

40. Innovationstagung

DIGITALE TRANSFORMATION IN PROJEKT FINANZIERUNG: ICOS

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■ First publication

Distributed DNS – pay with CPU time for reserving a name in a math virtual machine

- «Introducing CPU Time as a Scarce Resource in P2P Systems» - in January 2006!

■ Finished in 2010

- Software Engineer at Netcetera in financial industry

■ Postdoc UZH 2013

- E.g., pay with Bitcoin in the cafeteria

■ HSR 2018

- Professor of Distributed Systems

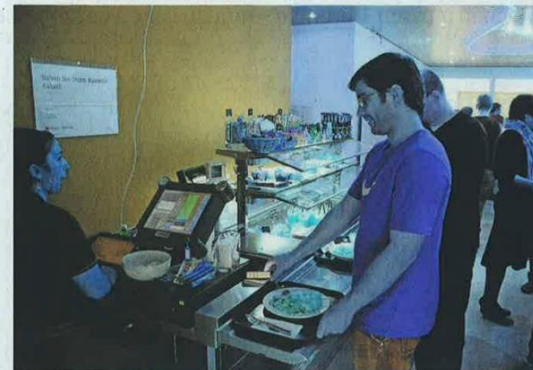
Mit Bitcoin zahlen in der Mensa

An der Universität Zürich läuft ein Versuch mit der digitalen Währung. Das funktioniert erstaunlich gut, wird aber noch wenig genutzt.

Benjamin Hämmerle

Zürich - Der graue Kasten mit dem orangenen Display ist nicht zu übersehen, wenn man das Foyer des Universitätsgebäudes an der Binzmühlestrasse in Oerlikon betritt. «It has never been so easy to buy and sell Bitcoin» steht auf dem Plakat neben der Maschine, die Schweizer Franken in virtuelle Münzen wechselt. Seit Anfang September können Studierende in der Mensa ihr Essen mit der digitalen Währung Bitcoin bezahlen. Drei Masterstudierende der Informatik haben dafür eine Smartphone-App mit dem Namen Coin Blesk entwickelt. Schnell wie ein Blitz sollen Geldbeträge von einem Gerät aufs andere verschoben werden, deshalb der Name Blesk (tschechisch: Blitz).

Das Neue an der App: Sie basiert auf der Near Field Communication (NFC), einem Übertragungsstandard zum kontaktlosen Austausch von Daten, der auch in gewissen Kreditkarten zum



Ein Android-Handy genügt an der Mensa-Kasse. Foto: Benjamin Hämmerle



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David Hausheer
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Introducing CPU Time as a Scarce Resource in P2P Systems

January 2006

University of Zurich
Department of Informatics (IFI)
Winterthurerstrasse 190, CH—8057 Zurich, Switzerland



Projects

■ Startup [modum.io](#)

- Started with 2 bachelor and 1 master student a prototype for at Kickstart accelerator
- Successful ICO in Q4 2017 (16m)
- Initial price: 1 MOD = 1 USD, now 0.90 USD



■ Startup [procivis.ch](#) / [vetri.global](#)

- Advisor for Identity project
- Master project for E-voting with 2 students
- Successful ICO in Q1 2018 (10m)
- Initial price: 1 VLD = 0.065 USD, now 0.01 USD



■ Startup [Dezos](#)

- Advisor for decentralized asset tracking
- Preparing for ICO
- Initial price 1 DOS = 0.20 CHF, now ?



Projects

■ Startup [EUREKA](#) / [Sciencematters](#)

- Preparing for ICO
- Initial price: 1 EKA = 0.10 USD, now ?

■ Startup [Topl](#)

- Advisor for open capital infrastructure for developing markets
- Preparing for ICO

