Platform Shift: How New Biz Models Are Changing the Shape of Industry

Marshall Van Alstyne

April 10, 2015
# InterBrand: 2013 Best Global Brands

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand</th>
<th>Value 2013 $m</th>
<th>Growth %</th>
<th>Value 2012 $m</th>
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<tr>
<td>1</td>
<td>Apple</td>
<td>$98,316</td>
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<td>$79,213</td>
</tr>
<tr>
<td>2</td>
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<td>$25,430</td>
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<tr>
<td>9</td>
<td>Intel</td>
<td>$24,893</td>
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<td>10</td>
<td>Toyota</td>
<td>$24,088</td>
<td>+9%</td>
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<td>Mercedes</td>
<td>$31,804</td>
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<td>Nike</td>
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<tr>
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## These Grew Fastest

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Growth Rate</th>
<th>Market Cap Increase</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Apple</td>
<td>+58%</td>
<td>$98,316 m</td>
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<tr>
<td>2</td>
<td>Google</td>
<td>+74%</td>
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<td>Coca-Cola</td>
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<td>$79,213 m</td>
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<tr>
<td>4</td>
<td>IBM</td>
<td>+2%</td>
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<td>Microsoft</td>
<td>+3%</td>
<td>$59,546 m</td>
</tr>
<tr>
<td>6</td>
<td>GE</td>
<td>+7%</td>
<td>$46,047 m</td>
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<td>7</td>
<td>McDonalds</td>
<td>+5%</td>
<td>$41,052 m</td>
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<td>8</td>
<td>Samsung</td>
<td>+20%</td>
<td>$39,610 m</td>
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<tr>
<td>9</td>
<td>Intel</td>
<td>+5%</td>
<td>$37,237 m</td>
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<td>Toyota</td>
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<td>18</td>
<td>Oracle</td>
<td>+3%</td>
<td>$20,988 m</td>
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<tr>
<td>19</td>
<td>Amazon</td>
<td>+72%</td>
<td>$20,820 m</td>
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<td>Honda</td>
<td>+2%</td>
<td>$18,490 m</td>
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<td>Budweiser</td>
<td>+16%</td>
<td>$12,614 m</td>
</tr>
</tbody>
</table>
These are Platforms

1. Apple
   - Top Riser
   - +28% $98,316 mln

2. Google
   - Top Riser
   - +74% $93,201 mln

3. Coca-Cola
   - +2% $79,213 mln

4. IBM
   - +6% $78,808 mln

5. Microsoft
   - +7% $59,546 mln

6. GE
   - +7% $6,047 mln

7. McDonald’s
   - +5% $43,052 mln

8. Samsung
   - +20% $39,010 mln

9. Intel
   - -5% $37,247 mln

10. Toyota
    - -5% $35,345 mln

11. Mercedes Benz
    - +6% $31,604 mln

12. BMW
    - +10% $31,839 mln

13. Cisco
    - +7% $29,053 mln

14. Disney
    - +1% $15,823 mln

15. HP
    - +1% $12,205 mln

16. Gillette
    - +1% $2,831 mln

17. Louis Vuitton
    - +6% $2,363 mln

18. Oracle
    - +9% $34,088 mln

19. Amazon
    - +27% $23,620 mln

20. Honda
    - +5% $18,490 mln

21. H&M
    - +20% $18,168 mln

22. Pepsi
    - +8% $17,892 mln

23. Nike
    - +12% $17,646 mln

24. SAP
    - +11% $17,085 mln

25. Nike
    - +7% $16,076 mln

26. IKEA
    - +6% $13,818 mln

27. UPS
    - +5% $13,763 mln

28. eBay
    - +20% $13,162 mln

29. Pampers
    - +15% $13,035 mln

30. Kellogg’s
    - +8% $12,987 mln

31. Budweiser
    - +6% $12,014 mln
Dominated by Platforms
Platform Firms Becoming More Important in Economy

<table>
<thead>
<tr>
<th>FIRM</th>
<th>MARKET CAP</th>
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</thead>
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<tr>
<td>Apple</td>
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<tr>
<td>Exxon Mobile</td>
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<tr>
<td>Microsoft</td>
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<tr>
<td>Berkshire Hathaway</td>
<td>357</td>
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<tr>
<td>Google</td>
<td>344</td>
</tr>
</tbody>
</table>

