tokenization), it could strengthen this application. Deadlines like March 20, 2025 were mentioned for some tracks; future rounds likely occur, so K9 should keep an eye on Encode’s announcements. A grant from here could be additive to the main Community Grant.

Polygon Thrive (Community DeFi) Grants: There was a mention of a “*Thrive*” program with a pool of 2.4M POL (~\$840k) focusing on memecoin and community projects. A Shibarium-linked project like K9 might fit the community-driven ethos, though it’s unclear if liquid staking would be funded as a “memecoin project.” If K9 incorporates a fun community angle or perhaps a viral marketing hook, this is a possible avenue, but likely the regular grants are more straightforward.

Polygon Ventures (Venture Capital Arm): Separately from grants, **Polygon Ventures** invests in projects that enhance the Polygon ecosystem. They typically do equity or token deals (not free grants). For a DeFi protocol like K9, possible funding routes are:

- *Seed/Pre-seed investment:* Polygon Ventures has done \$500k pre-seed checks for DeFi projects (e.g., Davos Protocol in 2023). K9 could pitch for a seed round in the **\$500k–\$1M** range if it’s looking to scale aggressively. This would likely involve selling some tokens or equity to Polygon Ventures and possibly other VCs. The presence of **Polygon co-founders (like Sandeep Nailwal) in such investments** highlights that if K9’s proposal is compelling (unique cross-chain LSD, benefiting POL adoption), it could attract high-level support.
- *Strategic token sale:* Polygon Ventures might participate in a private sale of K9’s native token (KNINE) if offered. This could raise **\$1M–\$2M** depending on terms. K9 would need to articulate token utility and upside (e.g., governance, revenue sharing). This is an unlikely path for the DAO to pursue as it involves selling KNINE tokens to a VC firm and

there would likely be significant community resistance in Shibarium.

- **Co-investment round:** Polygon has a \$100M ecosystem fund (with contributions from big VCs). If K9 pursued a larger raise, Polygon Ventures could bring in other investors for a bigger round (\$1M+). This is beyond a simple grant, essentially turning K9 into a venture-backed project. It's an option if K9 aims to become a top-tier multi-chain LSD player quickly. If the venture funding were pursued, an additional round of due-diligence would need to be performed to determine what is possible with the current DAO legal structure.

The DAO should carefully weigh taking VC money vs. sticking to grants. Grants are non-dilutive and keep community control high, whereas VC funding could accelerate growth but might pressure the project towards certain trajectories (and introduce token unlock/ROI expectations). Given K9's ethos as a DAO, starting with **grants and ecosystem support** is likely preferable. However, knowing these avenues exist is useful if large-scale funding is needed (for example, if K9 wanted to run a whole fleet of validators or expand to many chains, a \$500k+ raise might make sense). This is currently outside the scope of this study but felt important to mention.

Other Funding Sources:

- **Launchpad Programs:** Polygon has supported launchpads like QuickSwap's "Dragonstack" or TrustSwap for new DeFi tokens. K9 could consider doing a small public raise on a launchpad (where users commit POL in exchange for KNINE tokens, for instance). If QuickSwap or another Polygon launch platform is interested, K9 might secure \$50k–\$200k via a community sale. This doubles as marketing, bringing in Polygon users as token holders.
- **Polygon Foundation Initiatives:** Occasionally, Polygon offers targeted bounties or challenges (e.g., hackathon prizes). Ensuring K9 is present in such events could indirectly bring resources (prize money, developer contributions).

Key Contacts and Influencers: To maximize grant success, K9 should engage with individuals influential in Polygon's ecosystem:

- The **Polygon Community Treasury Board** – consists of notable figures like Roc Zacharias (Quickswap co-founder), Maggie Love (SheFi), David Gogel (dYdX Foundation), Pete Kim (Coinbase Wallet creator). They review grant allocations. K9 should network with them or at least tailor the grant application to address their focus (e.g., emphasize how knPOL grows Polygon DeFi – something Roc from QuickSwap would appreciate – or how it engages community – which Maggie Love might like). Pete Kim in particular has shown interest in Polygon liquid staking (he authored the PIP for share token improvements), making him a great potential ally. Reaching out via the

forum or X (Twitter) with the concept could garner support.

- **Polygon DeFi team / Developer Relations:** Polygon Labs has folks dedicated to DeFi growth. If K9 can get an intro to someone like Hamzah Khan (previously head of DeFi at Polygon) or other ecosystem leads, they can champion K9's cause internally. These connections often help expedite grant processing or get advice on integration hurdles.
- **Sandeep Nailwal / Polygon founders:** While high-level, they have endorsed projects publicly. If, for example, K9's entry aligns with Polygon's vision to boost POL staking, co-founder tweets or support could be invaluable. Sandeep was directly involved in a prior LSD-related investment (Davos), showing he's approachable for innovative DeFi ideas.
- **Community Influencers:** Aside from officials, tapping into Polygon's community on Reddit (r/0xPolygon), Telegram/Discord, and crypto Twitter is important. For instance, user "Blackie" (mentioned in context of critiquing a Polygon DAO proposal) or other vocal community members can amplify K9's plans. Early engagement can build grassroots support – which matters in a DAO grant vote or just in gaining users.