■ Open source projects

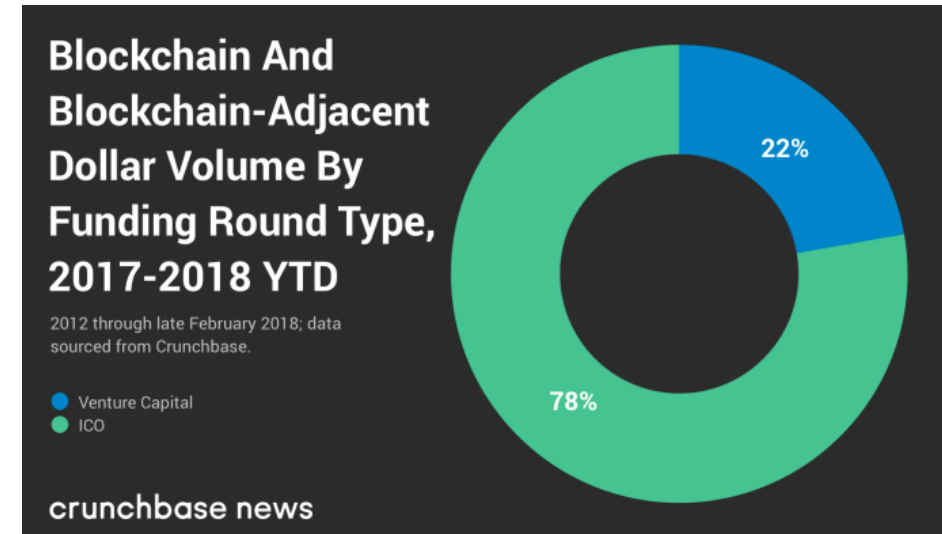
- Research blockchain: [Bazo blockchain](#)
 - HSR: 1 bachelor thesis finished, 1 seminar, 1 mini project, 1 bachelor thesis started, topic: PoS, sharding, pruning, smart contract
- ICO platform: [ICOnator](#)
- P2P and DHT network: [TomP2P](#)
 - HSR: 1 bachelor thesis starting



What is an ICO

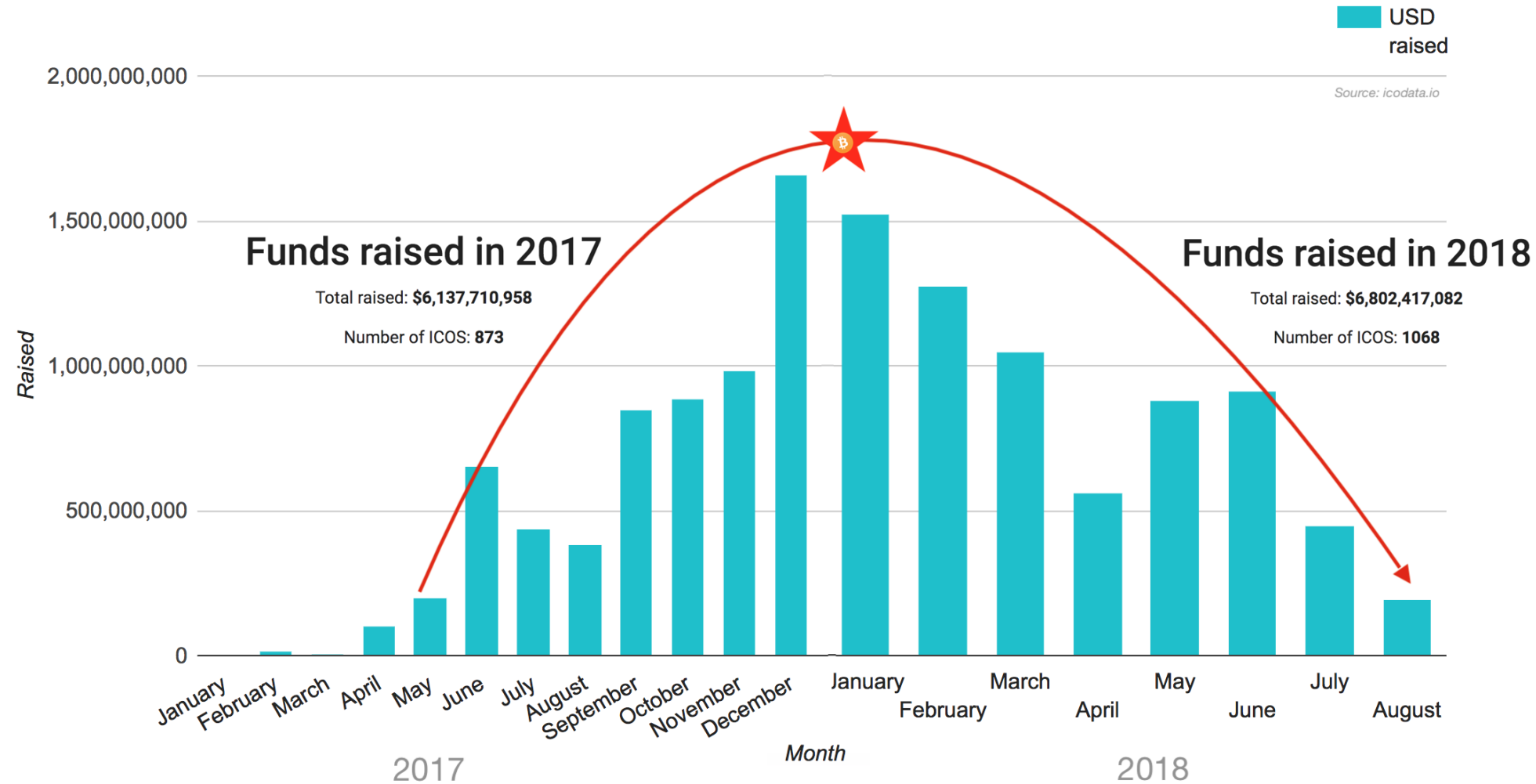
- **An initial coin offering (ICO) is a means of crowdfunding**
 - Tokensale - release of a new cryptocurrency
 - 1490 listed cryptocurrencies with a [marketcap](#), 4942 with [coinlib.io](#)
- **ICOs vs IPOs**
 - ICO little regulation, IPO are heavily regulated
 - ICO short in duration, IPO much longer
 - IPO are exclusive, ICO are open to anyone
- **TechCrunch: Over 1000 Crypto Projects Are Considered 'Dead' Now**

