

Tokenize or Subsidize? How To Grow A Platform

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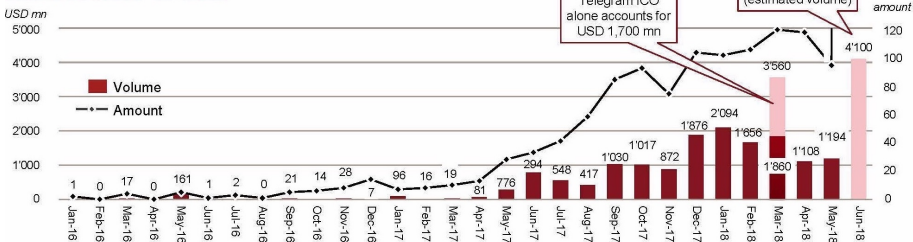
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ICOs EVERYWHERE

ICO development

Year	duration/ ICO (d)	USD mn/ ICO	Total # ICOs	Total volume (USD mn)
2013	41	0.4	2	0.8
2014	68	3.8	8	30.5
2015	32	1.0	10	9.9
2016	39	5.1	49	252.0
2017	29	12.8	552	7,043.3
YTD 2018	48	25.5	537	13,712.8
All	38	18.2	1,158	21,049.4

Monthly ICO number and volume



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- We focus on a rational justification for issuing tokens in platform settings

PLATFORMS

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- Network effect: participation in the platform is valuable only if others also participate

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- Typically solved by subsidizing early users, and profiting from those who join later, when it is clear that the platform is successful
- This requires upfront capital, which can be expensive

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 - ▶ they are sold at a lower price to compensate early buyers for the risk of platform failure

TWO-PERIOD MODEL WITH NETWORK EFFECTS

Two-period model with network effects

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- Everybody observes whether platform was successful

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 - ▶ Early arrivals that did not buy a token in Period 1 can also buy now
 - ▶ Early arrivals can sell their token to late arrivals and exit

TOKEN TRADEOFFS

- With tokens, the platform can charge higher price in period 1 and still have successful adoption
 - ▶ potential users know they will benefit from tradable tokens in period 2
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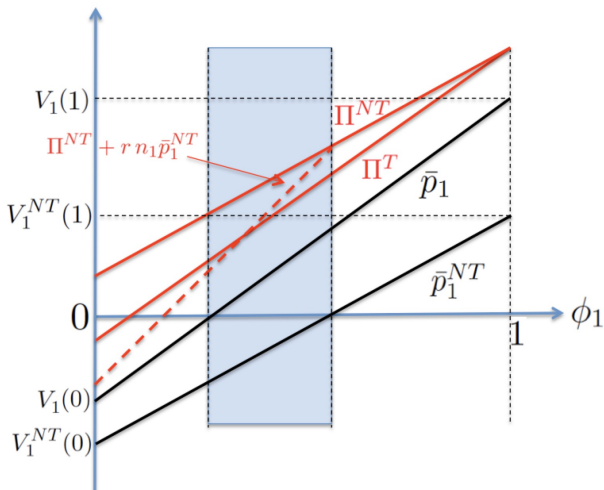
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- **Result 3:** The more the platform can project inevitability, the higher the cost of capital threshold that favors tokens

TOKENS VS. NO TOKENS AND MARKET FAVORABILITY BIAS

- Cost of capital threshold is increasing with favorability bias towards the platform



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- Tokens increase early profit but decrease total profit
 - ▶ transfer revenue from second period to first period
- Can lower or eliminate the need to subsidize early adopters
 - ▶ Let them buy cheap tokens instead!
 - ▶ subsidy could be required without a token, but not needed with token
 - ▶ if platform faces high cost of capital, issuing a token can enable platform adoption and success

Thank you!