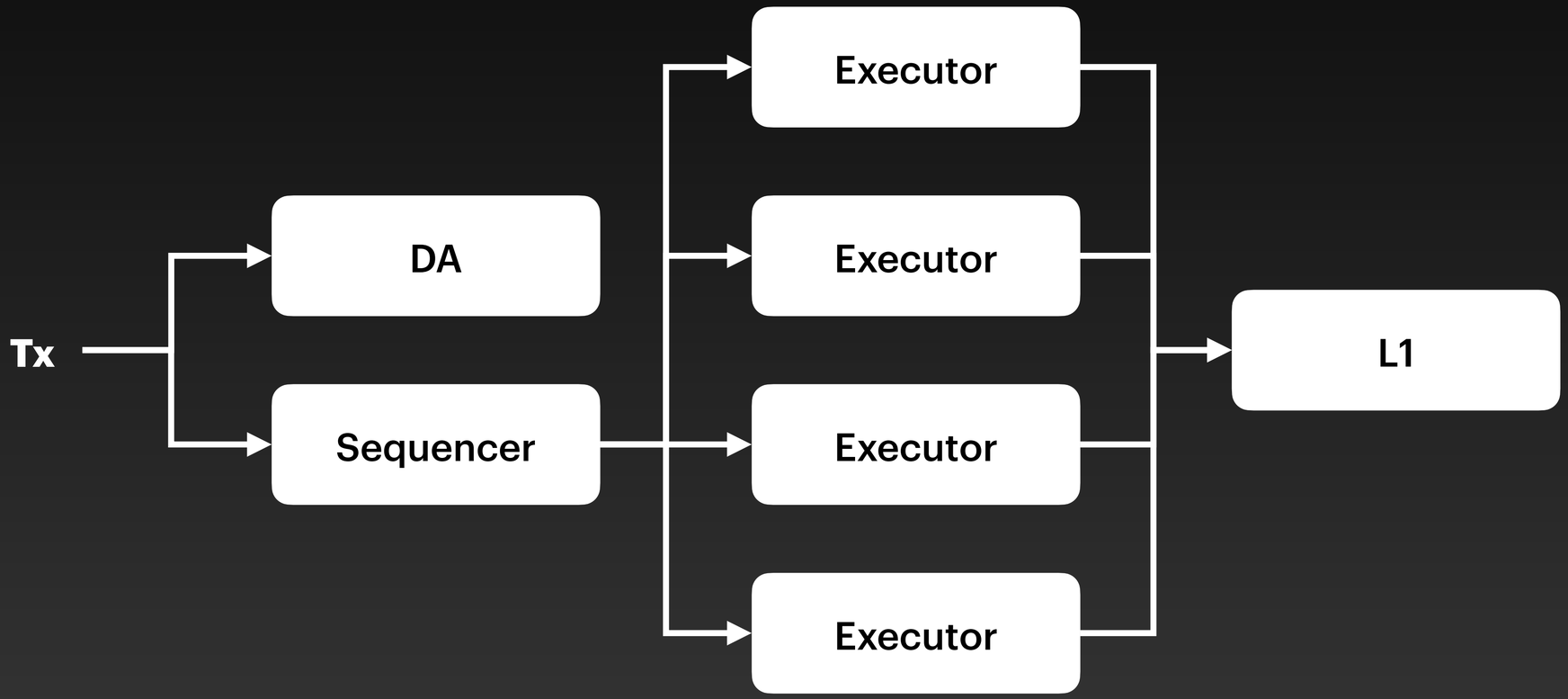
Sui as Infrastructure

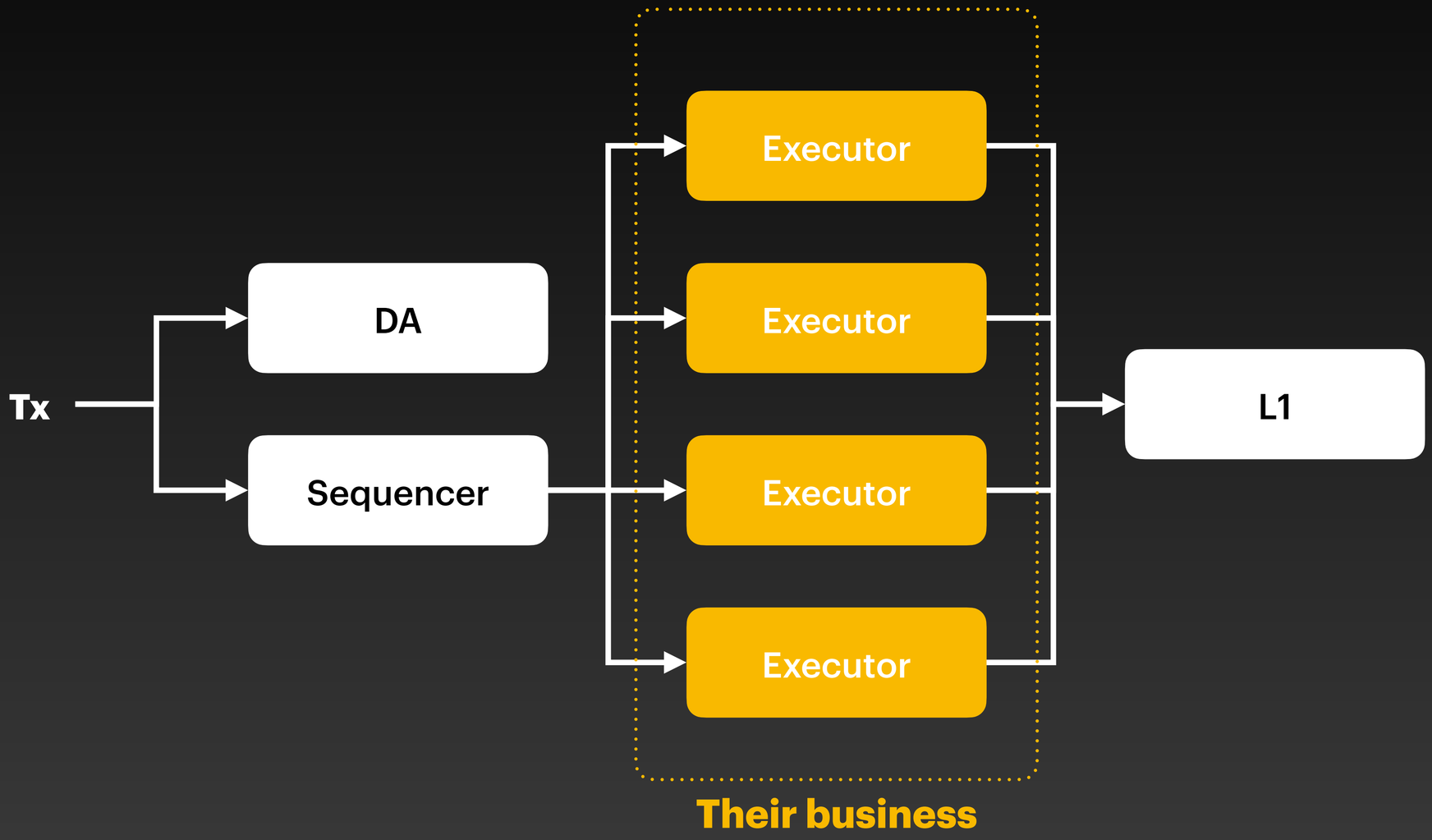
For Rollups & Sidechains

Lisbon Research Offsite

What People Try to Do



