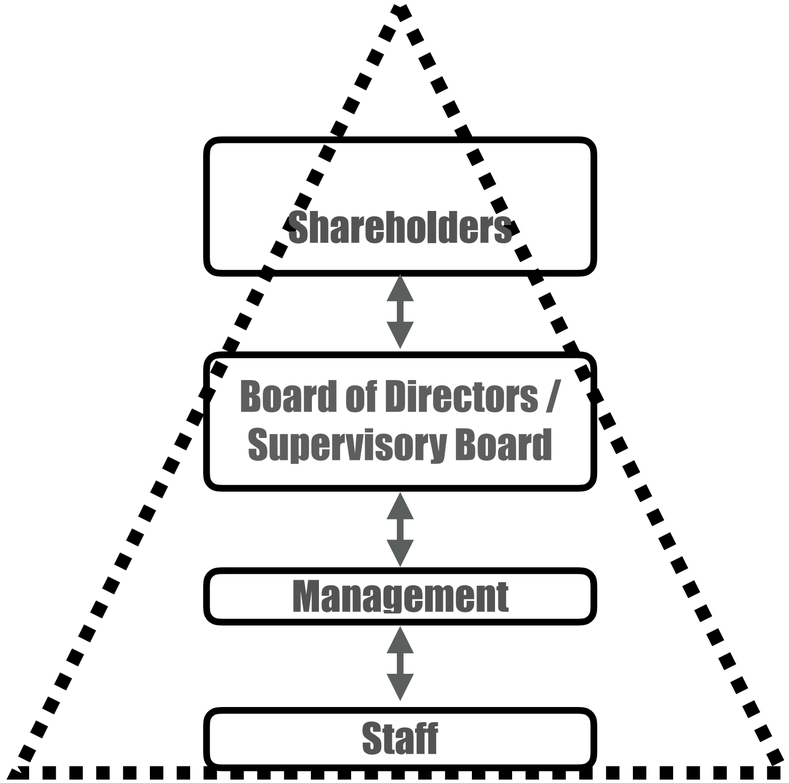
CHANGE

Erik P.M. Vermeulen

Coding for Lawyers in JAPAN



Hierarchies, Processes, Procedures, Profit, Control

DECENTRALIZED AUTONOMOUS ORGANIZATION TO AUTOMATE GOVERNANCE

FINAL DRAFT - UNDER REVIEW

CHRISTOPH JENTZSCH
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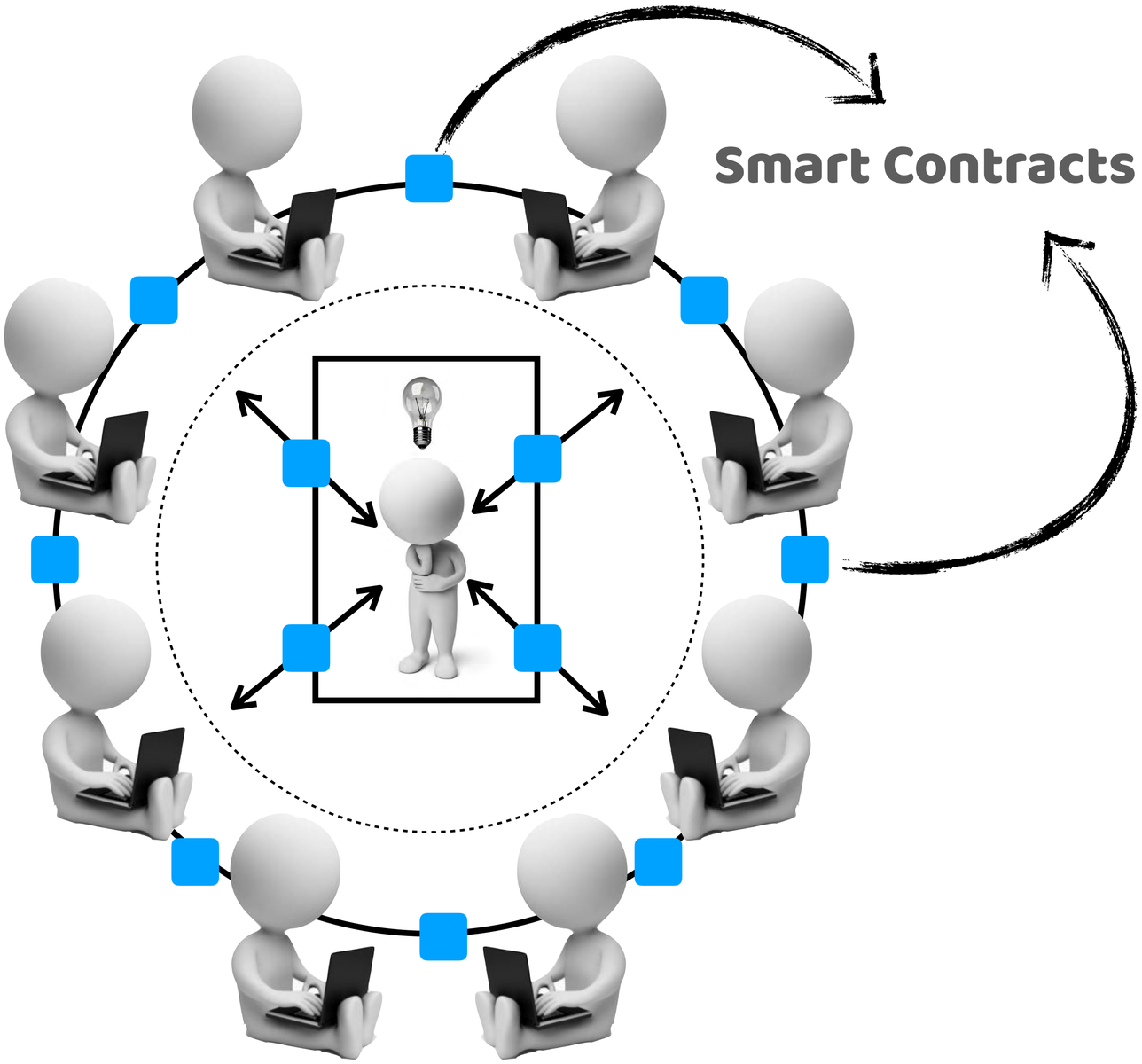
ABSTRACT. This paper describes the first implementation of Decentralized Autonomous Organization (DAO) code to automate organizational governance and decision-making. The code can be used by individuals working together collaboratively outside of a traditional corporate form. It can also be used by a registered corporate entity to automate formal governance rules contained in corporate bylaws or imposed by law. First the DAO concept is described, then minority rights is discussed, and a solution to a "robbing the minority" attack vector is proposed. Finally, a practical implementation of a first generation DAO entity is provided using smart contracts written in Solidity on the Ethereum blockchain.




```
contract DAOInterface {
    Proposal[] public proposals;
    uint minQuorumDivisor;
    uint lastTimeMinQuorumMet;
    address public curator;
    address[] public allowedRecipients;
    mapping (address => uint) public rewardToken;
    uint public totalRewardToken;
    ManagedAccount public rewardAccount;
    ManagedAccount public DAOrewardAccount;
    mapping (address => uint) public paidOut;
    mapping (address => uint) public DAOpaidOut;
    mapping (address => uint) public blocked;
    uint public proposalDeposit;
    uint sumOfProposalDeposits;
    DAO_Creator public daoCreator;

    struct Proposal {
        address recipient;
        uint amount;
        string description;
        uint votingDeadline;
        bool open;
        bool proposalPassed;
        bytes32 proposalHash;
        uint proposalDeposit;
        bool newCurator;
        SplitData[] splitData;
        uint yea;
        uint nay;
        mapping (address => bool) votedYes;
        mapping (address => bool) votedNo;
        address creator;
    }
```

Technology

AR/VR
Big Data
IoT
Deep Learning
Sensors
Blockchain
DLT
Machine Learning
YOU ARE HERE
Platforms
Social Media
Internet
PC

1980 1990 2000 2010 2020 2025

Content

WELLS FARGO

Personal | Small Business | Commercial

Financial Education | About Wells Fargo

Banking | Loans and Credit | Insurance | Investing and Retirement | Wealth Management | Rewards and Benefits

View Your Accounts

Account Summary

Username

Password

Go

Save Username

Forgot Password/Username?

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Sign Up Now or Take a Tour
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Information and resources from the nation's #1 lender provide support at every stage of homeownership.

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Buying a house?

Estimate how much you may be able to borrow

Get Prequalified ›

Time to refinance?

