

open technologies and international consulting

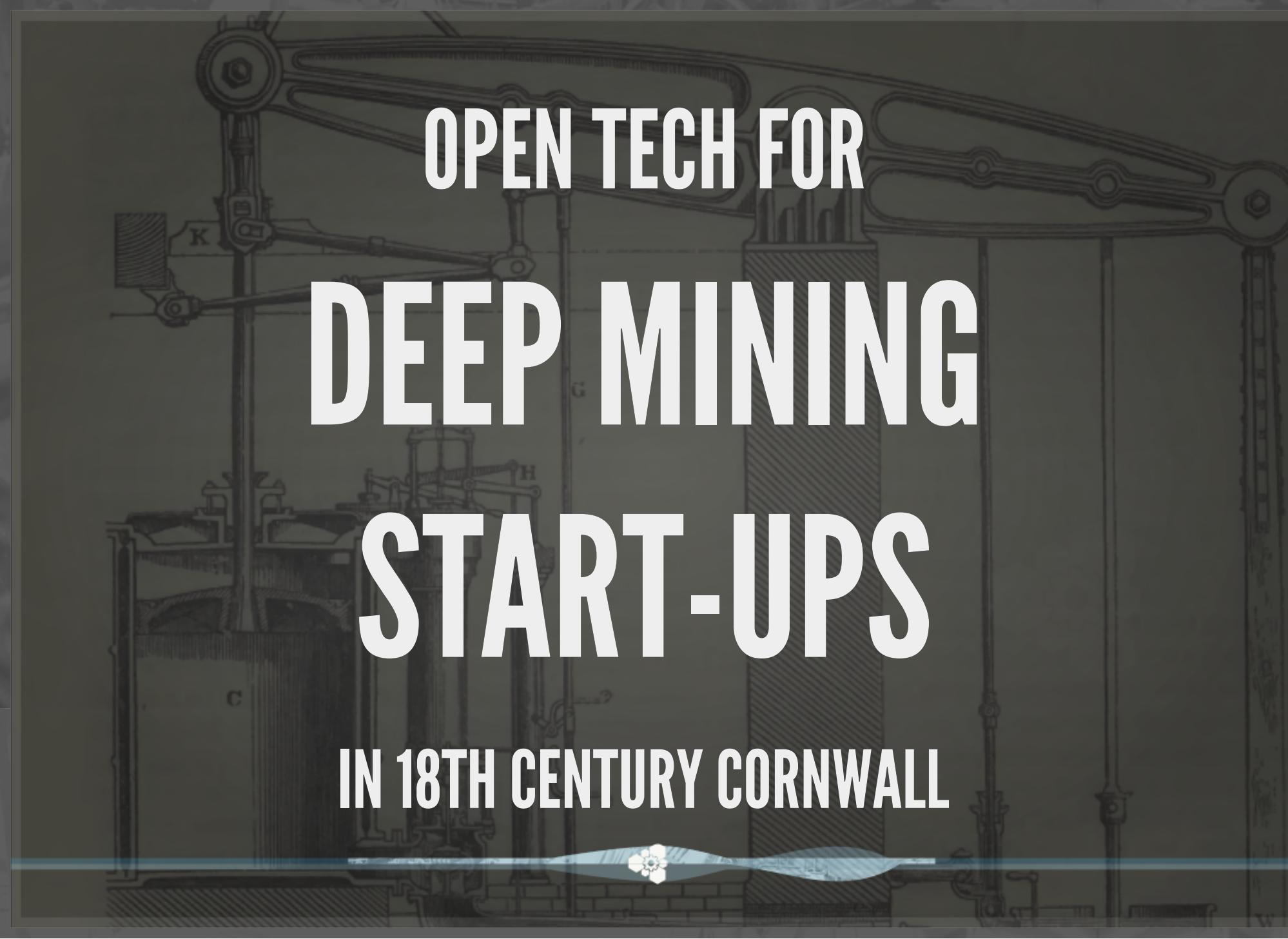


OPEN SPECTRUM

HOW OPEN ACCESS OPENS DOORS

