COMSM0019
Internet Economics & Financial Technology
Lecture 20

Current Thinking

Dave Cliff

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You've had 19 lectures, covering the past 20+ years of thinking in internet economics and financial technology

Today we look at very recent views/arguments from international thought-leaders.

Today we look at very recent views/arguments from international thought-leaders.

In their own words.



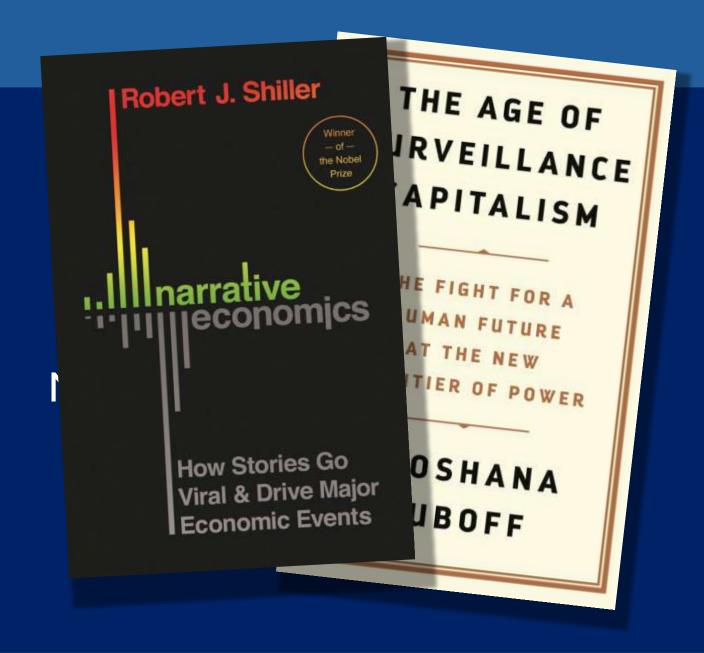
Welcome to the M0019 Book Club...

Welcome to M0019 Book (

THE AGE OF SURVEILLANCE CAPITALISM

THE FIGHT FOR A
HUMAN FUTURE
AT THE NEW
FRONTIER OF POWER

SHOSHANA ZUBOFF



All three were published this year, 2019



Last year, December 2018, we could not have taught this lecture

How do we know what the good books are?



Business Book of the Year Award 2019 – the longlist

A review of the 16 titles that are competing for this year's £30,000 prize



The contenders for the 2019 Financial Times and McKinsey Business Book of the Year Award © St. Martin's Press, Allen Lane, Bloomsbury Publishing, Simon & Schuster, Bantam Press, PublicAffairs, Profile Books, Pan Macmillan, William Collins, PublicAffairs, Portfolio Penguin, Chatto & Windus, Virago

Andrew Hill AUGUST 11 2019





The pressing issue of how to handle fast-moving technological change looms over the longlist for this year's Financial Times and McKinsey Business Book of the Year Award.



Business Book of the Year Award 2019 – the shortlist

Data privacy and bias against women are among the themes explored in this year's annual prize



Dismon & Schuster, Penguin Press, Portfolio Penguin, Riverhead Books, Macmillan, Chatto & Windus, Public Affairs, Profile Books

Andrew Hill SEPTEMBER 16 2019



Heavyweight books on data privacy, bias against women and the rise of the politically powerful conglomerate Koch Industries are among six titles on the shortlist for this year's Financial Times and McKinsey <u>Business Book of the Year Award</u>.

The shortlist for the £30,000 prize was announced in London on Monday by

How do you find the time to read?





Walks Into Allison Schrager

walks into a Broth... By Allison Schrager

Narrated by Holly Palance 6h 47m remaining

an **amazon** com



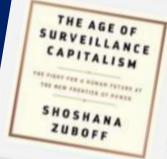
Narrative Economics: How Stori... By Robert J. Shiller

Narrated by Susan Osman, Robert J.... 11h 7m



Don't Be Evil: The Case Against... By Rana Foroohar

Narrated by Rachel Fulginiti 11h 58m



The Age of Surveillance Capitali... By Shoshana Zuboff

Narrated by Nicol Zanzarella 24h 16m

walks Into Allison Schrager

Walks into a Rrott

11 hours

By Allison Schrager Narrated by Holly Palanc 6h 47m remaining

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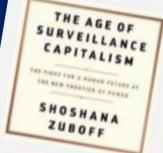
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6h 47m remaining

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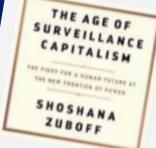
24 hours

...