Application Timeline: Given grants in the **\$50k–\$100k** bracket are likely split across multiple programs, K9 should pursue them in parallel:

- Prepare a solid proposal deck and documentation by **early Q3 2025** (covering value prop, technical plan, resources, ask amount).
- Submit to Polygon Community Grants during the **current round** (deadline: **mid/late August 2025**)
- Submit to Encode Club's DeFi track (if timing aligns, possibly next cohort if one just closed in March 2025).
- Reach out informally to Polygon Ventures contacts around the same time, to gauge if a venture deal is realistic or if they suggest sticking to grants first.
- Expect initial feedback within a month or two; if approved, **funds (\$90k minimum)** could be received by late 2025, just in time to support the mainnet launch and liquidity bootstrapping of knPOL.
- Be prepared for any **due diligence**: grant committees might ask for code demos, security plans, etc., given LSDs are critical infrastructure.

Utilization of Grants:

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- If K9 secures ~\$90k, priority uses should be: **Audit funding, liquidity provisioning, and perhaps validator bond** (though \$5k for validator stake is small, the grant can cover it easily).
- Any remainder can extend runway for developer compensation or be kept for future incentives (with community approval).
- It's beneficial to publicly announce the grant if received – it adds credibility (“Polygon supports K9 Finance expansion”) and is good PR for both sides.

Incentives for Users: Aside from institutional grants, K9 should consider user-facing incentives:

- A **knPOL airdrop or bonus** for early adopters? For example, the first X users or first Y POL staked could get a one-time KNINE reward. This creates hype and draws initial TVL.
- **Referral programs:** use Shibarium community to spread the word by rewarding those who bring Polygon stakers.
- **Polygon ecosystem campaigns:** coordinate with Polygon’s marketing – perhaps they can spotlight K9 in a blog or include it in Polygon’s newsletters if grant-backed.

Finally, note that Polygon’s own staking incentives (the 12% of supply for staking) ensure that yield for stakers will continue (1.2B tokens reserved polygon.technology). K9’s proposal to “**boost POL staking adoption**” aligns perfectly with the network’s goals. Emphasizing this in grant applications – that knPOL will increase the stake ratio and security of Polygon – will strengthen the case. In short, K9 is looking to be an enabler for one of Polygon’s core objectives (increasing POL staking participation), which is exactly what grant committees want to hear.

7. Marketing and User Acquisition Strategy

To ensure knPOL’s success, K9 needs a comprehensive marketing and user acquisition plan tailored to both Polygon’s DeFi community and the Shibarium user base. Below are the key strategies:

Minimum Viable User Base & Target Segments: As calculated in the financial section, achieving profitability requires on the order of **hundreds to a few thousand users** (depending on stake size). In early stages, focusing on **quality over quantity** is prudent – a few large stakers (whales) can provide substantial TVL. However, reliance on only whales can be risky (they might withdraw suddenly), so K9 should also cultivate a broad base of retail users for stability.

- **Retail Polygon DeFi Users:** These are users who actively use Polygon's DEXes, lending, farms, etc. They look for convenience and yield. Marketing angle: *"Earn staking rewards on your POL **without lockups** – try knPOL for liquid staking."* Emphasize how knPOL saves them the hassle of direct staking (no 3-day lock to trade out, etc.). Channels: Twitter (CryptoX) influencers, Polygon subreddit (share guides or infographics about knPOL vs direct staking APY), Telegram communities. Also, integrate with DeFi dashboards (Zapper, DeBank) so that knPOL shows up in portfolio trackers – increasing visibility.
- **Shibarium Community Members:** Many Shiba/Shibarium users may hold POL (given Shibarium itself benefits from Polygon's tech, and many are general crypto enthusiasts). Marketing angle: *"K9 DAO brings Polygon yields to the Shib Army!"* Highlight that by using knPOL, they support Shibarium too. Channels: Shiba Inu forums, Discords, and influencers. For example, getting a mention on official Shib marketing channels or community AMAs would be huge, given the Shib Army's size.
- **Validators and Polygon Stakers:** Surprisingly, another target could be existing Polygon delegators. Those who are already staking POL might be convinced to switch to knPOL for liquidity. Marketing angle: *"Already staking POL? Swap to knPOL and earn **extra DeFi yields** on top of staking rewards."* Show them that by holding knPOL, they can e.g. provide liquidity or use it as collateral simultaneously. We might create case studies: e.g., using knPOL in Aave (if listed) to borrow stablecoins – essentially demonstrating increased capital efficiency.

Polygon vs Shibarium User Behavior: It's important to adjust messaging between the two:

- **Polygon Users:** Tend to be **ROI-driven and tech-savvy**. They respond to clear value propositions (APY, low fees, integration). They might be more critical about security (due to seeing past hacks on Polygon). Thus, for Polygon we highlight **audit completion, backed by Polygon grants, and comparables (if they used stMATIC, we explain how knPOL is similar but community-run and here to stay)**. Polygon users also have many alternatives for yields (farmers can move to other chains easily), so we must emphasize unique advantages (like knPOL's connection to Shibarium, or potential dual rewards if any).
- **Shibarium Users:** Tend to be **community-driven and meme-friendly**. They value the Shib ethos, might be less experienced with sophisticated DeFi. For them, marketing should be more educational (what is liquid staking, why knPOL is beneficial) and tied to the Shib narrative (*"Shibarium meets Polygon – together stronger"*). They may also be more patient and loyal once convinced, which is good for stable TVL. Shibarium's current user activity is smaller than Polygon's, but very engaged. K9 can leverage existing trust (from knBONE) to cross-promote: e.g., on the K9 dApp or social media, prompt knBONE users to also try knPOL for diversification.