Phil Weir
@flaxandteal

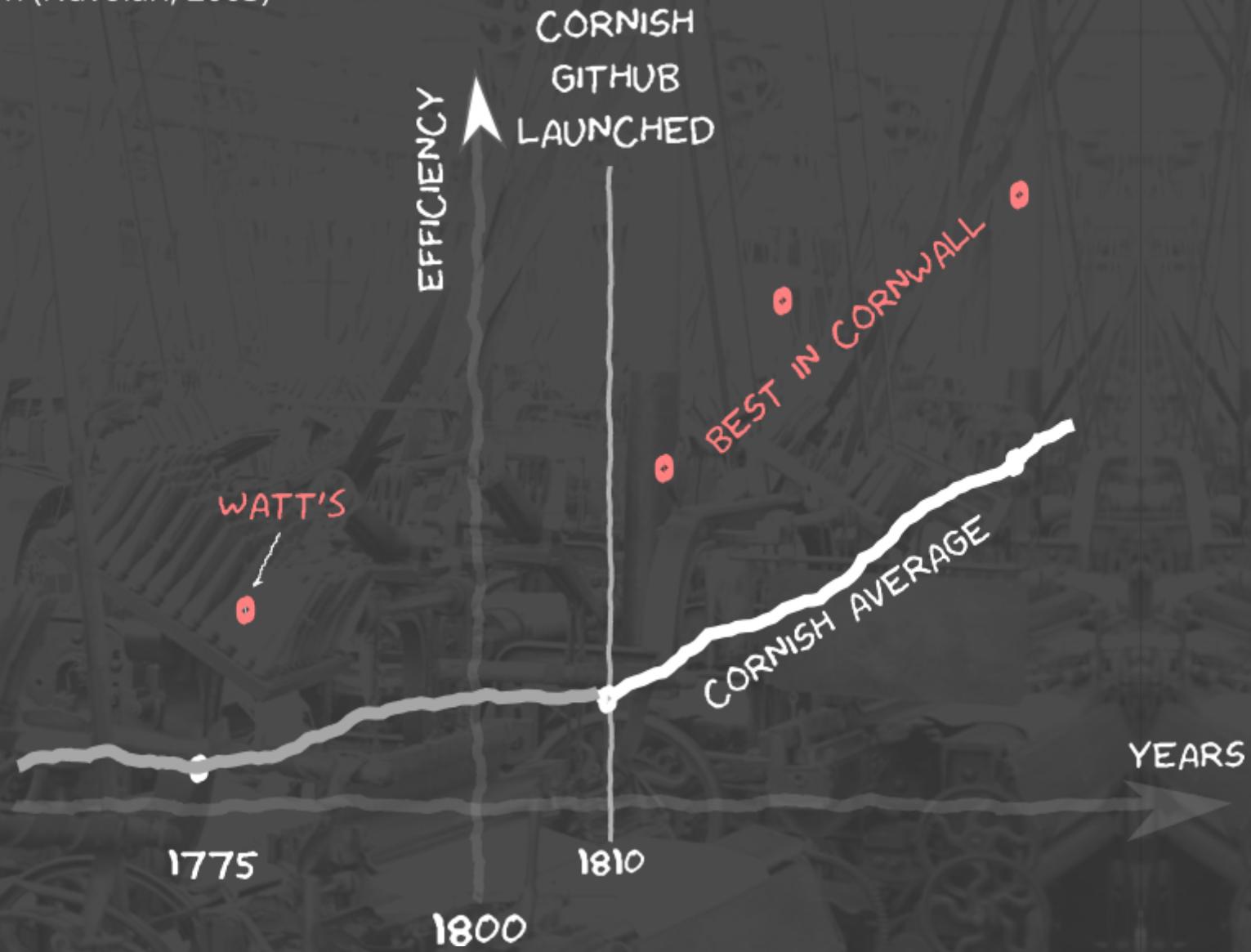
Avata
Industries



OPEN TECH FOR DEEP MINING START-UPS IN 18TH CENTURY CORNWALL