Understand if refinancing makes sense for your situation with a free analysis

Get Started ›

Banks

Digitizing

FinTechs
TechFins

Scaling

CBINSIGHTS

Chart of the Week

THE LARGEST COMPANIES BY MARKET CAP

The oil barons have been replaced by the whiz kids of Silicon Valley

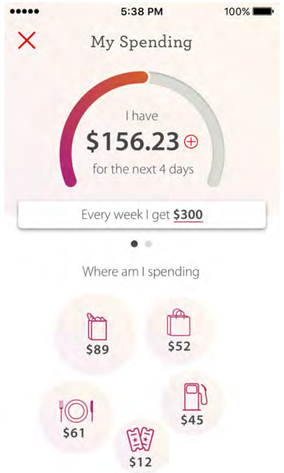
Top 5 Publicly Traded Companies (by Market Cap) — Tech — Other

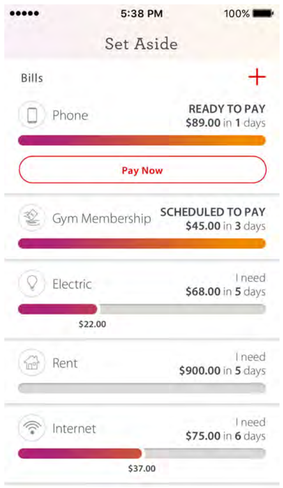
	#1	#2	#3	#4	#5
2001	GE $406B	Microsoft $365B	EXXON $272B	citi $261B	Walmart $260B
2006	EXXON $446B	GE $383B	TOTAL $327B	Microsoft $293B	citi $273B
2011	EXXON $406B	Apple $376B	PetroChina $277B	Shell $237B	ICBC $228B
2016	Apple $582B	Alphabet $556B	Microsoft $452B	amazon $364B	facebook $359B

visualcapitalist.com

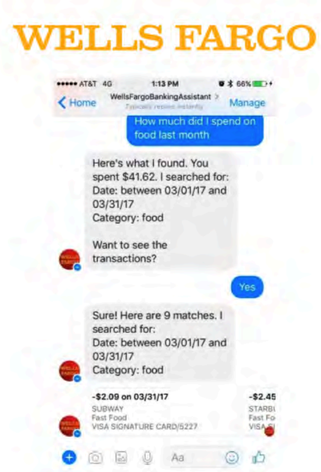
Data- and intelligence-driven enterprises win