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Key Marketing Channels & Activities:

- **Content Marketing:** Publish a series of medium articles or docs explaining the Polygon expansion in simple terms. For example: *“Introducing knPOL: Liquid Staking for Polygon”* – covering how it works, benefits, and a step-by-step guide. Also, produce comparative content like *“knPOL vs stMATIC: What’s different after Lido?”* using data (like Lido’s exit rationales) to show knPOL’s edge. Infographics that visualize K9’s cross-chain flow (perhaps the flowchart from docs simplifying Ethereum–Polygon–Shibarium interactions) will help. All content should be shared on both Polygon and Shibarium social channels.
- **Community AMAs and Webinars:** Host AMA (Ask Me Anything) sessions on Polygon’s Discord or Telegram. There are Polygon community Discord stages where new projects pitch. Do the same on Shibarium’s community channels. Possibly a joint AMA with a Polygon personality or influencer could draw a mixed crowd. These sessions allow direct Q&A, addressing any skepticism (e.g., “How is K9 different from Lido?” – we can answer by referencing our lean model and DAO approach).
- **Partnership Announcements:** Use integrations as marketing events. For example, if QuickSwap lists a knPOL pool, do a joint announcement with them. If a lending protocol like Mai Finance or QiDao agrees to accept knPOL as collateral, trumpet that news – it adds legitimacy. Polygon’s official Twitter often retweets ecosystem news; getting a mention there is valuable. Similarly, any grant or funding news (e.g., “K9 Finance awarded Polygon Community Grant”) should be press-released via Cointelegraph, etc., to reach a wide audience and signal confidence in K9.
- **Events & Hackathons:** Participate in Polygon hackathons or conferences (Polygon often has a presence at major crypto events). Even presenting K9’s story on stage (if possible) could attract developers and users. For instance, EthGlobal hackathons frequently have Polygon tracks – K9 could sponsor a prize for building something with knPOL (like an integration or analytic tool), which increases developer awareness.
- **Liquidity Mining Campaign (Marketing aspect):** If K9 does incentivize a knPOL pool, that itself is marketing – yield farmers will notice a new high-APR pool. The key is to manage it so that it attracts genuine long-term users, not just mercenaries who dump rewards. Perhaps a short initial LM program followed by focusing on intrinsic value (like encouraging those LPs to stick around by showing TVL growth, etc.).
- **Cross-chain PR Strategy:** Get coverage in news outlets focusing on both communities. For example:
 - Shibarium news sites (like *news.shib.io* which covered K9) and popular Shib bloggers – pitch them the angle “Shibarium’s LSD expands to Polygon”.

- DeFi media (The Defiant, DeFi Pulse blog) – where the narrative can be “After Lido’s exit, a new DAO steps in on Polygon”.
- Traditional crypto media (Cointelegraph, Coindesk) – which did cover Lido’s Polygon exit; they might be interested in a follow-up story about who’s filling that gap. Emphasize the Google Cloud grant, Shibarium link, and Polygon grant – these are concrete and newsworthy items.
- **User Incentives & Referral:** K9 could implement a referral program: e.g., refer a friend to stake POL and both earn a small bonus in KNINE. This can help word-of-mouth spread in retail circles. If feasible, maybe airdrop a tiny amount of knPOL to active Polygon DeFi addresses to spark interest (though random airdrops can be seen as spam – better to target engaged communities).
- **Minimum Viable Community:** Set up or bolster a **Polygon-focused K9 community channel** – perhaps a Telegram group for knPOL or a sub-section in K9’s Discord for Polygon discussions. Early adopters can gather there, provide feedback, and become advocates. K9 DAO should be active in answering questions, as a good support experience often converts curious users into loyal ones.

KPIs and Goals:

- **Target TVL milestones:** e.g., \$1M in first month, \$5M in 3 months, \$10M in 6 months. Coordinate marketing pushes around these (celebrate milestones publicly).
- **User count goals:** e.g., 500 unique wallets staking within the first 2 months. Polygon addresses are easy to track; K9 can use Dune Analytics to monitor unique knPOL holders and publicize progress (this creates a sense of growth momentum).
- Achieve **parity with Lido’s usage** on some metrics within 6-12 months. For instance, Lido had ~4% of POL staked – K9 could aim for 1% in the first 12 months, which would be a big success in relative terms.
- **Community engagement:** measure Discord/Telegram growth, AMA participation counts, etc. A highly engaged community is a leading indicator of sustained growth.

Polygon User Behavior Considerations: One challenge is that Polygon users are cost-sensitive (the chain is known for low fees and sometimes lower-value users compared to Ethereum). So the average stake might not be huge. K9 may need to attract some larger players (maybe funds or DAOs that hold POL). This could involve direct outreach to treasury managers of Polygon projects or whale accounts, offering to help them stake via K9. On the other hand, Shibarium users might have smaller portfolios but higher risk appetite (given

memecoin culture). So offering even modest additional yields or gamified experiences could excite them.

In summary, **marketing will focus on trust, clarity, and community crossover**. Emphasize that knPOL is here to stay (unlike Lido's exit), that it's safe (audited, DAO-governed, supported by Polygon), and that it offers more than just staking (tying into Shibarium and DeFi usage). By hitting these notes and actively engaging both Polygon's and Shibarium's communities, K9 can build the minimum viable user base and then some – setting knPOL on a trajectory to become the leading liquid staking solution on Polygon.

