



Smart Layer

LIGHTPAPER

Smart Layer Lightpaper

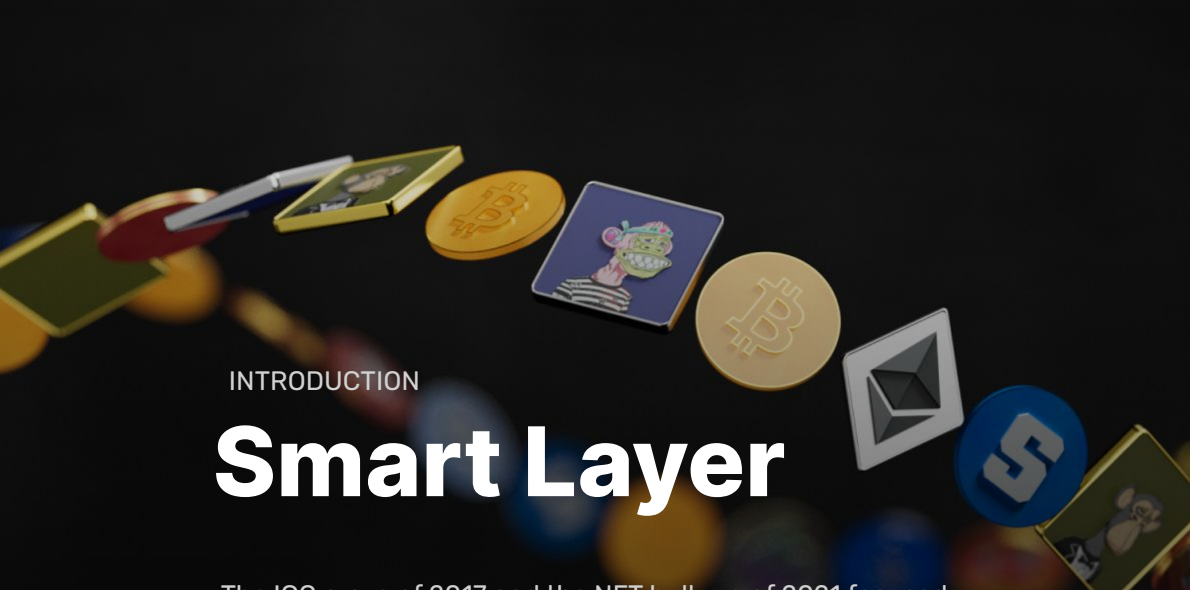
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Table of Contents

INTRODUCTION	3
OVERVIEW	4
SMART TOKENS	5
TOKENSCRIPT	6
THE NETWORK	7
VALUE CAPTURE	8
ABOUT SMART TOKEN LABS	9
CONTACT	10



INTRODUCTION

Smart Layer

The ICO craze of 2017 and the NFT bull run of 2021 focused on tokens as speculative assets. Both waves failed to deliver mainstream use cases beyond DeFi and digital collectibles.

The next wave of tokenization isn't about assets, it's about experiences. Tokens as applications that bring composability to mainstream web services. These programmable Smart Tokens are user centric integration points for the integrated web.

Smart Tokens will fuel innovation based on portable and composable website and business services. We will experience a new era of digital transformation as we progress from websites, to apps, to tokens. Tokenized services will transform user experience by rendering services when and where a consumer needs them.

This is when Web3 goes mainstream.

When large web-based businesses use tokenization to create greater customer value, faster partnerships, frictionless experiences and new means of personalization.

This is the promise of Smart Layer and the integrated web.





OVERVIEW

The Missing Layer

Businesses want to create better user experiences, and gain business efficiencies. Standing in their way are complex integrations, and data sharing regulations. Tokenization can solve this, however current efforts have stalled due to scale and functionality limitations. Both of which Smart Layer solves.

Current token functionality is limited by smart contracts. Smart Layer solves the issue of extending token functionality by introducing a new token standard (EIP-5169) enabling tokens to become Smart, and go beyond assets to deliver composable business services.

Secondly, for a web service to integrate advanced token functionality, beyond token gating, requires a direct integration to the underlying smart contract. This isn't scalable. Smart Layer also acts as a middleware, enabling Web2 services to embed advanced token functionality into existing web services.