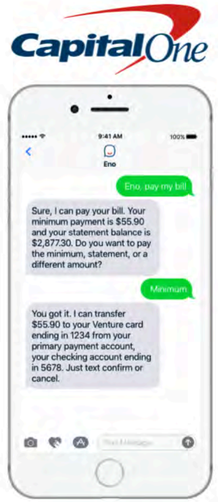
AI Solutions

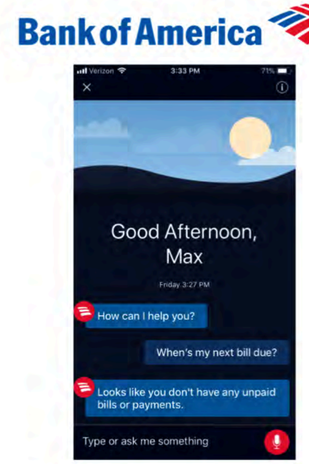




Chatbots

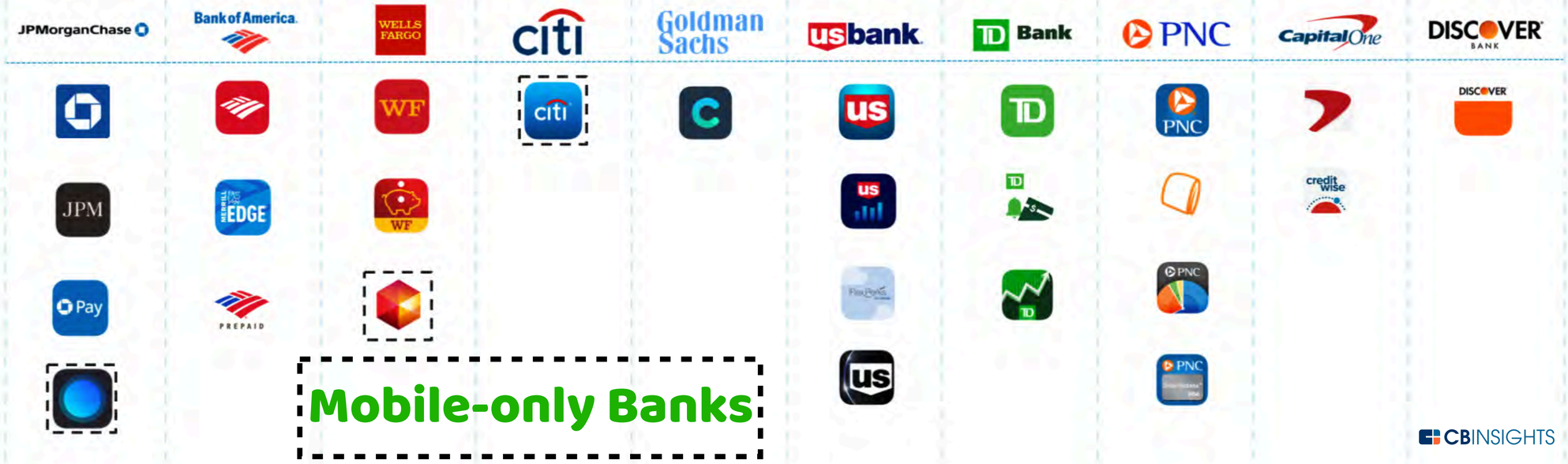






Technology ⟷ Content

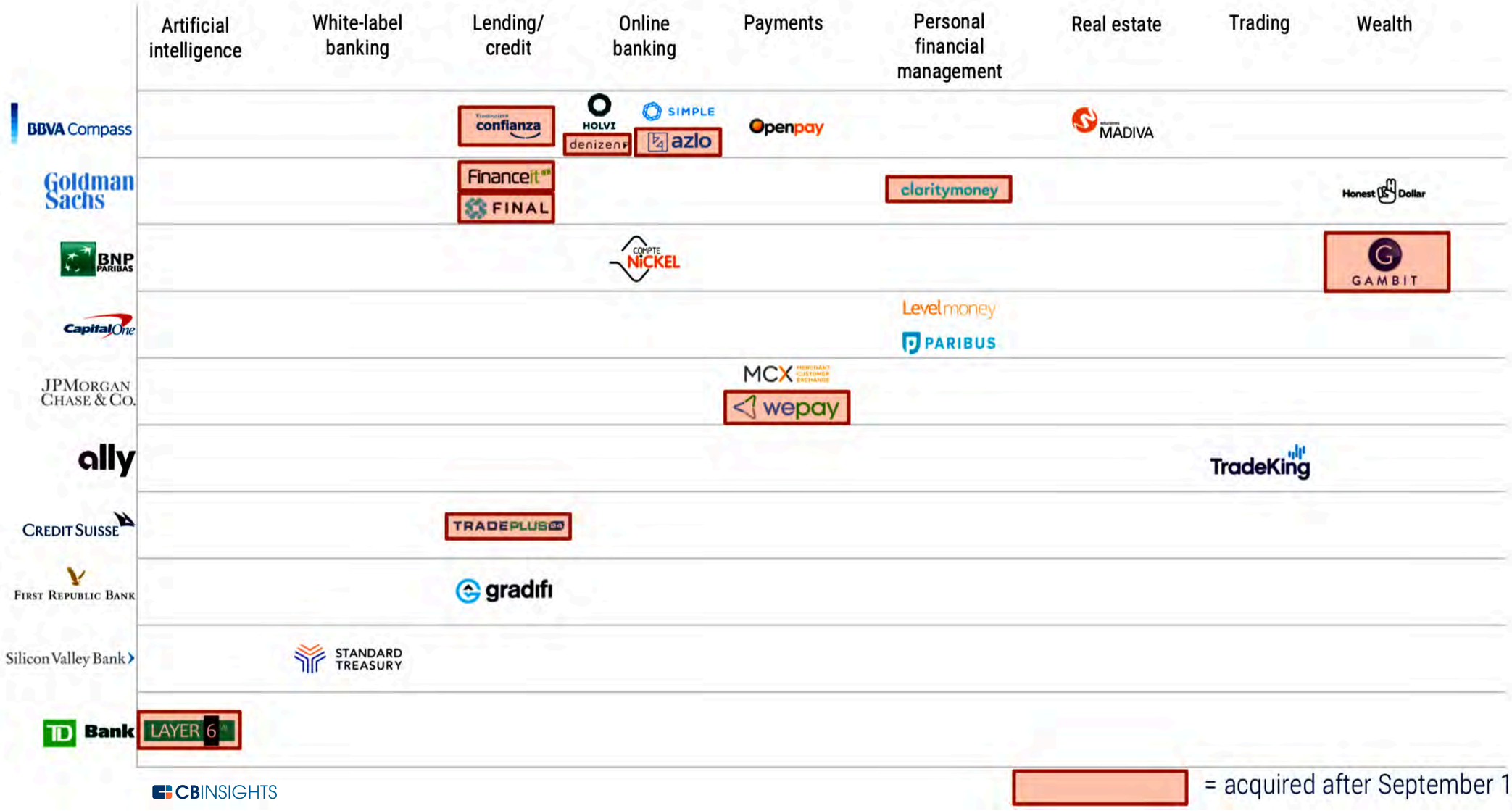
Mobile Apps

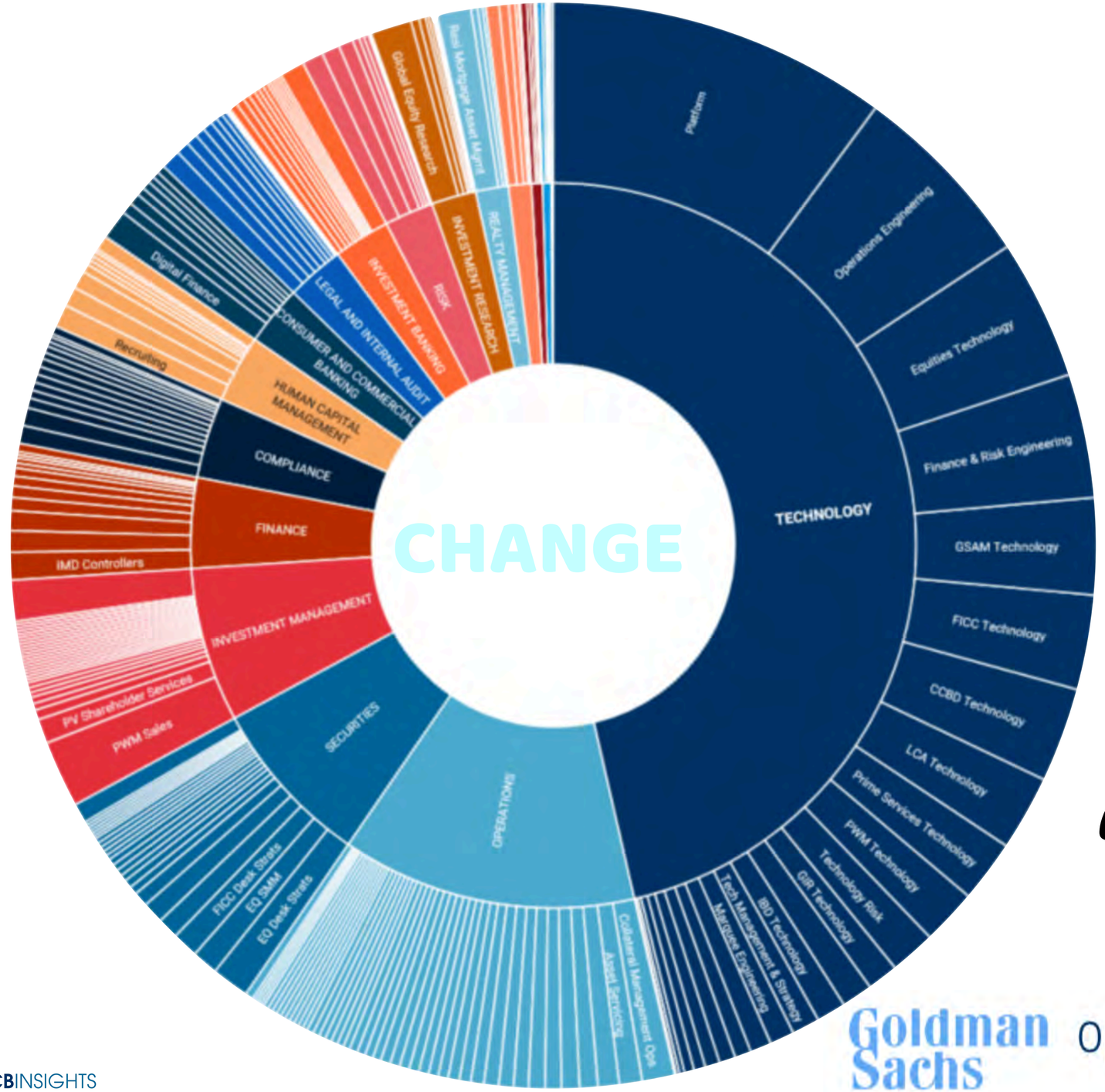


CBINSIGHTS

CHANGE

Successful “Partnerships” & Acquisitions



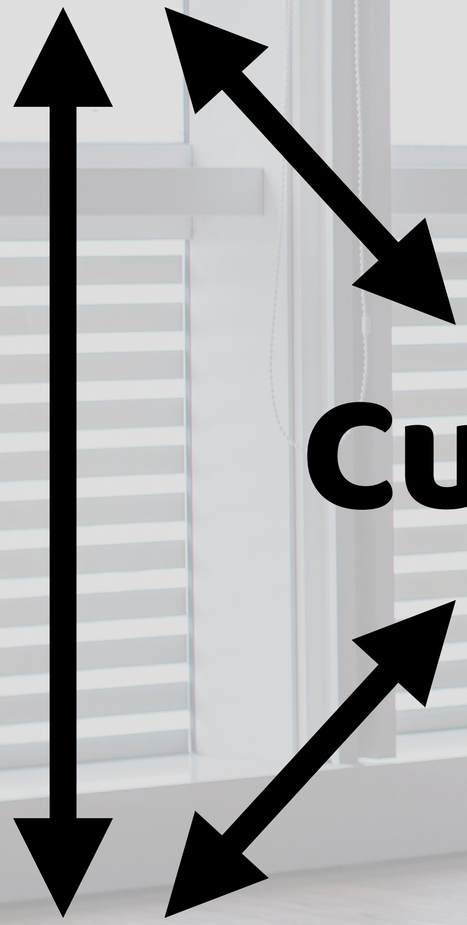


Attracting, training & retaining "tech talent"

Goldman Sachs open job listings (9/14/2017)

CBINSIGHTS

Technology



Culture

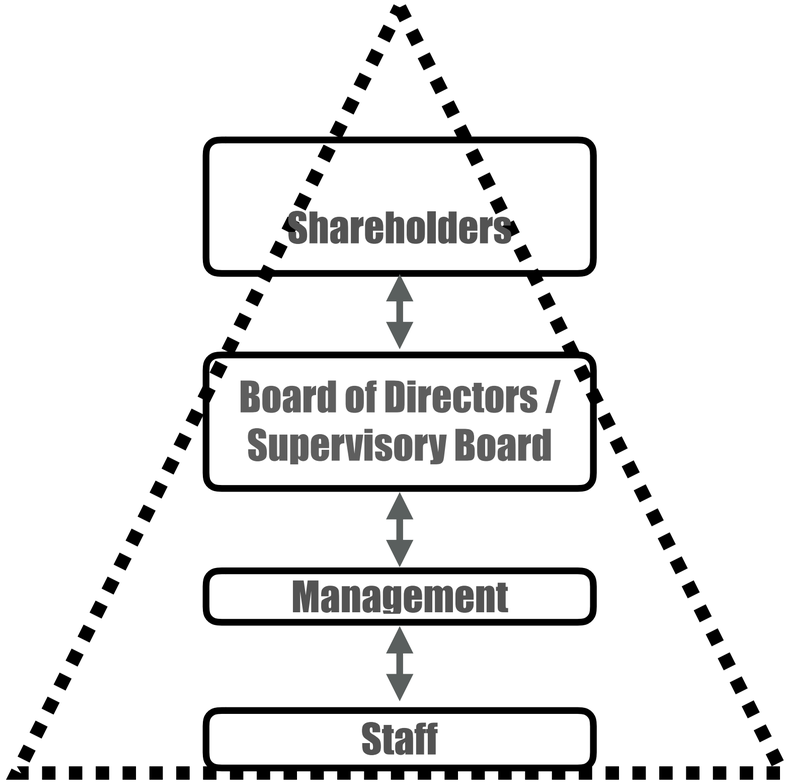
Content

CHANGE

The Importance of “CULTURE”

GE needs “more candor, more debate, more pushback”

“When the top guy is the smartest guy in the world, you’ve got a real problem”



Hierarchies, Processes, Procedures, Profit, Control

Disillusioned millennials feel little brand loyalty to banks

Only 24% of millennials 'strongly agree' their bank helps them reach financial goals

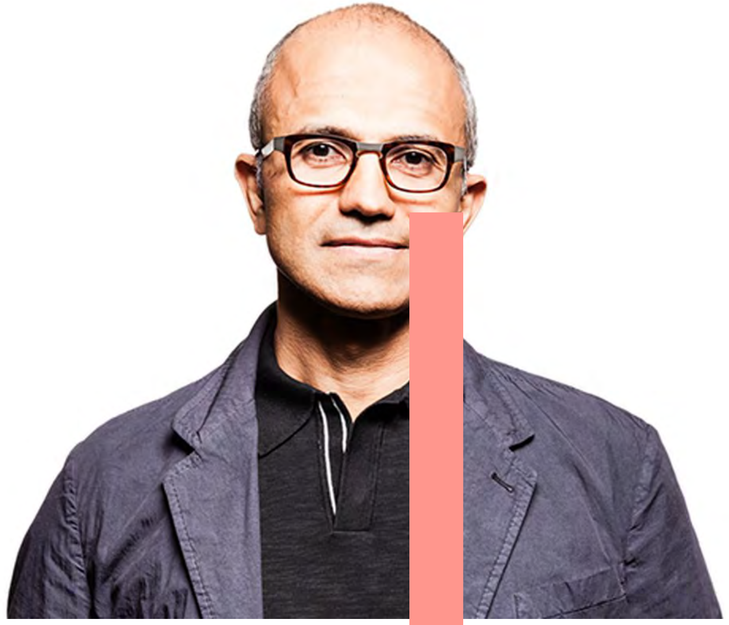
Millennials switch primary banks 2.5X more often than baby boomers

