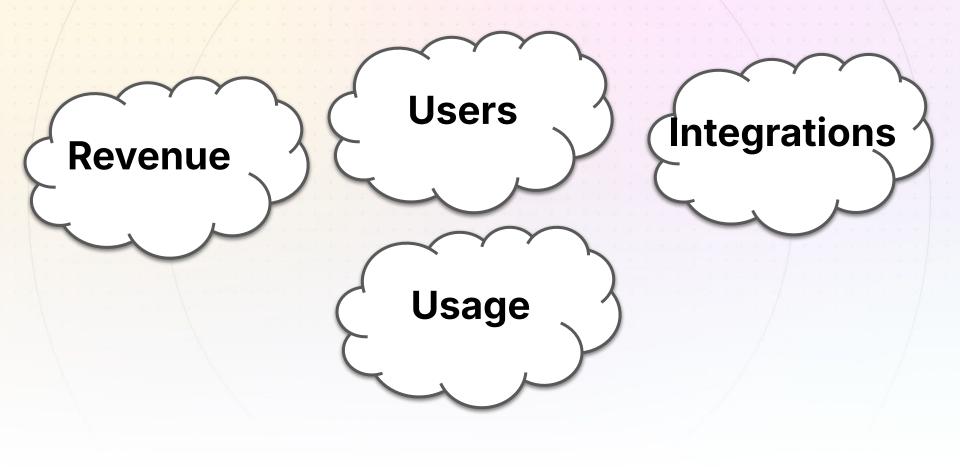
# NameHash Labs

### ENS Service Provider Update Feb 6, 2025

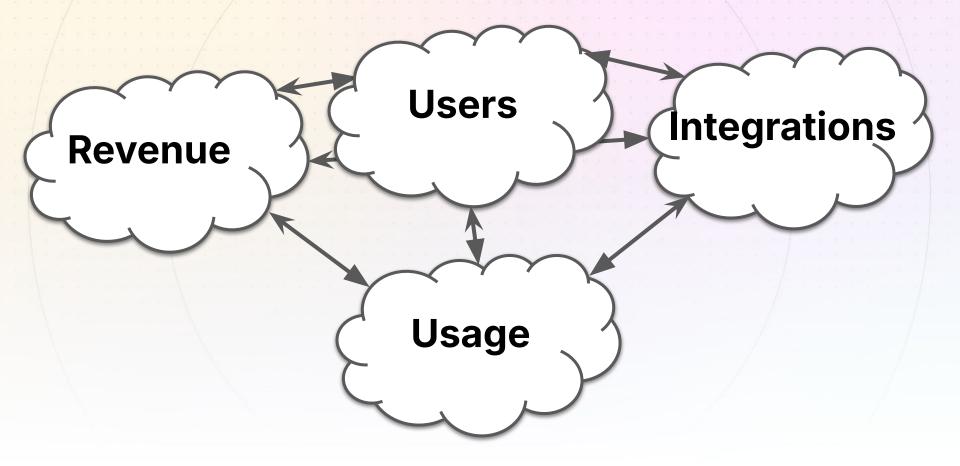
#### **Our Mission**

# Help ENS grow

#### **Measuring Growth**



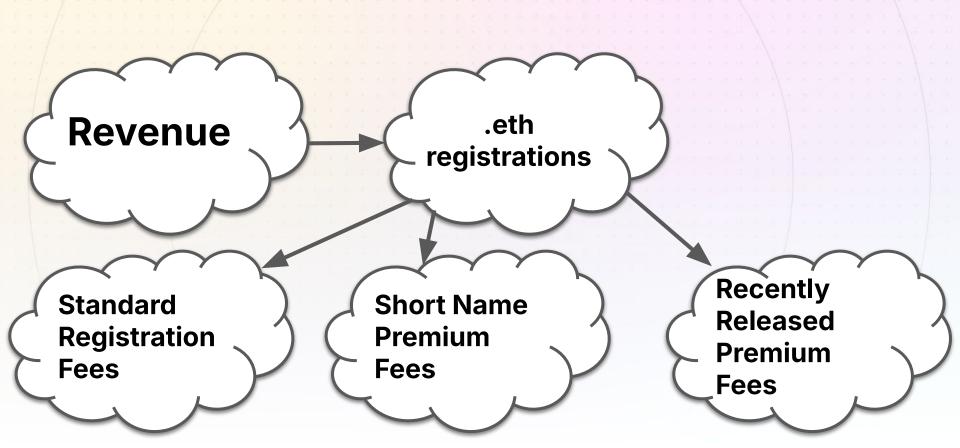
#### **Measuring Growth - Key Metrics Support Each Other**



