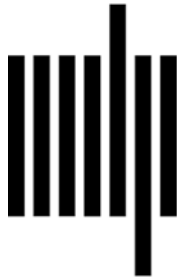

The Next IT:

Innovation Transformation & The Technologies of 'Virtuous Cycles'

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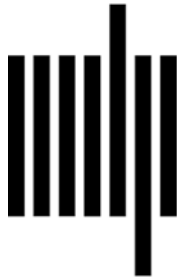

The Content of the Audience
is more important than
The Content of the Talk

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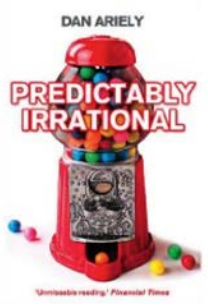
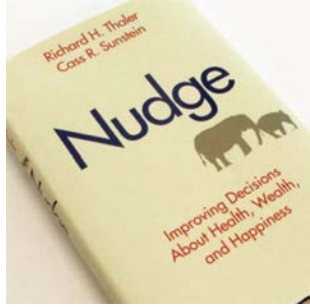
I explore…





'Behavioral Economics' of Enterprise Experimentation, Innovation & Network Effects

Via their ***Models, Prototypes & Simulations***

My 'Big Flip'

From

'How Can People Create More Valuable Innovation'?

To

'How Can Innovation Create More Valuable People'?

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'Digital Transformation'

'Digital Transformation' is….

Less About **'Delivering Better IT Services Better'**

Than **'Co-Creating New Business Capabilities'**

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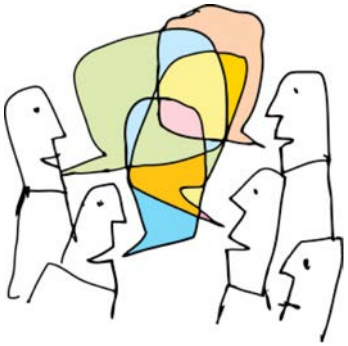
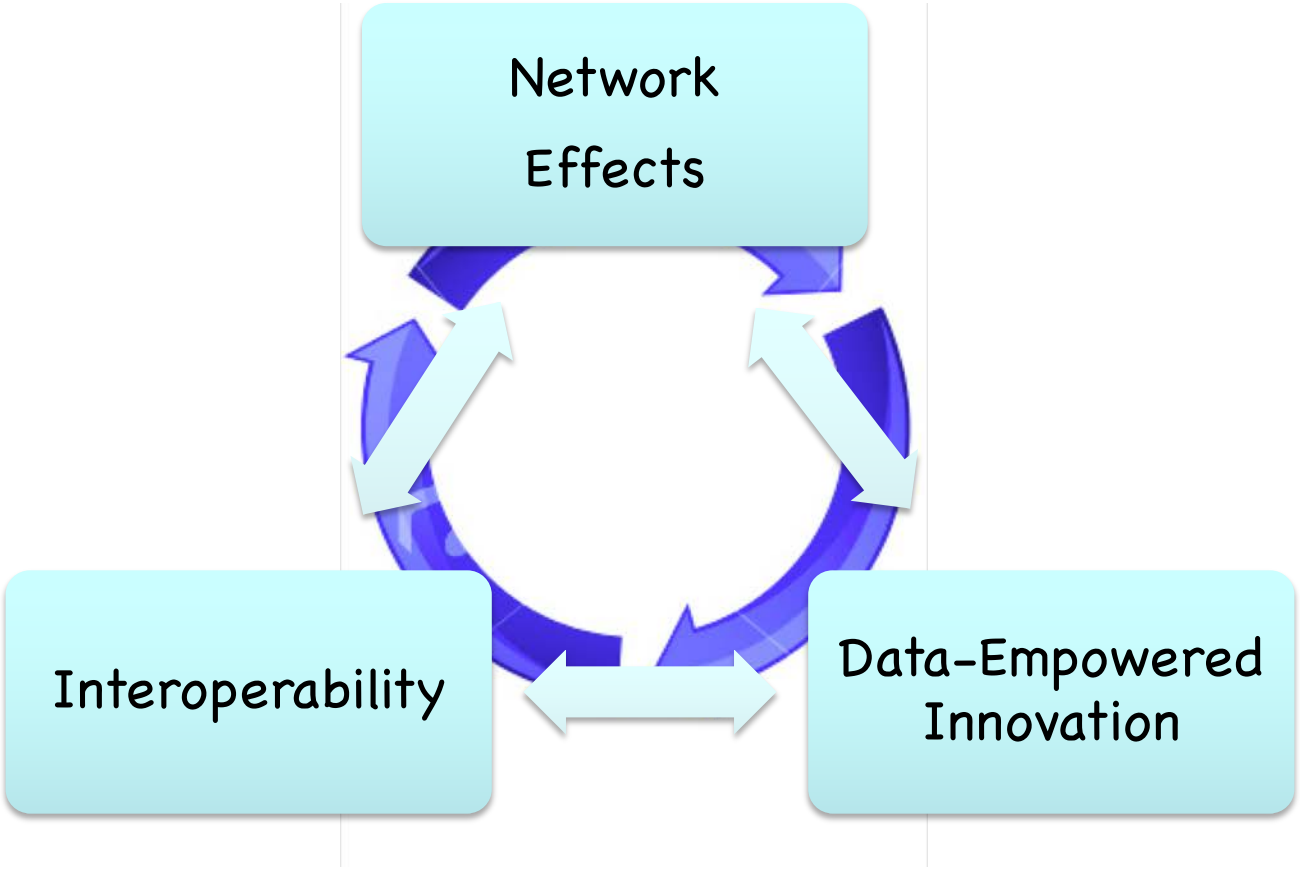
What Is This Brief Talk 'About'?

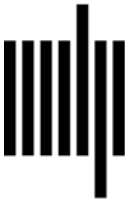


- Embracing/Enabling Data-Driven 'Virtuous Cycles
  - Innovation as a 'Human Capital' Investment'
    - Collaboratively Aligning 'APIs' with 'KPIs'

[What] Digital Architectures Must Enable



My Theme/Call To Action



Make Your Customers/Clients/Users More Valuable

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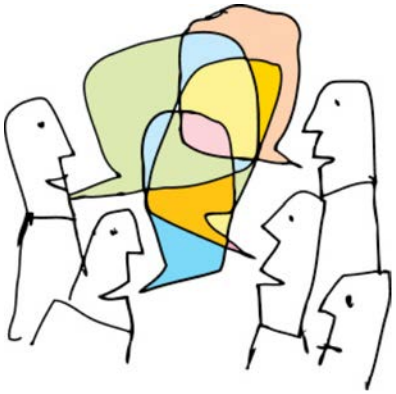
Key Insight….?



Innovation as 'Human Capital' Investment

Key Challenge….?

Massachusetts Institute of Technology

[How To] Successfully Invest in the 'Human Capital' of Your Customers & Clients

[& Partners]

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Obligatory Profound Quote

The Most Important Product of the Mines...

---Frederick Le Play
(1806 - 1882)

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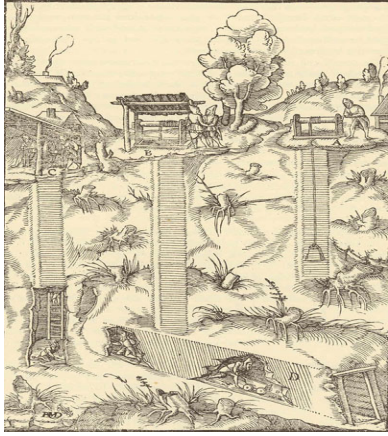

...is ***the Miner***.

---Frederick Le Play
(1806 - 1882)

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The Most Important Product of the Network is the ***Networker***.

---Michael Schrage

Winston Churchill

"We Shape Our Dwellings And Afterwards
Our Dwellings Shape Us"

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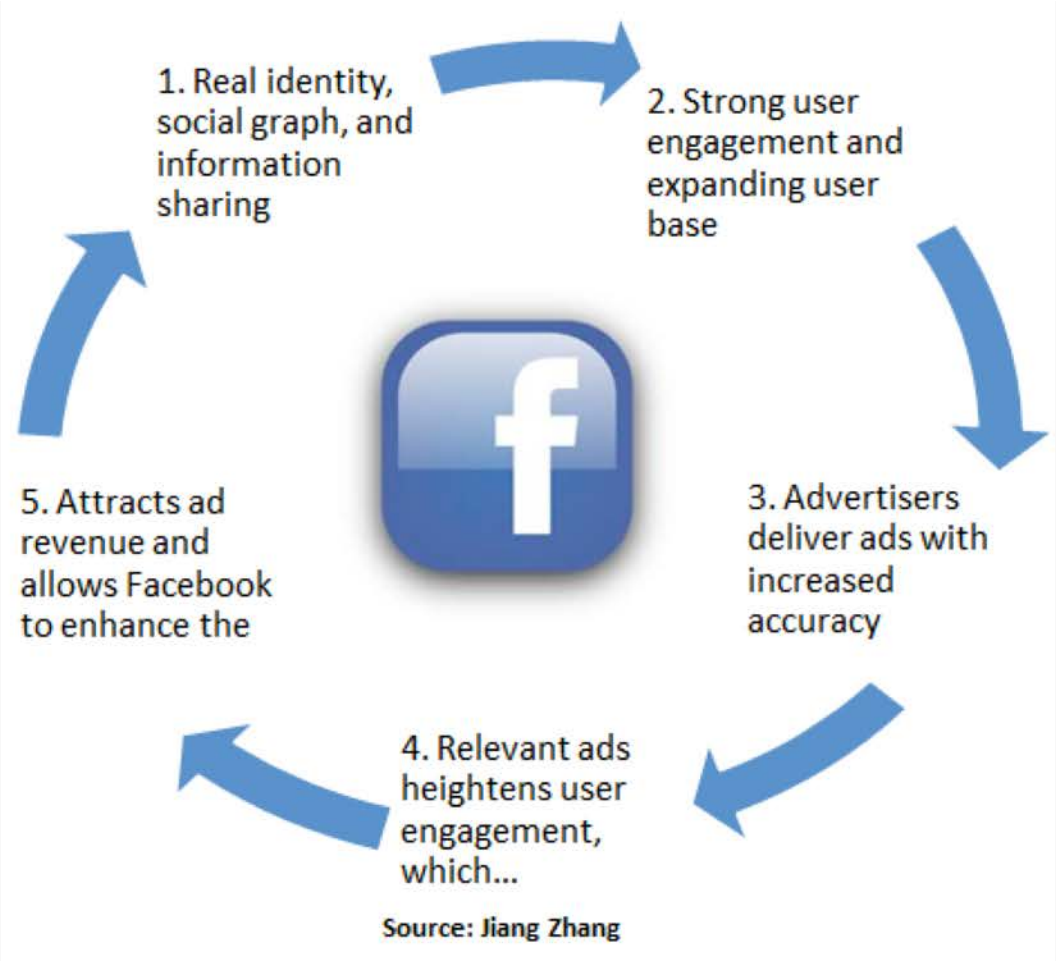
AI *Artefact Influence*