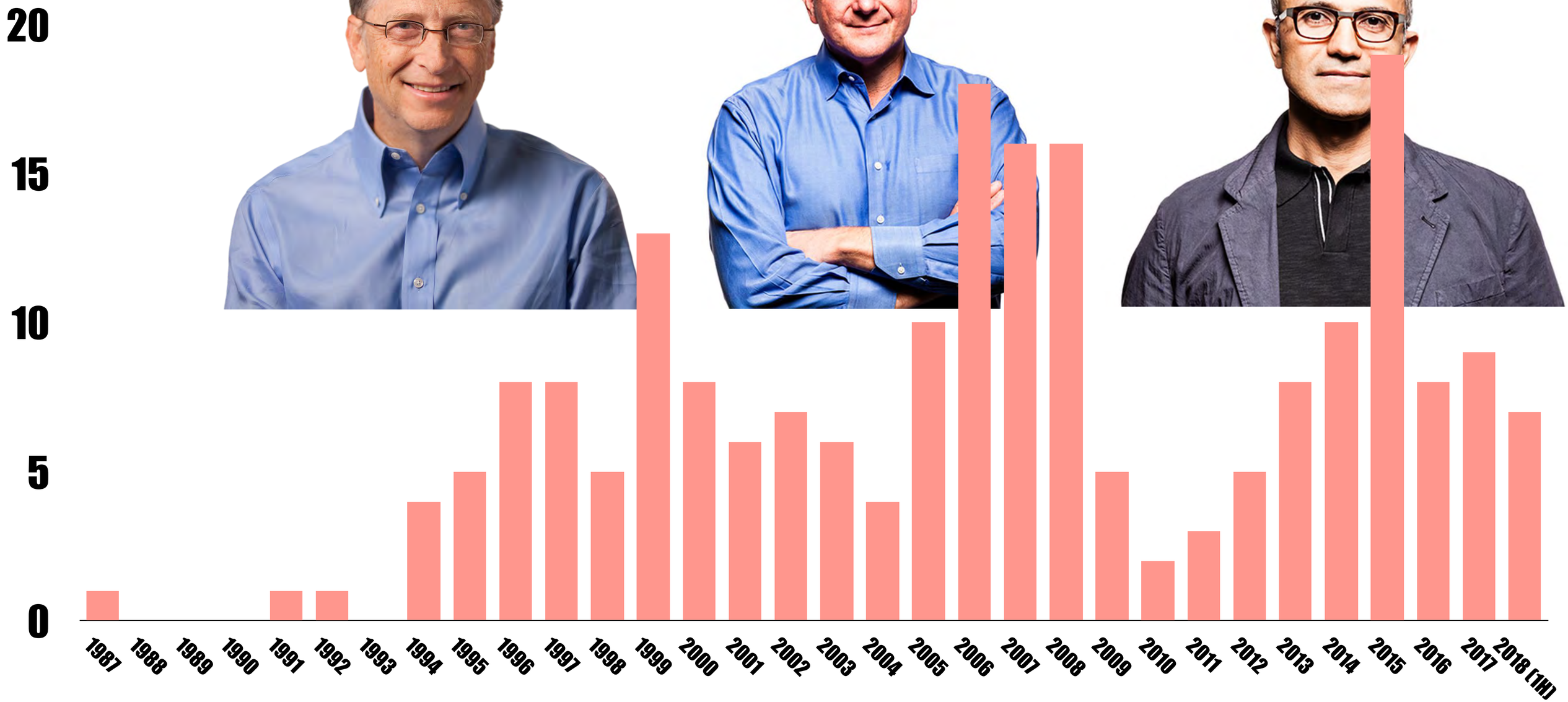
CBINSIGHTS

Japan megabanks fighting stodgy corporate culture as new fintech players encroach

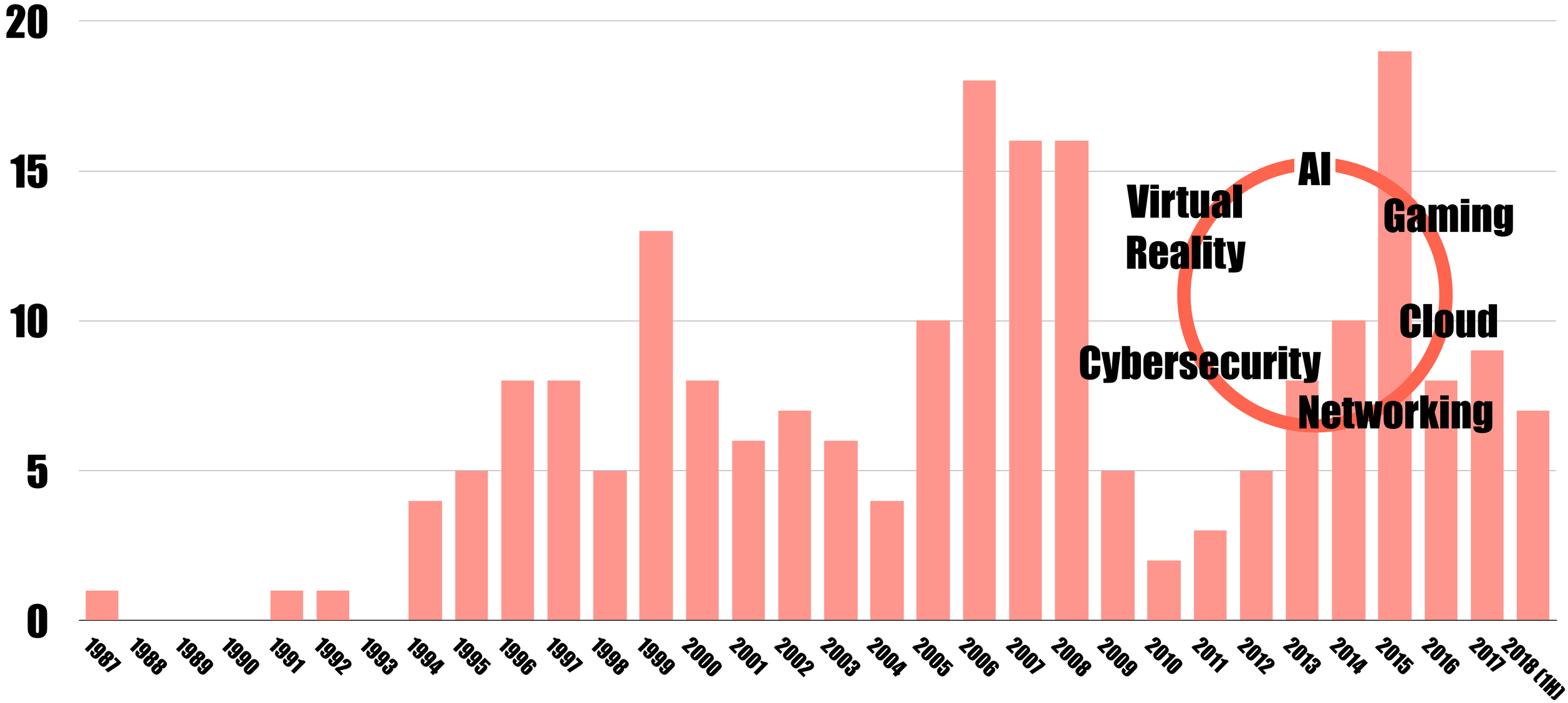
The Mainichi
Japan's National Daily Since 1922