12 hours



Don't Be Evil- The Case By Rana ForJohar ainst... Narrated by Rachel F 11h 58m giniti



The Age // Surveillance Capitali... By Shornana Zuboff Narrated by Nicol Zanzarella 24h 16m

How do you find the time to read?

NARRATIVE ECONOMICS

By

Robert J. Shiller

January 2017

COWLES FOUNDATION DISCUSSION PAPER NO. 2069



COWLES FOUNDATION FOR RESEARCH IN ECONOMICS YALE UNIVERSITY Box 208281 New Haven, Connecticut 06520-8281

ne to read?

yright © 2019, Dave Cliff

walks Into A Brothel

Walks into a Rrott By Allison Sah

Palanc

11 hours

The Observer Technology

'The goal is to automate us': welcome to the age of surveillance capitalism

John Naughton Sun 20 Jan 2019 07:00 GMT





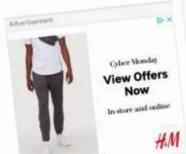




▲ Technology is the pupper, but serveillance capitalism is the popper master: Photograph: Getty Images

Shoshana Zuboff's new book is a chilling expose of the business model that underpins the digital world. Observer tech columnist John Naughton explains the importance of Zuboff's work and asks the author 10 key questions

e're living through the most profound transformation in our information environment since Johannes Gutenberg's invention of printing in circa 1439. And the problem with living through a revolution is that it's impossible to take the long view of what's happening. Hindsight is the only exact science in this business, and in that long run we're all dead. Printing shaped and delice over the peyt four centuries, but nobody in Mainz 14 hour known that his technology



ours

ours

By Allison Sale

Palanc

11 hours

NARRATIVE POLICE Welcome

The long read

How big tech is dragging us towards the next financial crash

▲ Illustration: Guardian Design/Christophe Gowans/Getty

Like the big banks, big tech uses its lobbying muscle to avoid regulation, and thinks it should play by different rules. And like the banks, it could be about to wreak financial havoc on us all. By Rana Foroohar

