

Class 17 Overview

- Readings and Study Questions
- Review of Bakkt Discussion
- Initial Coin Offering Characteristics
- Evaluating ICOs
- ICO Statistics
- Conclusions

Class 19 (11/20): Study Questions

 What is the new crowdfunding mechanism of blockchain technology - initial coin offerings (ICOs)?

What attributes help distinguish successful ICOs?
 Why have so many ICOs failed?

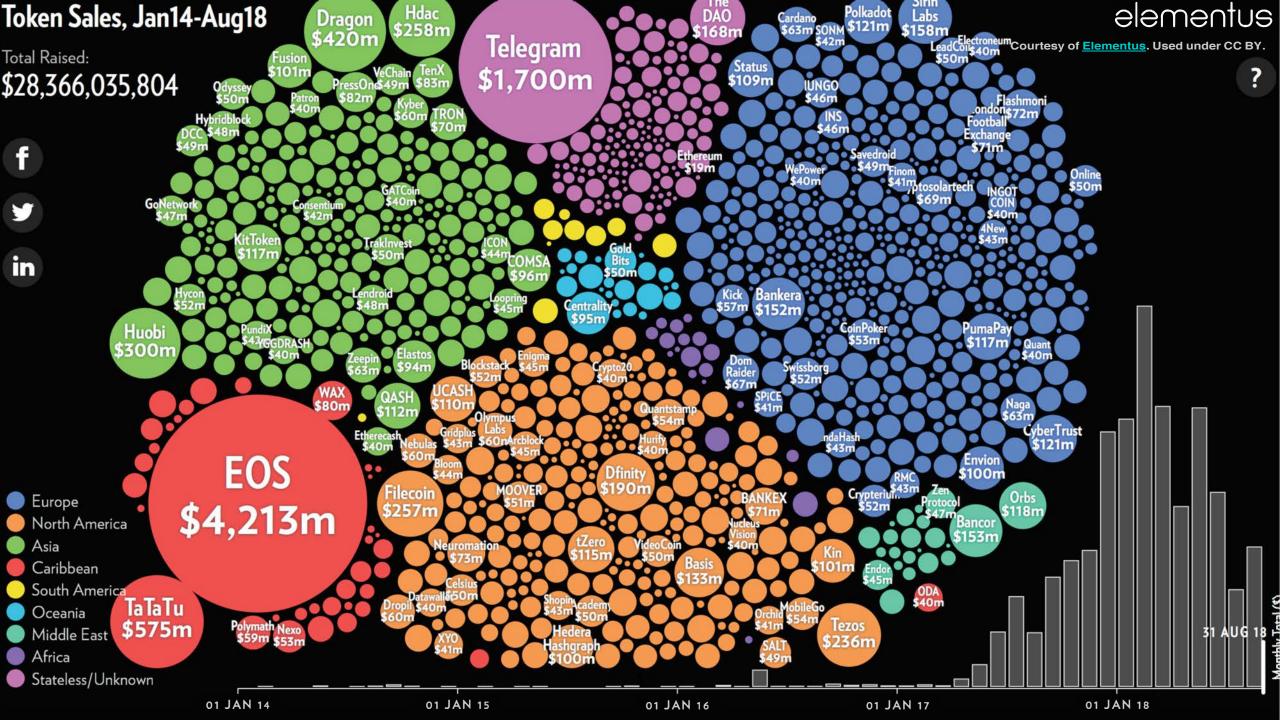
 What has the wave of ICOs meant for the venture capital field?

Class 19 (11/20): Readings

- 'All-Time Cumulative ICO Funding' CoinDesk
- 'Initial Coin Offerings and the Value of Crypto Tokens' Catalini and Gans
- '10 keys for evaluating Initial Coin Offering (ICO) investments' Crypto Potato
- 'Nearly Half of 2017 Cryptocurrency 'ICO' Projects Have Already Died' Forbes
- 'The Rise of the ICO, and What It Could Mean for Venture Capital' Visual Capitalist
- 'How to Launch An ICO, A Detailed Guide' Coin Telegraph

Optional

• 'J. R. Willett: How I Invented the First ICO' radarZero



Initial Coin Offerings

- Proceeds used to build networks
- Tokens usually issued prior to being functional
- Development, while open source, is largely centralized
- Promoters allocate themselves 'premined' tokens
- Tokens are fungible & transferable
- Scarcity is fostered with preset 'Monetary policy'
- Purchasers anticipate profits through appreciation

Evaluating ICOs

- Assess Viability of Token Use Case
- Whitepaper Details and Source Code
- The Team
- Venture Capital Involvement
- Media and Community Reddit, Medium, BitcoinTalk, ...
- Monetary Policy
- Token Distribution
- Regulatory Compliance

Use Cases: Assessing Costs & Benefits

Strategic questions?

- What is the value creation proposition?
- What problem or 'pain point' is being solved?
- What are competitors doing to address similar 'pain points'?
- Why is blockchain technology and native token the best solution?

