An Outlier Venture

BLOCKCHAIN ANGELS

Coming to a major European City near you. Subscribe for details.

hosted by @jamie247 of www.outlierventures.io

www.BlockchainAngels.eu
Quick Survey

Q. Who has made a blockchain investment?

Q. Who is actively assessing an investment?

Q. Who feels they don’t have enough knowledge to invest at this stage?
Purpose

- Increase early stage blockchain investment in Europe
- Empower entrepreneurs to connect the dots
- Increase breadth of use-cases beyond capital markets
- Provide a platform for deal-flow
Event Format

• 6 week cycle across Europe cities
• Each session 20min on the basics
• Market Overview Update
• 4+ Startup pitches
Who am I & what’s in it for me?

• Co-founder of Europe’s 1st blockchain venture builder
  - Outlier Ventures Ltd / OutlierVentures.io
  - Block Stars Ltd / Blockstars.io

• Chief Exec Europe’s 1st angel investment fund & portfolio
  - Outlier Capital LLP
  - Entry level £25k
Agenda

(7:00 to 7:20) Introduction to blockchain technology

(7:20 to 7:40) Investment to date

(7:40 to 8:00) Investing today with case-studies

(8:00 to 8:10) Break

(8:10 to 8:30) Investment horizon

(8:30 to 10:00) Live Pitches
Why are you here?

The trust machine
How the technology behind bitcoin could change the world

News Published Mentioning Bitcoin

- FT: 46 Q3 2015, 77 Q4 2015
- NYT: 76 Q3 2015, 76 Q4 2015
- WSJ: 87 Q3 2015, 81 Q4 2015
- Sina: 202 Q3 2015, 287 Q4 2015

Note: Numbers of stories obtained by searching 'bitcoin' on respective publishers' websites.
It all started with..

Who is Satoshi Nakamoto?

Bitcoin core protocol likely created by a group in academia

The bitcoin blockchain experiment

- Protocol is free & open source

Creators profited from owning bitcoins not the protocol
Has the experiment worked?

Bitcoin was/is an experiment ‘decentralised monetary system’

It has succeeded & it has failed

Major centralisation of mining / 51% processing China

Major centralisation of wealth distribution
But it’s now a world of many Blockchain‘S’
Understanding blockchains

1. Distributed Ledgers
2. Un-Permissioned / Permissioned
3. Unique Digital Tokens
4. Smart Contracts
5. Cryptographically secured
6. Decentralisation / Disintermediation
7. Decentralised Autonomous Organisations
Paradigm Shift: The Phase of Web

- Today trust is managed by intermediaries
- Blockchains have trust inbuilt
- Are ‘trustless’ or ‘trustfull’
- That removes friction
- That improves liquidity
- That equals growth in trade especially cross-border
Blockchains, what are they good for?

1. Secure digital assets value
2. Secure 3rd party data
3. Automate manual tasks
4. Remove trust barriers
5. Expedite processes
6. Enable true p2p marketplaces
7. Secure supply-chains
Blockchain as accelerator & combinator
When is a blockchain appropriate + Limitations today

1. Smart contracts are only as good as their connection to the real world

2. Legal state of smart contracts unclear:

3. Limited capacity / performance: smart contracts are extremely limited in storage and speed.

4. Usable security and identity: giving end users autonomy over their data comes with responsibility.

5. Slow evolution of capability so far..
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$1 Billion in Bitcoin & Blockchain Infrastructure (end of 2015)
The blockchain is the most important innovation since the Internet itself.
Blockchain invest lags behind Bitcoin

The Valley's got a lot riding on Bitcoin..

Data source: CoinDesk
2nd Half of 2015 Funding by Region

- No VC investment in Middle East, Latin America and Africa for three consecutive quarters
- US continues to dominate bitcoin VC investment

Note: $ invested represents all-time total bitcoin VC investment at the end of each quarter. Data sources: CoinDesk, CrunchBase
Total Funding by Country $m

Note: US is excluded from above chart. Data sources: CoinDesk, CrunchBase
Where are we in the hype?