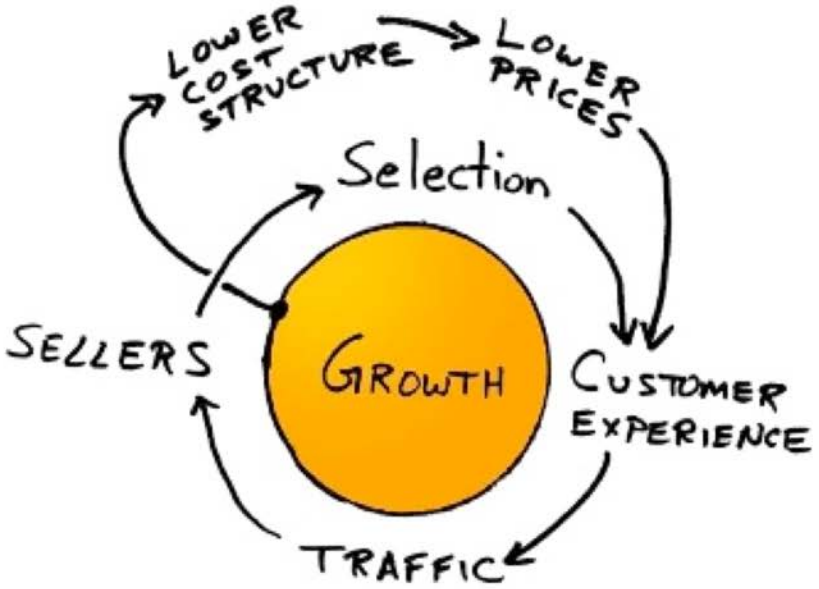
We Shape Our Innovations And Afterwards
Our Innovations Shape Us

Paradigmatic 'Virtuous Cycle'



Amazonian/Bezosian 'VCy' [2001]

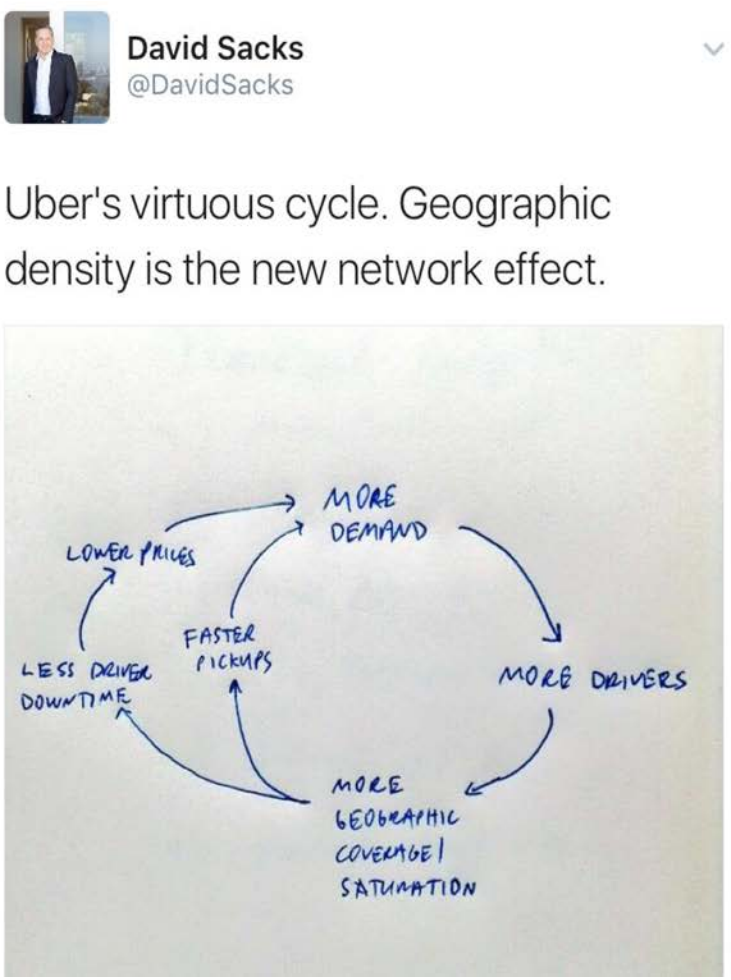
Our Virtuous Cycle of
VALUE, SELECTION & CONVENIENCE



Amazon Confidential

amazon
we pioneer

Think 'Cycle Vertueux'



Even in bed….

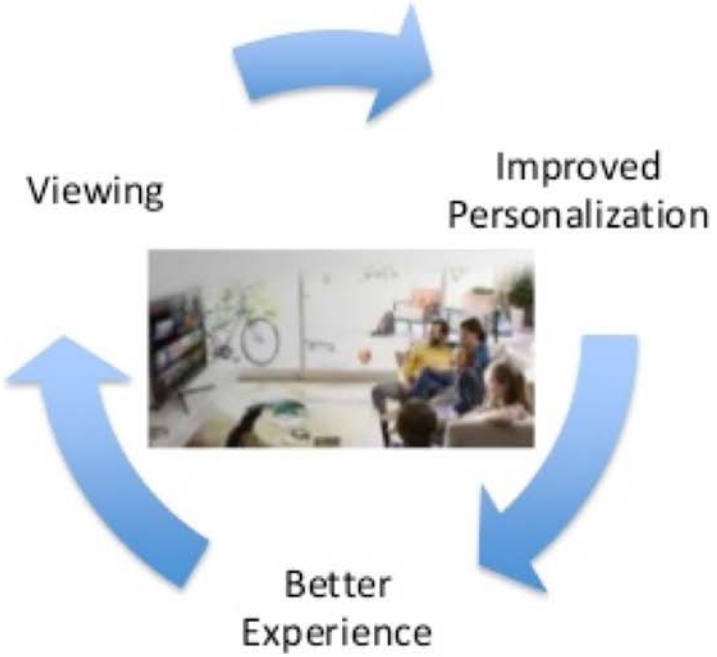
Who am I?

Philip Fisher-Ogden

- Director of Engineering @ Netflix
- Playback Services (making "click play" work)
- 6 years @ Netflix, from 10 servers to 10,000s

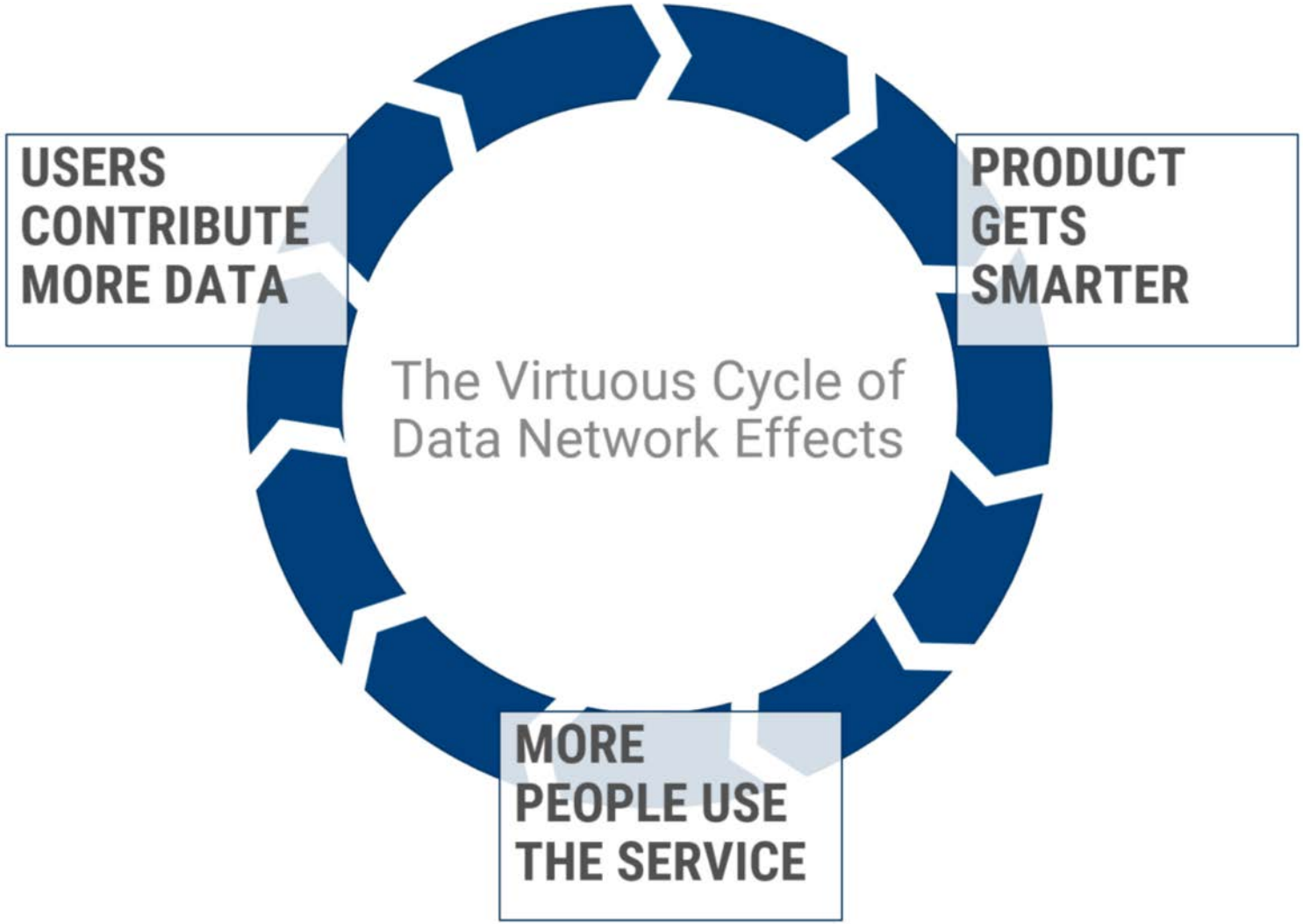
NETFLIX

Virtuous Cycle



NETFLIX

`Informatization Transformation'



Please Go Beyond 'Process'….