3 of top 5 firms in 2015 by market cap.
Platform Firms Becoming More Important in Economy

Percentage of Platform Firms weighted by MKT CAP
(2001-2014)

% of top 20 firms by market cap since 2001
The Product Business Model is Broken
The Product Business Model is Broken

In 2009, BlackBerry had nearly 50% market share in U.S. operating systems, according to IDC. Now: 2.1%
Apple launched the PC revolution but Microsoft licensed widely, built a huge developer ecosystem, 6X larger.
Michael Dell - "Shut it down and give the money back to the shareholders."
## Interbrand: 2014 Best Global Brands

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<td>Honda</td>
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</table>
Nike Builds a Biz Platform
How would you create a platform around spice?

1. Enumerate embeddable features: salty, citrus, sour, toasted, …
2. Get consumer preferences
3. Match to best recipes
4. Mix new combinations, help users create & upload, allow ratings, build a community
Create a whole geometry of flavor combinations
To Be a Platform

The system must provide a useful function or service and allow 3rd party access.

Examples:

iTunes: get music onto iPod

SAP: execute ERP systems

Facebook: connect family, friends & acquaintances

Cisco Smart Grids: capture AC/DC sources, route power

Nike Fuel: motion capture and social benchmarking

Products have features, Platforms have communities
How are these Related?

Each Side Attracts More of the Other

- eBay Sellers
- Uber Drivers
- Xbox Developers
- Amex Merchants
- Aga Khan Doctors
- YouTube Videographers
- AirBnb Rooms
- Tesla Charge Stations
- Mechanical Turk Laborers
- LinkedIn Employers
- Android Developers

- eBay Buyers
- Uber Riders
- Xbox Gamers
- Amex Cardholders
- Aga Khan Patients
- YouTube Viewers
- AirBnb Renters
- Tesla Car Drivers
- Mechanical Turk Jobs
- LinkedIn Employees
- Android Users
More Android Developers
… get more Android Users…

More Android Users
… get more Android Developers…
Why Platforms Beat Products Every Time

Apple iPod pre-Platform

(1) Product First Thinking
(2) Standard linear value chain
(3) User bought music retail (or P2P)
(4) Minimal network effects
Apple iPod Combined with iTunes

Apple iPod

Music Producer

Retailer

Listener

Apple Platform

$ $ $
Apple iPod post-Platform

(1) Remove supply chain inefficiency
(2) Triangular platform supply network
(3) Apple owns financial chokepoint
(4) Apple helps users find content
(5) Stronger network effects
How Apple is Killing Standalone Platforms

Sony could have done this. It has many great standalone products. Apple has vastly stronger network effects. Google is not making this mistake with Android.
How Apple is Killing Standalone Platforms

So what happened?

2007 vs. Today:
- Nokia: $30/share vs. $8/share
- Sony: $53/share vs. $30/share

Platforms:
- User
- Music
- TV
- Dvpr
- HTML
- eBooks
- Calls
- MP3
- Video
- Games
- Web

Apple Strategy:
- Integrating all functionalities into a single platform
- Decreasing dependency on standalone devices

Microsoft, Sony, Nokia:
- Declining market share and revenue

RIP Platforms

Twitter: @InfoEcon :: marshall@mit.edu :: PlatformEconomics.com

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How Apple is Killing Standalone Platforms

Polycom Speakerphone
Cisco Flip Camera
HP Calculator

User
Music
TV
Dvpr
HTML
Publi
Calls
MP3
Video
Games
Web
eBooks

Message for you: A great standalone product is not sufficient.
How Apple is Killing Standalone Platforms

Message for you: A great standalone product is not sufficient.
Why Apple isn’t Killing Kindle: Amazon Ecosystem
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.
Giants of Supply Economies of scale