Smart Layer is the the missing layer connecting Web2 services to Web3 utility enabling businesses to create better user experiences, and gain business efficiencies.

The Smart Layer Network

The Smart Layer is a token-incentivised network of service nodes. It is fueled by Smart Layer Token, driving its operations and incentivizing nodes to contribute their resources and enforcing service level agreements.

Three key components make up the Network:

1. **The blockchain:** This layer provides smart contracts that enforce token transaction rules and maintains snapshots of token operations' commitments for later validation. The Smart Layer Network can operate in any chain.
2. **Anchoring Nodes:** Run by reputable organisations elected by Smart Layer DAO, these nodes maintain the network's stability and security, verifying that the service nodes have performed their tasks well and issuing proof-of-work attestations.

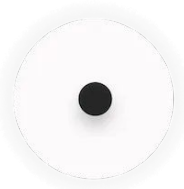
3. **Service Nodes:** The larger network of nodes distributes work via a distributed hashtable and provides TokenAPIs, enabling integrations. Operators earn in two ways: firstly, when paid for their services, as websites, apps, and token issuers request data, and secondly, via mining rewards issued from the DAO.

These components work together to create a dynamic, secure, and efficient network.

Both Anchoring and Service nodes are rewarded with Smart Layer tokens for their participation in the network - the more resources they contribute, the greater their rewards. This incentive mechanism ensures the continued growth and sustainability of the network.



Smart Tokens



Token

+



TokenScript

=



Smart Token

Blockchain gave us fungible tokens kicking off the token revolution. Ethereum gave us non-fungible tokens unlocking a new way to prove ownership and rights. Smart Layer gives us Smart Tokens as a new way to deliver business services unlocking the next era of digital experiences.

Unlike regular tokens, Smart Tokens have a programmable interface and can interact intelligently with websites and web services. More than an asset, they are portable and composable applications powering the next web.

Think of Smart Tokens this way. First we used web sites to deliver digital services, and the businesses with the best digital experience won. Then we moved to apps as an easier way to deliver those services. Now tokens allow us to liberate those services from websites and apps by tokenizing them, allowing them to be delivered when and where the consumer needs them, and without requiring direct integrations.

Smart Tokens are made using Token Script, a core underlying technology of Smart Layer that enables any token to become Smart.

TokenScript is a framework that allows token issuers to enrich a given token with a wide set of information, rules and functionalities.

Think of TokenScript like an extension to a Smart Contract. A Smart Contract sets the rules, TokenScript adds a layer of code transforming the token into a programmed object that can provide services. This is something a Smart Contract can't do on its own. While a Smart Contract sets the rules, it doesn't provide the services based on those rules. So, you can think of a Smart Contract as a piece of blockchain code that sets the stage, and TokenScript as the actor that performs the play.

TokenScript is a crucial technology that enables the creation and operation of smart tokens.

Car Ownership Smart Token

A Car Ownership Smart Token sits at the centre of the car ownership experience seamlessly connecting the car owner to all manner of vehicle services and functions.

Ownership: A car manufacturer issues a Smart Token to enable car functions from the user wallet as well as the integration of vehicle maintenance or registration data.

Insurance: The token can be presented to an insurer, validating ownership, and creating the ability to add an insurance token which can be dynamically updated to include usage based cover for ride sharing or car rental.

Market: The token provides the interface, as well as the proof of ownership, insurance, and maintenance required for trusted peer to peer transactions such as sale or rental.

Service: A token based record of the service and maintenance history of a vehicle makes it far simpler for 3rd parties to leverage this data as part of services they wish to provide.

With the car ownership smart token as the integration point, a new type of car ownership experience is enabled.