Agile
'Virtuous Cycles'

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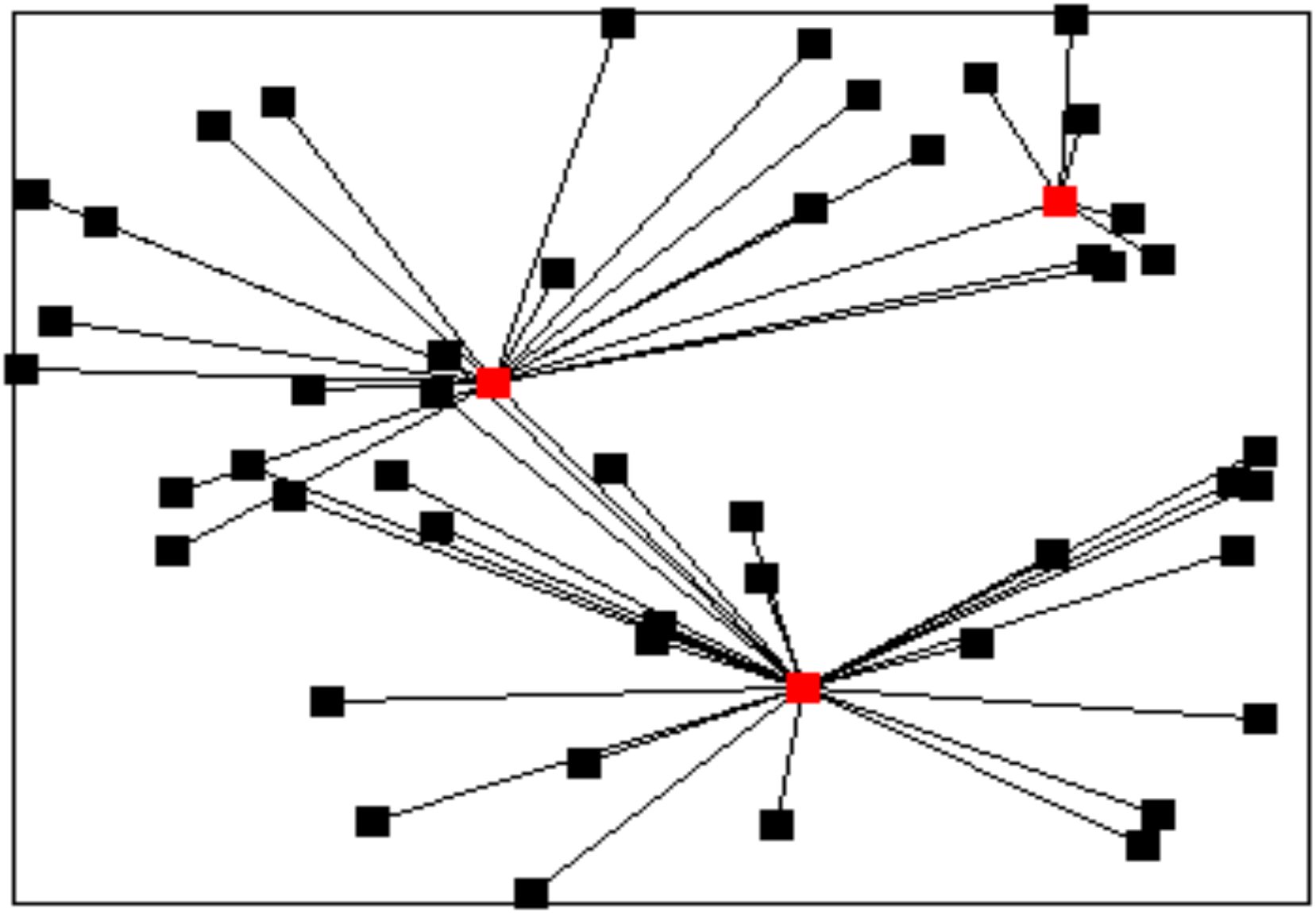
The Purpose of Platforms: Enable 'Virtuous Cycles' aka 'Network Effects'



'Network Effects' mean….

Marshall van Alstyne

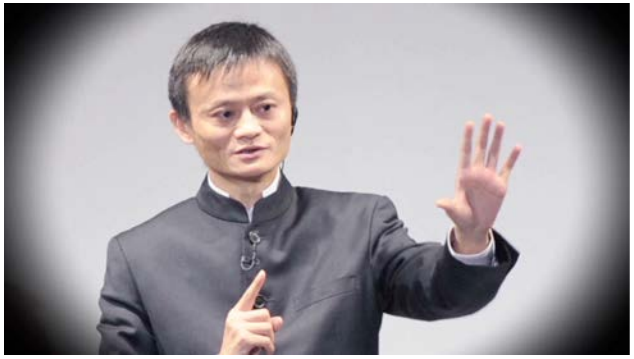
'Users Creating Value
For Other Users'

The 'Schrage NFX/Human Capital Extension'….

'Users Creating *More Valuable Users*
For Other Users'

Jack Ma Alibaba

June 2016



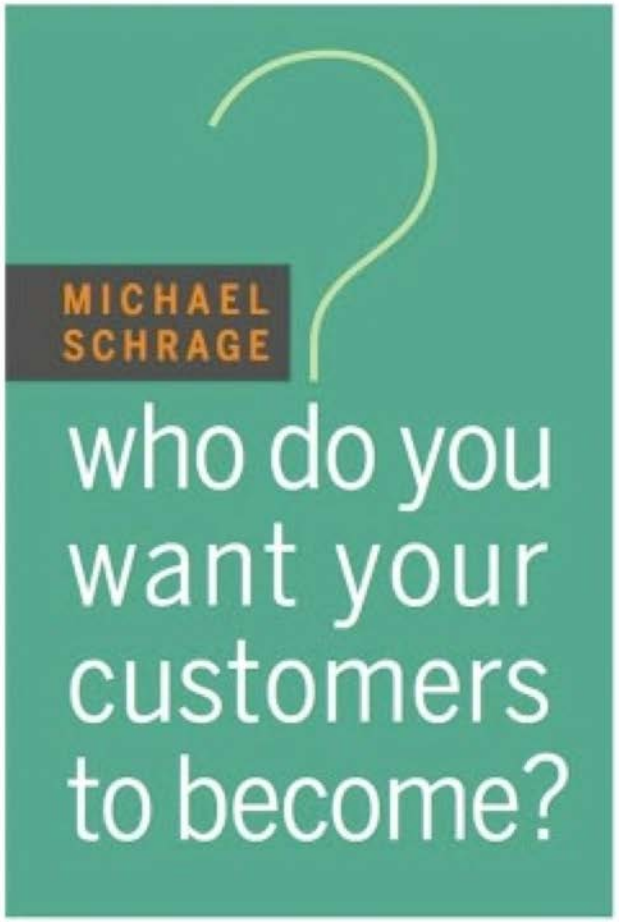
Six years ago we told the staff in a meeting that we were not a GMV company but a data company.

People have been asking me how I make money with data. Even today we still don't know the answer. However, we know people can't live without data in the near future. Walmart amasses data from its sales, and we do e-commerce and logistics for data.

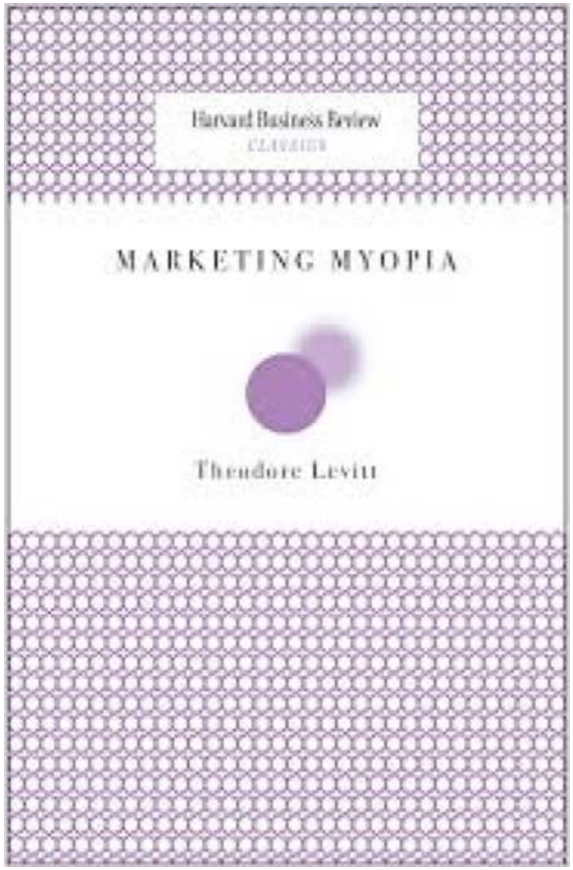
People keep asking me about GMV. But I am telling you now GMV is not our goal. ***We sell stuff to collect data****, which is different from Walmart….*

Data As An 'Asset'

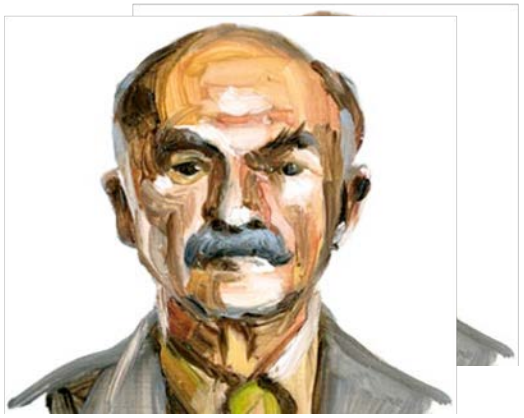
Lesson Learned



A Genuine Classic: The Most Popular HBR Reprint EVER!