Acquisitions Microsoft





Acquisitions Microsoft

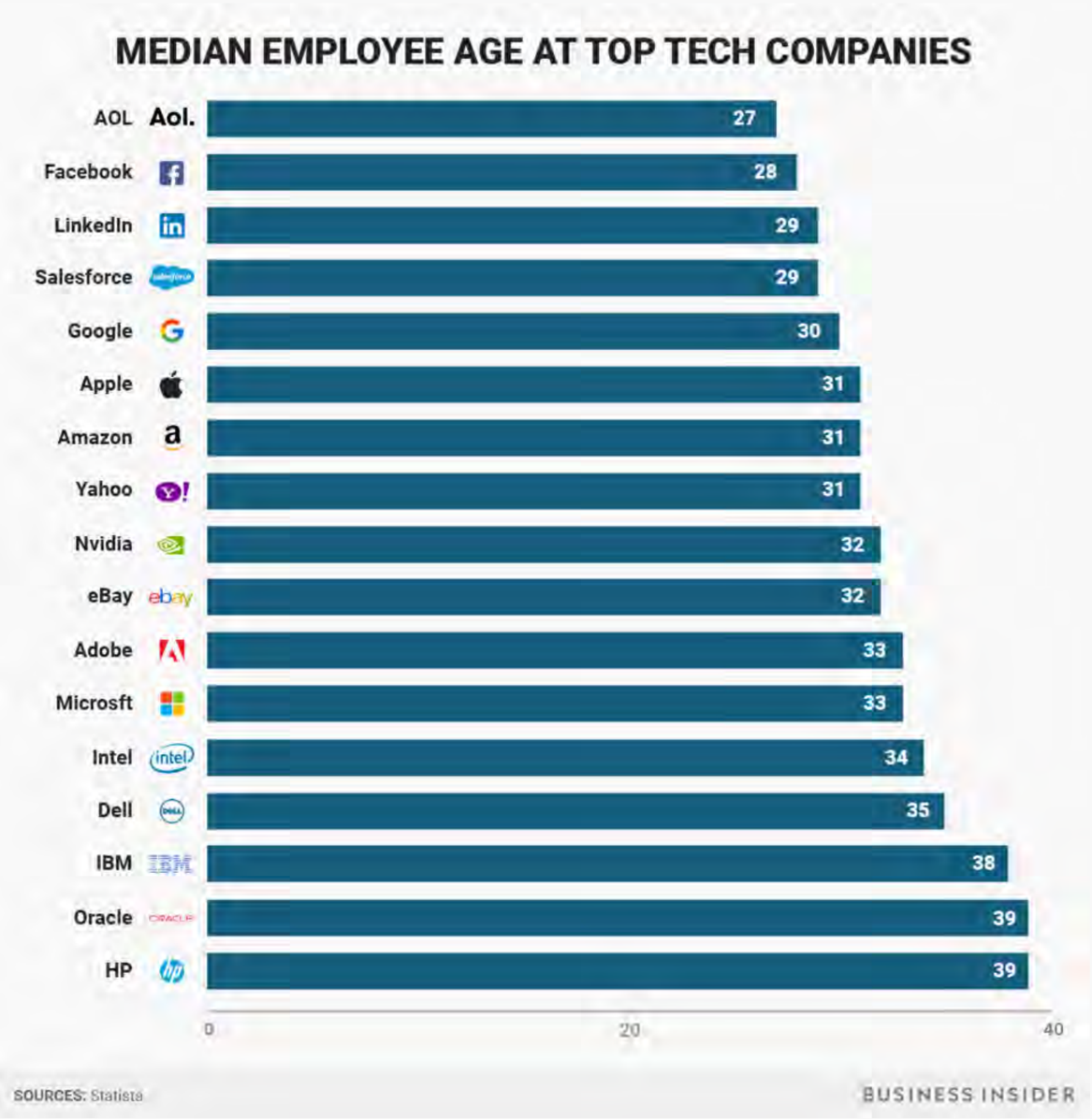


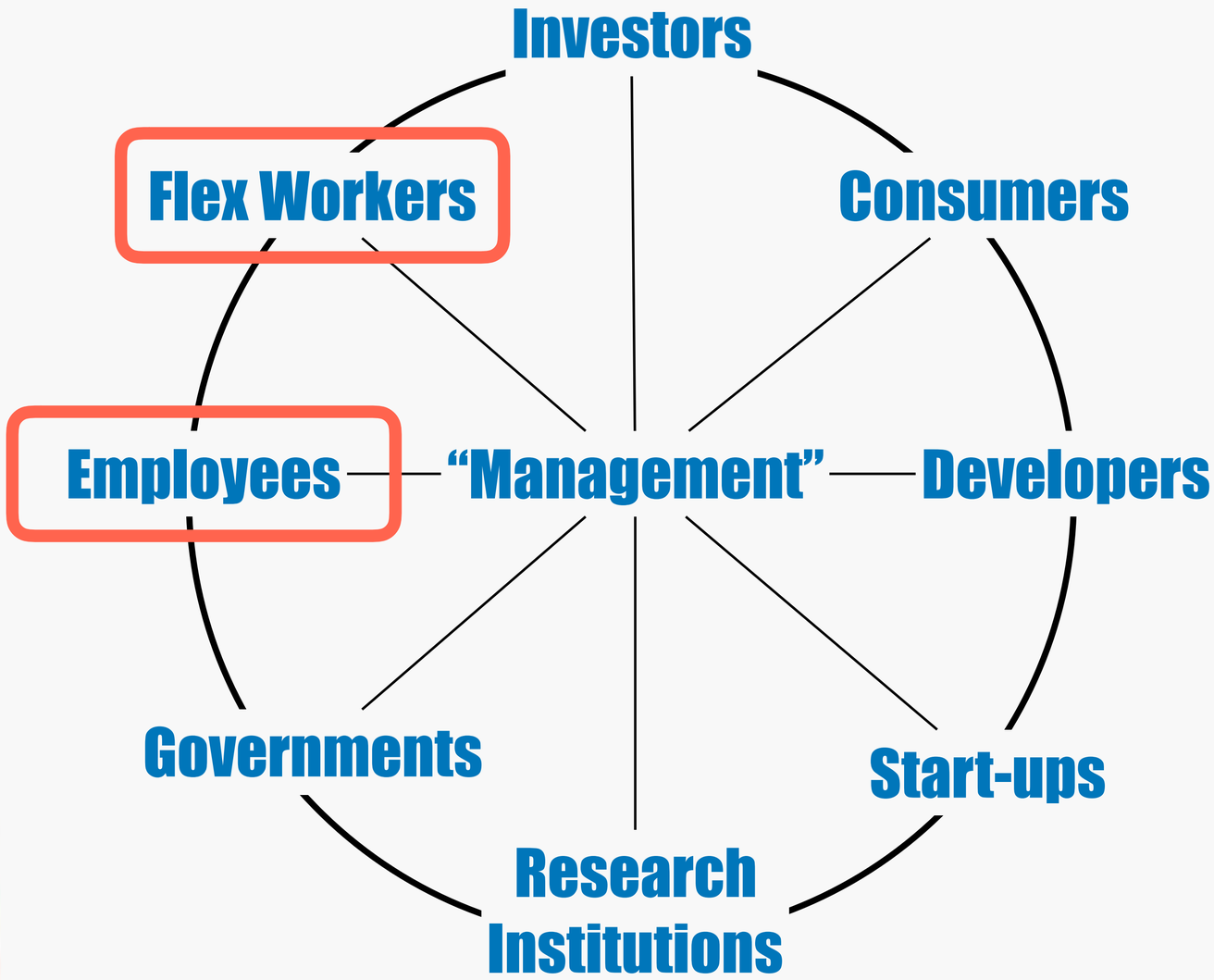
“In short, developers will be at the center of solving the world’s most pressing challenges. However, the real power comes when every developer can create together, collaborate, share code and build on each other’s work. In all walks of life, we see the power of communities, and this is true for software development and developers.”

—

Satya Nadella (CEO Microsoft)

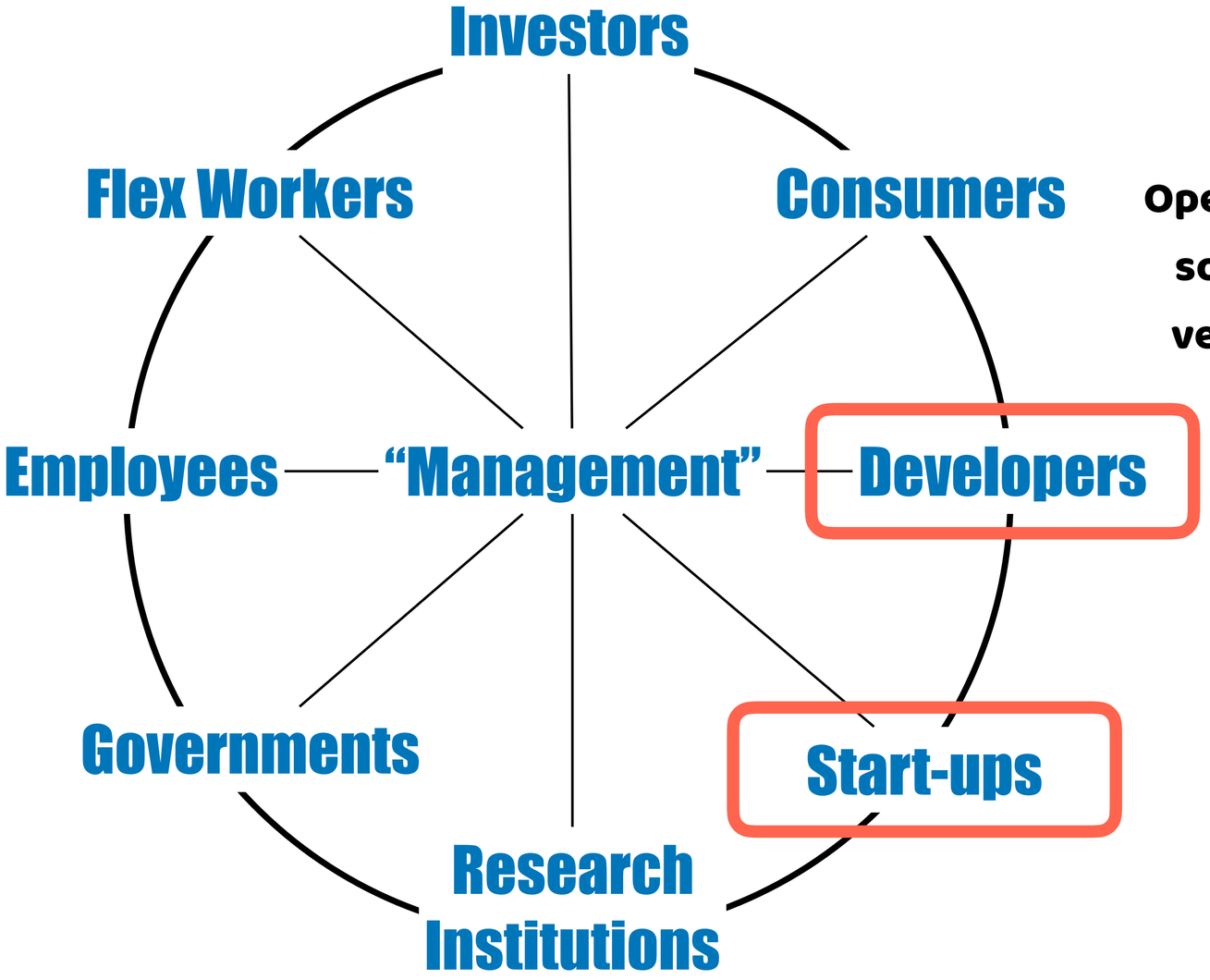
An “Open” & “Accessible” Culture





Ecosystems, Networks, Purpose, Empowering, Experimentation, Collaboration, Co-Creation