- **ICOs delivered at least 3.5x more capital to blockchain startups than VC since 2017**



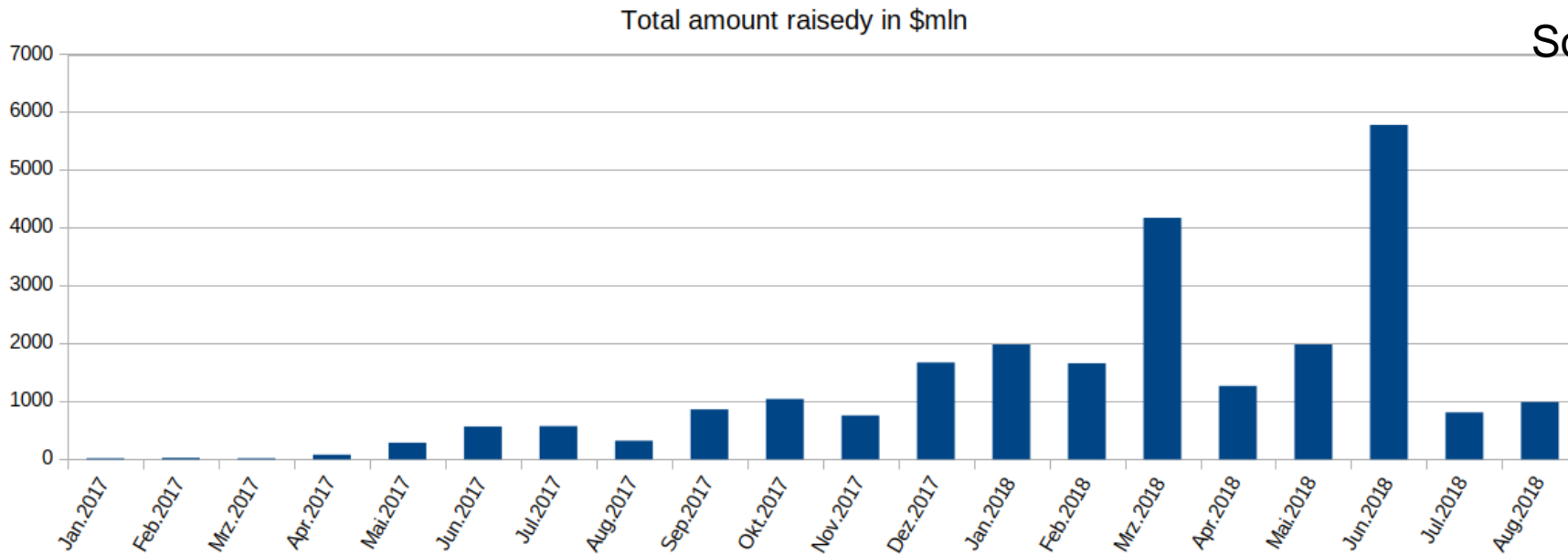
- **Wall Street Journal: 20 percent of all ICOs are fraudulent**
- **SATIS Group Report: '78% of ICOs are Scams'**

Total amount raised by all ICOs in total (\$)



