#### **Platform Revolution**

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## Platform Revolution: Making Networked Markets Work for You

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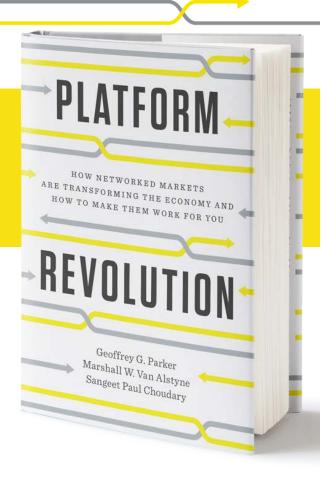
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## **Something has Changed**

FIRM	YEAR	EMPLOYEES	MKT CAP	
BMW	1916	116,000	\$53B	
UBER	2009	7,000	\$60B	
MARRIOT	1927	200,000	\$17B	
AIRBNB	2008	5,000	\$21B	
WALT DISNEY	1923	185,000	\$165B	
FACEBOOK	2004	12,691	\$315B	
KODAK	1888	145,000	\$30B (heyday)	
INSTAGRAM	2010	13	\$1B (acquisition)	



## **Forces of Change**

Trends likely to continue and intensify

#### **Age of Networks**

Networks connect physical, digital, and social



#### **Age of Platforms**

New business models that that leverage networks and intelligence

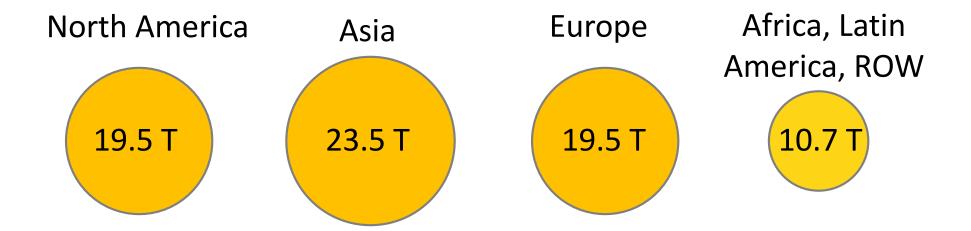
#### **Age of Data**

Surge in data and tools that can manage and analyze data

Source: P. Evans, "Networks, Data and Platforms," in *Growing Global: Lessons for the New Enterprise*, Center for Global Enterprise, 2015.



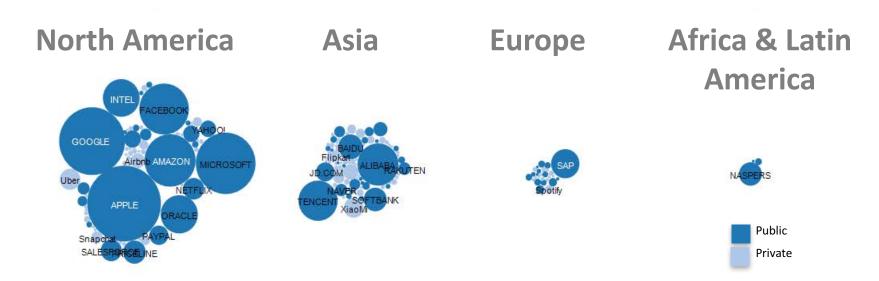
## Global Economy is Relatively Balanced



2015 Nominal GDP US\$ Total: 73.1 T



## The Platform Economy is Unbalanced

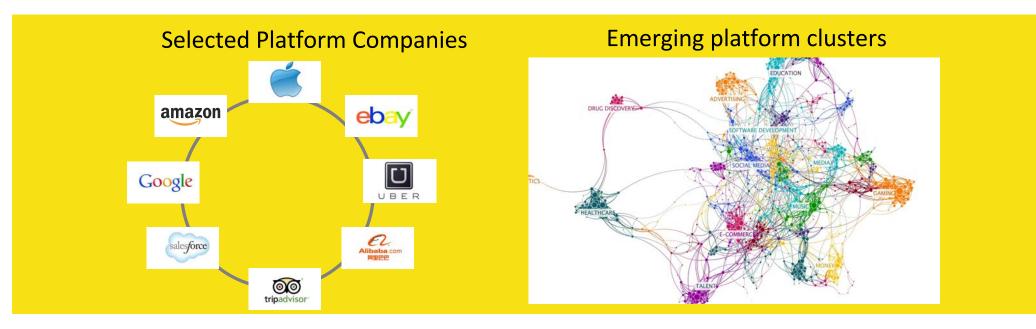


North America has the most \$1B+ platform firms, as measured by market cap. China, with a large homogeneous market, is growing fast. Europe, with a more fragmented market, has less than ¼ the value of North America