Culture - Environment



Open APIs (Application Programming Interface) and “open source software” attracts “developers” who can create very specific customized app solutions (which can help engage and retain customers)

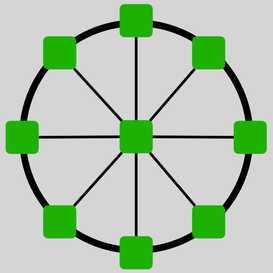
By the end of 2010, Riot Games had rung up $17.25 million in revenue, according to SuperData. A year later, sales had almost quintupled, to $85.3 million. Its distribution partner in China and investor, internet giant Tencent Holdings, saw Riot Games' meteoric rise and wanted to buy the company, offering $400 million in early 2011 for a 93 percent stake. Merrill and Beck accepted, persuading Tencent to let them operate independently. The two had big plans for LoL.

In December 2015, Tencent bought the remaining 7 percent of the company for an undisclosed sum. But Riot shows little evidence of being wholly owned by another entity. "There's not much about the relationship that's been typical," says Tencent EVP and "chief exploration officer" David Wallerstein. "I feel like the more we own of Riot, the more independent they become."

Flatter

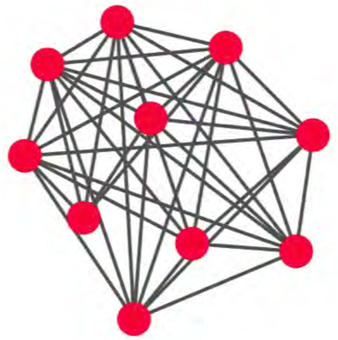
- Code
- Connectivity
- Crowd
- Collaboration

Continuous Engagement



Digital Governance

Decentralized Autonomous Organizations



ethereum

"Asset" Light Platforms

Google airbnb

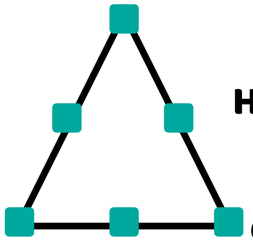
Mixed Platforms

amazon

Asset Heavy Platforms

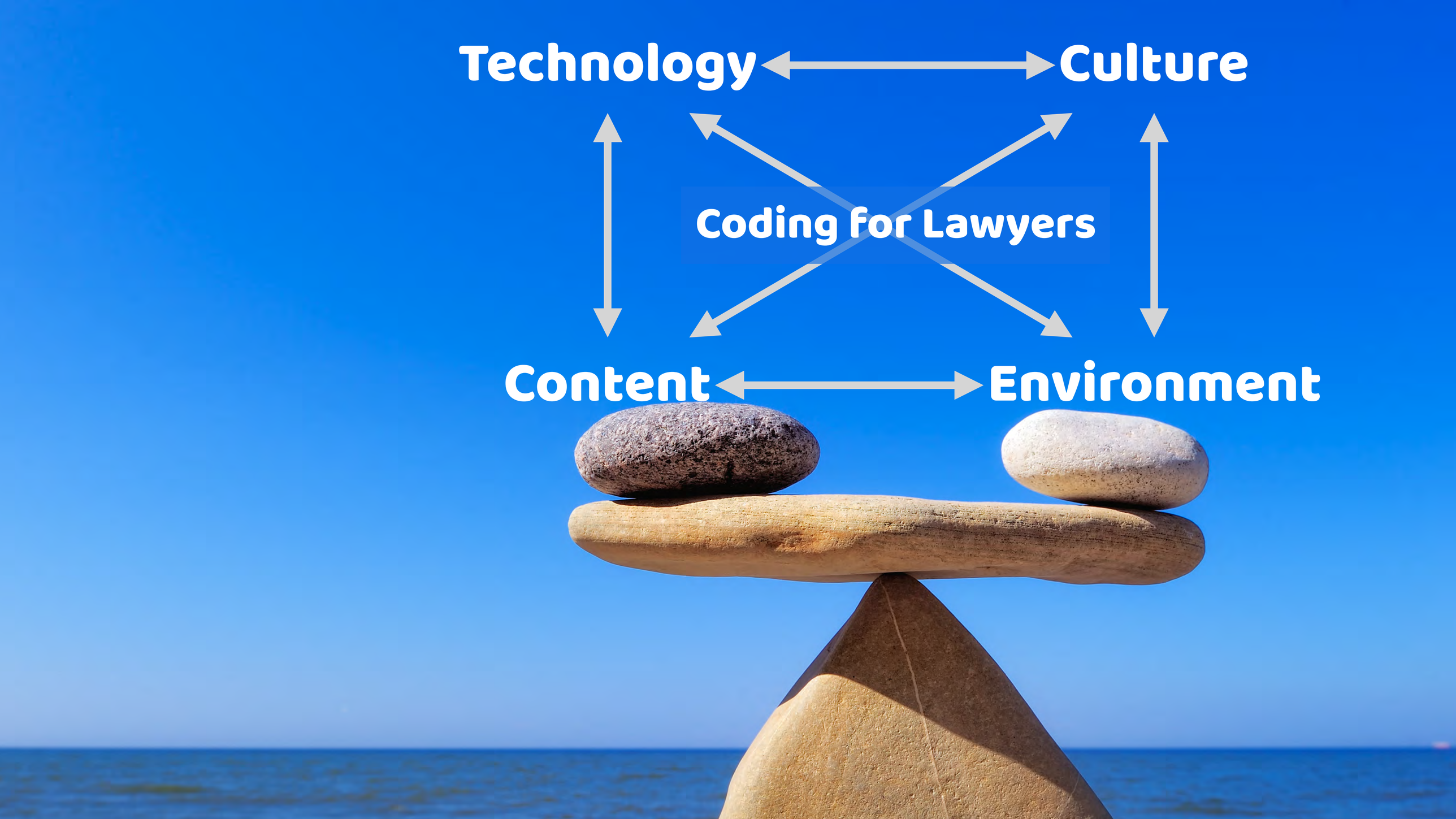
For Shell Gas Stations, GM Connected Car Partnership Also Connects Loyalty And Convenience

Crypto-networks are a powerful way to develop community-owned networks and provide a level playing field for 3rd-party developers, creators , and businesses.