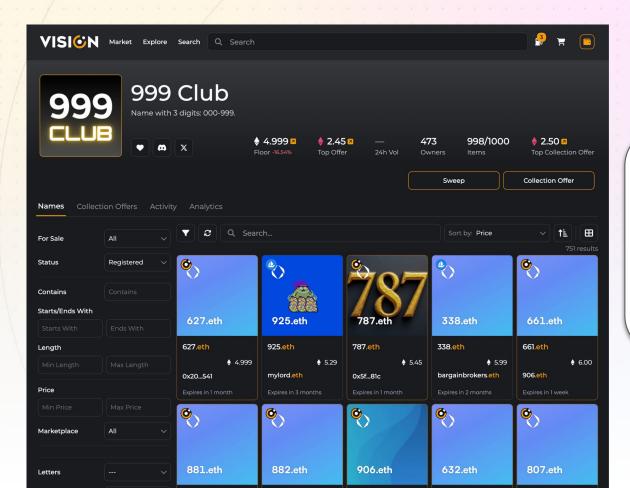
#### **Measuring Growth - Revenue Focus**

Revenue

#### **Measuring Growth - Revenue Focus**



#### **Measuring Growth - ENS Secondary Markets**

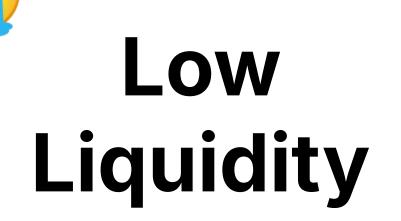


# Secondary Market Speculation A Key Revenue Driver

#### **Growth of secondary markets** $\rightarrow$ **growth of ENS**

# How can we support our secondary markets?

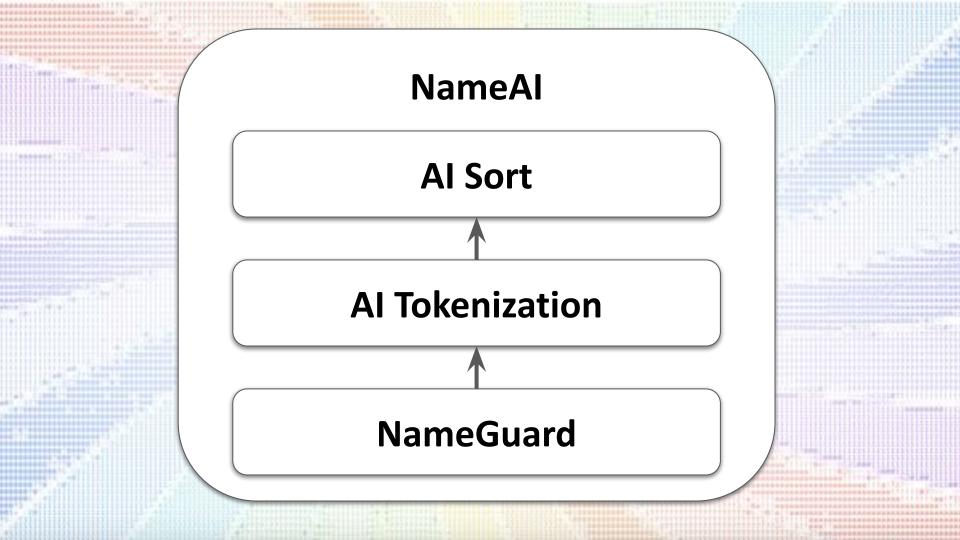
#### Key secondary market challenge

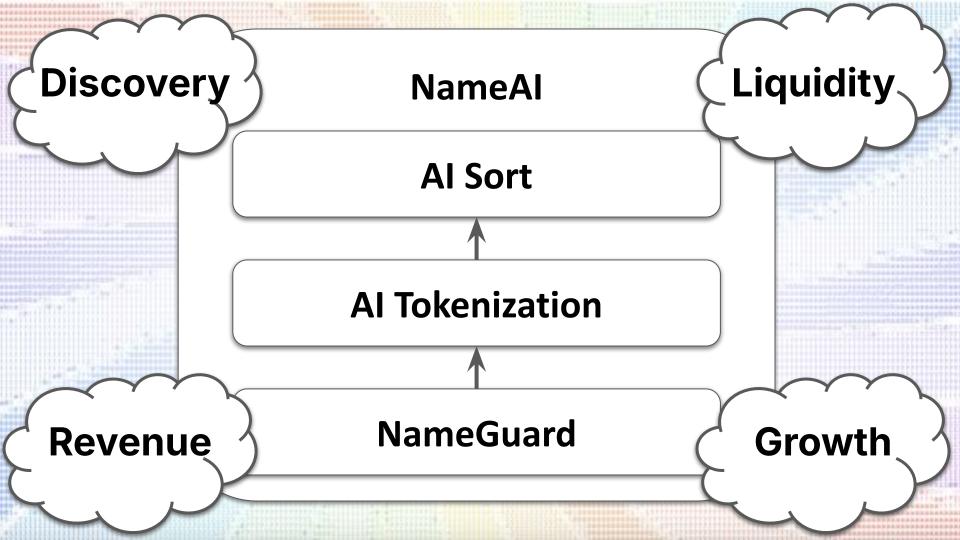


#### **Our strategy**

# Improved Discovery

# NameAl





# NameAI fully open source

**GitHub** 

# NameAI coming soon to



# Enable new ENS user experiences What will you build? npm install @namehash/nameai 🗋 G Github API docs kkkkkkkkkkkkkkkllkllkks