8. Risk Assessment

Expanding to Polygon carries several **risks** that must be acknowledged and mitigated. We categorize the risks into technical, financial, and reputational domains:

Technical Risks:

- **Smart Contract Bugs:** Any flaw in the knPOL smart contracts could lead to loss of funds (e.g., incorrect reward accounting, inability to unstake, or worst-case, an exploit allowing theft). Given LSD contracts deal with large pooled funds, they are high-value targets for hackers. *Mitigation:* Conduct thorough audits (as budgeted) and possibly a public bug bounty after launch. Reuse battle-tested code where possible (e.g., fork proven components from Lido or OpenZeppelin). Include emergency pause switches in contracts to halt operations if a severe bug is discovered (with DAO oversight to prevent misuse of pause).
- **Validator Slashing / Performance issues:** If K9 runs a validator, there is a risk of **slashing** if the node misbehaves (double-signs or has extended downtime). Slashing on Polygon historically has been rare and minimal for downtime, but double-sign slashing could burn a portion of staked funds. This would directly harm knPOL holders by reducing the pool's total POL. *Mitigation:* Follow best security practices for key management (e.g., use sentry nodes, never run two instances of the validator with the same key to avoid equivocation). Keep the validator online and updated – with monitoring, as discussed, to catch issues. Possibly start with delegating to a *trusted third-party validator* as an interim measure if the DAO feels uncertain, though that introduces some dependence risk. Also, not putting 100% of knPOL stake into one validator forever – as knPOL grows, consider spreading across multiple validators (if governance allows adding more node operators) to decentralize slashing risk.
- **Bridge/Multichain Risks:** If the strategy involves bridging knPOL or assets between Ethereum, Polygon, and Shibarium, the bridge itself can be a point of failure. Bridge hacks have been common (e.g., PolyNetwork, Multichain exploits). A malicious event on the bridge could result in **wrapped tokens losing backing** or funds being stuck. *Mitigation:* Use established, audited bridges. Possibly limit the amount of assets bridged

at any given time (e.g., cap how much knPOL can be issued on Shibarium if it's not fully trustless). Or operate without cross-chain moves initially (manual one-directional moves via the user if needed, rather than an always-on bridge contract). If using a custom bridge, ensure a multi-sig with reputable signers and maybe time-locks on large transfers to catch any issue.

- **Oracle Failures:** K9 might rely on oracles for certain functions (like using an oracle to price knPOL for some reason or to automate processes). If an oracle feed (Chainlink, etc.) is manipulated or fails, it could cause incorrect operations (for example, if an oracle incorrectly said POL price is \$0 and a contract logic wasn't resilient to that). *Mitigation:* Use robust oracles and build failsafes (e.g., sanity checks, or design contracts to not require external price data heavily – stMATIC, for instance, didn't require price oracles internally; its value was based on internal exchange rate).
- **Polygon Network Congestion or Changes:** Polygon PoS occasionally has periods of congestion or checkpoint delays. If transactions (like unstake requests or reward compounding transactions) fail or are delayed, it could affect user experience. Also, if Polygon implements major changes (say moving validators to a different system or introducing new slashing conditions under Polygon 2.0), knPOL might need updates. *Mitigation:* Stay adaptive and involved in Polygon governance to anticipate changes. Build flexibility – e.g., upgradable contracts (via proxy) so that DAO can upgrade knPOL logic if needed for compatibility (with careful security around that upgradeability).

Financial Risks:

- **Sustainability and Liquidity Risk:** There's a risk that knPOL might trade below its intrinsic value (POL backing) due to low liquidity or market panic. If, for example, a large holder wants out quickly and liquidity is low, knPOL's price could drop (a "depeg" scenario), hurting user confidence. *Mitigation:* Ensure sufficient liquidity via LP as planned, and possibly introduce an arbitrage mechanism (like if knPOL discount gets too large, K9 could allow some direct exit even if not unbonded yet, in exchange for a penalty – to incentivize arbitrageurs to step in). Over time, encouraging integrations that create demand for knPOL (like collateral use) will support its price.
- **Incentive Exhaustion:** If user growth is slow without heavy incentives, there's a risk that to attract users, K9 might feel pressure to spend more on incentives than is financially wise (repeating Lido's mistake). Overspending on incentives could drain the DAO treasury, leaving insufficient funds for operations or exposing K9 to dependency on continuous external funding. *Mitigation:* Set and stick to a clear incentive budget and timeline. Use data to monitor if incentives are yielding real retention (e.g., if users leave immediately after incentives end, re-calibrate). Focus on organic value (yield, utility) to retain users rather than constant rewards.

- **(Critical) Grant Dependency:** If K9's plan assumes grant money that then doesn't come through or is delayed, the expansion could stall or be under-resourced. *Mitigation:* Have a fallback plan in DAO budget to cover critical items (for example, proceed with a smaller audit by reallocating some treasury funds if grant is delayed; launch with a lower-cost approach and then improve when funds arrive; or cancel the launch entirely).
- **Regulatory Risk:** While decentralized, LSDs could come under regulatory scrutiny (e.g., classification of liquid staking tokens by regulators is an emerging question). If any regulatory action targeted LSDs (like treating them as securities), it could limit growth or integrations. This is a low-probability risk in the near term, and more relevant to larger protocols, but K9 should keep an eye on the legal landscape. *Mitigation:* Ensure K9's communications and operations remain as decentralized and transparent as possible, to not be singled out. Possibly seek legal advice when expanding to new jurisdictions or listing on exchanges.