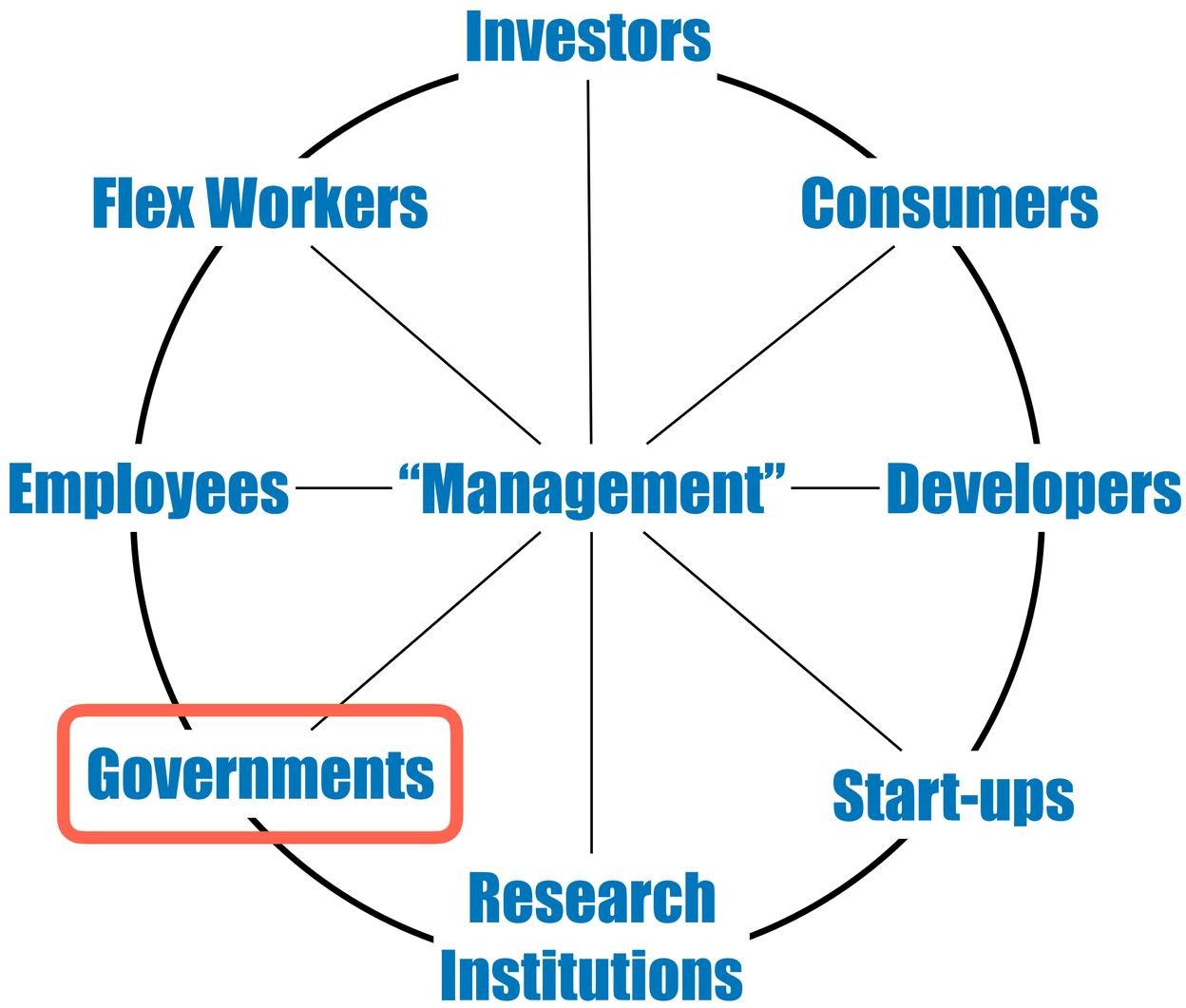
Hierarchical & Formalized Governance

More Open


Technology
Culture
Coding for Lawyers
Content
Environment

One More Thing...

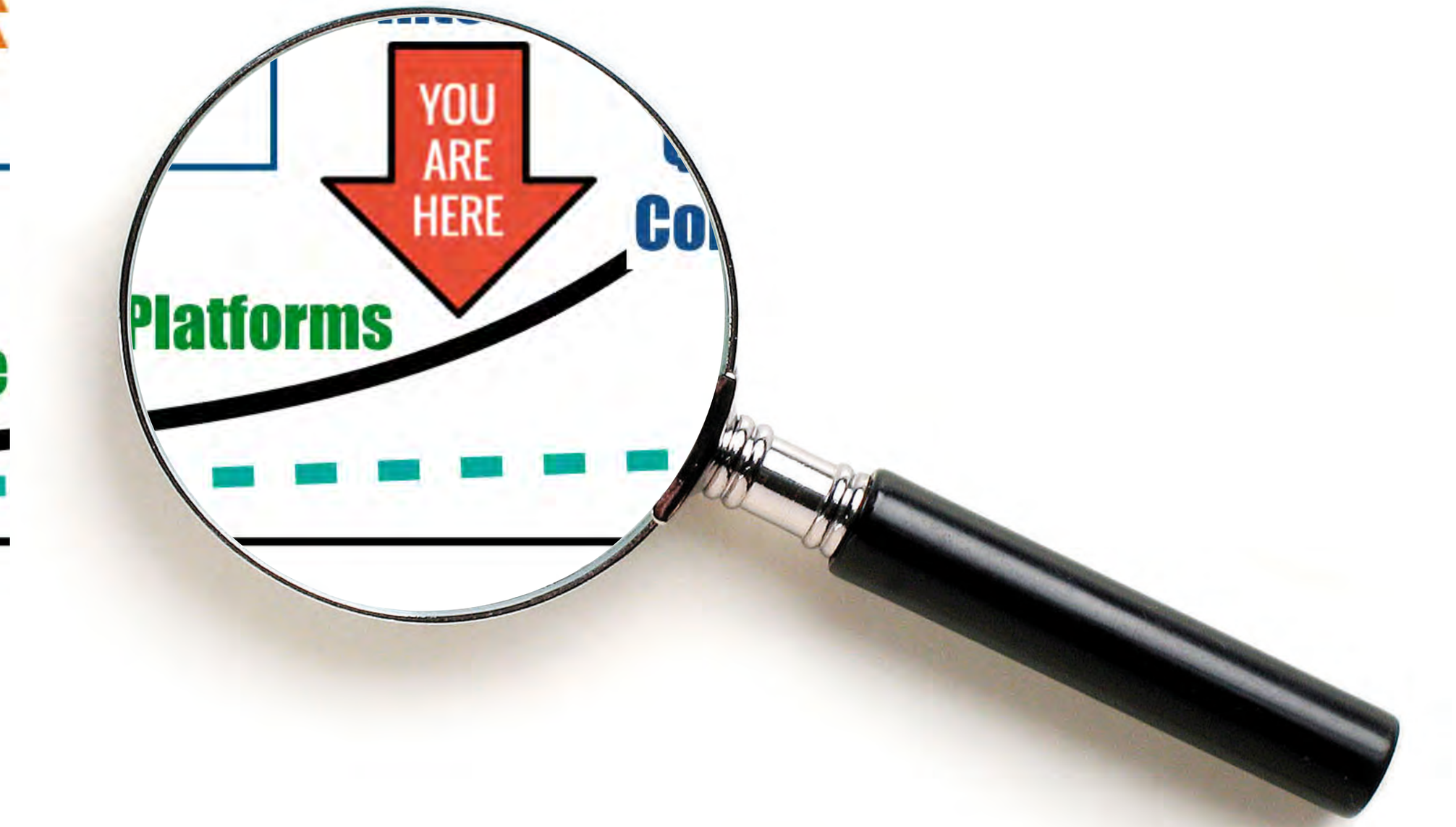
CHANGE



Regulation

AR/VR
Big Data
IoT
Deep Learning
Sensors
Blockchain
DLT
Machine Learning
YOU ARE HERE
Platforms
Social Media
Internet
PC
Regulatory Systems (usually facts-based)

1980 1990 2000 2010 2020 2025



“We Are Already Living in the Future”