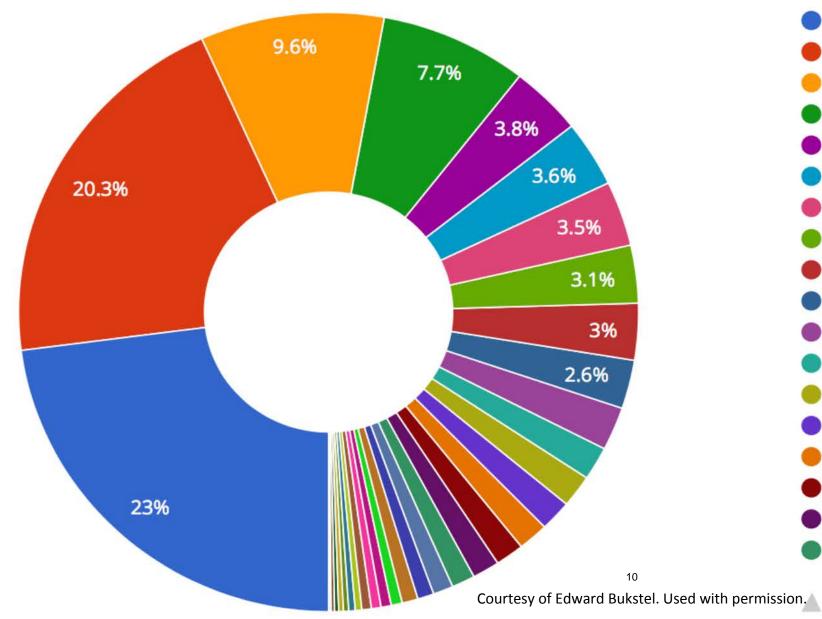
Specifics of the blockchain technology and native token use case?

- Which costs of verification or networking can be reduced?
- Which transactions need recording?
- Which stakeholders need write and read access to ledgers?
- What is the customer interface and how is it better than current interface?

Use Cases: Assessing Costs & Benefits

- Costs of technical challenges and transition?
 - What tradeoffs are necessary?:
 - scalability, performance, privacy, security, interoperability & coordination
 - Can Permissioned blockchain or Traditional Data Base adequately address use case?
 - How can broad adoption be realized?
- Are net benefits sufficient?

ICOs by Category 2018



- Infrastructure 23.0% (\$5,035,420,876)
- Finance 20.3% (\$4,460,787,640)
- Communications 9.6% (\$2,103,941,199)
- Trading & Investing 7.7% (\$1,687,483,991)
- Payments 3.8% (\$827,149,250)
- Gaming & VR 3.6% (\$783,131,093)
- Governance 3.5% (\$767,300,000)
- Events & Entertainment 3.1% (\$685,156,075)
- Commerce & Advertising 3.0% (\$669,017,324)
- Privacy & Security 2.6% (\$575,834,938)
- Marketplace 2.3% (\$511,814,884)
- Data Storage 1.8% (\$394,372,944)
- Supply & Logistics 1.7% (\$381,460,593)
- Social Network 1.7% (\$362,810,885)
- Machine Learning & AI 1.6% (\$348,578,453)
- Drugs & Healthcare 1.5% (\$327,599,161)
- Energy & Utilities 1.4% (\$310,721,843)
- Gambling & Betting 1.2% (\$266,441,510)

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Source: CoinSchedule

Published ICOs

The following graph shows the number of ICOs published in the past twelve months.



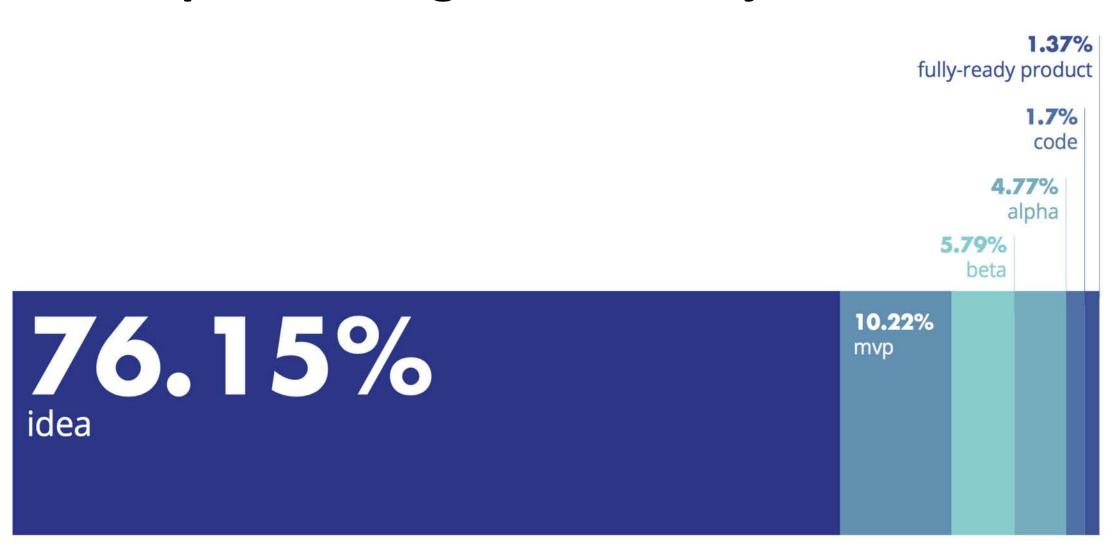
Source: ICOBench.com

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ICO & Blockchain VC Markets 2018 3Q