Toyota C-HR Koba 2022 Ownership Token

Make VIN
Tesla, Year 2022 4Y1SL65848Z411439
Colour Black

OPEN

START

LOCK

LOCATE

Authorisation Panel

AUTHORIZE USE

TRANSFER OWNERSHIP

SEND

Market Panel

LIST FOR SALE

AUCTION

COLLATERALIZE

LIST FOR SHARING

Registration



Issuer: Services NSW
Rego: CY1PWD

Toyota Capped Service



Issuer: Toyota Australia
Coverage Expiry: 2026-12-09
Last Serviced: 400 days ago, due for service

Insurance



Issuer: AAMI Insurance
Policy Expiry: 2023-06-07, due for renewal

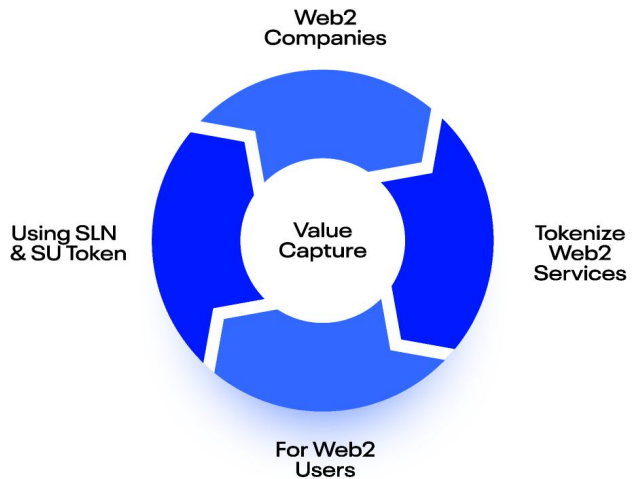
Purchase

Issuer: Manheim Automotive
Date: 2022-1-6
Price: \$35,500

Value Capture and Network Effects

Smart Layer Network empowers Web2 businesses to build seamless user experiences by enabling their services to become portable & composable through tokenization.

Businesses don't need to build complex integrations with multiple chains and businesses; they can simply use Smart Layer. And in turn, Smart Layer captures value with every integration and token issued, as businesses easily tokenize their experiences and services, bringing web2 business dollars into web3.



Consider an example of a travel experience: When a user travels, they go through several checkpoints that ask for identity, information or payment. There is a network where a token can enable a more efficient and better experience.

The airline issues a smart token with their ticket. The smart token becomes a robust integration point that connects any company or service needing the ticket information: Transfer services can use ticket data to manage pick-ups better. Immigration services can verify arrival and departure dates, making visa processes smoother. Hotels can verify passenger arrival hours and details, making check-ins a simple welcome and ensuring premium travellers receive premium service.

As more services and issuers join, more integrations can happen, and the value increases for all tokens and businesses connected with the Smart Layer, increasing the value of the SLN Token in turn.



Smart Token Labs

Smart Token Labs is the team behind Smart Layer.

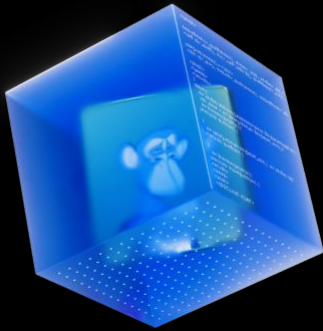
Since 2017 we've been building for our vision of an integrated web based on a new approach to tokenization where tokens function as APIs not just assets.

In the early days we believed advanced tokenization would require a super user agent, so we built the world's most forked Ethereum wallet, Alpha Wallet. Today, we understand that tokens should also function outside of wallets, in emails, and on websites directly. So we've built Brand Connector, and Token Negotiator to enable those interactions. We also knew tokens needed to have more functionality than what the smart contract could provide so we built TokenScript and EIP 5169.

We've proven these technologies with over 30 POC's including one of the world's first car ownership tokens for Karma Automotive, tokenized tickets for the 2018 FIFA world cup, and the first open loyalty platform for events which has been deployed at Devcon6 in Bogota, EdCon in Montenegro, and DevConnect in Amsterdam. Now we are taking those technologies to market via Smart Layer.

Our team is comprised of Web3 pioneers from Salesforce, Ebay, Meta, Uber, and the Commonwealth Bank of Australia. With over a half a dozen exits between the founders, and backing from likes of Mark Cuban Enterprises and Framework Ventures the team has a proven track record and is trusted to deliver.

We believe tokenization will enable a better internet, and unlock a wave of innovations and experiences creating a new web that serves the users. If you believe as we do come join us!



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