Westinghouse Dynamo 1893

Ford Model T 1908

Carnegie Steel 1905

Vanderbilt Colossus of (Rail) Roads
Giants of Demand Side Economies of scale

Windows OS 1990s-00s

Matched Mkts Now

Micro Blog Now

Social Networks Now
What Changes :: Logistics & Supply Chains

Platforms Don’t Own All Production but Tap New Value from Spare Resources and User Communities
AirBnb sells users’ spare rooms, competing with hotels that must own them

RelayRides sells users’ spare cars, competing with rental firms that must own them
Instagram sold for $1B not because of contributions from 13 employees but from 30 million users.
WENT TO THE MOON
TOOK 5 PHOTOS

WENT TO THE BATHROOM
TOOK 37 PHOTOS
``In 2015, Uber, the world’s largest taxi company owns no vehicles, Facebook the world’s most popular media owner creates no content, Alibaba the most valuable retailer has no inventory, and Airbnb the world’s largest hotelier owns no real estate.”

Tom Goodwin, Sr. VP of Strategy Havas Media
What changes :: Marketing & Prices

Monetizing Platforms Means Free Pricing is Profitable

To Price a Platform with Network Effects, Who Gets the Subsidy?
If markets are independent, collect profits in both.

But if markets are coupled, discounting one builds demand in the other.

There are 2 types of Free

1. Cellphones & Minutes, Razors & Blades

2. eBay, Uber, Google, Amazon all use 2-sided *platform* pricing.
For work on antitrust regulation, market power & two-sided platforms

Jean Tirole: Nobel Laureate in Economics 2015
Corporate valuation models that underestimate market expansion due to network effects fail to invest
- Estimate global taxi market
- Estimate market share
- Est. risk adjusted cash flow
- Consider proprietary methods, barriers to competition

- **Value: $5.9 Billion**
• All true but overlooking network effects.
• Prices decline expanding to rental car market and car replacement market and delivery market.
• Oh, BTW, already six size in 2009 when Uber started.

**Value: $17 Billion**

*Source: David Sacks, COO PayPal, CEO Yammer*
What Changes :: R&D and Innovation

Platforms Open Themselves to Third Party Contributions
A platform is a system that can be… adapted to countless needs and niches that the platform’s original developers could not possibly have contemplated…”

Mark Andreessen: Venture Capitalist, Netscape Founder, Board HP, eBay
It’s Working when Users do Something You Didn’t Expect

Ford Model T

Hay Carrier

Flour Mill

Racecar
It’s Working when Users do Something You Didn’t Expect

Mobile Church

Sawmill

Snowmobile

Goat Carrier
Does Openness Work?

The Rise & Ignominius Fall of MySpace – Business Week 2011
Does Openness Work?

“We tried to create every feature in the world and said, ‘O.K., we can do it, why should we let a third party do it?’” says (MySpace cofounder) DeWolfe.

“We should have picked 5 to 10 key features that we totally focused on and let other people innovate on everything else.”

The Rise & Ignotinium Fall of MySpace – Business Week 2011
Platforms Get Enormous Value from 3rd Party Developers

Most firms can only concentrate on most valuable apps

Profits increase when others add to platform’s Long Tail

You don’t need to own this
Consider product innovation alone

Harnessing 3rd party resources, innovation occurs at a higher combined rate

Even if a platform starts behind, its value overtakes the product leader

Shed costs, keep 30% gains!
What’s Next?
raining taxis

Singapore's mobility is heavily reliant on taxis, but what happens when it rains? Getting hold of a cab is not the easiest thing in the world. We are exploring how our transportation system behaves by combining taxi and rainfall data, and investigating how in the future the system can streamline in order to better match taxi supply and demand.

click and drag map to rotate, click on timeline to move in time
Energy/Smart Grid as Platform
Education as Platform
Healthcare as Platform
Platforms are beating products

The key drivers are communities and network effects (a.k.a. demand economies of scale)

This changes ownership of supply, prices, financial indices, innovation, ...
If you believe in the power of people connecting, then embrace platforms.

If you convert your product/service to a platform, what would it do, what community would it serve?
THANK YOU

QUESTIONS & DISCUSSION

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