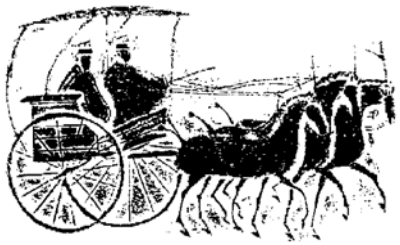


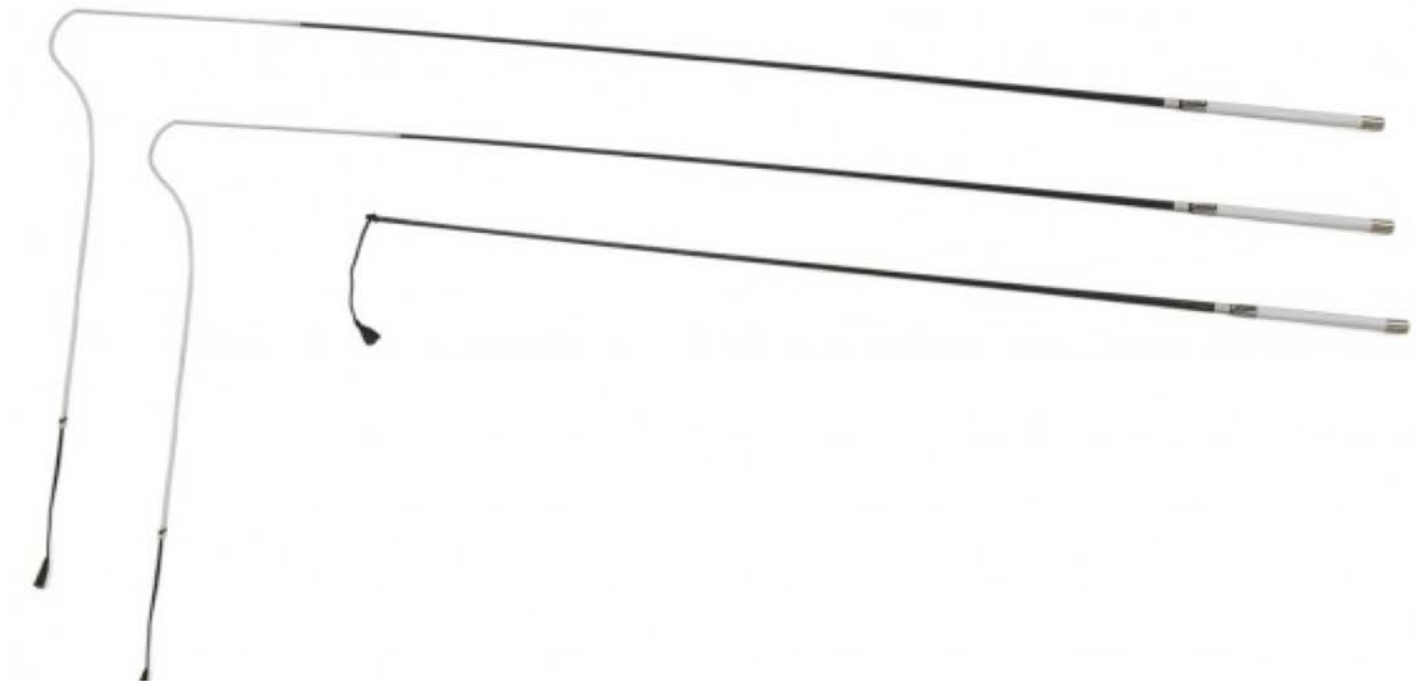
Levitt's Essential Marketing/Strategic Question



"What Business Are We In?"

What Business are 'Buggywhip Manufacturers' In?





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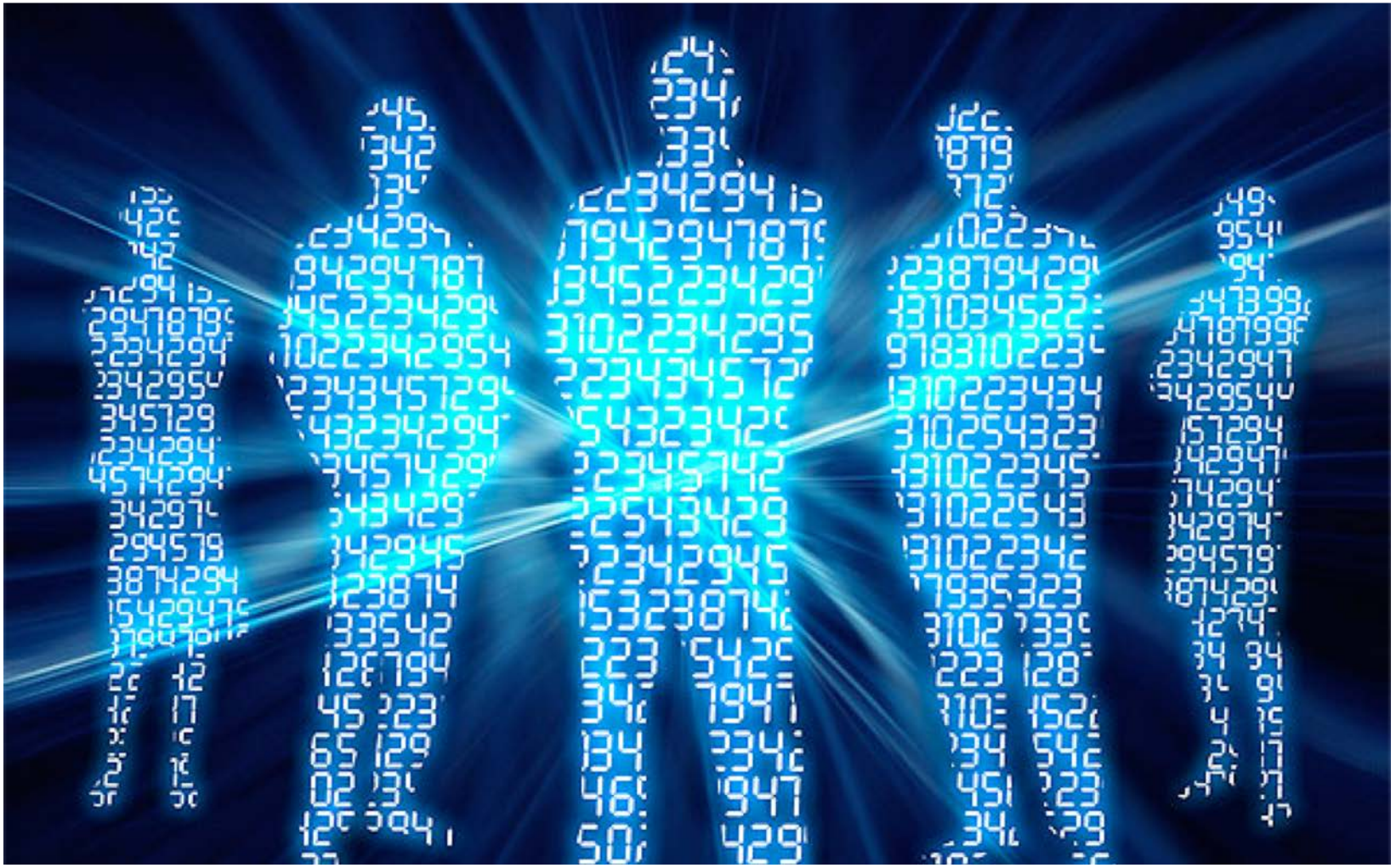
How Can [Digital] Innovation Help Us Better Define and Support '*The Business We're In*'?



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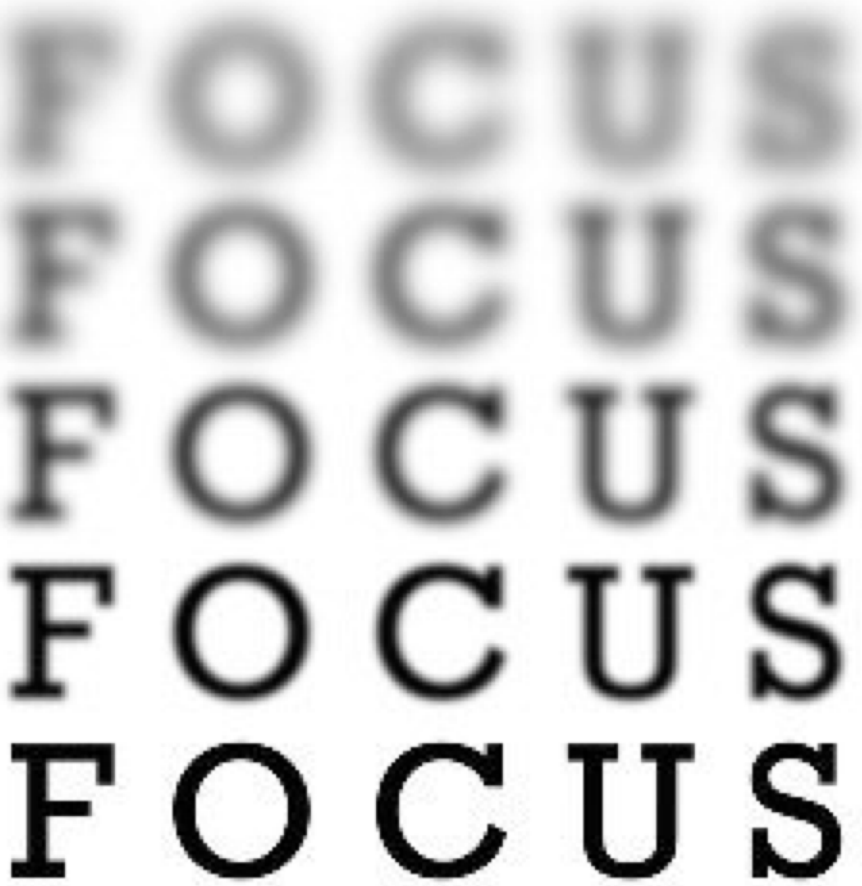

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What was Henry Ford's 'Real' Innovation?