Big investments: Circle & 21inc
VC Deal Size Declining

Largest Quarterly VC Deals

*Note: 21 Inc. is excluded because the precise timing of when it raised the $116m, which occurred in various individual stages, has not been revealed.

Source: CoinDesk
Internet VC investment did the same

Annual Internet VC Investment

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Investment ($b)</th>
<th>Annual percentage increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>$0.17</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>$0.45</td>
<td>155%</td>
</tr>
<tr>
<td>1997</td>
<td>$0.63</td>
<td>41%</td>
</tr>
<tr>
<td>1998</td>
<td>$1.08</td>
<td>71%</td>
</tr>
<tr>
<td>1999</td>
<td>$4.39</td>
<td>308%</td>
</tr>
<tr>
<td>2000</td>
<td>$9.08</td>
<td>107%</td>
</tr>
</tbody>
</table>

Data source: PricewaterhouseCoopers
Total VC Investment & Average Deal Size Dropped

Quarterly VC Investment ($m)

Data sources: CoinDesk, CrunchBase
Blockchain VC Investment Growth Decline in line with general
Where are the next start-ups innovating?
Size of new ventures

How many are in your team?

- 1 to 5
- 5 to 10
- 10 to 25
- 25 to 50
- 50+

How much have you raised to date?

- Below £100k (Pre-seed)
- £100k to £500k (1st Round...)
- £500k+ to £2m (2nd Round...)
- £2m-£10m (Series A)
- £10m+ (Series B to C)
How have they been funded?
Are you actively fundraising now?

- Yes (now or in the next 3...)
- No

Are you profitable?

- Yes
- No
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Predictions: $10 Billion Will Be Invested in 2016

@leashless

My view:

• That isn’t necessarily from the same people going to same places as pre ’16

• More Northen Europe and Asia (particularly China)

• More from Corporates both venturing & internal

• Capital Markets, Insurance, Health & Govt
Crossing the chasm

- ‘Open Ledger’ Standards
- Use-case Crossover
- Aligned markets
- Widening of vertical use cases
- BaaS
- Innovators, technology enthusiasts
- Early adopters, visionaries
- Early majority pragmatists
- Late majority conservatives
- Laggards, skeptics

Early Market

Mainstream

- Customers want technology and performance
- Customers want solutions and convenience

2015
Exploration & Investment
- Initial capability & focus on experiments
- Early adoption leads to interest & traction

2016-2017
Early Adoption
- Scaling capabilities & value of feedback and design
- Early adoption leads to interest & traction
- Improved usage & adoption

2018-2024
Growth
- Early leaders seize the benefits of adoption
- Early and market leadership
- Market expansion

2025
Maturity
- Blockchain adoption is considered mainstream and integrated in capital markets
The Chasm Deepview

- governance & regulatory issues
- business models
- IP & licensing
- accessibility, performance & scalability
- proof-of-whatever & mining
- tokens, altcoins, metacoin, x-coins
- hashing, merkle proof & PKI

the gap that needs to be bridged
Ethereum DevCon & EthBaaS

Devcon Zero

Devcon One

FREE
Gray indicated the plan is for the Azure BaaS platform to scale up into a "certified blockchain marketplace" by this spring and that, at this stage, the technology providers undergo a more serious security vetting.

“For our clients, understanding new world applications of Bitcoin and blockchain technology, adapting it for myriad uses, and using it optimally are critical to improving financial security, efficiency and compliance,” said PwC FinTech Co-Leader Haskell S. Garfinkel.

Rubix will help or allow you to prototype, test, and build your own customized blockchain and smart contract application for any use case.
Capital Markets & R3 Consortium

42 banks including JP Morgan, UBS, HSBC and Barclays.