What People Try to Do



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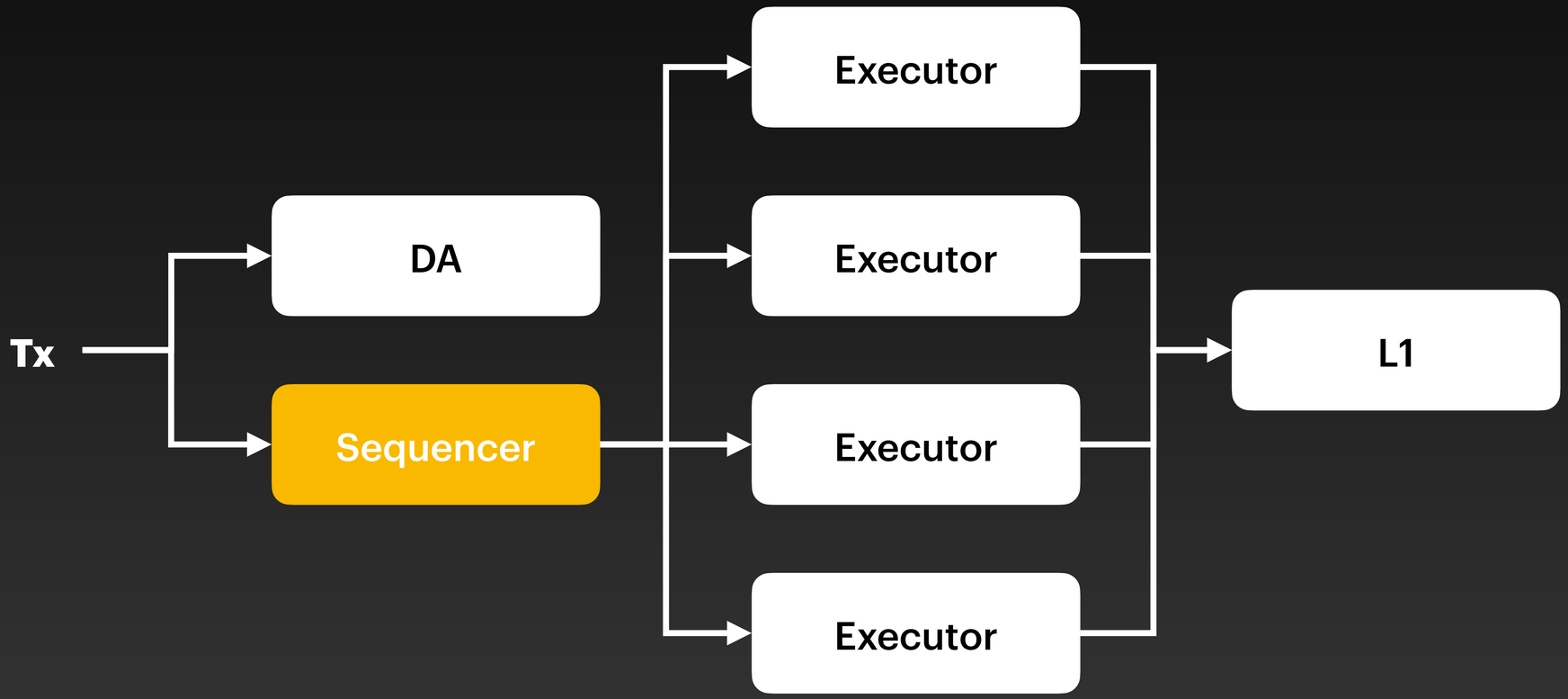
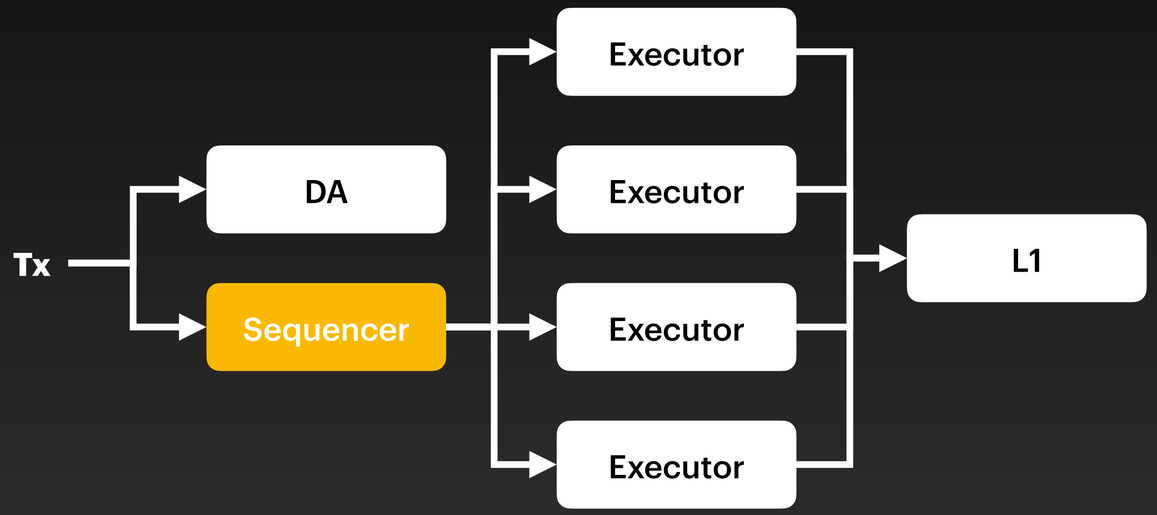
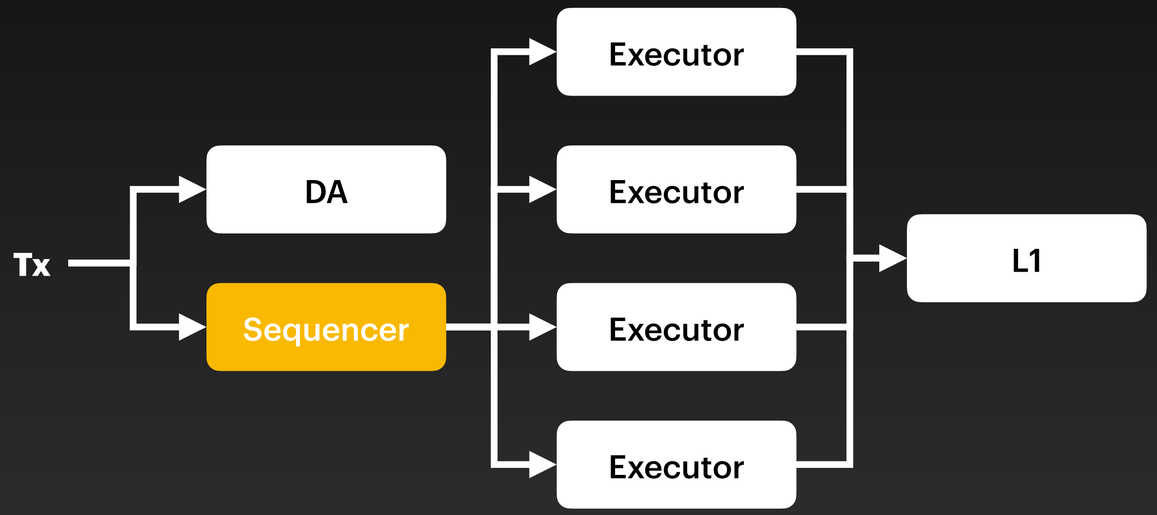