Reputational and Ecosystem Risks:

- **Reputation Damage from Failure:** If the Polygon expansion encounters a serious failure (hack, prolonged downtime, user losses), it could tarnish K9's reputation not just on Polygon but also back on Shibarium. The community might lose trust in the DAO's abilities. *Mitigation:* Do thorough testing and maybe a phased launch (private beta -> capped public beta -> full launch) to iron out issues. Maintain open communication – if something goes wrong, promptly inform users and have a remediation plan (Lido's handling of Solana sunsetting, providing guides and support, helped preserve their reputation somewhat).
- **Overextension Risk:** By focusing on Polygon, the DAO might divert attention from Shibarium, causing the original product (knBONE) to suffer (e.g., slower updates or support). Shibarium community might view Polygon expansion as neglect. *Mitigation:* Show that resources are being added, not just divided. Perhaps appoint separate leads for Shibarium vs Polygon efforts, so neither is ignored. Highlight the positive feedback loop (Polygon benefits Shibarium) consistently to remind everyone it's complementary.
- **Centralization Concerns:** LSD protocols often face criticism for centralizing stake. If knPOL ends up controlling a large percentage of Polygon's stake concentrated in one validator (the K9 validator), it could raise centralization alarms in the Polygon community. Similarly, if bridging knPOL relies on a centralized custodian, that's a point of central failure. *Mitigation:* Address this proactively by perhaps decentralizing the validator set over time (maybe add more community-run validators to K9's protocol if possible), and supporting Polygon's initiative for permissionless share tokens which would allow using multiple validators easily. Communicate to the community that K9's long-term vision is a **decentralized LSD** where stake is not all in one entity (maybe in future, adopt an Lido-like model of multiple node operators governed by DAO). For bridging, if feasible,

use a decentralized bridge or multi-sig with representatives from both communities.

- **Market Risk and User Behavior:** If the crypto market turns bearish or POL price drops significantly, users might unstake en masse (to sell), testing knPOL's systems. High volatility can also cause reward rates to fluctuate (since they're partly token-denominated). *Mitigation:* Ensure withdrawal processes can handle volume (maybe limit how many can exit per epoch if needed to avoid strain). Maintain a buffer of POL if possible to smooth out withdrawal requests (some LSDs keep a small unstaked buffer to handle redemptions quicker). In communications, set correct expectations: knPOL is not a stable value token; its value relative to POL will gradually increase, but in extreme events (slashing or illiquidity) it could vary.

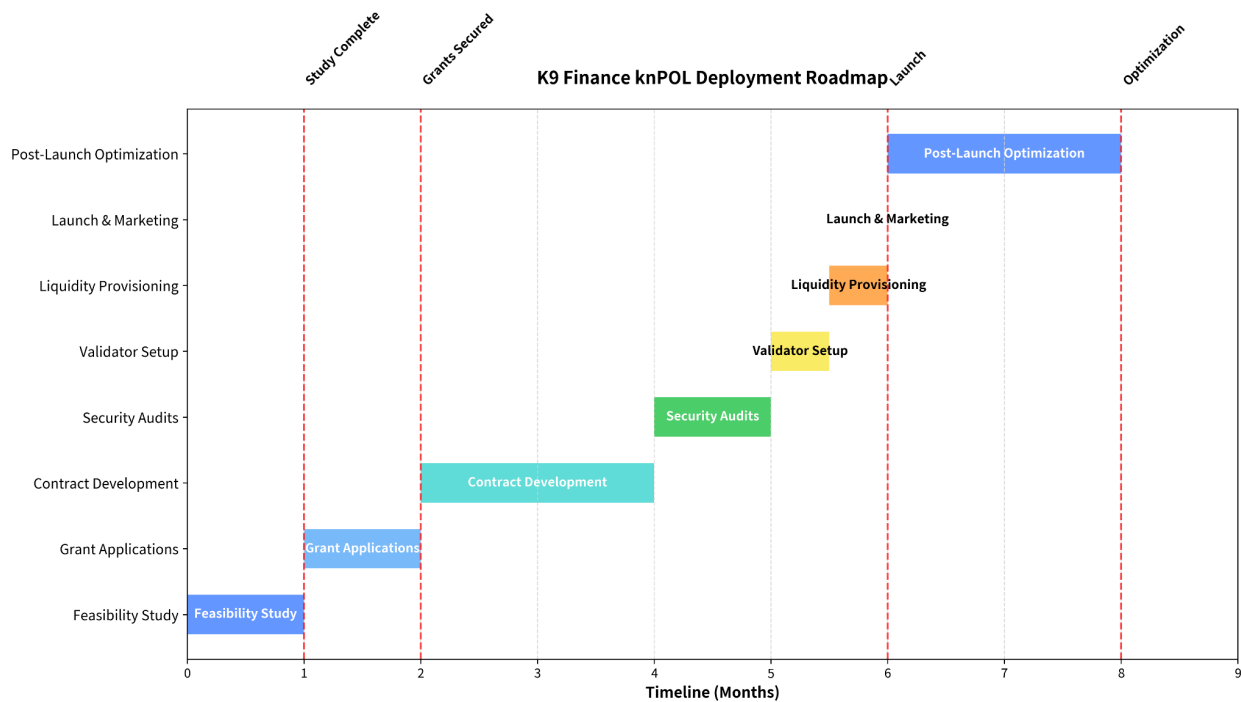
Summary of Risks: On the whole, none of the risks identified are show-stoppers; they are common to any LSD protocol. K9 can manage them by leveraging best practices: **audits, monitoring, conservative financial planning, community transparency, and iterative decentralization**. The greatest risks (security exploits or major slashing) have low probability if diligence is done, but their impact would be high, so those get top priority in mitigation efforts. Financially and reputationally, K9's fate will depend on execution – delivering on promises will build trust, whereas any missteps must be handled swiftly and honestly.