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The Driver

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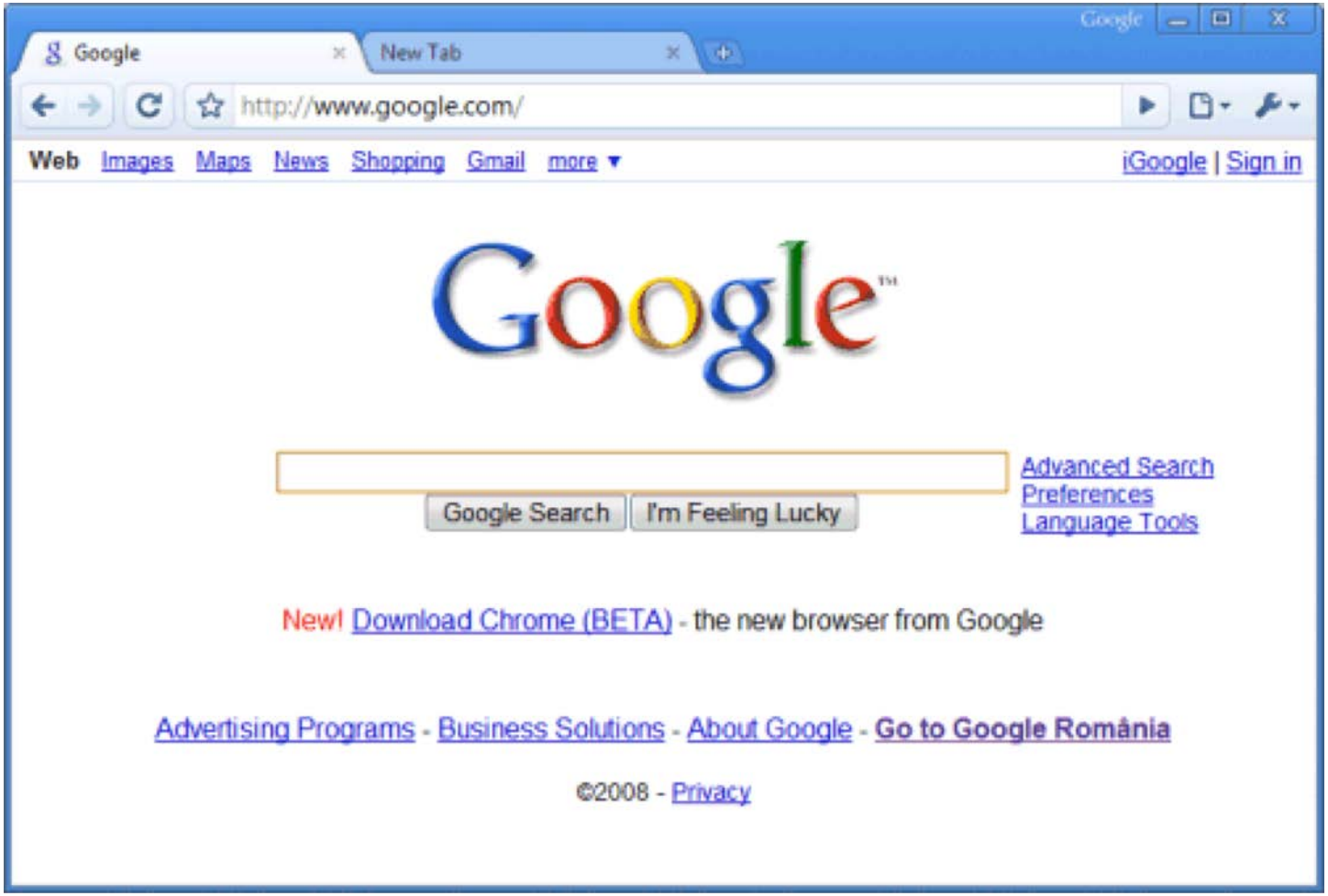
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Advanced Search
Preferences
Language Tools
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Google Created 'Page-Ranked' Searchers

What Does Disney Ask Its 'Customers' to Become?

Andy Mooney

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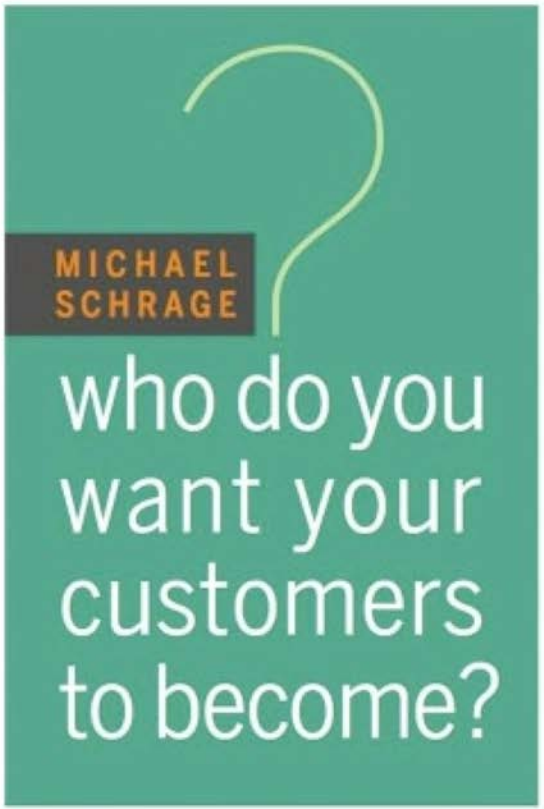
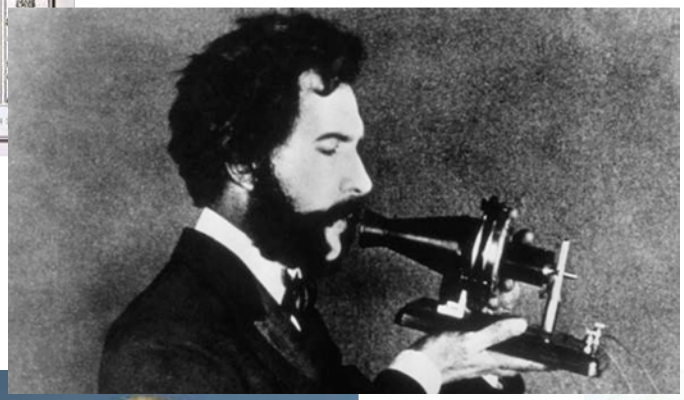
What Are Your Answers?



What Business Are They In?

Who Did They Want Their Customers to Become?



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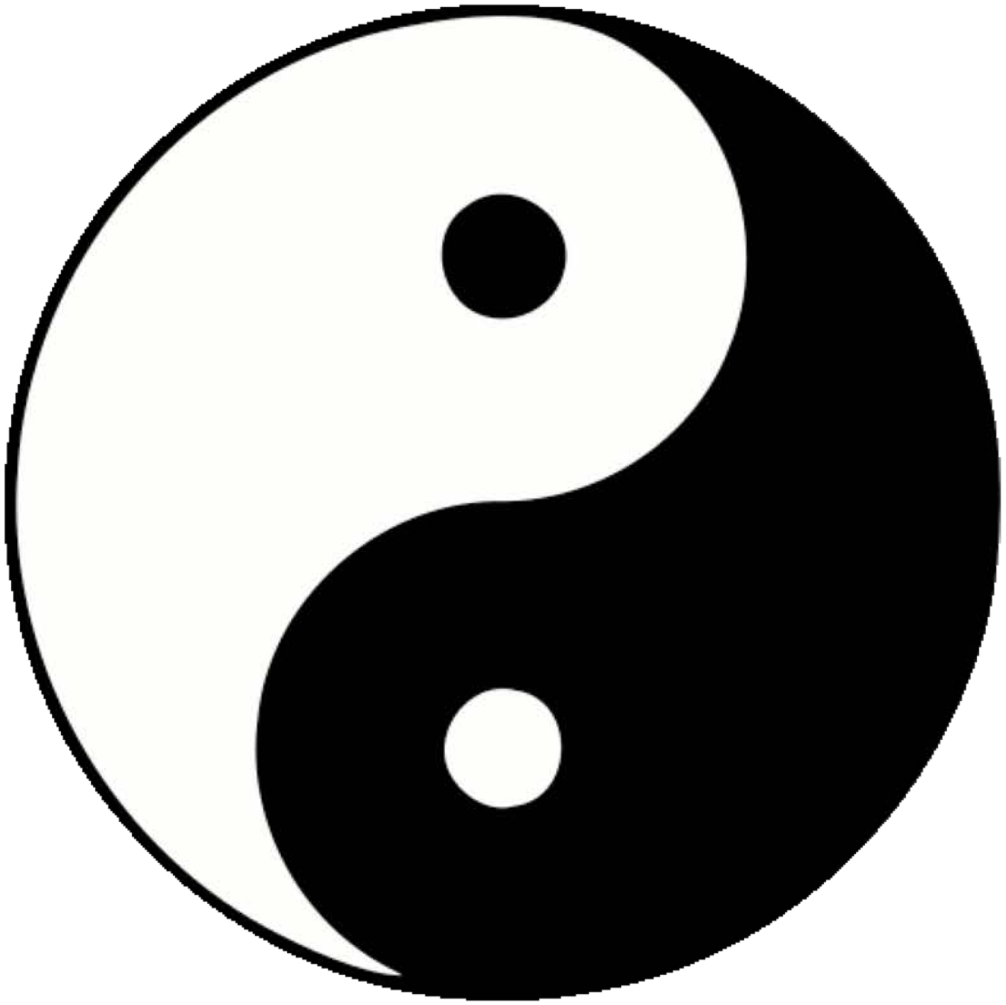
WBAWI?/WDYWYCTB?: Aligning The Answers



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Digital Tools, Techniques, Technologies….

Enabling 'Alignment'

Not Just 'Faster, Better, Cheaper' Products & Services:

They're How We Align…

'Innovations' are Investments
in the Human Capital, Capabilities,
Creativity and Competences of
Customers and Clients

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YOUR DOMINANT 'HUMAN CAPITAL' Challenge:

How Does/Should Our 'Innovation' Support/Shape Who We Want Our Customers/Users to Become?