The Sequencer Problem



- **Centralised sequencer**

The Sequencer Problem



- **Centralised sequencer**
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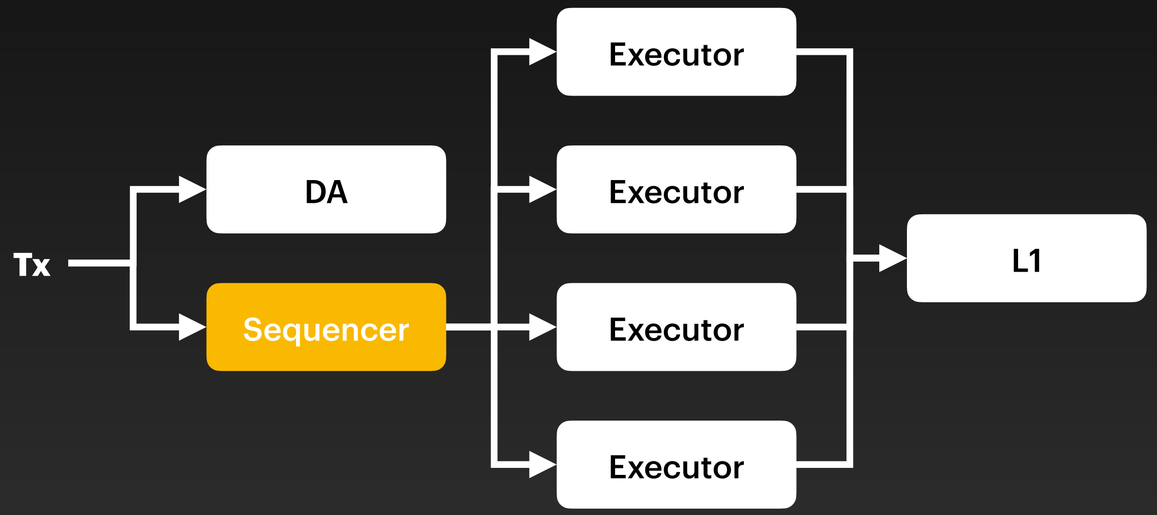