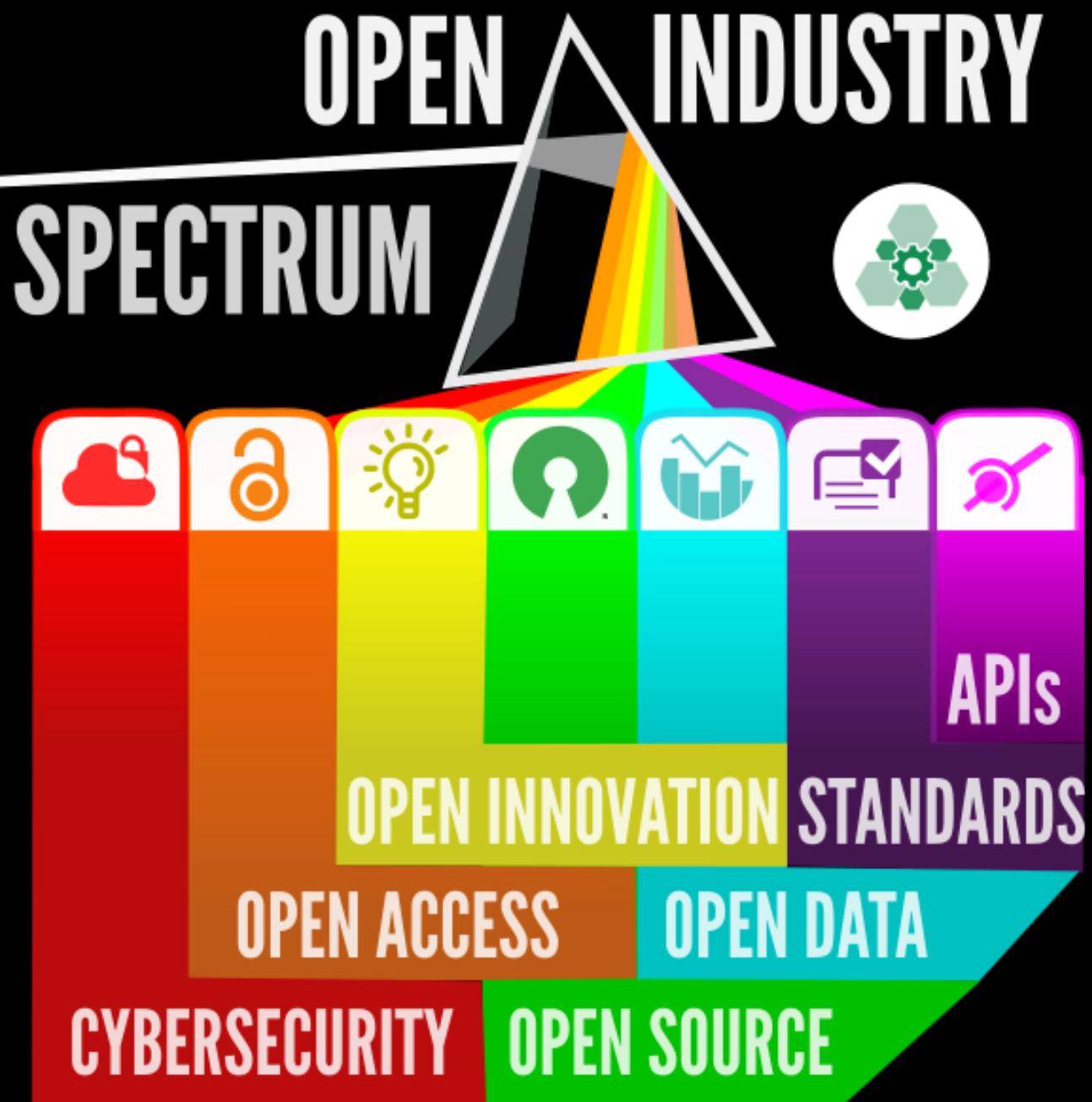
VERY ROUGH SKETCH OF EFFICIENCY OF CORNISH STEAM ENGINES

Based on (Nuvolari, 2003)



