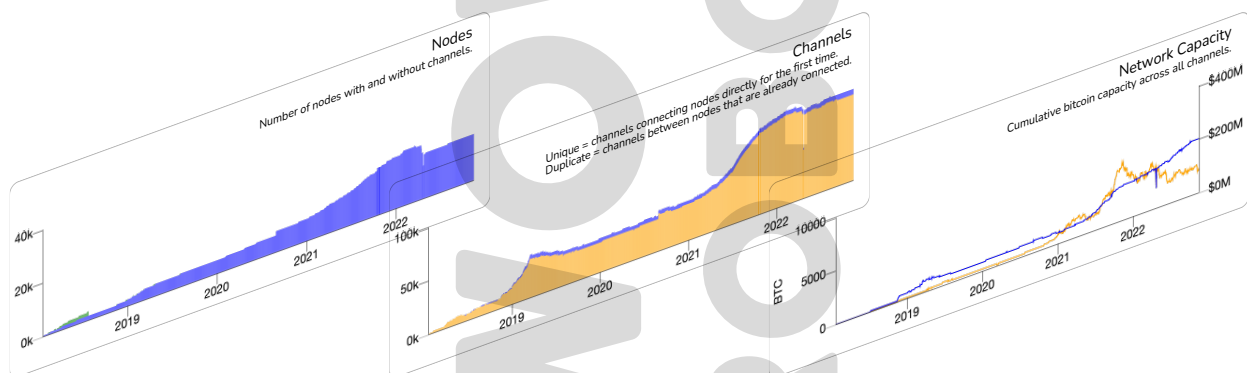




DeFi on Lightning ⚡ with non-convertible bitcoin yield

Krutt is a non-compromising answer to Decentralized Finance, henceforth "DeFi". Unlike competing protocols attempting to construct financial primitives such as borrowing and lending on the immutable blockchain using tokenized shares; Lightning proposes a novel approach to **allocation**. Already the most liquid second layer ^[1], Lightning also presents monetization pathway for the **bitcoin** network while being indifferent to price changes and lend out liquidity to those in need. We assume around 3.5 - 6% ^[2] Annual Percentage Rate, henceforth "APR", using data from existing popular node operators, of at no conversion risk while keeping custody of your own coins. Competing protocols semi achieve this by collateralizing base-chain token ^[3] for stabilized value, but fail to do so consistently causing many depeg events. ^[4,5,6,7] **bitcoin** fixes this.



Figures 1 - 3: Consistent growth in all metrics for the Lightning ⚡ network using live data over the period of January 2018 to current date.

An industry of wolves

Well-known DeFi solutions require conversion of users' funds from higher-value assets, base-chain token or wrapped **bitcoin** offered by a central authority like Bitgo as counterparty, to mint supposedly equivalent in value amount of governance tokens. The pre-minting for the developer team and private sale of said tokens are agreed upon beforehand as beyond reproach or completely obscured in marketing. User funds and corporate runway and interchangeably mingled in this scenario, yet users do not raise an eyebrow at the apparent conflict of interest due to promise of future profits. Yield generated, if any, will be distributed back to the holders at no custodial risk, lest there be faulty logic in the contract or oracle exploits. The transformation of custodial risk to a variety of obscure risks such as miner extractable values, backdoors or lagging oracles are excused by being early. Many believe that the "social layer" will self-police scams, rug-pulls, and poorly architected technological promises despite anonymity-based economy being comprised of 97% bad actors. ^[8] We address the primary assumption in DeFi industry replacing subjectively pegged valued facade with a liquidity marketplace with more than 4 years in production and increasing in popularity for first-time users.

Looking beyond digital alchemy

Exchange between assets at varying urgency served as the most popular use-case of distributed ledger technology until recently. The pivot happened when of stable-coins were introduced allowing the poverty-stricken around the world to hold stable-valued assets against their own eroding currencies. Stable-coins like USDt and USDC, by Tether and Circle respectively, has long surpassed base-chain assets in daily volume of transfers, making it a more liquid asset, thus more desirable than the network it serves on. (\$20.3bn. of stable-coin value settled a day against \$8.9bn. of eth and wrapped eth as of December 10th, 2022. ^[9])

Orange is the new black.