- **Centralised sequencer**
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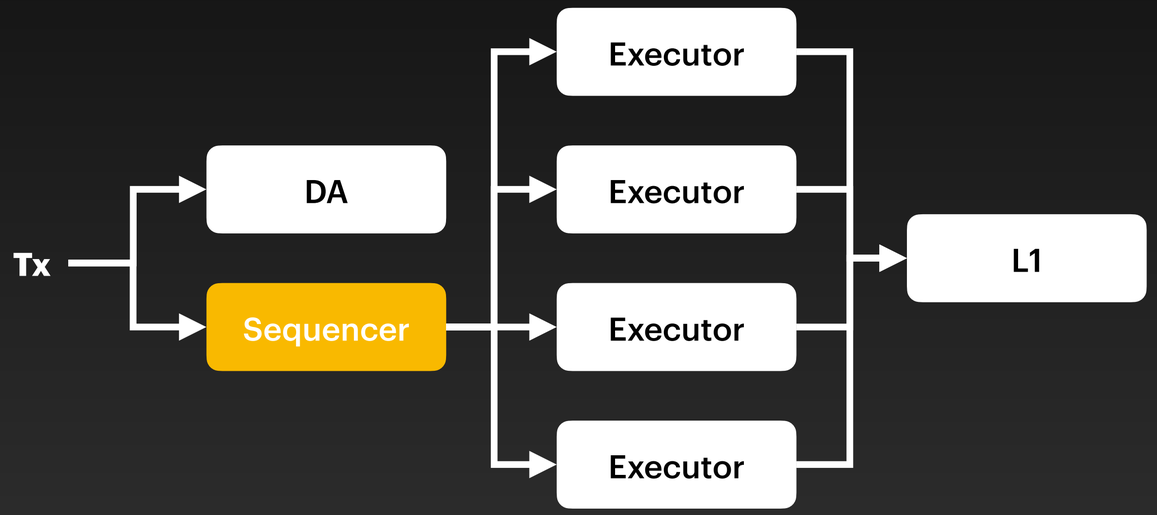

- **Centralised sequencer**
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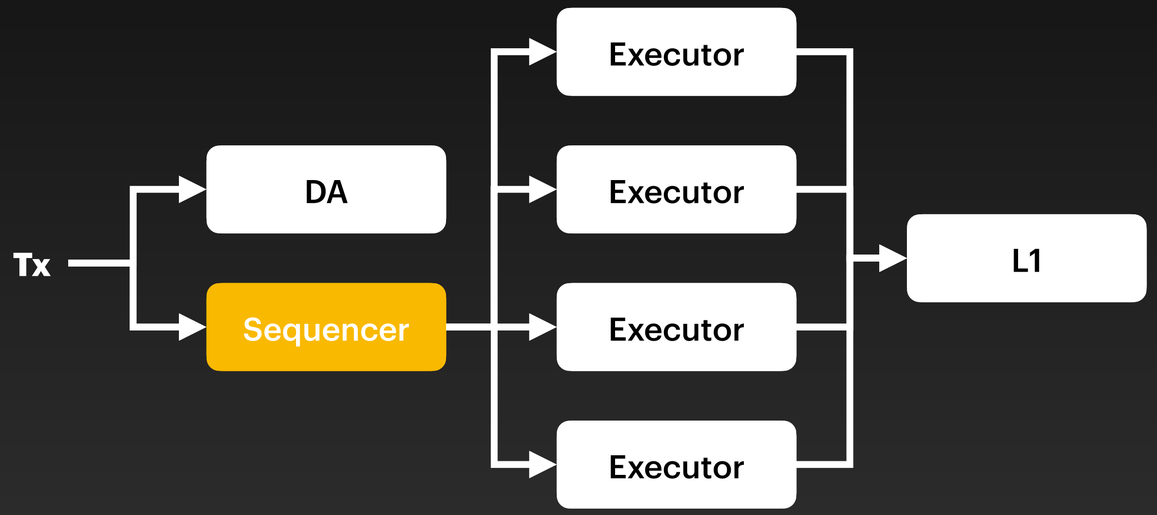
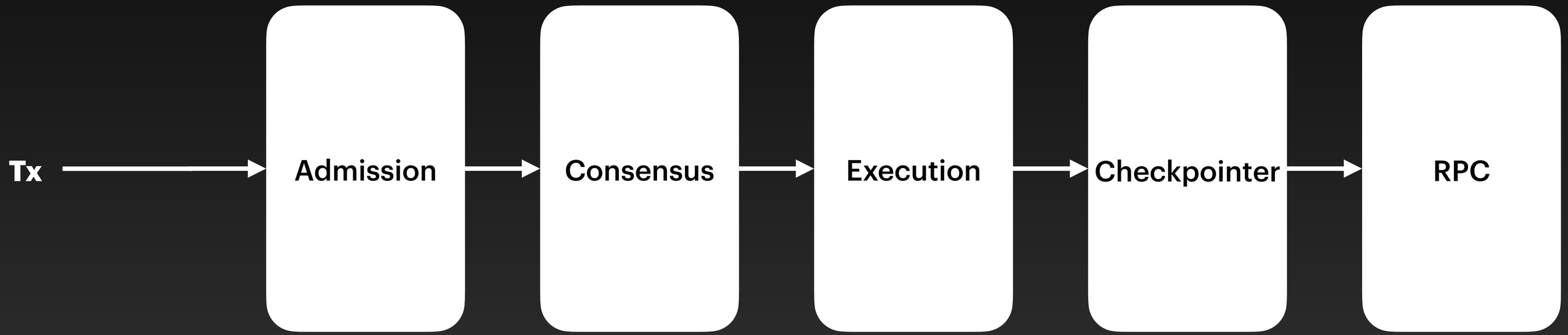
- **I am going to use Tendermint**

The Sequencer Problem

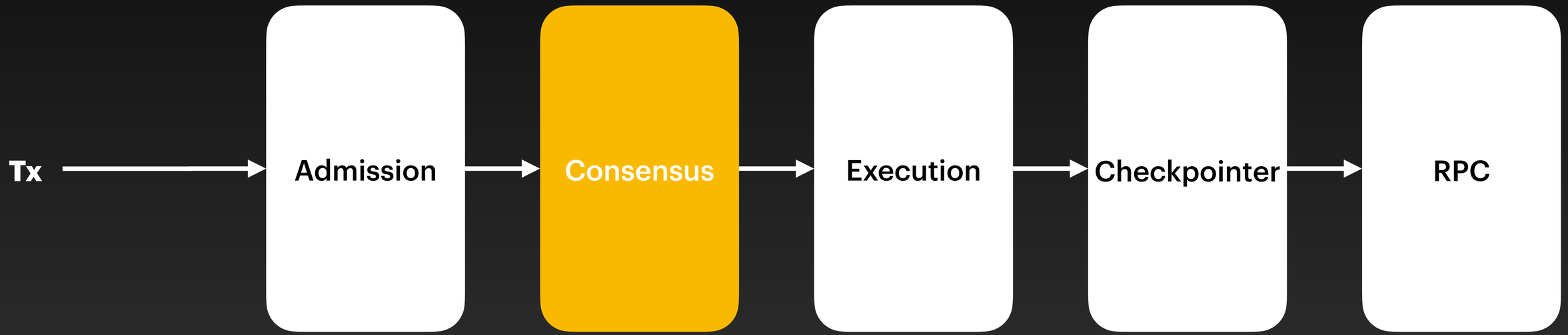


- **Centralised sequencer**
- **Can I use Bullshark**
- **Can I use Mysticeti**
- **I am going to use Tendermint**
- **How much to hire you?**