A final point on risk: **contingency planning**. K9 should draft a contingency plan document for worst-case scenarios (e.g., “What if our validator gets slashed 5%? What if knPOL loses its peg by 10%? **What if grant X fails?** What if a critical dev leaves?”). Having predetermined actions will allow the DAO to respond quickly under pressure. This could include having some emergency insurance (maybe the DAO sets aside a small insurance fund, or partners with a protocol like Nexus Mutual for validator insurance if available).

By anticipating these risks and addressing them, K9 can instill confidence in users and stakeholders, ultimately contributing to the success and robustness of knPOL's launch on Polygon.

9. Deployment Roadmap (4–6 Month Plan)

A phased approach over ~6-8 months is recommended to deploy knPOL on Polygon successfully. Below is a proposed roadmap with key phases, milestones, and timelines:



Phase 0: Feasibility & Funding (Pre)

- Grant Readiness Audit:** Confirm the external capital requirement—minimum \$90 k to cover audit, validator self-stake, and LP seeding. Record this figure in a DAO resolution; if the target is not met, expansion is automatically deferred.
- Grant Applications:** Immediately prepare and submit grant applications (Polygon Community Grants, Encode Club, etc. as per Section 6). This timing aligns with Polygon’s grants cycle (Season applications in summer). Even though approval might come later, starting now ensures potential funding by mid-project. Simultaneously, initiate conversations with Polygon Ventures and other partners for possible support.
- DAO Mandate Vote:** Submit a snapshot that ties Polygon deployment to receipt of grant funds (or equivalent partnerships). Include a “kill-switch” date—e.g., *abort if funding not secured by Nov 30 2025*—to avoid open-ended burn.
- Treasury Contingency Framework:** Draft a fallback that releases at most \$15 k of DAO reserves only if grants land below the \$90 k threshold; otherwise deployment pauses until the next grant window. This would require DAO approval/community vote. It is not recommended for the DAO to use current treasury funds for this initiative.
- Exit Criteria for Phase 0** (all must be satisfied before Phase 1 starts):
 - Signed grant LOI(s) totaling $\geq$ \$90 k and funds received in DAO multisig.
 - Audit slot booked and deposit paid.
 - Validator application acknowledged with ETA or partner validator MOU in place.

Feasibility Study: Expansion of K9 Finance DAO’s Liquid Staking to Polygon (knPOL)

Duration: 4–6 weeks, running concurrently with community discussions and final edits to this feasibility study.

Phase 1: Planning & Governance (Month 0-1)

- **Community Approval:** Secure DAO approval for Polygon expansion (already initiated via the feasibility study proposal). If not already, propose the actual deployment plan for a formal vote (including budget allocation for development and audits). Community consensus is crucial to proceed confidently.
- **Team Assembly:** Assign core DAO members to the Polygon project. Identify who will be responsible for smart contracts, validator setup, front-end integration, and partnerships. If needed, onboard additional talent (perhaps hire a Polygon-savvy dev using the operations budget).
- **Validator Slot Prep:** Open dialogue with Polygon's validator coordination team. Submit the validator application form. Indicate K9's timeline and ask about slot availability or expected queue time. If a known validator is willing to partner, begin due diligence on them. Also, set up a test validator node on Mumbai testnet to get familiar with the process.

Phase 2: Development & Integration (Month 2)

- **Contract Adaptation:** Modify the knBONE liquid staking contracts for Polygon. This involves pointing delegation functions to Polygon's StakeManager contract, changing token denominations to POL, and adjusting any chain-specific parameters (unbonding duration, etc.). Implement additional features if required (for example, handling the validator share token logic). Early internal testing of contracts (write unit tests simulating stake and unstake flows).
- **Deploy on Testnet:** Deploy the updated contracts to Polygon's Mumbai testnet. Mint some test knPOL and simulate a full cycle: user stakes test-POL, receives knPOL, accrues rewards, unstakes and gets POL back after the withdrawal period. This will likely reveal any issues to fix. Iterate until smooth.
- **Front-End Update:** Update the K9 dApp to add Polygon network support. This includes allowing network switching (Ethereum, Shibarium, Polygon), creating a staking UI for POL analogous to the BONE one. Possibly integrate WalletConnect or other wallets commonly used on Polygon (if not already) to ease access. Ensure the UI properly guides users (e.g., warns about unbonding period and withdrawal NFT process if used).
- **Subgraph & Analytics:** If using The Graph, set up a subgraph on testnet indexing knPOL events (stake, unstake, rewards). This will be useful for both the front-end and

later for tracking adoption metrics.

- **Audit Scheduling:** By mid-month 2, book an audit slot with the chosen auditor, providing them the testnet-deployed code. Good firms often have waiting lists, so early reservation is important. Aim for an audit in Month 3. If grant status is unclear, the DAO might approve using treasury funds to secure the audit first (perhaps refundable if grant comes).