Fri 8 Nov 2019 06.00 GMT





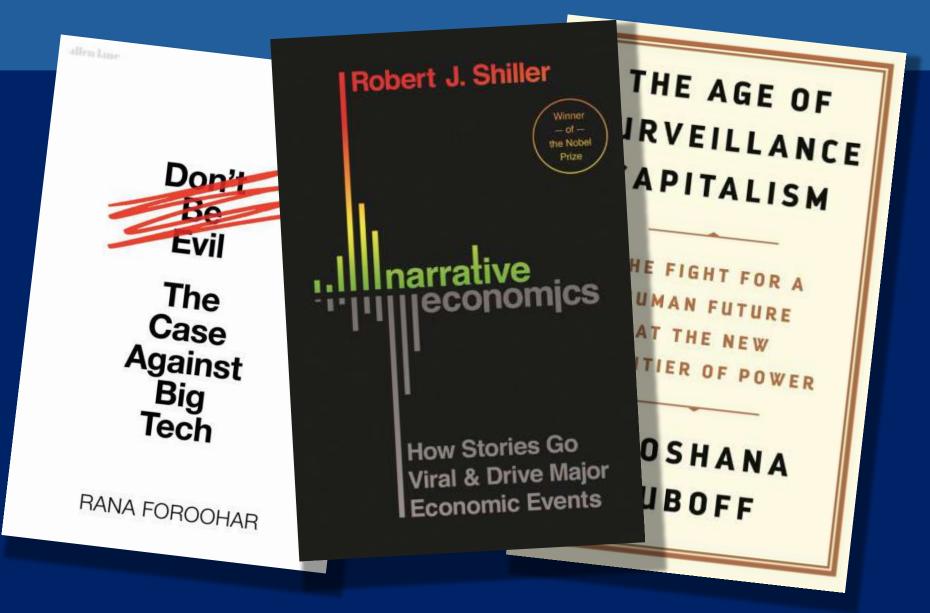


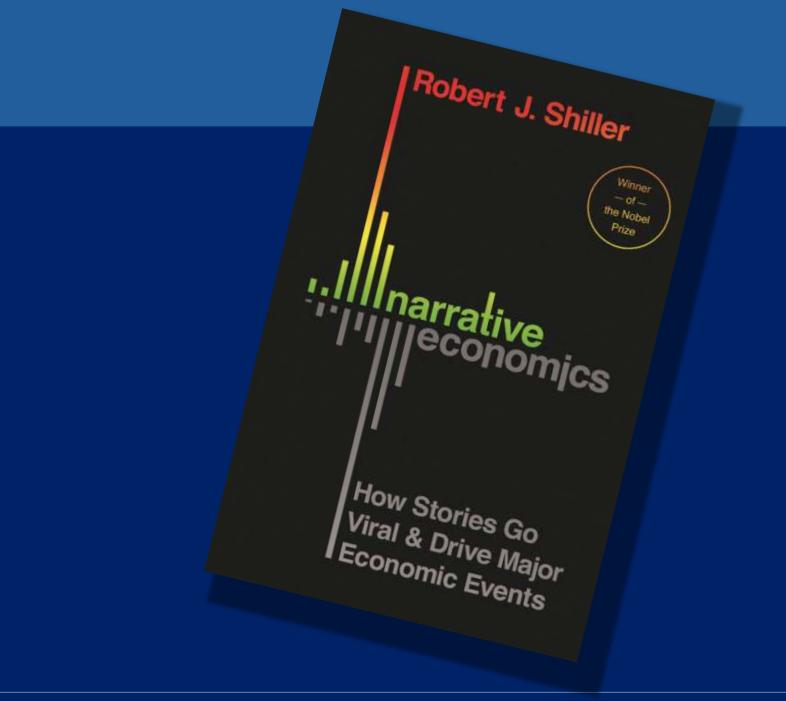


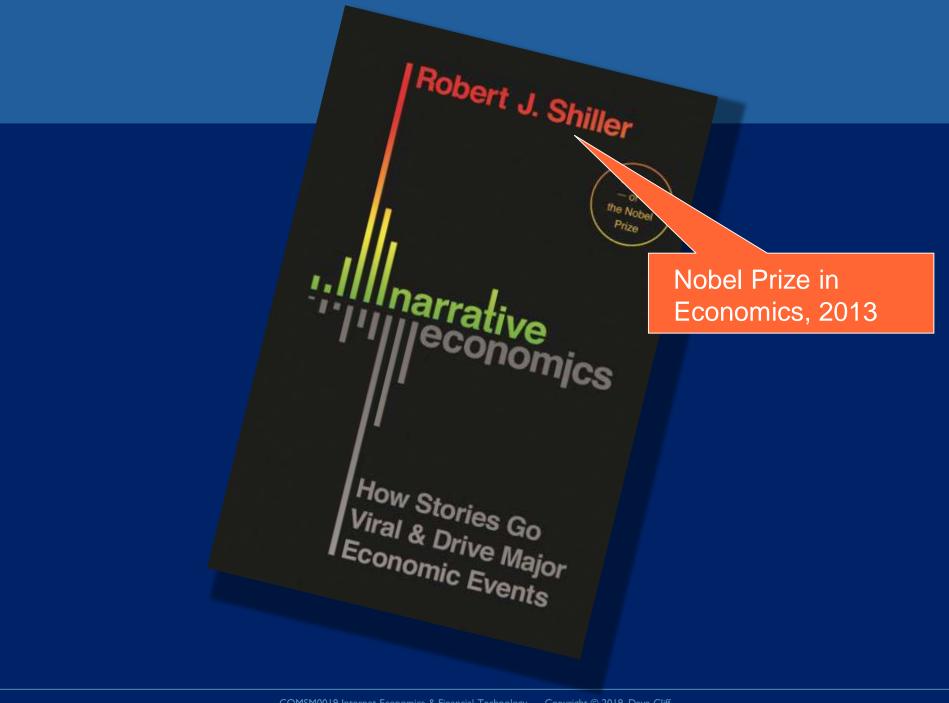
n every major economic downturn in US history, the 'villains' have been the 'heroes' during the preceding boom," said the late, great management guru Peter Drucker. I cannot help but wonder if that might be the case over the next few years, as the United States (and possibly the world) heads toward its next big

cloudown Downturns historically some about once avery decade, and it has

On to the books







Shiller in his own words



















Robert Shiller on Narrative Economics

YaleCourses • 25K views • 2 months ago

In his new book, Narrative Economics: How Stories Go Viral and Drive Major Economic Events, Professor Robert Shiller explores ...