Estimated bank spending on blockchain tech

$400 million

Figure 2: Capital markets today

Figure 3: Capital markets in 2025

The Blockchain: Capital Markets Use Cases
Consortiums for regulated markets

• BaaS sandbox to experiment with one another alongside internal programs

"Blockchain has the potential to improve the way insurers record risk, increasing the speed, accuracy and transparency of our processes. As part of the TOM consultation we will be interested to see how blockchain could help us resolve some of the challenges facing our industry."

Shirine Khoury-Haq (Lloyd’s Director of Operations)

• Largely around market efficiencies and then into competitive innovations

Insurance Ledger

Health Ledger

Interaction
Open Ledger for standards & governance

Linux Foundation Unites Industry Leaders to Advance Blockchain Technology

Project to drive robust, industry specific applications and platforms for broad business transactions


#blockchain #IBM

Want to get involved? Read how: ibm.biz/OpenLedgerProject
Bitcoin & Ethereum Corporate ‘Brain Drain’

"Bitcoin is a failed experiment"
Mike Novogratz

R3 CEV
WE EMPOWER INNOVATION WITH EXPERTISE

$60 million

Digital Asset Holdings
OVER 300 YEARS OF FINANCE AND TECHNOLOGY EXPERIENCE

BLYTHE MASTERS  
CEO  
CHRIS CHURCH  
CBOO  
SUNIL HIRANI  
Co-Founder  
DONALD WILSON  
Co-Founder
Entreprise Led Venturing (up to 20% of intake)

Santander
UBS
Barclays
Accenture
IBM
Citigroup & Visa
Cisco
Today’s Industry Challenges

1) Not enough experienced developers, with senior architect grade backgrounds, to CTO projects

2) Not enough entrepreneurs exposed to blockchain beyond bitcoin or financial services to connect dots. Means limited in scope and application

3) Further compounded by the pull of large consultancies and banks feverishly mopping up talent generally.

4) Absence of an informed angel investor community so very VC and corporate led
UK’s Setl: institutional payments & settlements

UK institutional payment & settlements infrastructure

Deliver operational efficiencies and reduce costs borne by savers & investors

Uses payments data from Bank of England and just hired ex director as Chairman

Complete transactions in seconds or minutes, instead of days.

Displace out of date back-office systems
Uphold: remittance bigger* than Transferwise?

Refer to being a platform to store, transfer ‘cloud money’

Can transfer fiat money from any bank account to a wallet where it is turned into ‘digital money or assets’ in any one of 23 currencies or precious metals

Foreign exchange transactions for free targeting $500bn international remittance

100% verifiable transparency on their reserves

Raised $20m to date and has 3rd party app market

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Year Launched</th>
<th>Funding Stage</th>
<th>Total Funding</th>
<th>Current Valuation</th>
<th>Total Lifetime Transactions</th>
<th>Year 1 Total Transactions</th>
<th>Capital Efficiency Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uphold</td>
<td>2014</td>
<td>Series B</td>
<td>$20M</td>
<td>$124.9M</td>
<td>$714.8M</td>
<td>$700.4M</td>
<td>2.8x</td>
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<tr>
<td>TransferWise</td>
<td>2011</td>
<td>Series E</td>
<td>$92M</td>
<td>$13B</td>
<td>$3.5B</td>
<td>$20M</td>
<td>0.7x</td>
</tr>
<tr>
<td>Coinbase</td>
<td>2012</td>
<td>Series C</td>
<td>$107M</td>
<td>$475M</td>
<td>$3B</td>
<td>$35M</td>
<td>1.6x</td>
</tr>
<tr>
<td>BitPay</td>
<td>2011</td>
<td>Series C</td>
<td>$33M</td>
<td>$160M</td>
<td>$523M</td>
<td>$4M</td>
<td>0.6x</td>
</tr>
<tr>
<td>Circle</td>
<td>2013</td>
<td>Series C</td>
<td>$76M</td>
<td>&lt; $250M</td>
<td>&lt; $80M</td>
<td>&lt; $25M</td>
<td>0.1x</td>
</tr>
<tr>
<td>Align Commerce</td>
<td>2014</td>
<td>Series A</td>
<td>$13.5M</td>
<td>&lt; $30M</td>
<td>&lt; $7M</td>
<td>&lt; $3.5M</td>
<td>0.1x</td>
</tr>
<tr>
<td>itBit</td>
<td>2012</td>
<td>Series B</td>
<td>$82M</td>
<td>$160M</td>
<td>&lt; $195M</td>
<td>$45M</td>
<td>0.3x</td>
</tr>
<tr>
<td>ABRA</td>
<td>2015</td>
<td>Series A</td>
<td>$94M</td>
<td>&lt; $25M</td>
<td>$0M</td>
<td>$0M</td>
<td>0.0x</td>
</tr>
</tbody>
</table>
Lo3: Sharing Economy for Energy Markets