Phase 3: Audit, Validation & Final Preparations (Month 3)

- **Audit Execution:** Undergo the security audit. During this time, freeze changes to contracts (unless a critical bug is found in the test). Provide auditors with comprehensive documentation (system design, state diagrams, etc.). Audit typically takes 2-4 weeks. Be responsive to auditor queries.
- **Audit Fixes:** Receive the audit report, address any issues found. For each finding, write fixes and test them. If major changes occurred, consider a quick re-audit or at least a peer review of the fixes. Publish a summary of audit results for transparency.
- **Validator Launch:** Assuming either a slot is available or a partnership in place, set up the **mainnet validator** by mid-month 3. Steps: launch the node with sentry architecture, stake the required POL (K9 or partner provides 10k+ POL to StakeManager contract via Ethereum mainnet transaction), and get into the active set. If a slot isn't immediately available, Plan B could be to temporarily delegate K9's stake to a trusted validator to secure rewards, with an aim to migrate later. Ensure monitoring is live from day 1.
- **Bridge Setup (if applicable):** If the strategy is to allow Ethereum deposits or bridging to Shibarium from day one, deploy and test the bridge contracts now. For example, deploy an ERC20 representation of knPOL on Shibarium and a locking contract on Polygon. Test bridging small amounts. Alternatively, decide to postpone bridging until after launch to reduce initial complexity – this might be wise unless bridging is trivial.
- **Liquidity Coordination:** By end of month 3, finalize which DEX to use for knPOL liquidity and any incentive details. Likely QuickSwap on Polygon (given its volume and the presence of many POL pairs). Possibly approach Balancer if looking for a more flexible pool (e.g., a 80/20 pool knPOL/POL to reduce impermanent loss). Prepare liquidity (POL from treasury or partners). If doing a joint liquidity mining campaign, align with the DEX's schedule (they might need to whitelist the pool for rewards).
- **Governance Checkpoint:** Present the DAO with an update: audited, ready to launch, here is the parameter set (fee %, initial validator, etc.) for final confirmation. This could even be an on-chain vote to set certain parameters (like confirming the fee rate or initial KNINE incentives allocation). Having DAO sign-off just before launch ensures legitimacy.

Phase 4: Mainnet Launch (Month 4)

- **Soft Launch (Controlled):** Deploy knPOL contracts on Polygon mainnet. Initially, consider a **soft launch** – e.g., open deposits only to a limited group or cap the total POL that can be staked (say an initial cap of 1 million POL) for the first week. This ensures if any unforeseen issue arises, impact is limited. Alternatively, do a “guardian” launch: the DAO multisig could have the ability to pause deposits if something seems wrong initially.
- **Announce Launch:** Publicly announce that knPOL is live on Polygon. Provide clear instructions for how to stake and how to unstake. Emphasize safety (audited, etc.) and any current limitations (like if caps or only one validator, explain plans to expand).
- **Liquidity Pool Launch:** Around the same time, launch the knPOL-POL pool on the chosen DEX. Seed it with K9’s liquidity. Monitor the price of knPOL – it should start at 1:1 with POL (minus any small fees). If offering incentives, start them now (this will attract users who might have been waiting for the pool to be liquid before staking).
- **User Support Blitz:** In the days following launch, be extremely active on support channels. Many first-time users will have questions (e.g., “I staked, why do I have to wait to unstake?” etc.). Quick, helpful responses will build confidence. Possibly set up a dedicated FAQ page for knPOL issues as they come up.

Phase 5: Monitoring & Growth (Month 5)

- **Remove Caps (Scaling up):** If a cap on staking was set and all looks good, gradually raise or remove it. Allow more POL to flow in.
- **Marketing Push:** Execute the broader marketing strategy (as in Section 7). This month should focus on user acquisition. Host the AMAs planned, release case studies of early adopters, push for media coverage (“knPOL reaches \$X TVL!” as a press hook if a milestone is hit). Also, leverage any Polygon events (if, say, Polygon has a quarterly ecosystem update, try to get knPOL mentioned or present).
- **Integration Outreach:** Now that knPOL is live with some usage, approach other protocols for integration:
 - Lending protocols (Aave’s Polygon market – though Aave might be cautious after stMATIC, but maybe smaller ones like QiDao or Hundred Finance could list knPOL as collateral). Show them data on knPOL stability to make the case.
 - Yield aggregators (e.g., Beefy Finance) to create a vault that auto-compounds knPOL in the LP or something.

- Wallets (like Metamask, Rabby) recognize knPOL in their token lists so users see it properly.
- Possibly centralized exchanges or staking services, although that's more long-term.
- **Community Building:** Identify power users and advocates, maybe form a “K9 Polygon Ambassador” group to reward those shilling knPOL in the community. Continue engagement on forums; maybe post a retrospective on Lido’s forum or Polygon forum about the successful launch of an LSD post-Lido – to garner respect and maybe attract former stMATIC holders.
- **Grant Utilization & Reporting:** If grant money was received, ensure to fulfill any requirements (updates to Polygon team, showing usage of funds). This keeps doors open for future funding and fosters goodwill.

Phase 6: Expansion & Long-Term (Month 6 and beyond)

- **Validator Decentralization:** Explore adding a second validator or diversifying delegation. If share tokens become transferable (should the PIP in Section 1 be implemented around this time), plan a migration or upgrade to utilize that (which could allow knPOL to spread stake across many validators trustlessly). This might require a v2 of contracts, so start research early if signals show the PIP will pass.
- **Governance Proposals:** Introduce a proposal to K9 DAO about longer-term parameters: e.g., adjusting fee rate if needed, or what to do with accumulated POL fees (distribute to KNINE stakers, or hold for buybacks, etc.). Also, perhaps propose establishing an insurance fund from a portion of fees to cover slashing risk – demonstrating proactive risk management.
- **Shibarium Integration:** If not already done, work on bridging knPOL to Shibarium to enable the envisioned cross-chain use. By month 6, knPOL will have more data to assure Shibarium users of its stability. Possibly launch a farm on Shibarium: e.g., a knPOL-BONE pool or use knPOL in Shibarium’s lending (if such exists by then). This realizes the funnel effect.
- **Continuous Marketing:** After initial hype, maintain momentum by showcasing achievements: user testimonials, DeFi building blocks using knPOL (like someone might build a structured product on top of it), etc. Attend any year-end blockchain events to represent K9 (for example, Polygon might have a summit or presence at Devcon—K9 can share its case study).