NameHash Labs	Products	Resources
Founded in 2022, Namehash Labs is a technology	NameKit	Contact us
and the second	a second the subdiversion	

## Label Tokenization

#### nameai.io/tokenization

probability(['the', 'cat']) > probability(['cat', 'the'])

#### used in AI Sort

#### **AI Tokenization Demo**

Extract recognizable words that are otherwise "smashed together" in labels.

	expertsexchange		Analyze	
	or try one of the example lab			
otoinoue	myfamilyandi Vall12months	spencecoin	chainlinkgod	Cel
Label For Analysis				
expertsexchange				
Recommended Tok	enization			PROBABILITY
experts exchange	3			
Discovered Tokeniz	ations			PROBABILITY
experts exchange	3			
expert sex c	hange			
experts ex cl	hange			
ex pert sex	change			-

## AI Sort

nameai.io/sort

# **AI Sort Demo**

Bring names more likely to be interesting to the top.

	Enter a label	Al Sort
defi		0.9337
blockchain		0.9337
vitalik		0.9337
ethereum		0.9337
web3		0.7828

# AI Sort

### default sort by method in any ENS names list

	SION Q Searc	ch		🦳 🐥 વ	=
P	PRE UNK LUB Pre-Pun Names min	nk Club Ited before Crypto Puni	ks.		
<b>♦ 0.0</b> Floor	0016 2 👌 2.00 7 Top Offer	<b>\$ 77.94 159'</b> 24h Vol -73.07% Owne		72328	
		Sweep			
Nam	nes Activity Analyt	tics			
Ø	Q Search				
	Sort by: Name				
					0,000 results
				Owner	
۹	Name 0-0-0-0.eth		Expiration 3 months	Owner 999club.eth	•
*					
	0-0-0.eth		3 months	999club.eth	• •••
•	0-0-0-0.eth 0-1-2-3.eth	Price — — — — (ⓒ ◆ 10.00	3 months 3 years	999 club.eth darrow.eth	•
*	0-0-0.eth 0-1-2-3.eth 0000000.eth		3 months 3 years 9 years	999club.eth darrow.eth hundun.eth	<ul> <li></li> <li></li> <li></li> <li></li> </ul>
*	0-0-0-0.eth 0-1-2-3.eth 0000000.eth 00000000.eth	_ _ _ (€ ♦ 10.00	3 months 3 years 9 years 7 years	999club.eth darrow.eth hundun.eth 000000.eth	<ul> <li></li> <li></li> <li></li> <li></li> <li></li> <li></li> </ul>

# NameAI SDK

https://github.com/namehash/namekit/tree/main/packages/nameai-sdk

Additional features provided by NameAI on top of NameGuard:

- Natural Language Processing: Evaluate how well ENS names represent meaningful words or phrases
- Tokenization: Break down names into meaningful word components with probability scoring
- Purity Scoring: Assess the cleanliness and quality of ENS names
- Sort Scoring: Get relative ranking scores for ENS names

The @namehash/nameai SDK provides full type-safety when working with the NameAI API.

npm install @namehash/nameai

### Example usage

const report = await nameai.inspectName("cryptowallet.eth");

// Results include:

- AI Sort score (0.0 to 1.0)

- Word tokenization ["crypto", "wallet"]

- Security checks (via NameGuard)

# Tokenization

up to 1000 potential tokenizations sorted by probability using n-gram language model

- fast tokenization with Aho-Corasick algorithm
- fast probability scoring with n-gram language model

# Scoring

Score Level	Condition	Example Labels
Invalid	Zero length or not normalized	"", nicK
Unknown Label	Matches labelhash pattern	[1234567890abcdef]
Invisible	Contains invisible characters	helloworld (with zero-width space)
Too Long	Length > 30 characters	thisisaverylongdomainnamelabel
Confusable	Contains confusable characters	paypal (with letter alpha)
Special	Contains special characters	hello!world
Other Number	Contains non-ASCII numbers	hello <code>١٢٣</code> (Arabic numerals)
Other Letters	Contains non-ASCII letters	привет

# Scoring

	Score Level	Condition	Example Labels
	Emoji/Underscore/ \$	Contains emoji, underscore, or \$	hello_world, \$price, hello 👋
	Hyphen	Contains hyphen	hello-world
	Simple Number	Contains ASCII numbers	hello123
	Zero Words	Word count is 0	123
	Many Words (4+)	Contains 4+ words	the quick brown fox
	Three Words	Contains 3 words	just three words
	Two Words	Contains 2 words	two words
	One Word	Contains 1 word	hello
+ probability adju	ustments		

## Infrastructure and documentation

#### • API Endpoints:

- NameAl: api.nameai.io
- NameGuard: api.nameai.io/nameguard
- AWS Lambda-based infrastructure
- Comprehensive documentation available
  - https://api.nameai.io/docs
  - <u>https://github.com/namehash/namekit/tree/main/apps/api.nameai.io</u>

## **Contact & Resources**

- Website: namehashlabs.org
- API Docs: <u>api.nameai.io/docs</u>
- GitHub: github.com/namehash/namekit
- License: MIT

We welcome any feedback you have - it helps us improve!