Why Everyone Must Understand the “Digital Age” Now

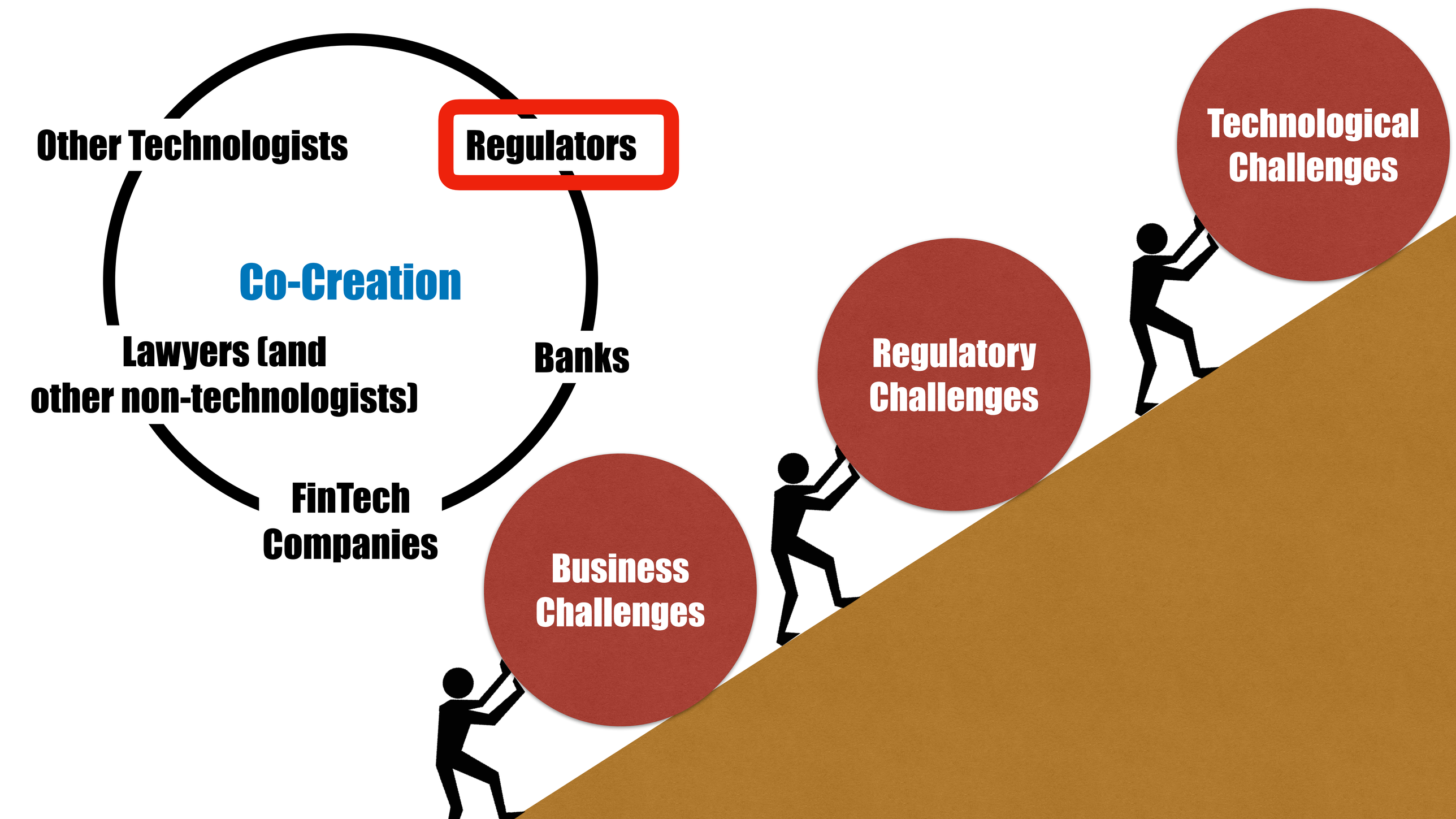
REWRITING THE RULES

Governments can't handle tech regulation. It's time for companies to take over

By Gillian Hadfield · July 2, 2018

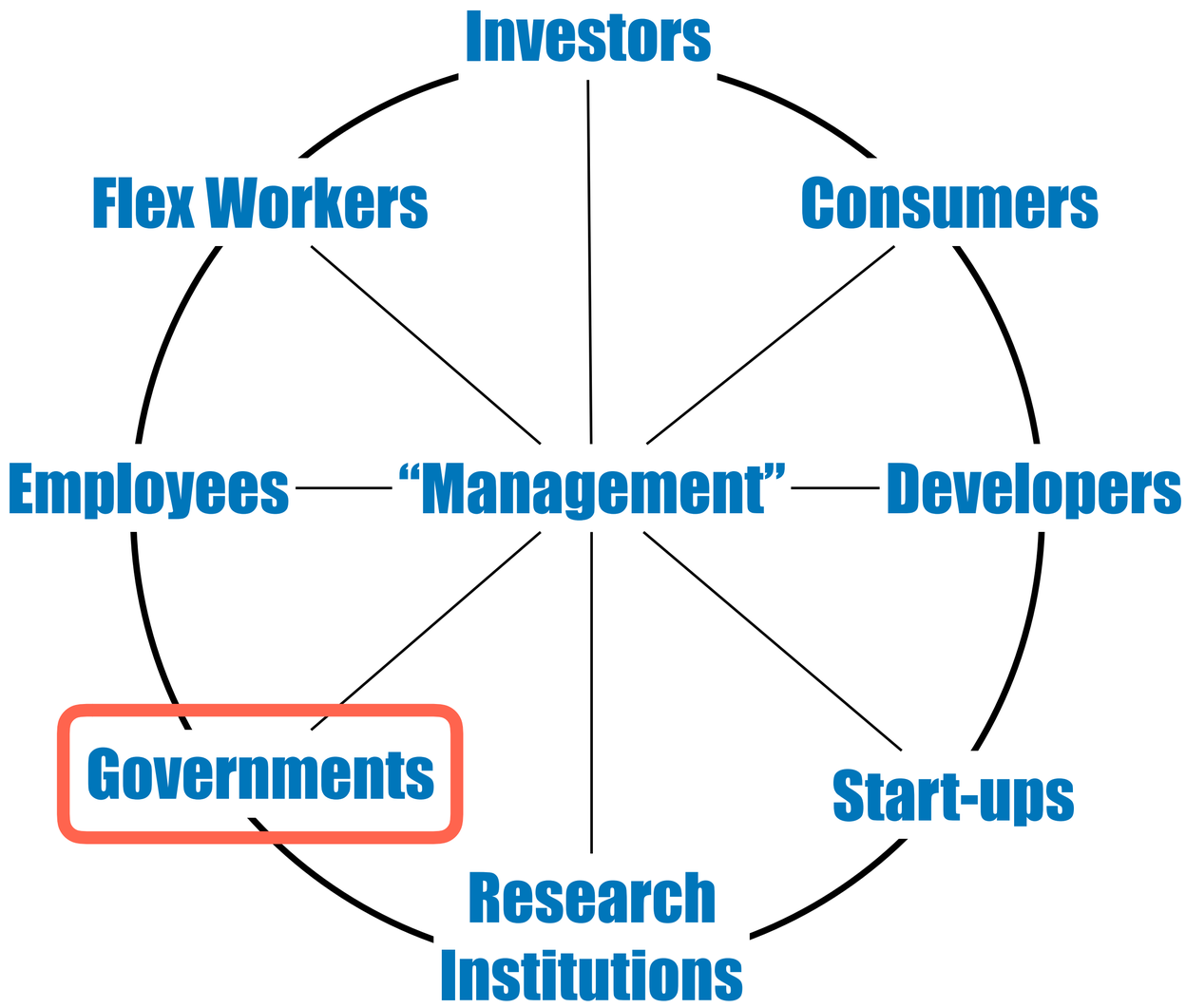
REUTERS/NICKY LOH

How do we build the systems we need to cope with and regulate the new economic and social challenges we are facing?

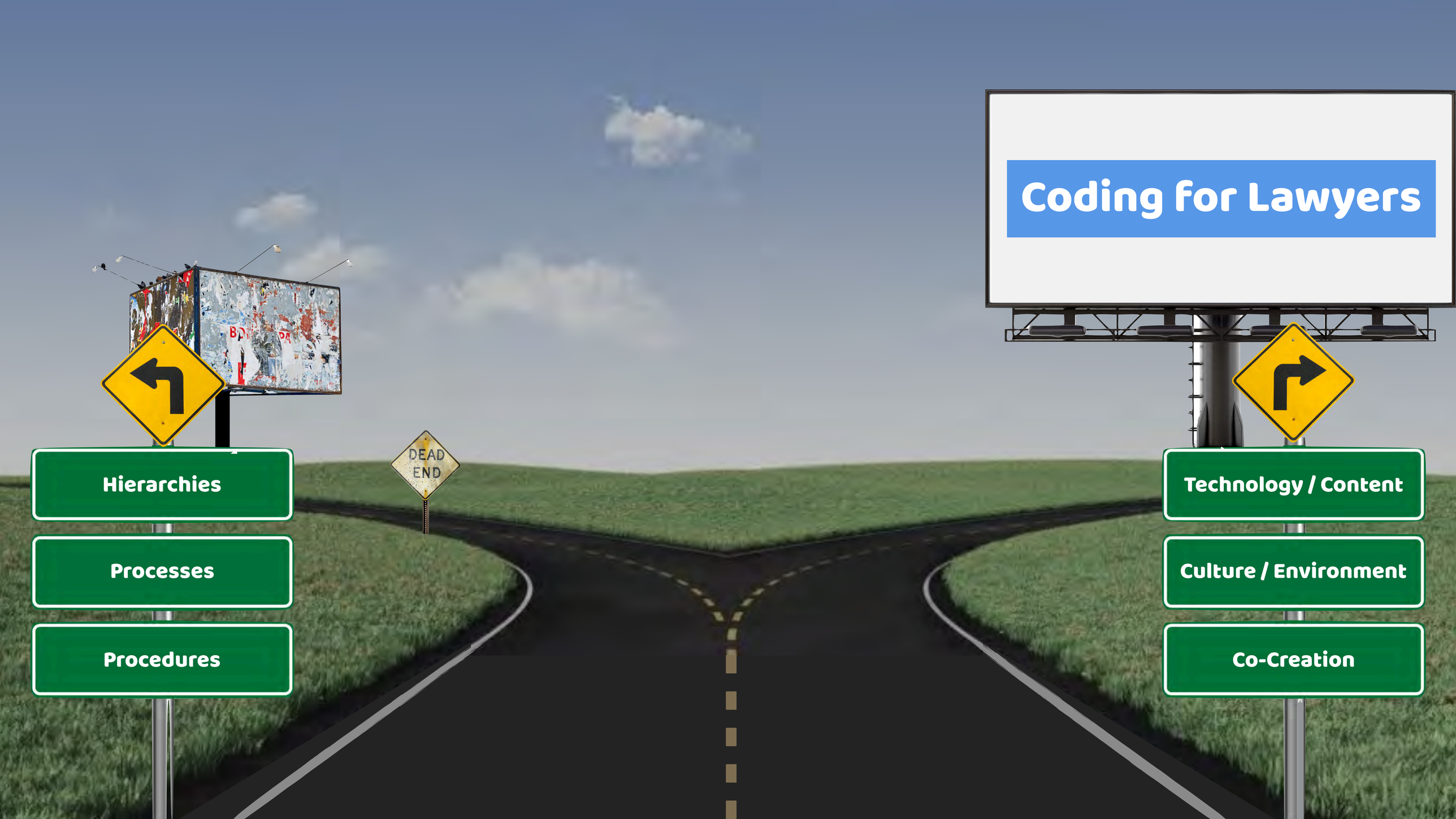

Other Technologists
Regulators
Co-Creation
Lawyers (and other non-technologists)
Banks
FinTech Companies
Business Challenges
Regulatory Challenges
Technological Challenges

Co-Creation Economy

CHANGE



In the current digital age, rules, regulations, and trust will increasingly be embedded in the technology itself.


Coding for Lawyers
DEAD END
Hierarchies
Processes
Procedures
Technology / Content
Culture / Environment
Co-Creation

pied piper
NEVER
FORGET

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