Robert J. Shiller: Narrative Economics Revisited

Columbia Business School • 5.2K views • 1 year ago

Robert J. Shiller, Nobel Laureste and Sterling Professor of Economics, Yale University presents "Narrative Economics Revisited" ...



Robert Shiller | Narrative Economics

Tony Blair Institute for Global Change • 3.1K views • 2 months ago

Nobel laureate and Yale Economics Professor, Robert S How stories go viral and ...

The Original Lecture (1h30m16s)



https://www.youtube.com/watch?v=yLsG4R8FFOc :30:16

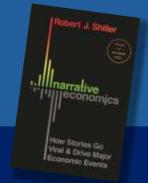
Robert J. Shiller, "Narrative Economics": Director's Lecture, January 26, 2017

Neubauer Collegium • 15K views • 2 years ago

Robert J. Shiller's Director's Lecture, "Narrative Economics," addressed narrative psychology in economics and its relation to ...

CC

Shiller in his own words



8m02s: https://www.youtube.com/watch?v=yLsG4R8FFOc



The 58-page 2017 paper that started this



https://cowles.yale.edu/sites/default/files/files/pub/d20/d2069.pdf

NARRATIVE ECONOMICS

By

Robert J. Shiller

January 2017

COWLES FOUNDATION DISCUSSION PAPER NO. 2069



COWLES FOUNDATION FOR RESEARCH IN ECONOMICS
YALE UNIVERSITY
Box 208281
New Haven, Connecticut 06520-8281

http://cowles.yale.edu/

Book Review in the Financial Times



https://www.ft.com/content/5ba0adf6-ec3c-11e9-85f4-d00e5018f061



While many economists are still busy creating mathematical formulas to decode and contextualise our supposedly "rational" behaviour, people's actions

Book Review in Nature

https://www.nature.com/articles/d41586-019-03081-7

Books&arts



A technician monitors cryptocurrency-mining rigs at a Bitfarms facility in Saint-Hyacinthe, Canada.

The storied state of economics

Robert Shiller's study probes how social behaviour supersedes statistics in determining the fate of economies. By Tim Jackson

conomists are tellers of stories and makers of poems," wrote observation for a profession that prides itself on hard-nosed, quantitative analysis and strives continually for predictive power. The Nobel-prizewinning economist Robert Shiller goes even further,

Stories are more powerful than statistics, he claims. The irrationality inherent in financial exuberance (and despair) defies the neat territory of numbers and demands a deeper excursion into the decidedly unruly world of narratives. That is the declared aim of his book Narrative Economics.

It's a compelling hypothesis. Since the 1960s, we have known that science is socially con-

of risk - in which people are drawn inexorably towards stories of disaster or triumph (rather the economic historian Deidre than statistics or probabilities) as the lodestone McCloskey in 1990. It's a curious for the perceptions of risk that guide their everyday decisions. Around the same time, philanthropist George Soros adapted the concept of reflexivity to explain how investors' perceptions affect the social environment, which, in turn, informs their perceptions.

This feedback loop allows speculative



Narrative Economics Hoer Stories Go Viral and Drive Major **Economic Events** Hobert J. Shiller Princeton University

bubbles to arise with alarming speed, and then collapse again. The phenomenon reached its apotheosis in a now infamous remark from Citibank chief executive Chuck Prince that "when the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you've got to get up and dance." His prophetic words came just months before the 2007-08 financial crisis struck.