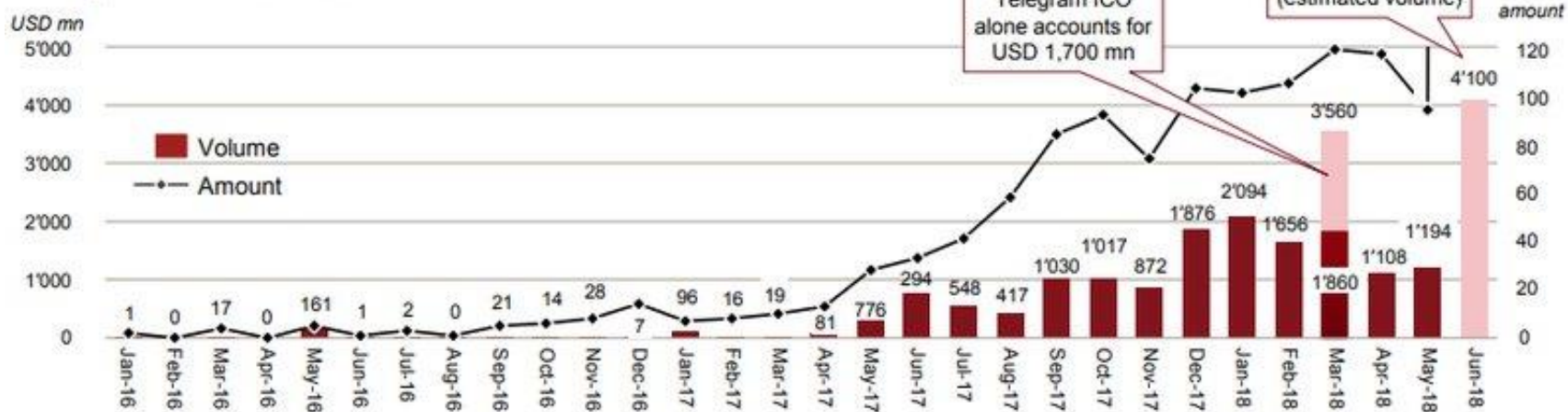
Source: icodata.io

Total amount raised by all ICOs in total (\$mln)



Source: [Coinschedule](https://coinschedule.com/)