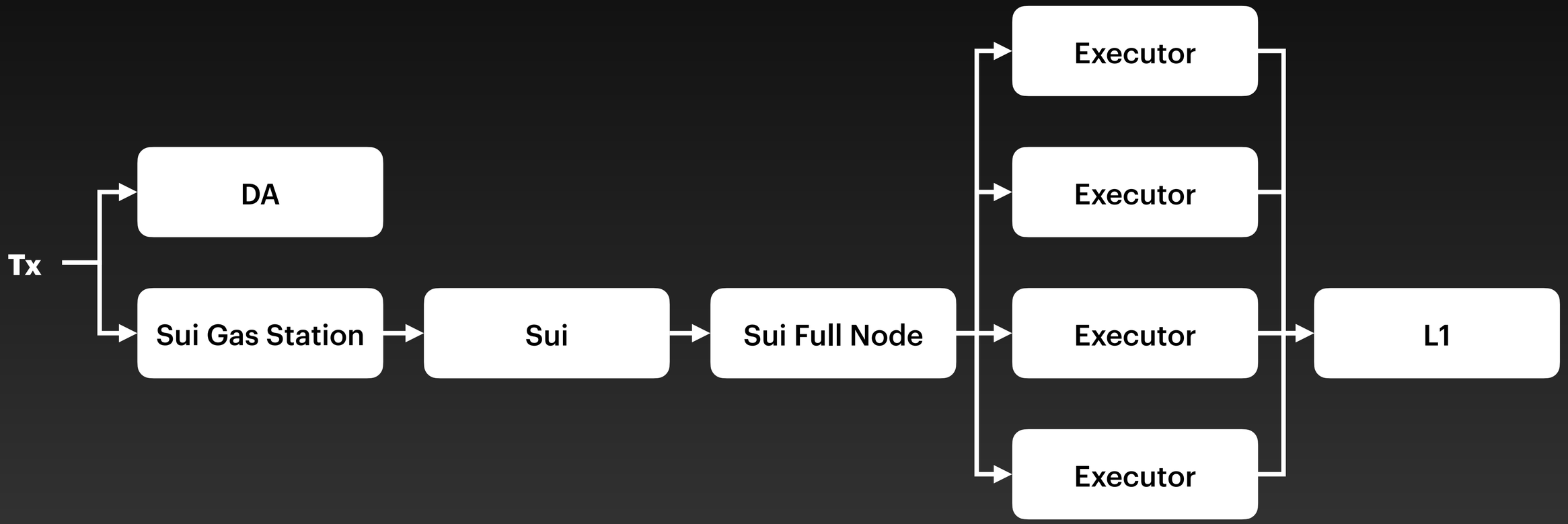
Sui as a Sequencer



Sui as a Sequencer



Proposed Architecture



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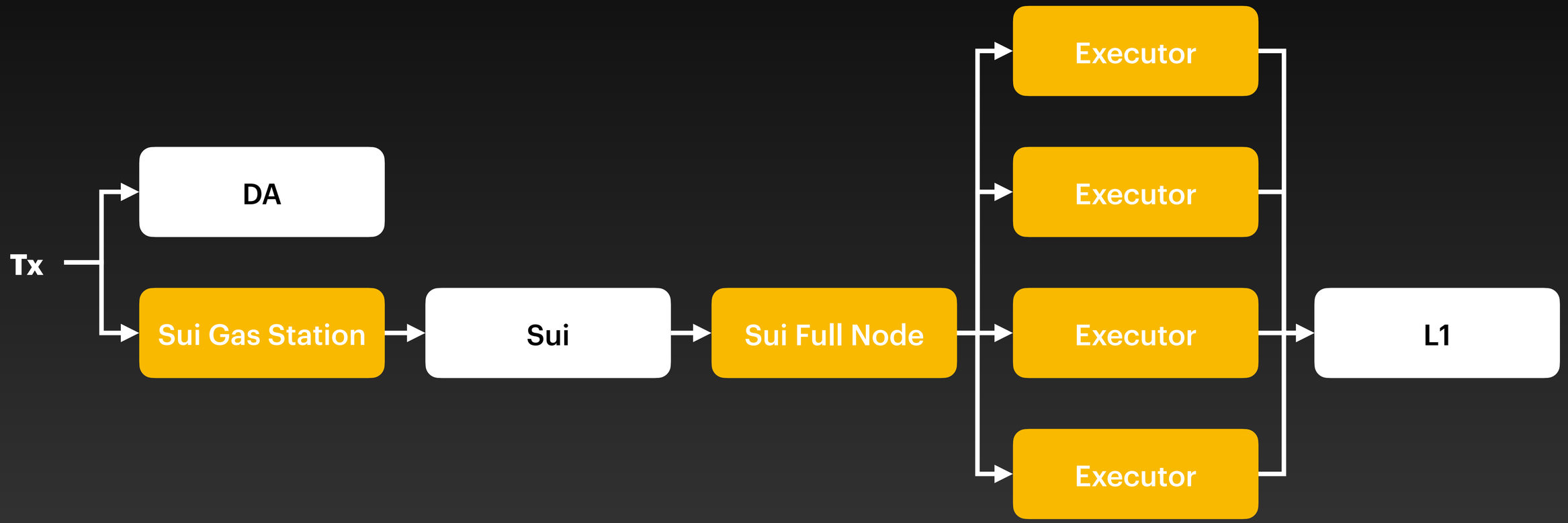