Shiller elevates these insights into a fullblown exploration of the multiple ways in which narratives influence economic behaviour. Much as he tracked the rise and fall of asset prices in his Nobel-prizewinning work, he now charts the flux of narrative memes using Google's Ngram Viewer -- which allows users to track the frequency of words and phrases in text over time - and Proquest's database of

Narrative Economics: Summary

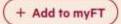


- Shiller proposes that the human brain is highly tuned toward <u>narratives</u> (i.e., stories) to justify actions, even fundamental economic actions such as spending or investing, and compelling narratives can affect people's economic activity, i.e. causing them to change their spending or investing activity.
- Compelling narratives can "go viral" and contagiously spread throughout a
 population in a manner that is comparable to the spread of an epidemic, and this
 then affects the economic activity in that population. Shiller argues that the
 popularity of Bitcoin, which has no intrinsic economic value, is primarily driven by
 narratives about the cryptocurrency, and yet at peak Bitcoin added \$300 billion
 of "value" to the global economy roughly the 2019 GDP of mid-ranked
 countries such as Egypt, Pakistan, Finland, or the Czech Republic.
- Shiller argues for the development of better <u>quantitative methods</u> to track and understand the impact of narratives on the economy. In particular he advocates for the use of <u>statistical analysis</u> and <u>semantic search</u> of <u>texts</u>, where the texts could be spoken or written <u>responses to questions</u> posed by economists, or unsolicited <u>posts from social media</u>.

THE AGE OF SURVEILLANCE CAPITALISM

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SHOSHANA ZUBOFF



Business Book of the Year Award 2019 – the shortlist

Data privacy and bias against women are among the themes explored in this year's annual prize



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Zuboff in her own words



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shoshana zuboff surveillance capitalism



RONTIER OF POWI

THE AGE OF SURVEILLANCE

CAPITALISM

THE FIGHT FOR A HUMAN FUTURE

SHOSHANA ZUBOFF



Shoshana Zuboff on 'surveillance capitalism' and how tech companies are always watching us

Channel 4 News ◎ 32K views • 2 month((vo)

She's a Harvard professor and celebrated scholar who has been described as "the true prophet of information age.



Shoshana Zuboff: Surveillance capitalism and democracy

Alexander von Humboldt Institut für Internet und Gesellschaft • 544 views • 2 weeks ago.

The collection and analysis of data is of anging the $w_i y = x m$ miles operate. Are these changes so fundamental that they can be ...



What Is Surveillance Capitalism? | Shoshana Zuboff

The Lavin Agency Speakers Bureau • 4K views • 6 months ago

Learn more about Shoshana Zuboff: http://www.tha.avinagency.com/speakers/shoshana-zuboff In her book The Age of ...



Shoshana Zuboff: Surveillance Capitalism and Our Democracy

WGBHForum • 27K views • 9 months ag >

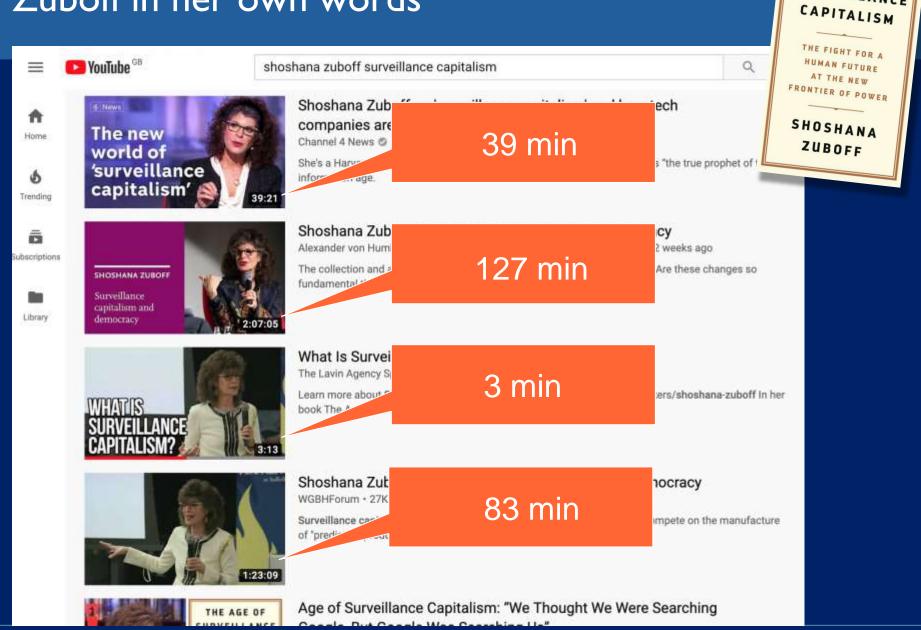
Surveillance capitalism is the foundation of a new economic order. Firms compete on the manufacture of "prediction products" ...