INNOVATION & COLLABORATION





Technological Readiness Levels

1

2

3

4

5

6

7

8

9



BIG BUSINESS

RESEARCH INSTITUTES

OPEN ACCESS as a CRITICAL ENABLER

Technological Readiness Levels

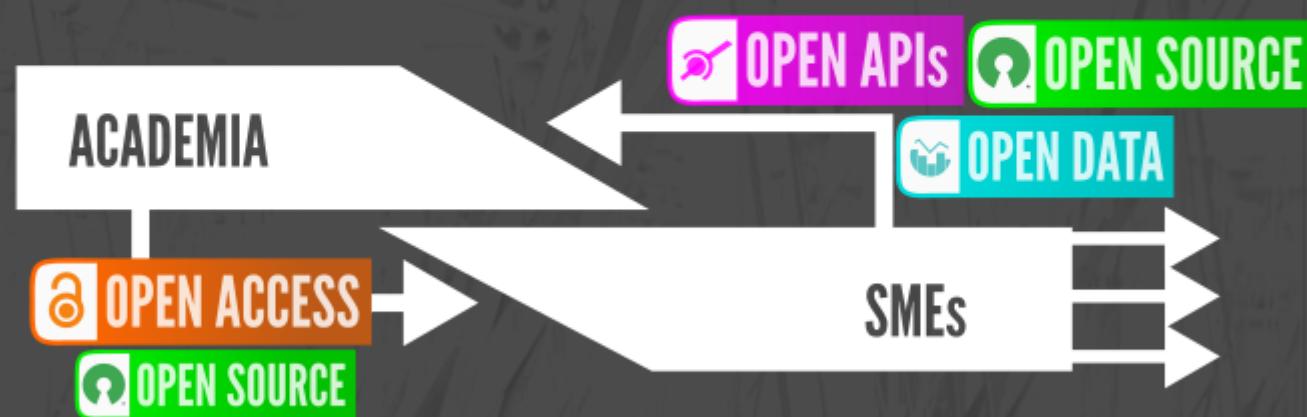
1 2 3 4 5 6 7 8 9

ACADEMIA

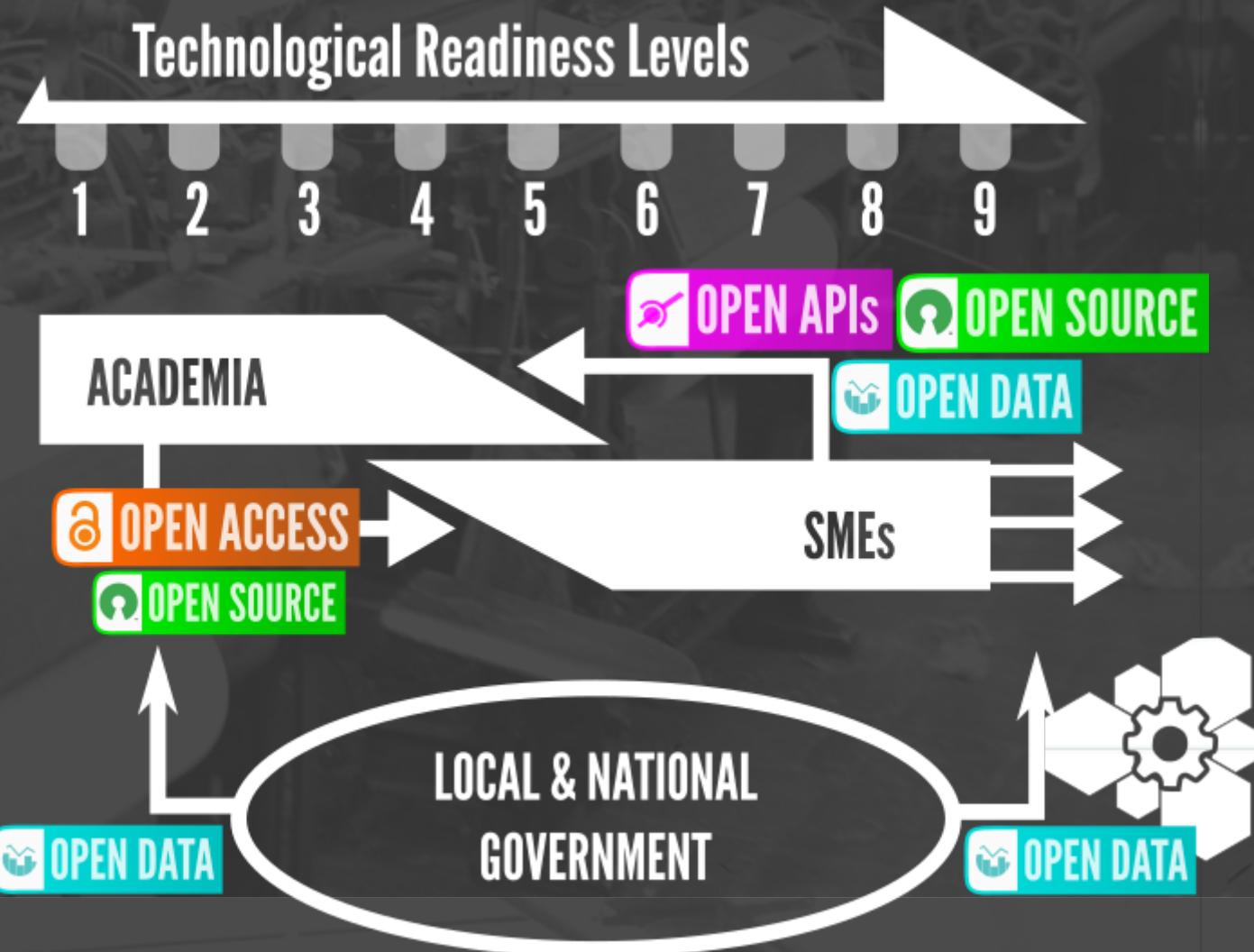
SMEs

OPEN ACCESS as a CRITICAL ENABLER





OPEN ACCESS as a CRITICAL ENABLER



OPEN ACCESS as a CRITICAL ENABLER

OPEN I/O



OPEN STANDARDS