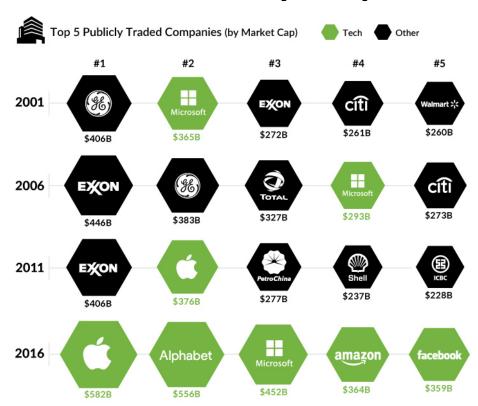
## **Explosion of Platform Companies**

Over \$3 trillion in firm market cap

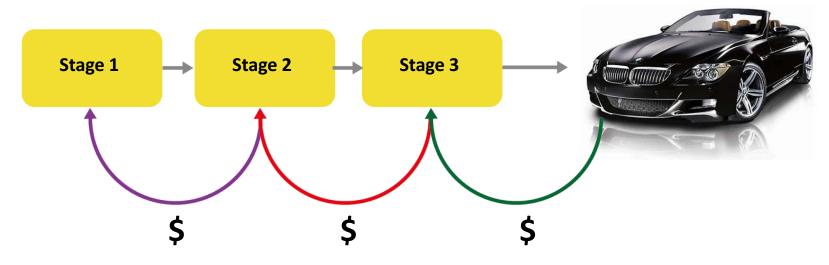


#### The New Multinationals

## **Platform Market Cap Displaced Energy and Finance**



## TRADITIONAL LINEAR VALUE CHAIN



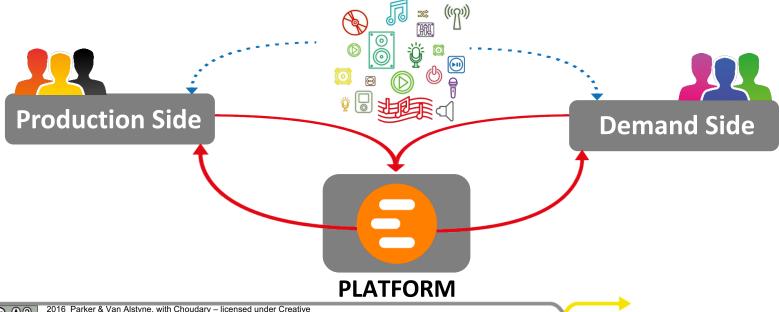
Value accumulates from stage to stage Minimal Network Effects



## Linear Pipe vs. Triangular Platform

**RAW MAT'LS DISTRIBUTION PRODUCTION ASSEMBLY Edit/Curate Create Bundles Source Content** Multiple channels

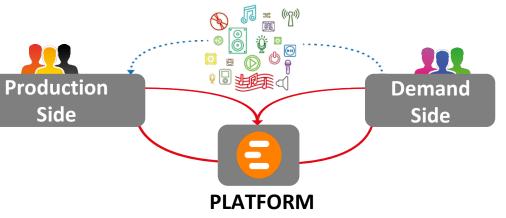
#### **Elements of value exchange**



#### A PLATFORM:

- Is a nexus of rules and architecture
- Is open, allowing regulated participation
- Actively promotes (positive) interactions among different partners in a multi-sided market
- Scales much faster than a pipeline business because it does not necessarily bear the costs of external production.