THE AGE OF

Age of Surveillance Capitalism: "We Thought We Were Searching

Zuboff in her own words

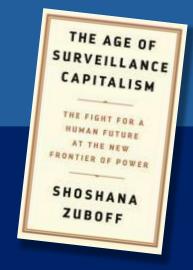


THE AGE OF SURVEILLANCE

Zuboff in her own words

22m17s: https://www.youtube.com/watch?v=XyQyZgqiokE&t=51s

... second part of a 2-part interview, but starts with recap of Part I

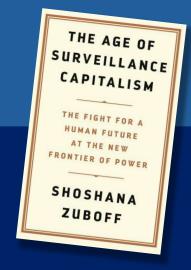




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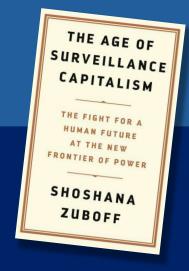




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This is Shoshana Zuboff

Interview + Review in The Observer, Jan 2019

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SHOSHANA
ZUBOFF

 https://www.theguardian.com/technology/2019/jan/20/shoshanazuboff-age-of-surveillance-capitalism-google-facebook



Interview in The Guardian, Oct 2019

 https://www.theguardian.com/books/2019/oct/04/shoshana-zuboffsurveillance-capitalism-assault-human-automomy-digital-privacy

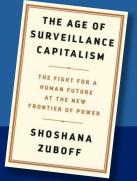


THE AGE OF SURVEILLANCE CAPITALISM

THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER

SHOSHANA ZUBOFF

Surveillance Capitalism: Summary



- Zuboff uses the phrase "Surveillance Capitalism" (SC) to refer to the process by which major global internet/tech companies such as Google and Facebook persuade their users to freely supply some of their private data in return for the convenience of being provided with services such as internet search, social networking, email, and messaging.
- Personal information that has been gathered by (or via) these companies has then been used as sources of data by others (companies and government agencies) to monitor and predict customer's behaviour, and also to determine ways that people's behaviour can be influenced or modified.
- Zuboff argues that this has had, or will soon have, very bad consequences for democracy and freedom. Zuboff sees the huge wealth built from customer data by the tech companies as evidence of the power of "surveillance capitalism", which she says should be dealt with or constrained by regulation.



The Case Against Big Tech

RANA FOROOHAR

Foroohar in her own words

퍞 FILTER



The Case Against Big Tech

Q

RANA FOROOHAR



rana foroohar dont be evil

19:33



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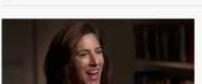
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Don't Be Evil. Rana Foroohar on Big Tech.

New Economic Thinking • 2.4K views • 2 weeks ago

INET President Rob Johnson talks with the Financial Times' Rana Foroohar about her new book. Don't Be Evil: How Big Tech ...

CC



"Don't Be Evil" author on the power of Big Tech

CBS News @ 2.1K views - 3 weeks ago

Google was founded with the corporate motto: "Don't be evil." Now that phrase serves as the title of a new book that explores how ...



Don't be evil: What went wrong with big tech and how can we fix it?

Resolution Foundation • 74 views • Streamed 1 week ago

Book launch for 'Don't Be Evil' by Rana Foroohar ~ When Google adopted their "Don't be evil" motto in the late 1990s, many ...



The case against big tech firms - Rana Foroohar

Channel 4 News @ 4.5K views • 1 week ago

Rana Foroohar is a business columnist for the Financial Times, analyst for CNN and author. (Subscribe: ...