OPEN ACCESS



OPEN DATA



OPEN SOURCE



OPEN INNOVATION



OPEN APIs



CYBERSECURITY

PUBLIC

PRIVATE

OPEN APIs

OPEN SOURCE

CYBERSECURITY

OPEN INNOVATION



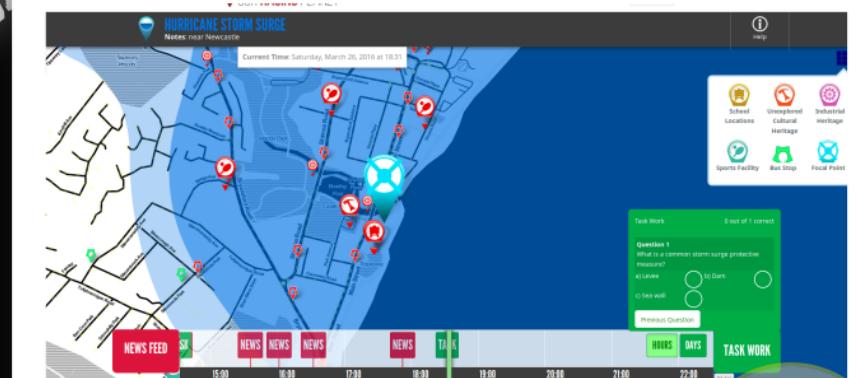
OPEN STANDARDS



OPEN DATA



OPEN ACCESS



OpenDataNI Education Challenge

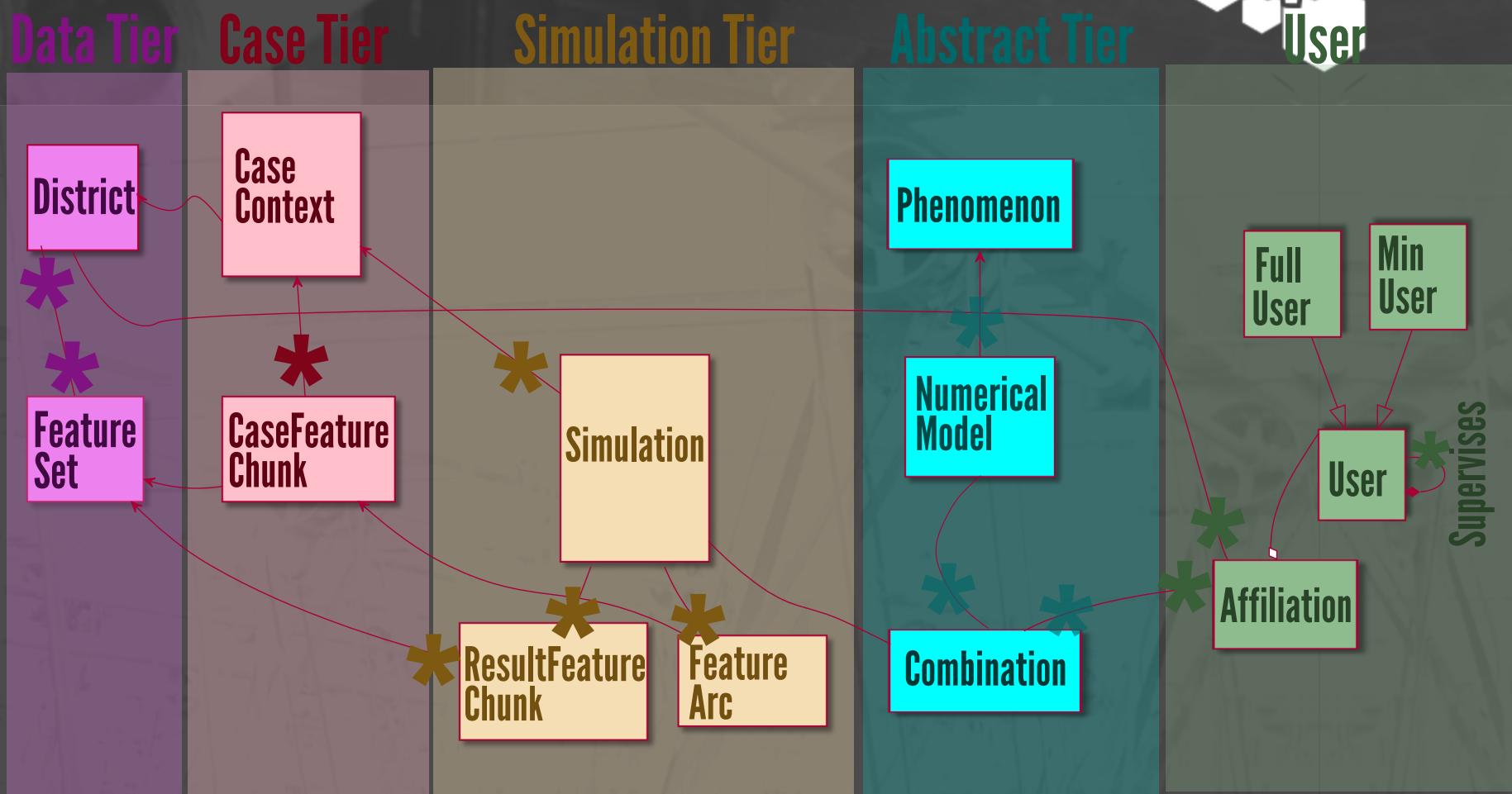
Token

Enter the token for the simulation

b49a85d1-19ce-4ee4-9fb9-a41b152d38

Submit

OurRagingPlanet Model (ASC core)