- **Monitoring and Analytics:** By 6 months, have robust metrics dashboards. Track TVL, number of stakers, reward APR vs native staking APR (to ensure knPOL yield stays competitive), and liquidity depth. Use these to adjust strategy (if, say, liquidity is lagging, add incentives; if TVL growth is slow, do another marketing round or consider tweaking fees/incentives).

Milestones & Decision Points:

- *Phase 0: Internal DAO resources will be dedicated to grant research/submission/discovery until Nov 30th 2025. If grant funding is not received or secured by this date, all Polygon expansion efforts will be paused.*
- *Month 2: Go/no-go after internal testing – if major flaws are found, decide whether to delay launch or simplify (this is unlikely if using proven code).*
- *Month 3: Audit results – a critical checkpoint. If an audit finds critical issues that can't be fixed quickly, it might postpone launch (communicate openly to the community about a new timeline in that case; security > speed).*
- *Month 4: Initial launch success – measure how many stakers join in first weeks and any technical hiccups. If issues occur (e.g., contract bugs), be ready to pause and patch (thus the phased launch helps).*
- *Month 6: Review against targets. If TVL or user numbers are far below expectations, investigate the cause (market conditions? insufficient marketing? product issues?) and decide on corrective actions (maybe increasing incentives or pivoting strategy). Conversely, if uptake is huge and beyond expectations, plan how to handle that scale (maybe expedite additional node setup, etc.).*

10. Final Decision Matrix:

To conclude the roadmap and feasibility study, we summarize the key considerations in a decision matrix, weighing the **Expansion to Polygon (knPOL)** against the status quo of **Staying Shibarium-Only**:

Criteria	Proceed with knPOL Expansion	Do Not Expand (Status Quo)
<i>Technical Feasibility</i>	Feasible. Polygon integration is technically achievable with minor modifications and has strong tooling support. K9's familiarity with similar tech (Shibarium, Polygon tools) lowers risk.	N/A (no new technical requirements, but also no cross-chain innovation).
<i>Financial Outlook</i>	Potentially profitable but requires grant. Break-even at ~\$10M TVL (about 1% of Polygon's stake) is tough but attainable. Expansion offers a new revenue stream in POL. Dependent on grant support of \$90k+.	No immediate costs, but also no new revenue. K9 remains limited to BONE staking revenue, which could cap growth. <u>Shibarium failure is a risk.</u>
<i>Market Opportunity</i>	High. Lido's exit leaves a vacuum and thousands of users needing an LSD. K9 can capture Polygon market share and possibly rival/exceed Lido's former \$86M TVL. Unique Shibarium angle gives competitive edge.	Missed opportunity. Polygon's LSD market (~\$670M staked) remains underserved by K9. Competitors (Stader, etc.) might claim Lido's users. K9 forgoes being a multi-chain player.
<i>Strategic Synergy</i>	Strong. Enhances K9's multi-chain presence, routes value to Shibarium (Polygon yields can feed Shib incentives) and attracts new users to Shibarium. Builds K9 brand in a top ecosystem.	Limited. K9 stays only in Shibarium; potential Shibarium growth is solely internal. No new external users or capital drawn into Shibarium via K9. Risk of K9 being too niche if Shibarium growth stagnates.
<i>Operational Load</i>	Moderate & manageable. Requires running 1 validator and additional dev effort, which is feasible given K9's resources and grants. Monitoring and governance structures can incorporate Polygon with planning.	Minimal. DAO continues focusing on Shibarium only. However, this means K9 is dependent on Shibarium.

<i>Risk Profile</i>	Acceptable. Introduces technical risks (contracts, validator) but these are mitigated by audits and best practices (Section 8). Reputational risk offset by careful rollout. Polygon’s support further reduces risk (they are incentivized to help K9 succeed).	Stable but with opportunity cost. Avoids new technical risks, but there is a strategic risk in not expanding – K9 could lose relevance if other LSDs dominate multi-chain. Also, over-reliance on one ecosystem (Shibarium) is a risk if that ecosystem faces challenges.
Overall Verdict	Proceed only if external grant funding of at least \$90k is secured <i>before</i> Phase 1. Without that runway the expected ROI turns negative, mirroring Lido’s Polygon exit numbers.	Maintain status quo. K9 would remain a single-chain LSD provider, potentially ceding multi-chain innovation to others.

Recommendation (Summary)

Expanding K9 Finance’s liquid staking to Polygon via **knPOL** remains strategically attractive—**provided the DAO first secures a grant of ≈ \$90 k** to cover audits, initial liquidity, and development. Technical fit is confirmed, Lido’s exit leaves a clear market gap, and the move aligns with K9’s cross-chain roadmap.

Action items

1. **Pursue and lock-in grant funding phase 0** before Phase 1 kick-off. Phase 0 has until Nov 30th 2025 to secure funding or Polygon expansion is paused.
2. On grant approval, execute the deployment roadmap as drafted and track KPIs quarterly.
3. If funding is delayed or reduced, pause at Phase 0 and re-scope costs or timelines rather than drawing down treasury reserves or abort.

With grant support in place, knPOL can become Polygon’s default liquid-staking option while deepening Shibarium ties—delivering outsized benefits to both ecosystems and to K9 token-holders.