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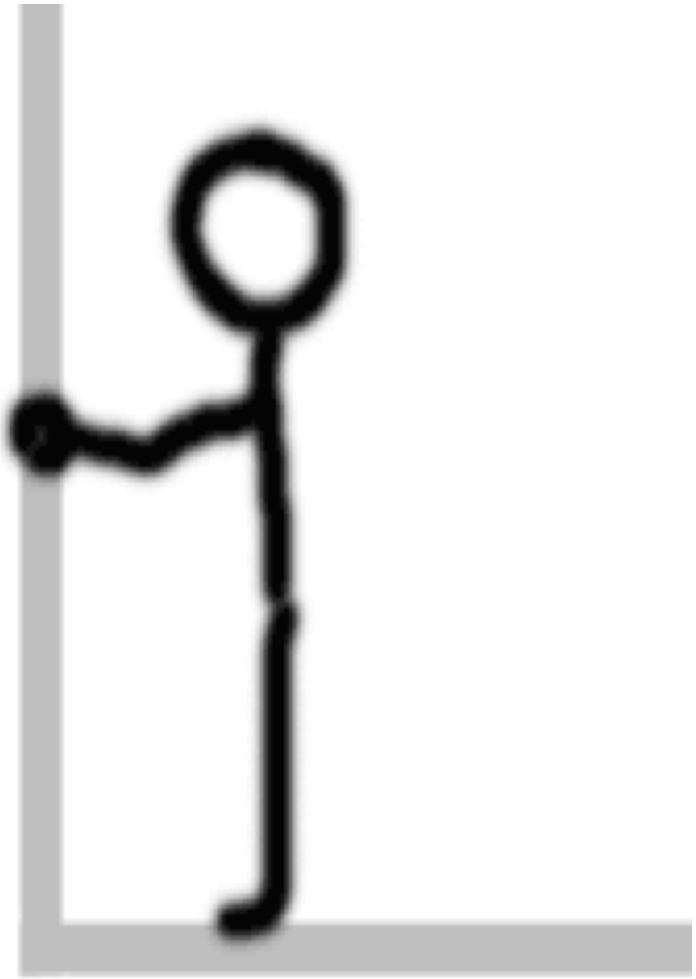
Umm, not really…..

Hello.
My Name is
CULTURE
strategy

The Greatest Innovation Frustrations Now Are Organizational & Cultural NOT Technical or Financial



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So What Do We Do?

…and how do we do it?

S

- Segmentation
  - Social-ization
- Skill-ification

Segmentation

'What's in Your Garage?

‘Cheap Discriminants’

Mass Produced 'CDs'

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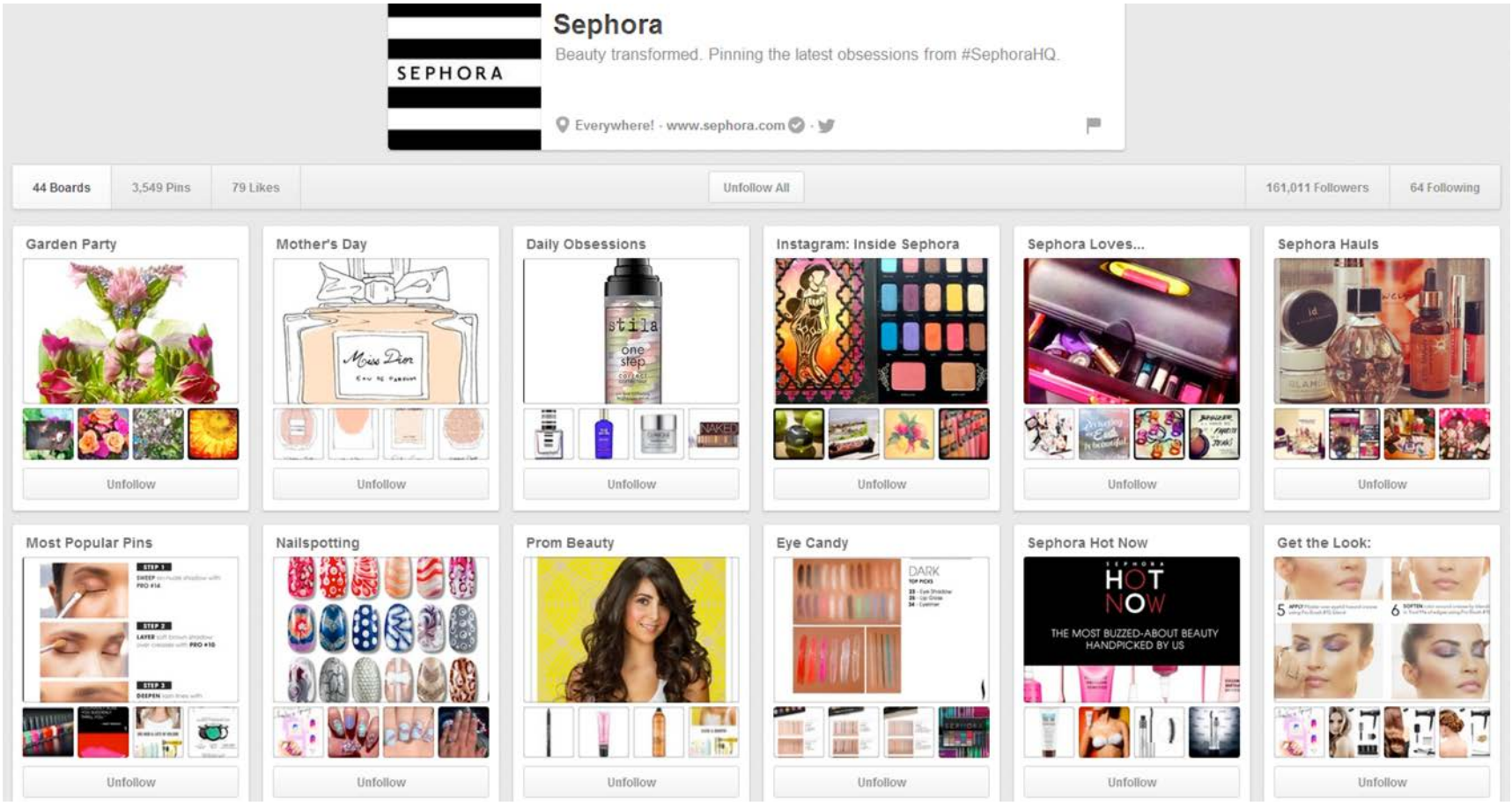
socialize

Socialization

Sephorha/LVMH



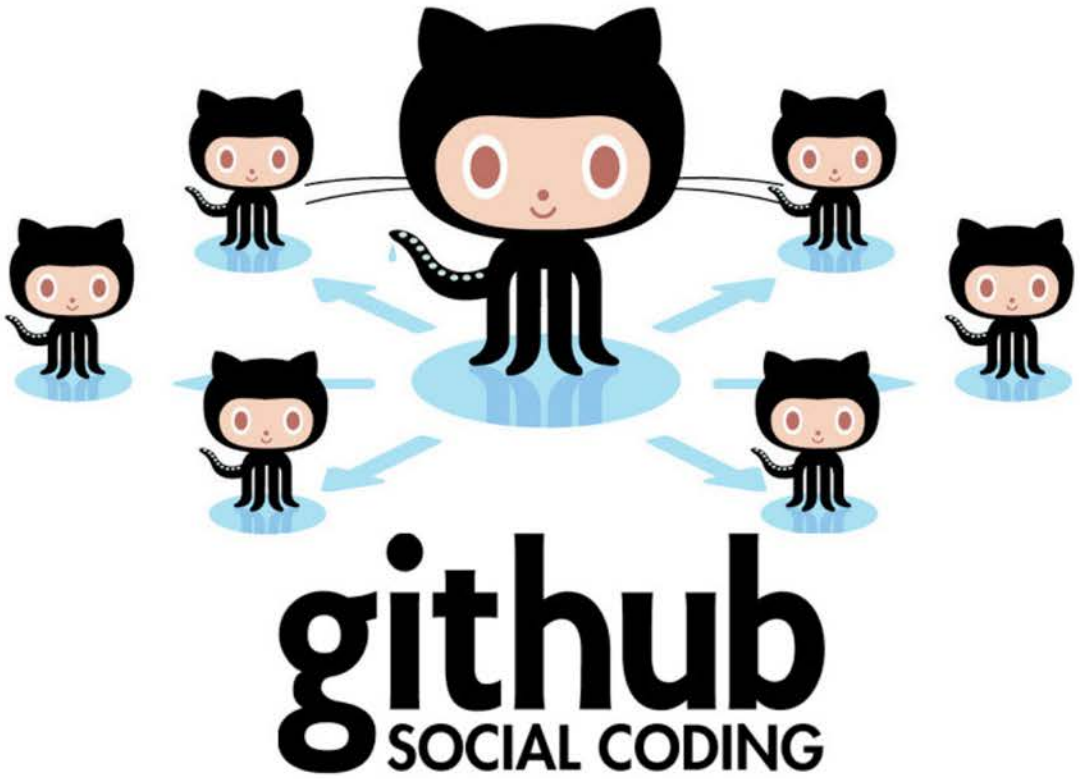
Julia Bornstein
Sephora CMO/CDO

[Now with StitchFix]

"When we create content for our site or emails, we think of additional ways that we can help the story along on Pinterest. We use web analytics to look at top pins, test quote layouts from brand founders, and try different product shots—we spend time learning about what works and experiment often to get it right."

Pinterest users spend 15 times more on Sephora products than Facebook followers

B2B [Microsoft/$7.5 billion]



Social Media Platforms Are 'Bait' For Network Effects

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The 'Virtuous Cycle' Ethos:

Understanding 'Network Effects'

"Google gets smarter every time someone makes a link on the web. Google gets smarter every time someone makes a search. It gets smarter every time someone clicks on an ad. And it immediately acts on that information to improve the experience for everyone else.

It's for this reason I argue that the real heart of Web 2.0 is harnessing collective intelligence."