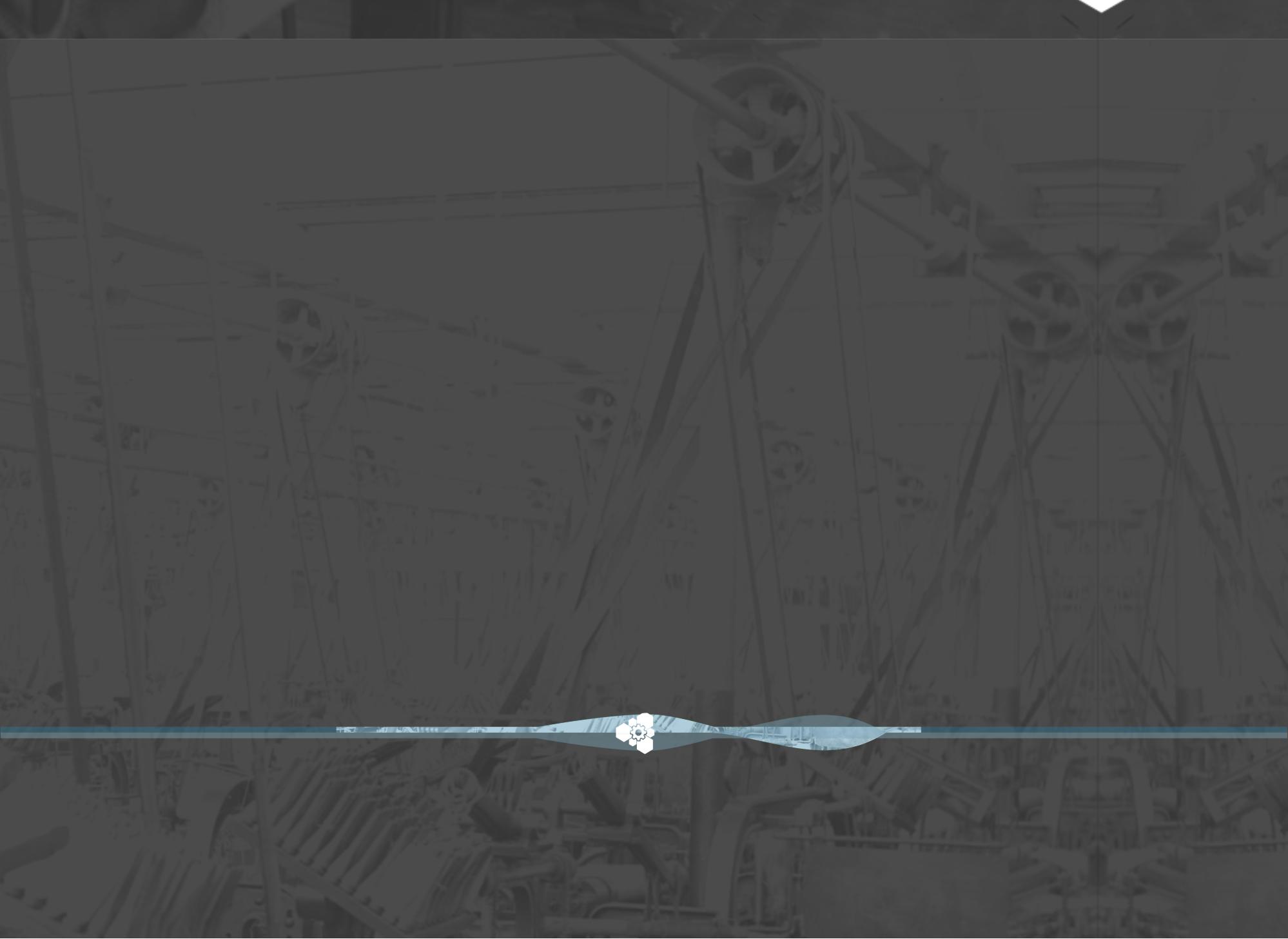
We're building an Open Data validating tool. Put simply, this is a bit like a grammar checker for Open Data (data which ever can access, use or share).

We're excited to announce the Open Data Coding Challenge: Project Lintol's global coding competition.



The Open Data Coding Challenge is unique. It's not just about the prizes (although they're pretty good). It's also a chance to get your coding talents seen by our judges: some of the UK Government's leading Open Data specialists.

Over £500 worth of Prizes & Swag



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Open Data
Coding Challenge



Want to play a part in
shaping its future?



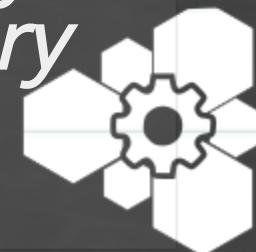
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Over £500 worth of Prizes & Swag

Sign up now and win some prizes



Would the human genome project have generated the billion dollar economic impact that it has "if you had to pay \$50 to look at every single paper that had been published on the subject?"



William Spooner, CTO (oastories.org)

SMEs and large business rank journal access importance equally

Over half of SMEs face article access difficulties

The most common coping strategy, is to find a different, similar paper

Less than 1/3 of companies consider Research Data easy to access

(ElSabry, 2017 & cited; CIBER, 2011)



Industry access to the literature

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Get citation

Download Citation

Access options

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Monero || #xmr Retweeted



MoneroGermany @MoneroGermany · Oct 17

Only 24 hours until #Monero gets bulletproofed with #bulletroofs A new non-interactive zero-knowledge proof protocol. Fees will be reduced by ~80%, the blockchain growth will be smaller and the network faster! Check the live countdown xmr.noctism.com

ions

Messages



Search



with multiple outputs needs multiple separate range proofs. Not great.