#### **Elements of value exchange**



## **Platforms Exist on Top of Asset Heavy Companies**

STRUCTURE	HIERARCHAL ORGANIZATION + PHYSICAL ASSETS*	PLATFORM ECOSYSTEM	EXAMPLE COMPANIES	PLATFORM
ASSET HEAVY		00000000000000000000000000000000000000	Daimler Johnson Controls GE Siemens	Moovel Panopix Predix MindSphere
MIXED			Apple Amazon HP Samsung	App store App store SDN App Store Samsung Apps
ASSET LIGHT		60000000000000000000000000000000000000	Google Uber Airbnb	Google Play Uber app Airbnb app

<sup>\*</sup> Includes HQ, other rooftops, retail outlets, manufacturing plants, service shops, etc.

**Enterprise type** 

Source: P. Evans, CGE; CB Insights, Capital IQ, 2015



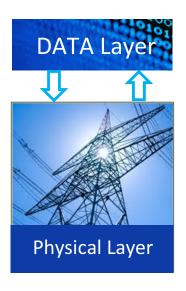
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## **Criticality of the Data layer**

New locus of value <u>creation</u> and <u>capture</u>











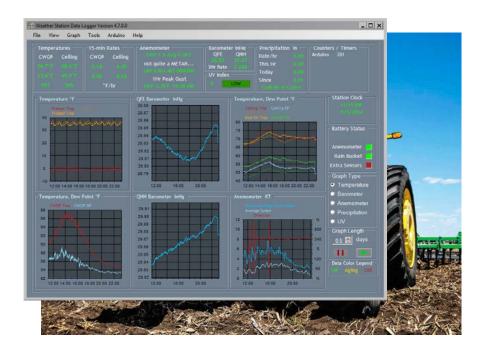


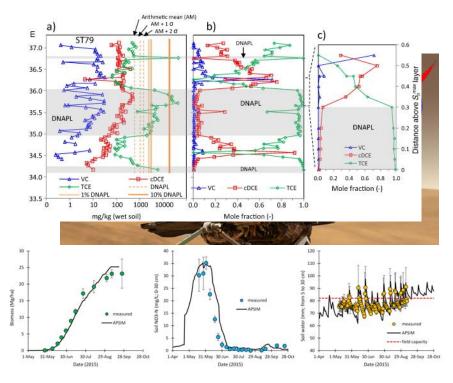




Source: P. Evans, CGE, 2015

## Just a tractor?

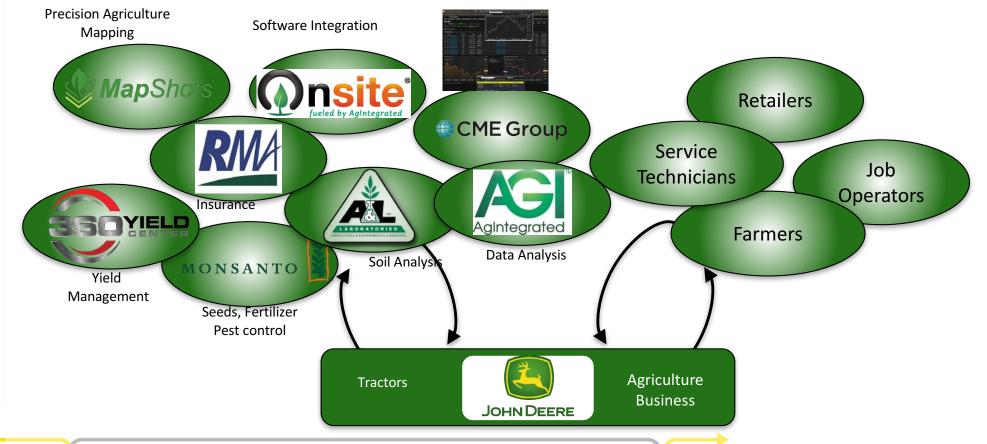




Inputs: Precise location, temperature, humidity, soil samples, seed information

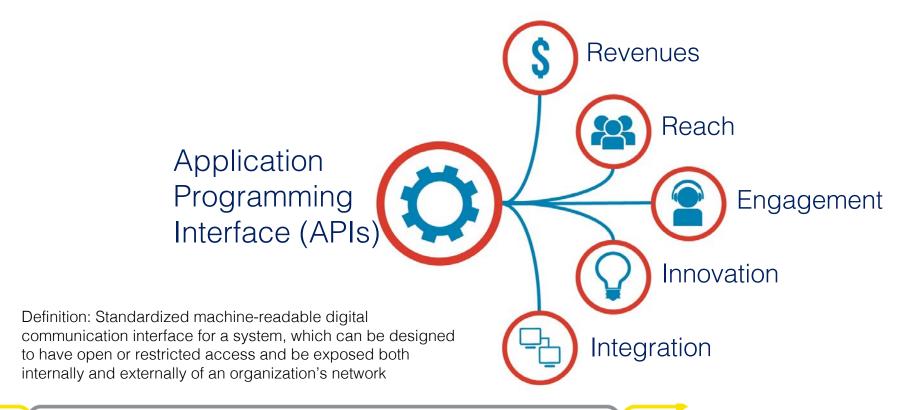
Outputs: Crop yields

## **Digital Farming Platform**



## APIs enable platform data capabilities

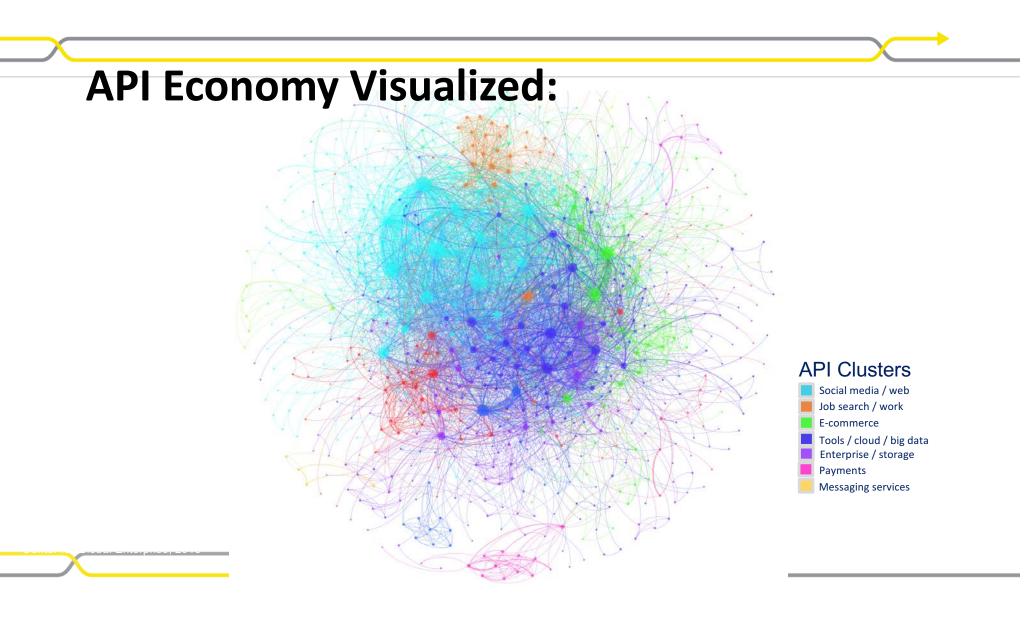
Exchange and value creation



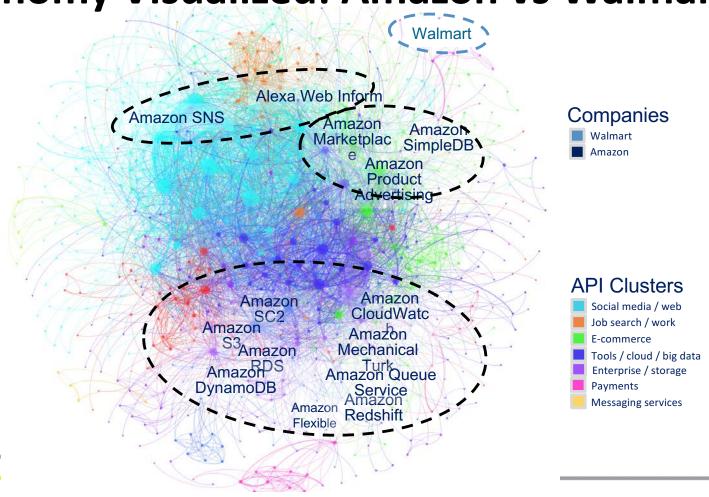
# Are Amazon and Walmart in the Same Business? Walmart amazon