Foroohar in her own words



19m32s: https://www.youtube.com/watch?v=MA8hHse]6ko



Foroohar in her own words



RANA FOROOHAR

Big Tech

7m01s: https://www.youtube.com/watch?v=MKyG1TVfsHw



"Long Read" article in The Guardian



 https://www.theguardian.com/business/2019/nov/08/how-big-tech-is-dragging-ustowards-the-next-financial-crash



Book review in The Observer (Book of the Week)



 https://www.theguardian.com/books/2019/nov/03/dont-be-evil-review-ranaforoohar-tech-giants-too-big-to-fail



Don't Be Evil review - how the tech giants have become too big to fail

Rana Foroohar's masterly critique of the internet pioneers who now dominate our world



▲ Google co-founder Larry Page, centre, at the company's flotation on the Nasdaq stock exchange in 2004. Photograph: Getty Images:



on't be evil" was the mantra of the co-founders of Google, Sergey Brin and Larry Page, the graduate students who, in the late 1990s, had invented a groundbreaking way of

Don't Be Evil: Summary

- Faroohar argues that tech giants such as Facebook, Apple, Amazon, Netflix, & Google (FAANG) have grown so large in terms of market dominance and financial reserves that they are similar to major investment banks prior to the 2007-08 global financial crisis: are they also "too big to fail"?
- Don't
 Be
 Evil
 The
 Case
 Against
 Big
 Tech
- Big tech companies spend a lot on political lobbying, shaping/avoiding regulation.
- E.g. USA's December 2017 Tax Cuts & Jobs Act cut Corp. Tax from 35% to 21% (so tax bills went down 40%) freed up cash which FAANG (& many others) used for share buybacks AAPL spent c.\$100bn on buybacks: increases shareprice and dividends: good for investors; does nothing for real economy or wealth inequality
- Foroohar argues that the winner-take all dominance of FAANG crushes innovation: who could possibly compete? Media & telecom companies going massively into debt to try to stay competitive wrt digital/sreaming media etc, but past decade had very low interest rates: what happens to those companies when rates rise?
- Big profitable technology firms with large cash reserves can borrow money at very low interest rates because their bonds (debt certificates) are "high grade" investments.
- High-grade tech firms have been borrowing money at low rates and using it to buy higher-yield debt of other, lower-grade, firms -- to get a better rate of return: i.e, acting like banks.
- Tech firms play a major systemic role in financial stability: if they sell or downgrade their holdings, entire markets or national economies could topple.

Don't B

See www.googletransparencyproject.org

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- Big tech companies spend a lot on political lobbying, shaping/avoiding regulation.
- E.g. USA's December 2017 Tax Cuts & Jobs Act cut Corp. Tax from 35% to 21% (so tax bills went down 40%) freed up cash which FAANG (& many others) used for share buybacks - AAPL spent c.\$100bn on buybacks: increases shareprice and dividends: good for investors; does nothing for real economy or wealth inequality
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Don't B

- Faroohar argues Google (FAAN) financial reserv 2007-08 globa
- Big tech comp
- E.g. USA's D bills went do AAPL spe does nothir
- Foroohar could pos competit what har
- Big prof interes:
- High-g yield
- Tech firms play a may holdings, entire markets or nauc

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voiding regulation.

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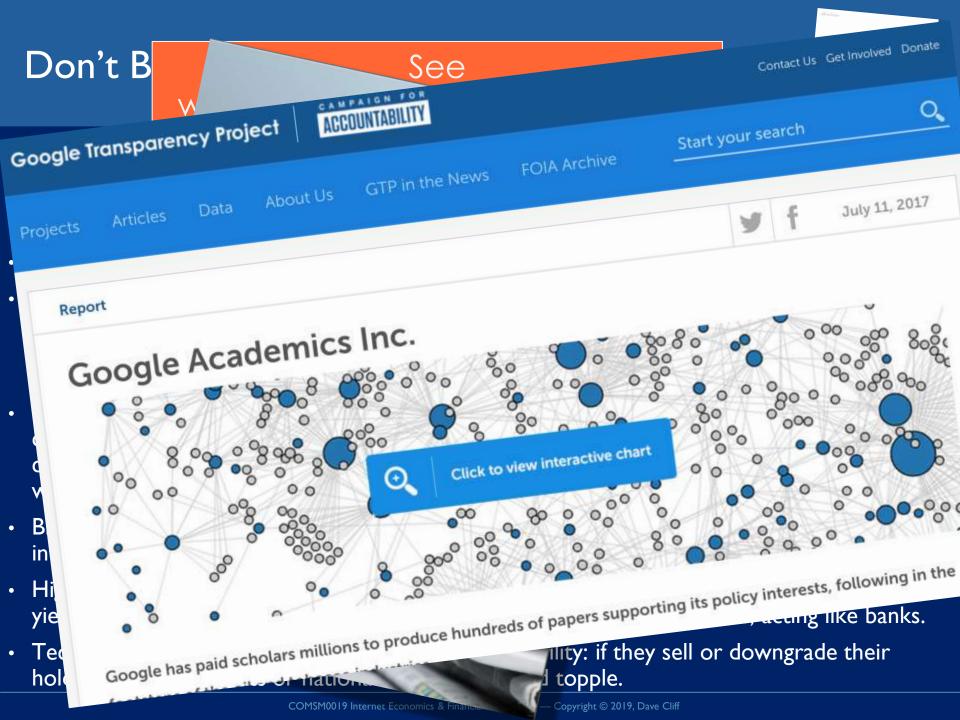
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ility: if they sell or downgrade their topple.