Monthly ICO number and volume



Source: PwC Report

ICO countries and categories

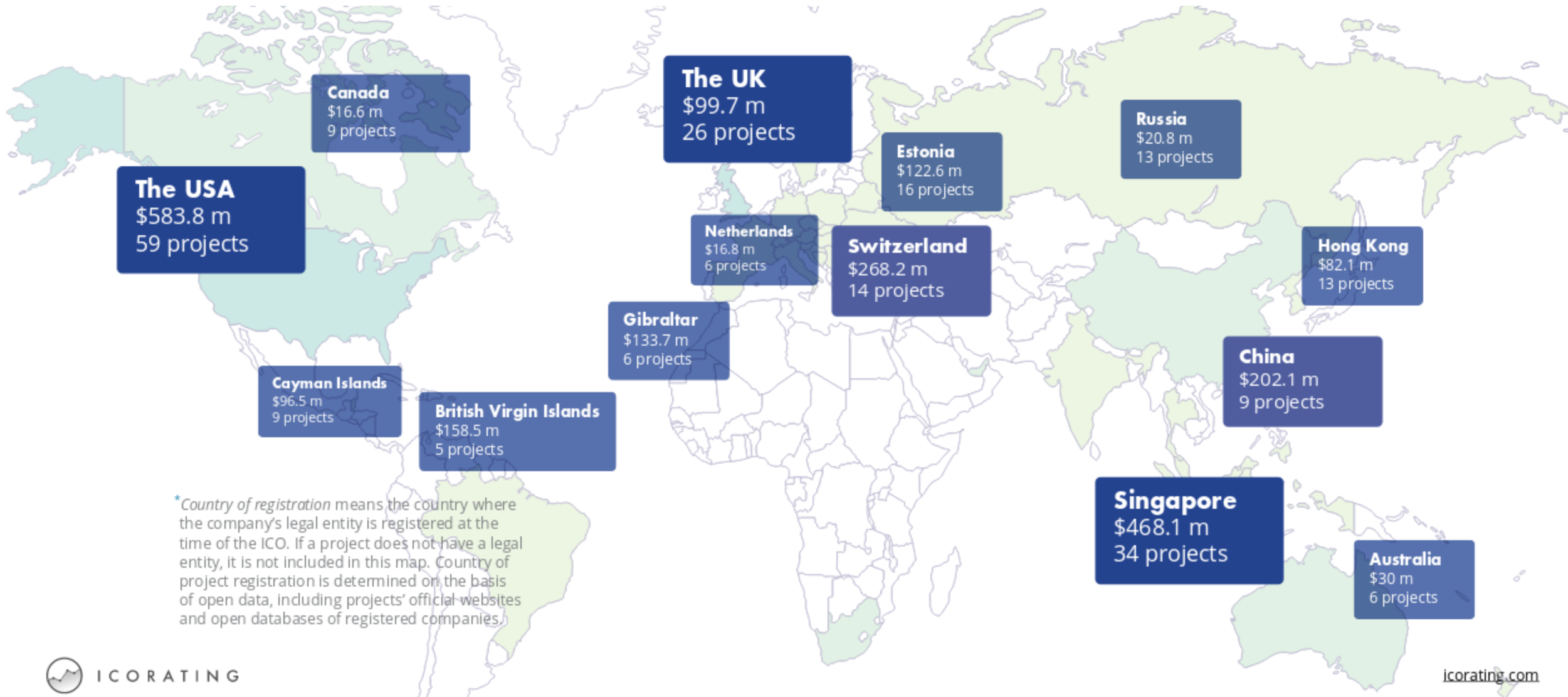
Number of projects

	Country	% of Projects	Total Raised
1	USA	16.3%	875m \$
2	UK	9.6%	173m \$
3	Singapore	7.5%	316m \$
4	Russia	7.2%	1003m \$
5	Switzerland	6.8%	540m \$
6	Estonia	4.1%	35m \$
7	Australia	3.2%	31m \$

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ICO countries and categories



Fundraising Advantages / Disadvantages

- + “Everyone” can participate
- + Global audience
- High chance that ICO won't work: In 2017 from 913 projects only 435 (48%) were successful (source: [TokenData and FabricVentures report](#))
- Time consuming, lots of effort
- Regulations not clear (improving)

Investor Advantages / Disadvantages

- + You have a token
- + Easy to participate for tech savvy people
- Token may be worth nothing or worse, a scam
- Due diligence time consuming, even if you are tech savvy

What to do as an investor?

- **Perform Your Due Diligence**
 - Read and understand the whitepaper
 - Check github/medium/reddit/telegram/bitcointalk for more information
 - Be critical!
- **Only invest as much money as you are willing to throw out of the window!**
- **Register via Email for ICO on project website**
- **If you don't have cryptocurrencies, open account with e.g., coinbase, bitstamp, kraken**
- **Transfer fiat to exchange, trade to BTC or ETH or any accepted crypto currency by the ICO**
- **Follow ICO instructions: either pay directly to address, or to your own wallet**
- **Store or trade your tokens securely**
- **After ICO if token is traded and listed, trade on binance, bittrex, poloniex**

What to do as a project initiator? (assuming you have a good team & advisors)

- **Prepare Whitepaper (probability of success of an ICO is unaffected, according to [1])**
 - Simplify your idea (translations)
 - Define token economics, check legal
 - **MVP (47% of the projects do not have MVPs)**
 - Probability of success is higher [1] if code available
 - Audit smart contracts
 - **Write blogs (medium), SEO**
 - **Write press releases about significant events**
 - **ICO listings**
 - **Polish profiles on LinkedIn**
 - **Conduct pre-sale**
 - Positively related to ICO success [1]
 - **Prepare roadshow, do interviews or AMA, speak at conferences**
 - **Create bounty program, for cheap clicks airdrop**
 - marginally significant [1]
 - **Social media: use twitter for updates, bitcointalk/reddit for announcements and bounty**
 - Answer questions on Telegram
 - Other sites to consider: Steemit/Discord/Quora/Facebook
- [1] *Why do businesses go crypto? An empirical analysis of initial coin offerings*; Saman Adhami, Giancarlo Giudici, Stefano Martinazzi, Elsevier Journal of Economics and Business

What to do as a project initiator? (assuming you have a good team+advisors)

■ After ICO

- Progress update (at least monthly)
- Seek partnerships
- List token on exchanges

■ ICO, technical steps

- Create public / private keys for payin
 - Store them in a bank vault, copy public keys
- Create ICO backend / frontend
 - Backend minimal endpoints: tiers, register, address, whitelist (e.g. [ICOnator](#))
- Minting – aka – create coins out of thin air 😊
- Consolidation
 - x investors, x accounts → 1 account

■ Common Mistakes

- Army of advisors + many employees
- Promise high returns for your investors
- Buy telegram members (airdrop)
- Spend your Token like crazy
- Hackers, Phishers, Spyware, and Thieves
 - Social media phishing
 - Web site

Questions?

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