Core Web 2.0 Design Principle

The service 'automatically' gets better
the more people use it

Recommendation Engines: ***Where Are Yours?***

facebook

YouTube

NickWebVideo.com

ebaY

amazon.com
and you're done.™

flickr

- *How do we make it easier for our customers/partners to* ***participate*** *&* ***create 'connections'*** ***they*** *see as valuable?*

- *How do we make it* ***easier for ourselves*** *to identify* ***value from customer participation, contributions and links****?*

- *How do we (re)organize ourselves to best* ***harvest*** *the value of this* ***'collective intelligence'*** *to boost our brands, profits and market share?*

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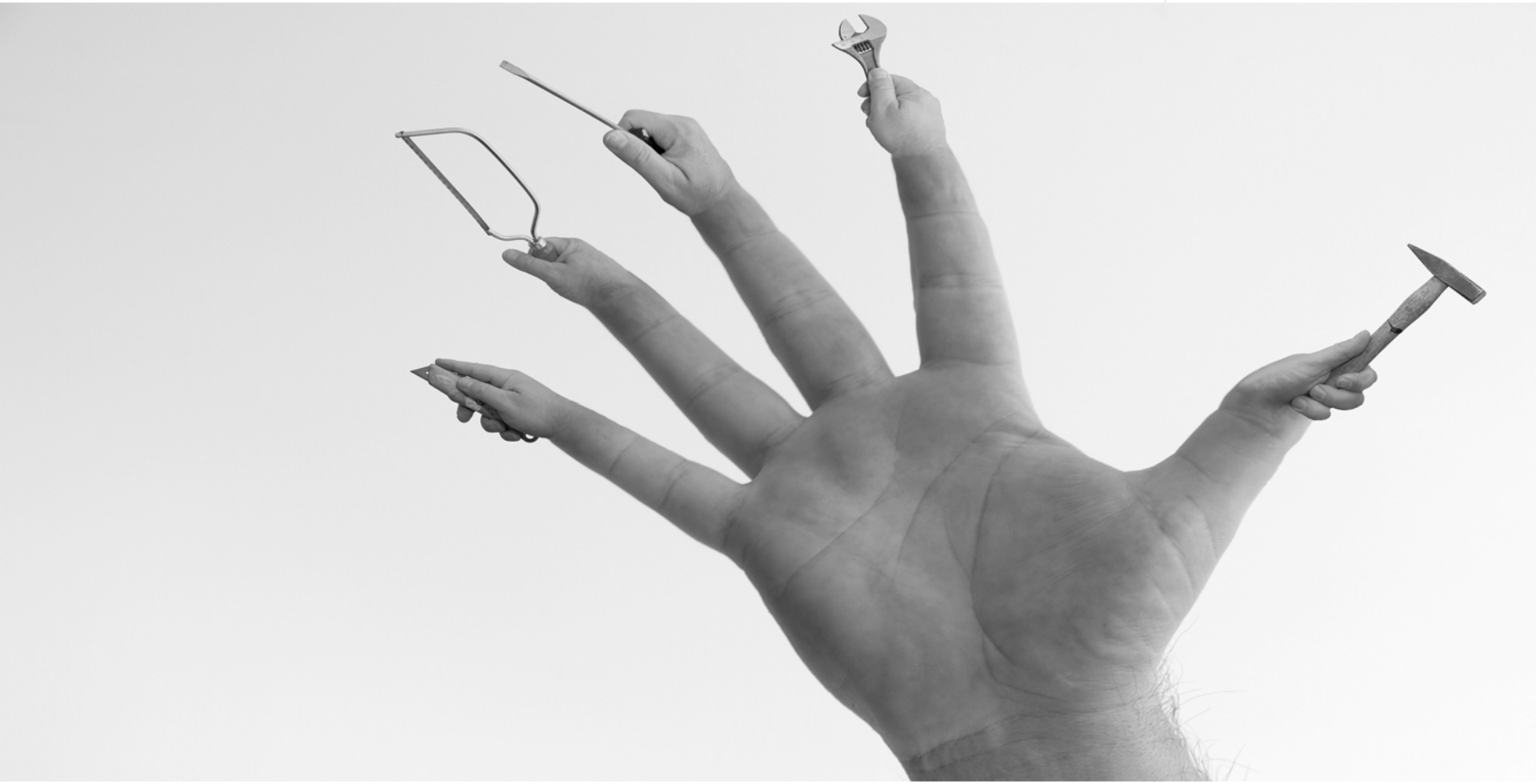
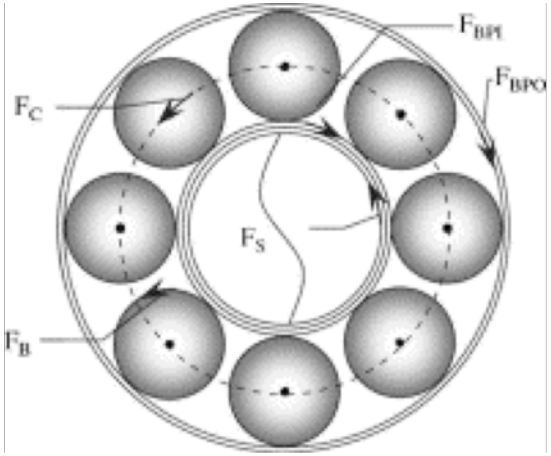
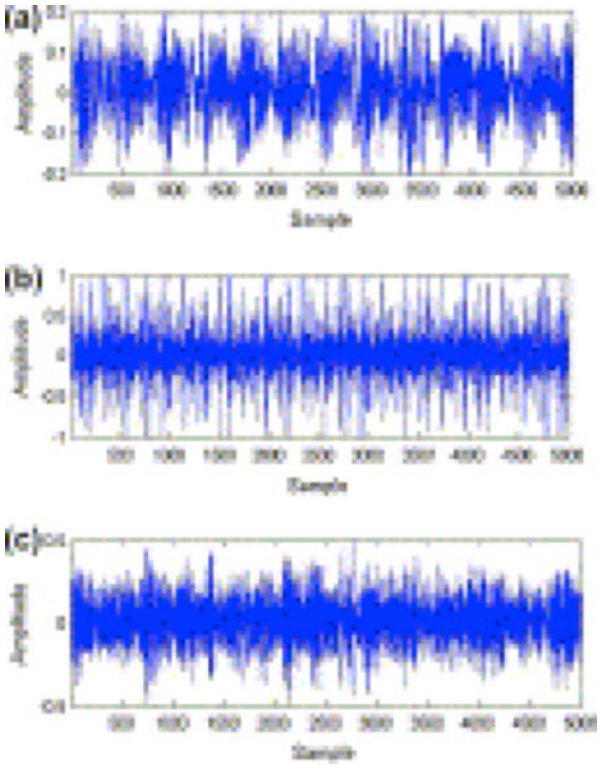
Skillification



SKF

Tele-Acoustic Diagnostics





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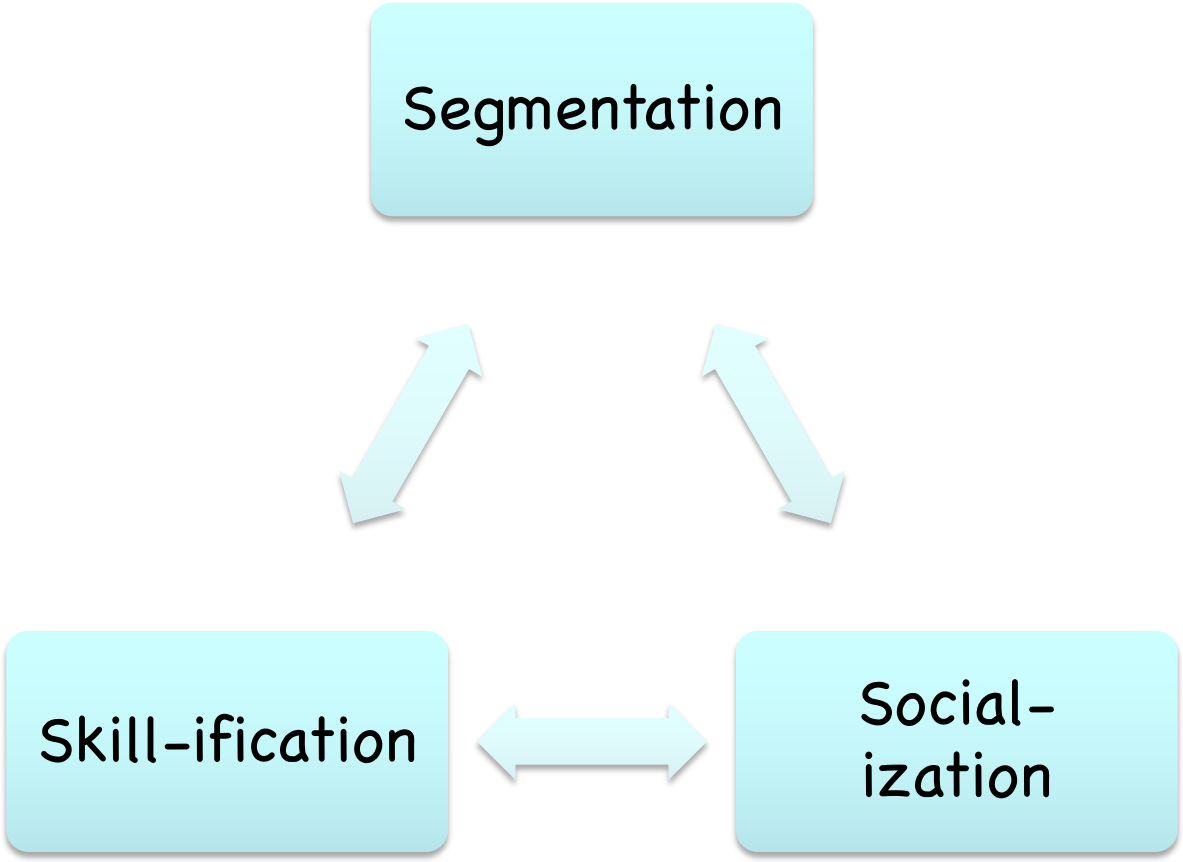
Salman Khan/Khan Academy

[How] Might You Create/Cultivate
Bespoke 'Khan Academies' for
Clients, Customers, Consumer & Partners?

Virtuous S-ycle: ***How Could/Should This Frame VC Innovation?***



Not Just 'Faster, Better, Cheaper' Products & Services

'Triple-S Innovation' as Investment in the Human Capital, Capabilities and Competences of Customers and Clients