- \$1.8 Billion ICO Raised Down 78% from Q2
- \$1.0 Billion Blockchain VC Raised
- 597 ICO Projects
 - 84% on Ethereum platform
 - 4% Listed on Exchanges
 - 57% raised less than \$100,000
 - 67% of DApp ICOs were unsuccessful
- Source: ICO Rating 'ICO Market Research 3Q 2018' Report

Development Stage of ICO Projects

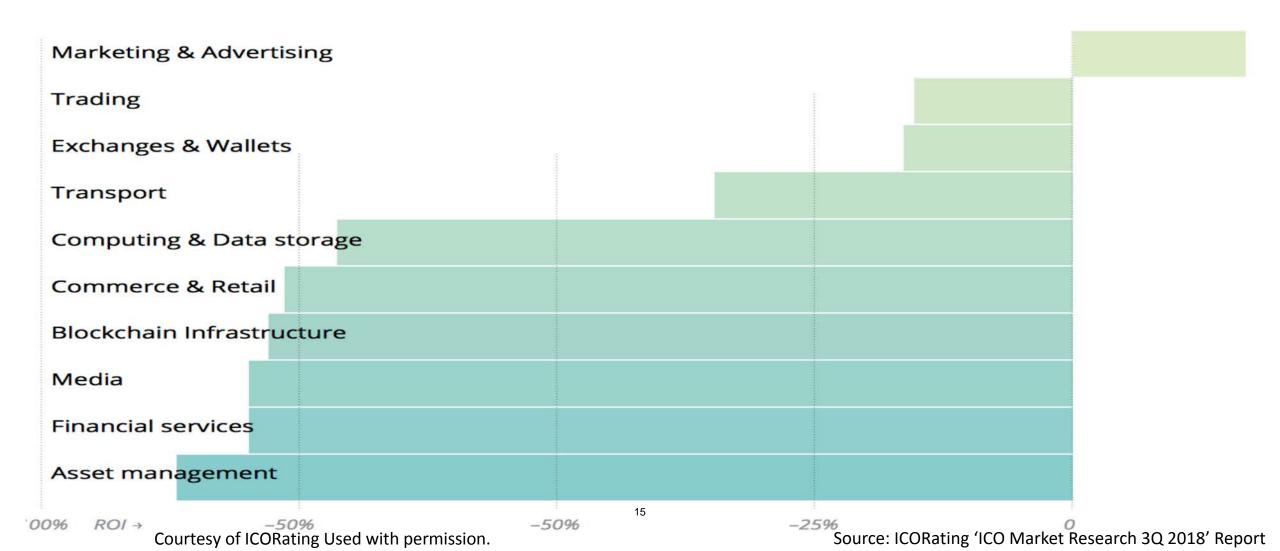


Top 10 Most Popular Industries

Business services & consulting	
Mining	
Gambling & betting	
Investment	Source: ICORating 'ICO Market Research 3Q 2018' Report Courtesy of ICORating Used with permission.
Banking & payments	
Commerce & retail	
Blockchain infrastructure	
Drugs & healthcare	
Trading	
Financial services	
Exchanges & wallets	14

Average Return for ICOs in 2018 by Sector

The average ROI by industry for the third quarter is positive only for the Marketing & Advertising sector.



Class 20 (11/27): Study Questions

• How ICOs mix economic attributes of both consumption and investment. How ICO tokens' design features - their risks, expectation of profits, manner of marketing, exchange trading, limited supply and capital formation — are similar to investments schemes.

Why is the ICO market rife with scams and fraud?

 What is the U.S. Securities and Exchange Commission's current approach to ICOs? What are the options for completing a compliant ICO?

Class 20 (11/27): Readings

- 'Digital Asset Transactions: When Howey Met Gary (Plastic)' Hinman
- 'Initial Coin Offerings: Can Regulators Curb the Risks? How Many ICOs Are Scams?' ValueWalk
- 'ICO Quality: Development & Trading' Satis Group
- 'Hundreds of Bitcoin Wannabes Show Hallmarks of Fraud' Wall Street Journal
- 'ICOs Are Setting Capital Free. That's Revolutionary' CoinDesk

Conclusions

- Initial Coin Offerings are a New Means of Crowdfunding
- Assessing Viability of Use Cases is Critical
- Benefits of Tokens Economics are still Uncertain
- A Majority of ICOs have Failed
- After a Boom Offerings have Declined
- Living within Investor Protection and Public Policy Frameworks also Key

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