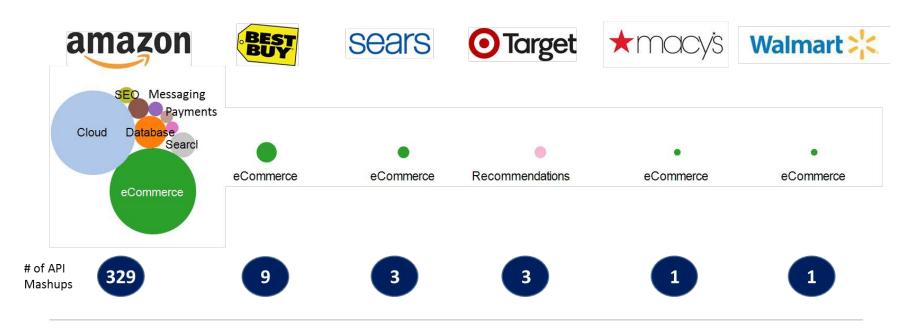


## **API Economy Visualized: Amazon vs Walmart**



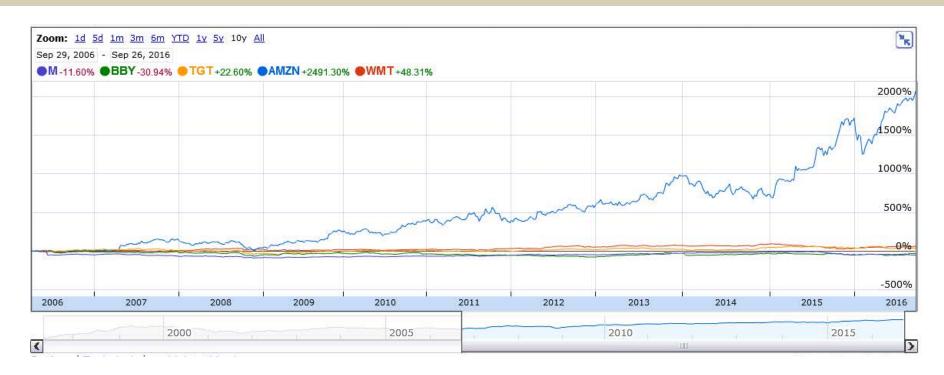
## Who is Getting More 3rd Party Value Add?

API Mashups: Amazon vs. Other Major Retail Enterprises



Source: Rahul Basole and Peter Evans, with data from ProgrammableWeb, Center for Global Enterprise, 2015

## Amazon growth over 10 years 2491% vs. Walmart (48%), Target (23%), Macy's (-12%), Best Buy (-31%)



Logistics & supply chain squeezing have limits. External value add is much less limited.

#### **Bezos Platform Manifesto**

- All teams will henceforth expose their data and functionality through service interfaces.
- Teams must communicate with each other through these interfaces.
- There will be no other form of inter-process communication allowed.
- It doesn't matter what technology they use.
- All service interfaces, without exception, must be designed from the ground up to be externalizable.
- Anyone who doesn't do this will be fired.

#### **6 Reasons Platforms Fail**

- 1. Failure to optimize "openness" Apple 1980s / Google 2010s
- 2. Failure to engage developers Johnson Controls Panoptix
- 3. Failure to share the surplus Covisint
- 4. Failure to launch the right side Google Health (consumer)
- Failure to put critical mass ahead of money BillPoint vs. PayPal
- 6. Failure of imagination HP, Sony, Garmin, Cisco, ...

## **Platforms Leverage Network Effects**

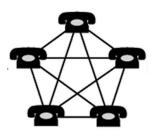
More users = more value = more users...