Google's Media Takeover

ogle Transparency Project

GAMPAIGN FOR



Don't Be Evil: Summary



- Faroohar identifies four major similarities between pre-crash big banks and current big tech firms:
- I. Corporate Mythology: "What's good for us is good for the economy" (because we're so big, too big to fail, and our benefits outweigh our costs) really?
- Opacity: internal operations and processes are obscured from scrutiny and poorly understood by customers and even by managers within the companies: compares banks' structured sub-prime credit derivatives to big-tech algorithmic manipulation of user data: risks and illicit uses are hidden; notes that advertisers increasingly just have to pay whatever Facebook or Google charges them.
- 3. Complexity: mega-corporations can be difficult to keep in full control e.g. Facebook allowed AAPL & AMZN & MSFT to access sensitive user data, even when it was claiming to be protecting privacy one unit within FB had agreed the data-sharing deal to increase traffic, grow the FB network. AAPL claimed that it did not even know it was in such a deal with FB.
- 4. Size: winner-take-all outcomes mean successful pipeline/platform companies can exploit customers: "surge" pricing (a la Uber) in any market encourages rent-seeking (i.e. increase profit without increasing productivity more money without more value).

Current Thinking: Summary

If you don't have time to read/listen to the whole of each of these three books, then do read the reviews/interviews to understand what these thinkers are saying.

These arguments are important, but your opinion of these arguments is what really matters: what do you think?

Eventually this stuff will find its way into textbooks, but textbooks are always written later.

What happens in this unit?

```
L01:The Big Picture (DC)
          L02:Who wants to be a Billionaire? (DC)
L03, L04, L05, L06: Economics of the Internet I, II, III, & IV (IC)
      L07, L08: Markets & Economic Agents I & II (DC)
            L09, L10: FinTech/TechFin I & II (|C)
          LII Markets & Economic Agents III (DC)
               L12: Empirical Methods (DC)
             L13: Derivatives and Betting (DC)
                L14: Gaming Economics (DC)
                     EXPLORE WEEK
                L15: Sentiment Analysis (IC)
                L16: Crowd Economics (JC)
   L17, L18: Blockchain & Cryptocurrencies I & II (DC, JC)
               119. Malware Economics (DC)
                L20: Current Thinking (DC)
                     REVISION WEEK
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What happens in this unit?

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Inlitha Rig Pictura (DC)
         L02:Who wants to be a Billionaire? (DC)
L03, L04, L05, L06: Economics of the Internet I, II, III, & IV (JC)
      L07, L08: Markets & Economic Agents I & II (DC)
            L09, L10: FinTech/TechFin 1 & II (|C)
          LII Markets & Economic Agents III (DC)
               L12: Empirical Methods (DC)
             L13: Derivatives and Betting (DC)
                L14: Gaming Economics (DC)
                     EXPLORE WEEK
                L15: Sentiment Analysis (IC)
                L16: Crowd Economics (JC)
   L17, L18: Blockchain & Cryptocurrencies I & II (DC, JC)
               L19: Malware Economics (DC)
                L20: Current Thinking (DC)
                     REVISION WEEK
```

The End