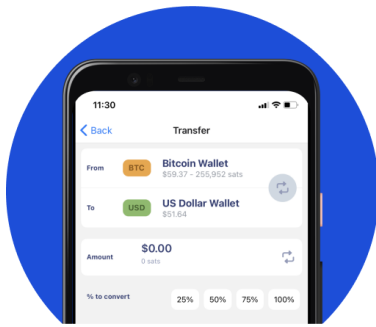
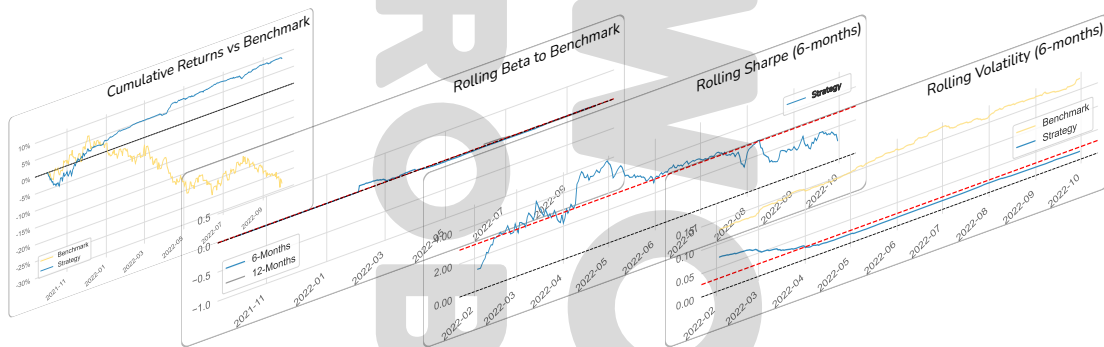


Figure 4: Early-mover, Galoy, serves Lightning-native stable-coins without fiat integration.

With regulations looming, the need arises for an asset denominated in storable and stable unit against price fluctuations without a central authority. The Human Rights Foundation agrees and has an open bounty of 1 **bitcoin** for the person or team who first achieves this goal. [10] The byproduct of **bitcoin** price hedging done by Krutt is stable-valued synthetic which can be, at appropriate timing when regulation permits, tokenized and issued. With distributed risk-profiles and plug-and-play oracles, treating exchanges' **bitcoin** perpetual contract as the most efficient and market tested value in the entire cryptocurrency market. When looking at emerging of token tech on **bitcoin**, we attest that **bitcoin** presents the most optimal path.[11]

Capital allocation needs not be permissioned nor a speculative one. Following BitMEX research's proposal [12] to the safest and market tested stable-valued synthetic, written by Arthur Hayes and scrutinized by like-minded risk-takers, we propose a combination of holding and hedging the value of **bitcoin**, using financial instruments only available in this market to issue stable-valued synthetic as user balance and selling Lightning network liquidity to highest bidders. The stable-valued synthetic locked, by shorting the market price of **bitcoin**, is yet tokenized but tentative to protocol upgrades called TARO [13]. We propose Krutt become a Lightning Service Provider for wallet users and liquidity borrowers alike, settled on Layer-2 and capacity maintained within Krutt treasury, while offering the byproduct of Krutt's delta-neutral balance sheet as stable-valued settlements available to users. Currently, two companies attempt to offer stable-valued settlements to their customers without risking customers' funds namely Galoy Stablesats [14] and The Bitcoin Company's virtual credit card offerings.



Figures 5 - 8: Simulated performance of proprietary delta-neutral portfolio management between October, 2021 to September, 2022.

3.5 - 6 % opportunity window is far from feasible for the average retail operator. However, under provision of a team like Krutt who operates with cash flow in mind, arbitraging on volatility to maintain hedging and delta ratio at zero, accumulation of permissionless liquidity becomes feasible.

Citations

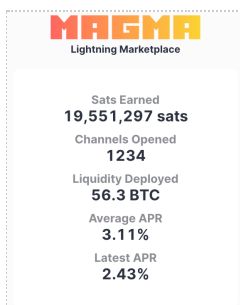


Figure 9: Lightning node operators' APR outperforms Alameda Research at a quick glance.

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