Allows neighbourhood to create a marketplace for green / surplus energy micro-grids using smart meters

Users become ‘prosumers’. Producing and consuming from local / regional marketplace

Surpluses can be traded from those producing more energy than consuming

Testing in a Brooklyn community using ‘energy credits’ via ethereum
Wave: Paperless Trade

WAVE connects all members of the supply chain to a decentralized network

Allows them a direct exchange of documents.

Manages ownership of documents on the blockchain

Eliminates disputes, forgeries and unnecessary risks.

Will help in trade finance like fluentfunds.com
OpenBazaar - dCommerce

Free Market for all. No Fees. No Restrictions. With total anonymity

Opensource p2p markets without any middleman

No Amazon, eBay or Paypal payment processors ran from desktop apps

You can build various apps on-top to custom to various markets
Slock.it: Gateway to IoT & Sharing Economy

Rent, sell or share anything - without middlemen

Blockchains for The Sharing Economy and gateway to your IoT

Making trusting the other party as unnecessary as possible

Handling secure direct P2P payments as a DAO

Providing a mechanism of deposits, and eventually, full blown insurance

Freeing the users from having to coordinate with each other to hand over keys

Supporting almost any objects including cars, lockers, apartments, sheds, office space, etc.
Everledger – Securing diamond supply chain

Permanent immutable ledger for diamond certification & transaction history for insurance companies, owners and law enforcement

Securing back to mining companies

Fraud detection system, overlaying big data from closed sources like insurers and law enforcement.

Targeting £45 bn lost in UE & Europe insurance fraud
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Next Level innovation

1. P2P / dCommerce
2. dMarkets (Uber for
3. Truer Sharing Economy (without the platform)
4. Smart Money (Programmable Money)
5. BaaS (3-5 year app market explosion)
‘Developed’ World

- focuses on integration into existing systems
- and gradual replacement of legacy
- firewall to disruption of regulated industries
- centralised platforms gradually disintermediated

Reverse Engineer Innovations

‘Developing’ World

- Blank canvas to truly innovate new models
- Greater incentive to bypass intermediaries (govt control, data)
- Blockchain becomes THE infrastructure
- Allowing for truly decentralized p2p systems
- Major breakthroughs in financial inclusion etc
Public Sector Innovation

• Estonia has created eResident program, blockchain notary service allow citizens, regardless of where they live or do business, to notarise their marriages, birth certificates, business contracts and more, on the blockchain in minutes.

• UK Govt mulls applications for DVLA, Land Registry, Voting & more
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The Blockchain of Real Estate.

We are now taking pre-orders for our Smart Tenancy product. To become an early adopter, please register your interest.

Register Interest

CITIBANK CHALLENGE

Midasium is selected for the Citibank Mobile Challenge Final. Watch the presentation of our Smart Tenancy prototype.
Save & borrow without the bank
Just you, your friends & family
Email Address
JOIN WAITING LIST
BioSSL is a biometric security layer which secures online access with a biometric password.

BioSSL allows people to use their own unique body features such as their fingerprint, facial features, voice and eyes as a password to unlock important data online instead of using traditional passwords.

https://www.youtube.com/watch?v=J2Kr6p9phD8&feature=youtu.be
Thanks!
follow me @jamie247