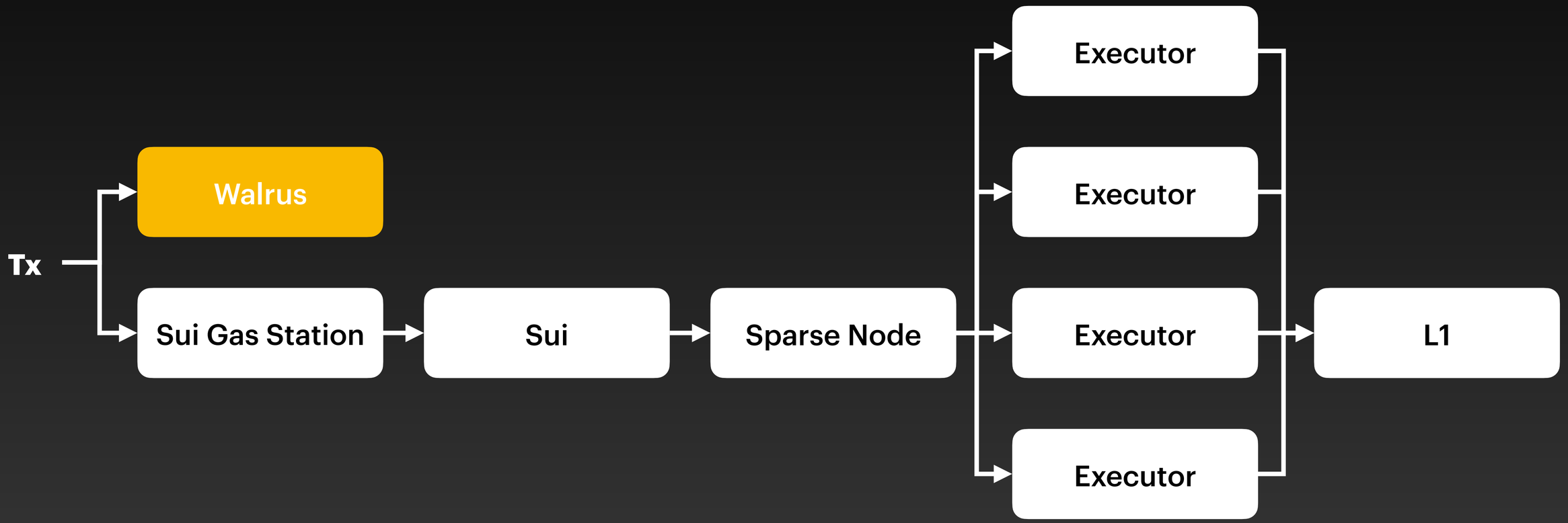
Not Trusting Sui

- The L1 is responsible for Safety & Liveness (escape hatch)
- The DA is responsible for data availability
- Sui is responsible for performance
  - (Special transaction on the L1 can replace Sui by Solana)

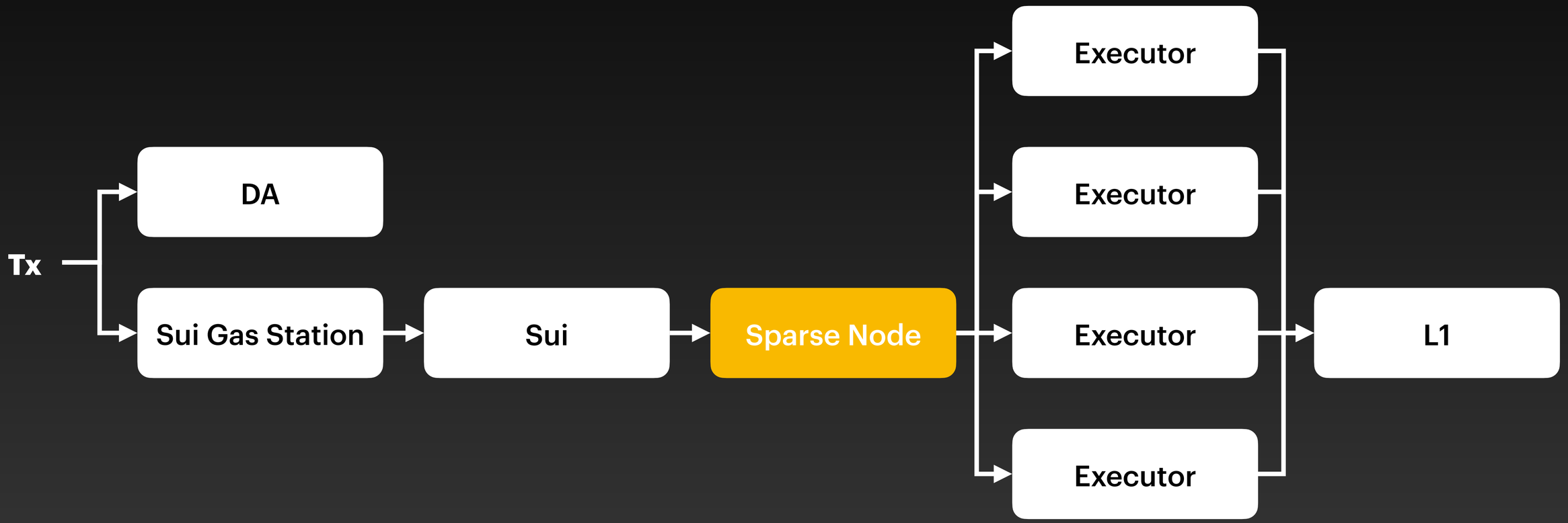
Zero Changes to Sui

(Can happen today)