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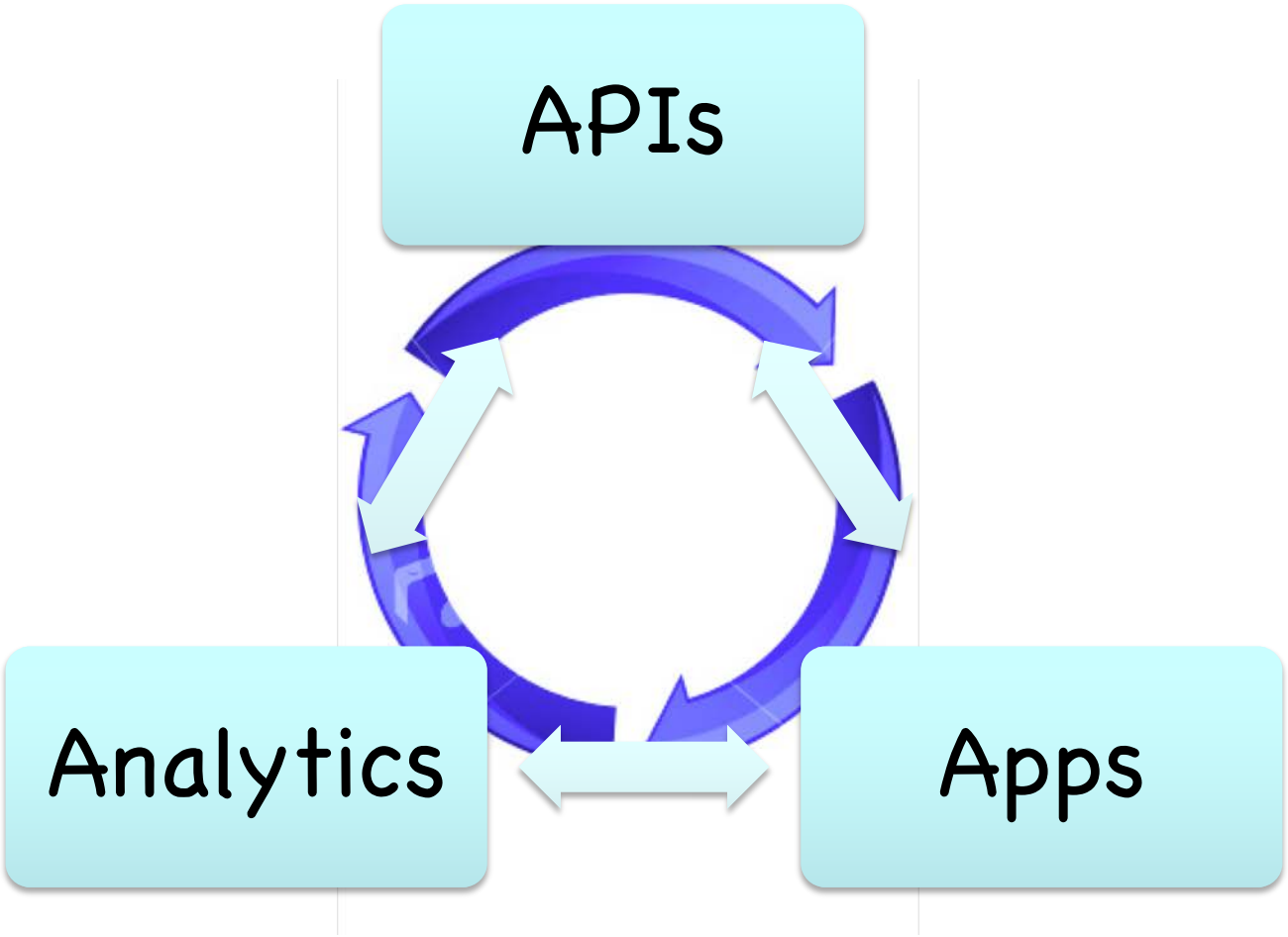
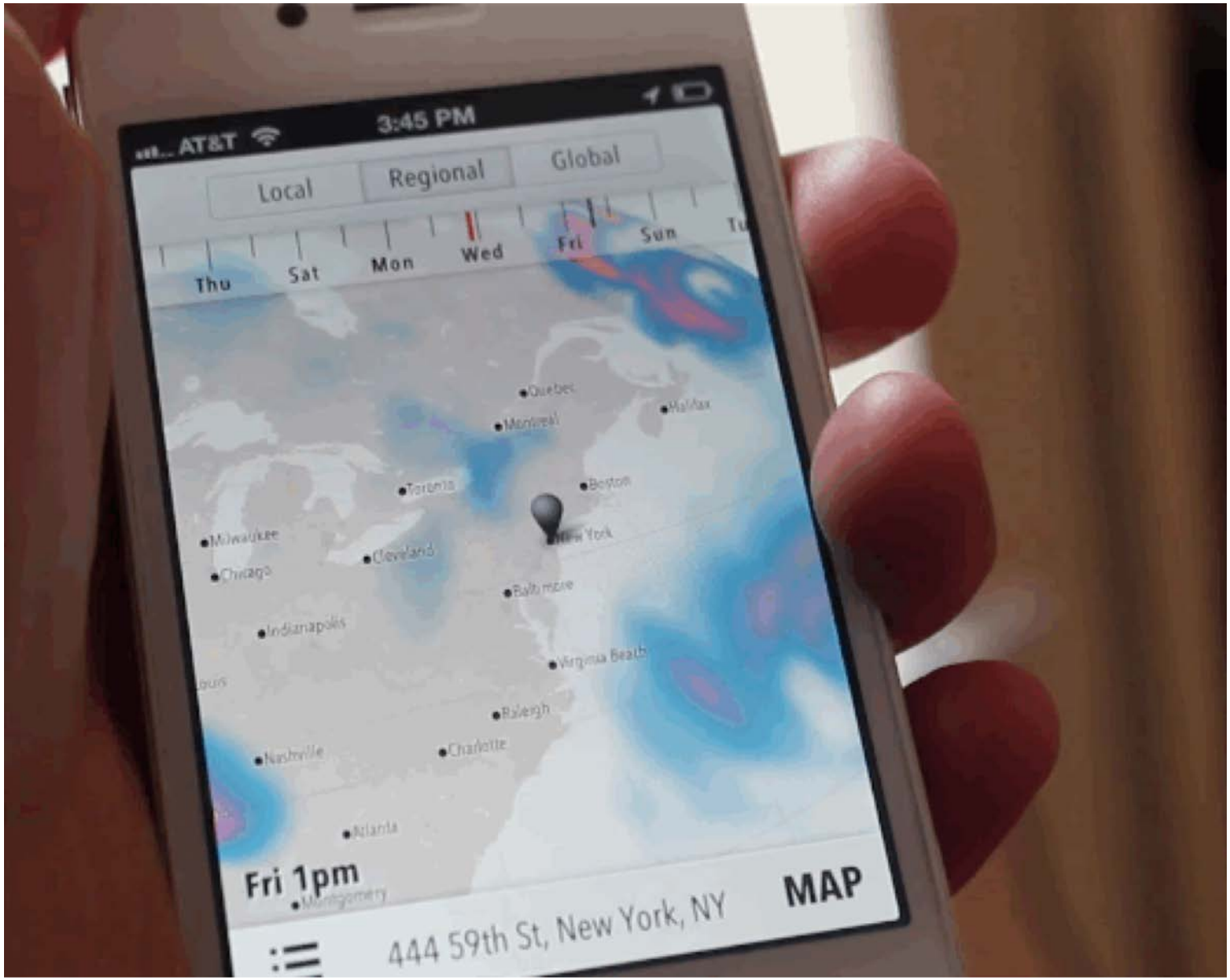
Creating 'Network Effects' To Enable "Network Effects"



Interoperability

http://www.programmableweb.com/apis/directory

APIs & Apps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Indianapolis
Virginia Beach
Raleigh
Nashville
Charlotte
Atlanta
Montgomery
Fri 1pm
444 59th St, New York, NY
MAP

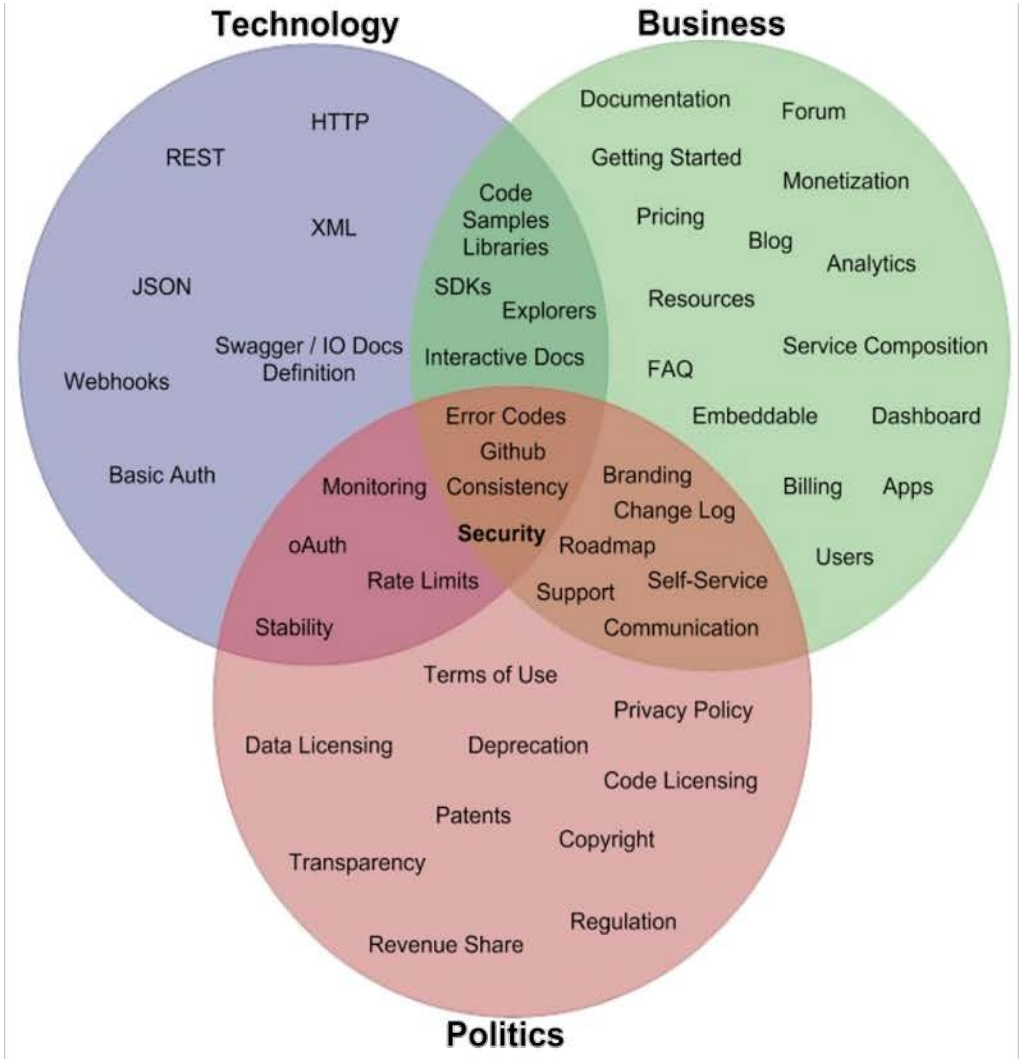
Jeff Evenson Corning Glass

"APIs for Glass"

Aligning API with KPIs

Explicitly Align APIs with KPIs ...own the dashboard!

API - not just 'Data' - Governance



Innovation Introspection

What is Your 'Customer/Client Transformation Roadmap'?

People don't
buy products;
they buy
better versions
of themselves.
UserOnboard

My Thanks….

schrage@mit.edu