Thanks to a fantastic new paper by Bünz, Bootle, and others ([freely available here](#)), there is a more efficient way to handle range proofs. The size of a bulletproof increases only logarithmically with both the size of the range and the number of

GIF

10

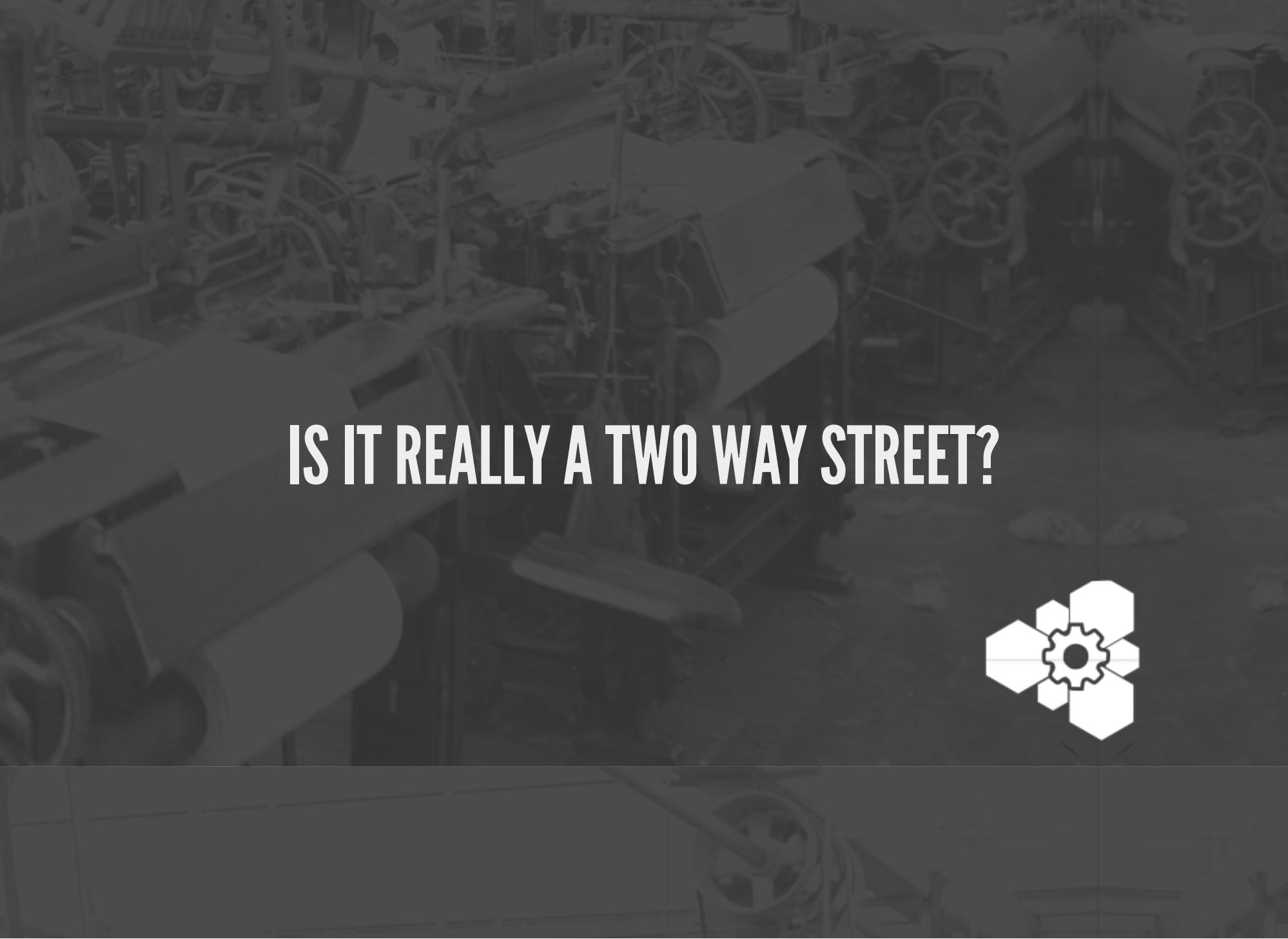
85

213

✉







IS IT REALLY A TWO WAY STREET?



EXAMPLE: NUMFOCUS

NumPy
pandas
Jupyter
Julia
FEniCS
...

EXAMPLE: NUMFOCUS

Bloomberg, MS, IBM

Two Sigma, NVIDIA, Capital One

IMC, Civis Analytics, Anaconda

Geotab, Google, optiver, ActiveState, zappi
plotly, Quantopian, Ravelin, QuanSight

...