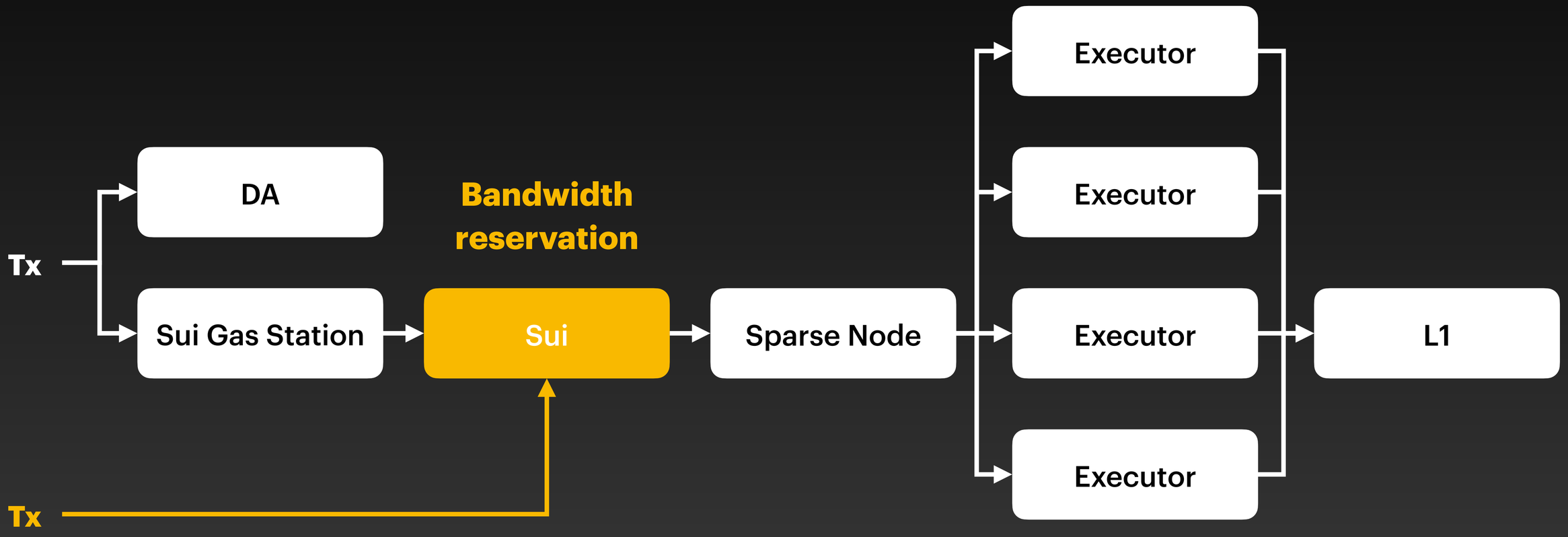
Improvements (1)



Improvements (2)



Improvements (3)



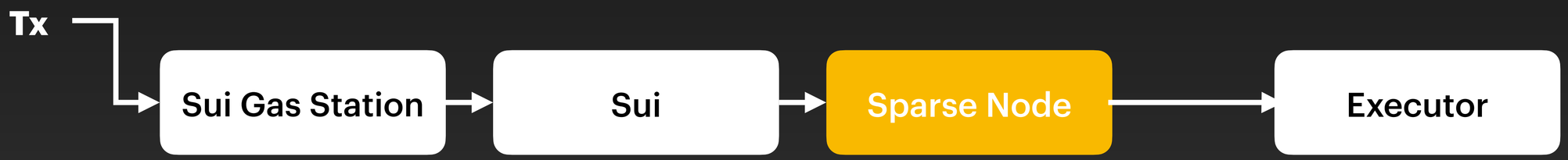
Discussion

- Why yes?
  - Showcase the power of Sui ecosystem
  - Make people realize what they are missing
  - Probably no pushback as we “donate” to other ecosystems
- Why no?
  - We literally donate our tech to other ecosystems
  - Value capture happens at the L1 and at the Executor/L2
  - We get peanuts to persist a few MB for a month + order DA proofs