2 phones



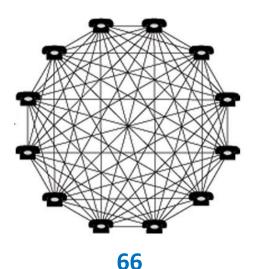
1 connection

5 phones



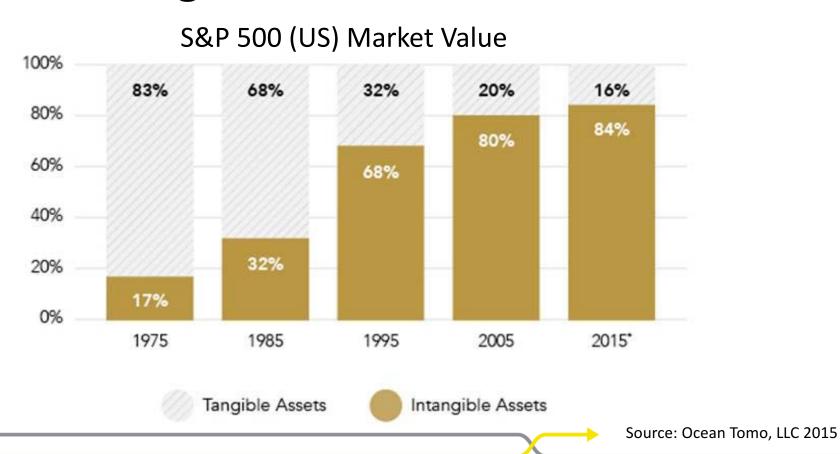
10 connections

12 phones



connections

## **Rise of Intangibles**



#### PLATFORM IMPLICATION

In any market with network effects, the focus of attention must shift from inside to outside the firm.

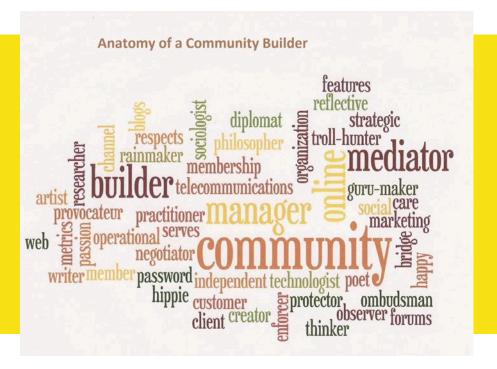
Reason: You can't scale network effects inside as easily as outside.

Source: Platform Revolution



## ... this implies ...

To have an external focus, you *must* have a community strategy.





## **How Strategy Changes**

Goal shifts from control, entry barriers, and differentiation to creating and facilitating more valuable market exchanges.

## Platforms Invert the Firm ...

#### Finance

- Records outside firm (e.g., blockchain),
- Shareholder Value → Stakeholder Value,
   Incorporate network effects

#### Human Resources

Internal Employees → External communities

#### R&D

Experts & Specialized departments →
 Crowdsourcing & Open Innovation

#### Marketing

Push → Pull, Outbound → Inbound

#### Strategy

Entry Barriers & Inimitable Resources
 → Ecosystem husbandry & Long Tail

#### IT

Back Office (ERP) → Front Office (CRM)
 → Out-of-Office (Social & Big Data).
 Communication among users.

#### Operations & Logistics

- Uber: no taxis, Airbnb: no real estate,
   Facebook: creates no content, Alibaba: no inventory.
- Shed fixed and variable costs

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# From Products and Services to Platforms Primary Tasks

- Add data layer to improve existing operations
- Create ecosystems to add value
- Invest in governance to attract partners and their investments

# From Products and Services to Platforms Secondary data uses

- Create architectures to facilitate access to data that can be used to create new business and revenue streams
- Develop shared understanding and rules to fairly divide value to provide incentives for asset owners to participate

"you'll know you're a platform when your users do something you didn't expect."

Peter Coffee, Salesforce.com, MIT Platform Summit 2013



## **Current Platform IDE Research Projects**

- Platforms in Finance and Telecoms
- B2B versus B2C Platforms
- Governance and Regulation in Platforms
- Data Value and Markets

## Q&A

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