SO IS IT ALL OPEN ROSES?

e.g. deanonymizability

...but k-anonymization [e.g. @kjam]

e.g. need for some IP

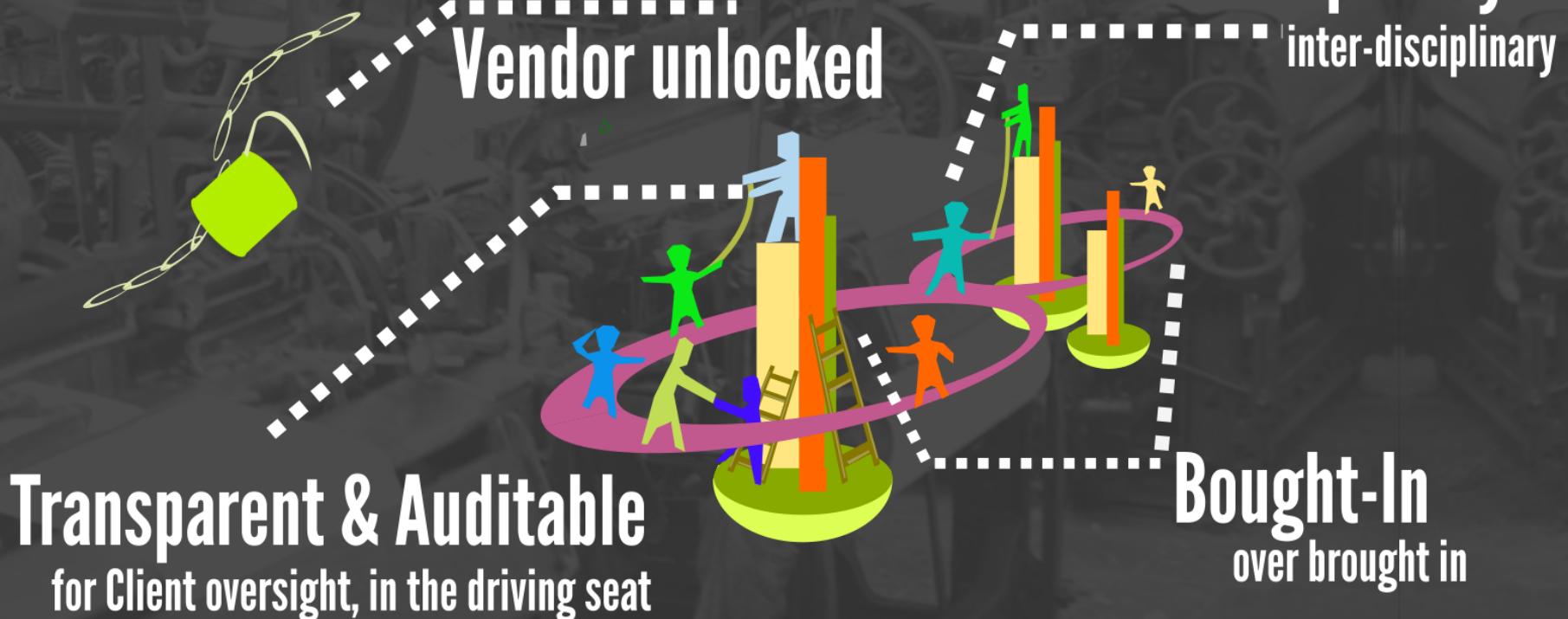
...focused on retaining transparency



@flaxandteal

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Industries

WHAT'S OUR USP?



**OPEN
MARKET**



INTEROPERABILITY

REINVESTMENT

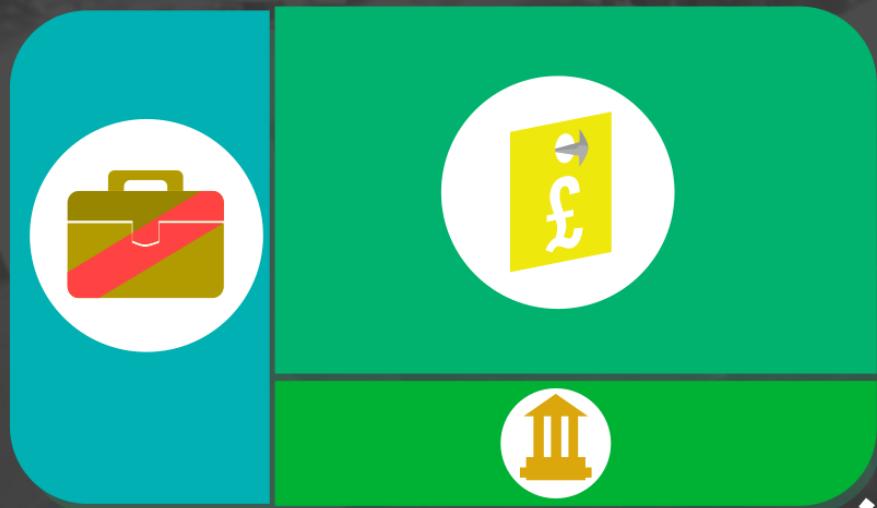


**CLIENT
DRIVEN**

WHO WE SELL TO

1/3

1/2



15%

85%

1/6



KICK-START
YOUR
COMPANY

FREELANCE
IN YOUR
SPECIALISM



SOFT
LANDING

BUILD YOUR
IDEAS



OPEN
SOURCE

WHY OPEN MAKES IT WORK

Products & services?
Data analysis and insights
Transparency and auditability