EVM Sidechain on Sui

Lisbon Research Offsite

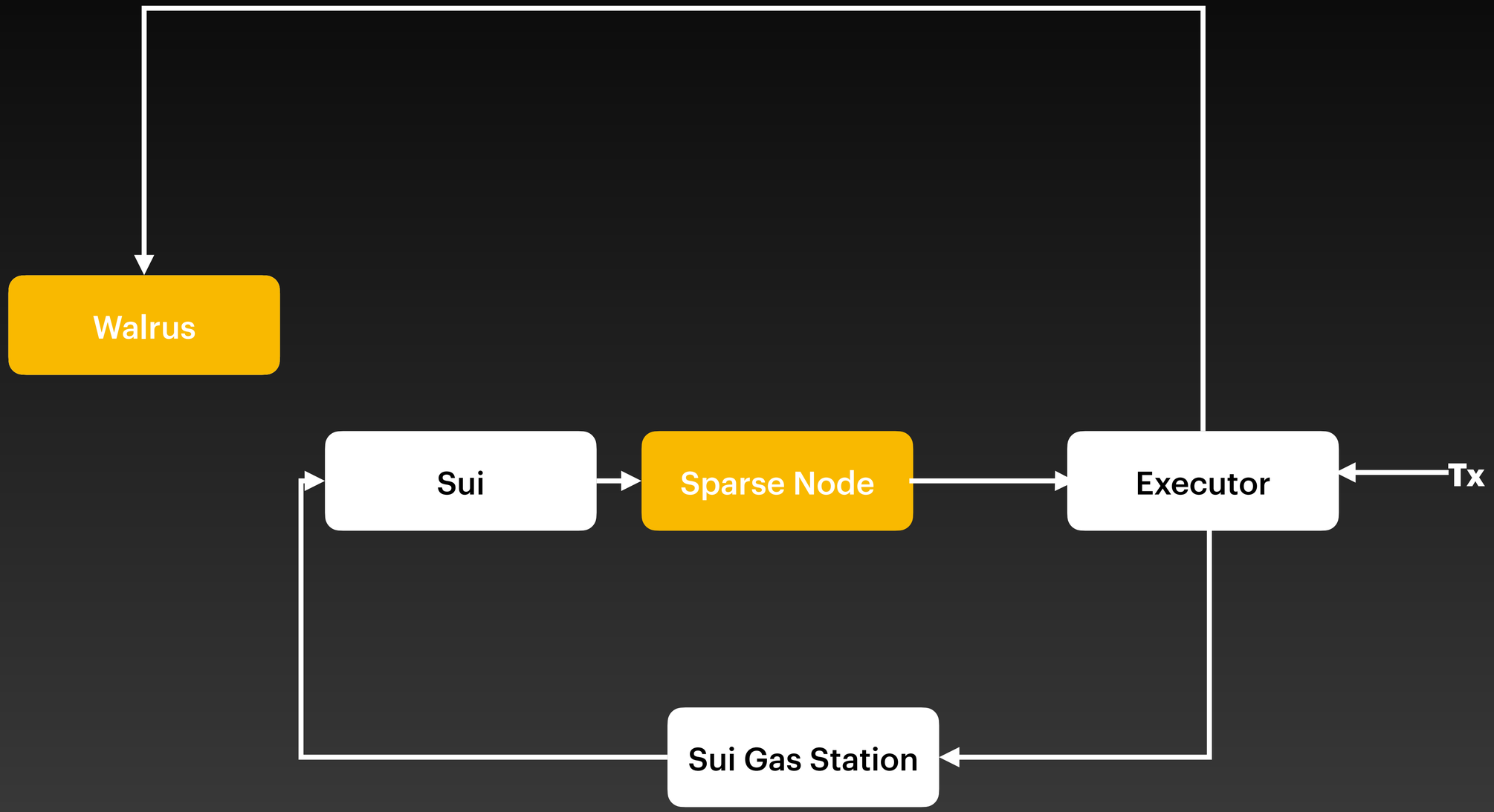
SideChain with Sui Sequence



Issues for EVM

- **Sui can’t validate transactions**
  - **EL crashes if an invalid transaction is scheduled for execution**

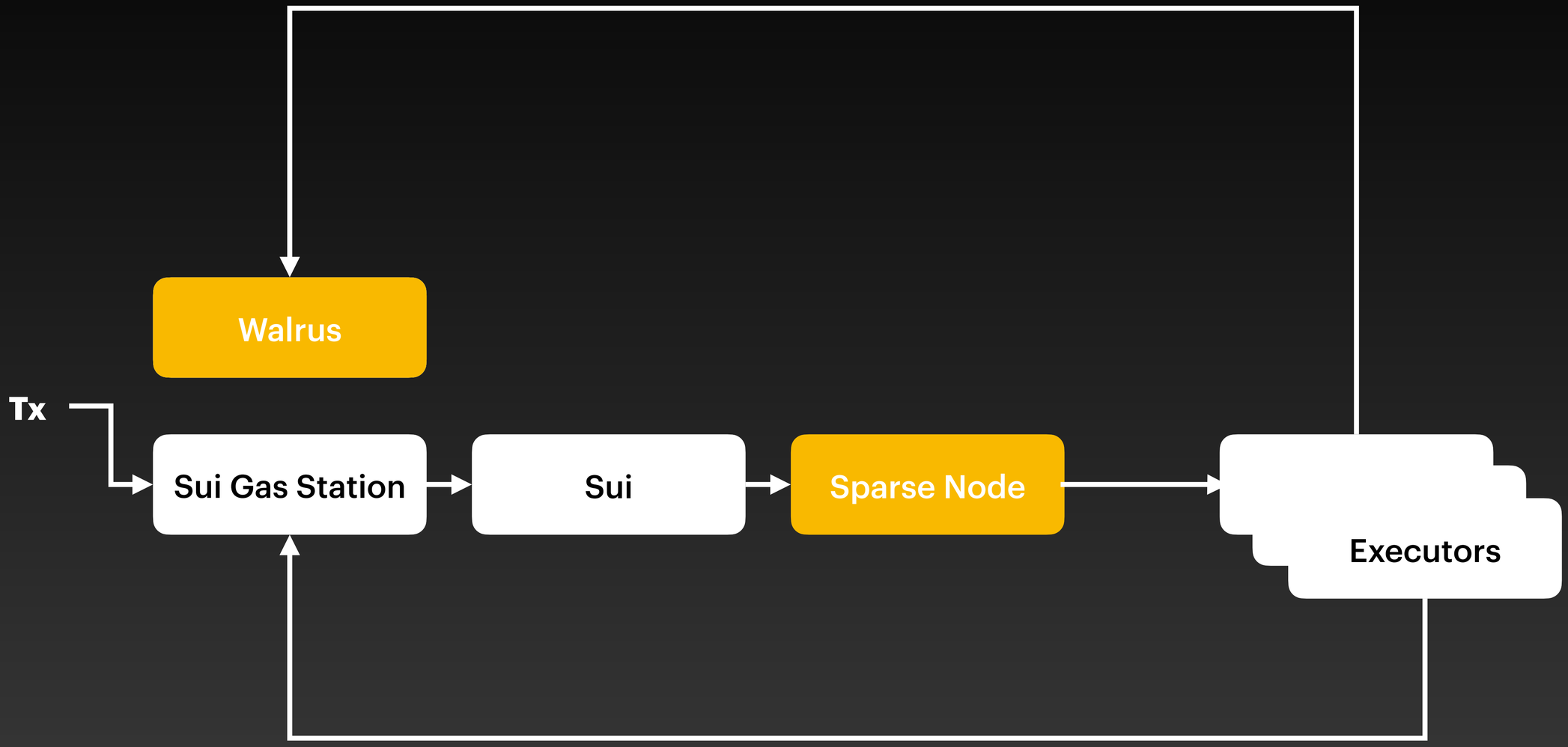
EVM SideChain with Sui Sequence



Issues

- If there is a proposer it might crash
- If there is a single proposer it might censor

EVM SideChain with Sui Sequence



Discussion

- Why yes?
  - Showcase the power of Sui ecosystem
  - Value capture happens through Sui only
  - We can built and run the EVM side-chain and also capture the rest of the value
    - Mysten-Fast and Mysten-Cheap Ethereum competitor
    - Bring your smart-contract’s in the Sui Ecosystem
    - We can create special EVM addressed controlled via Move on Sui
- Why no? Do we even care?
  - Neither Ethereum or the other L2s will like it