

**HARNESSING
OUR DIGITAL
FUTURE**

**MACHINE
PLATFORM
CROWD**

**ANDREW McAFEE
ERIK BRYNJOLFSSON**

**Business Advice
We Shouldn't
Believe Any More**

Andrew McAfee, MIT
amcafee@mit.edu
@amcafee

Process



Let machines handle the routine work;
let people make the judgment calls



jac

STRAIGHT FROM
JACK WELCH

EDUCATION
for
JUDGMENT

*The ARTIST
DISCUSSION LEADER*



*Edited by C. Roland Christensen,
David A. Garvin, and
Noel M. Tichy*

Harvard Business School

JUDGMENT

HOW WINNING LEADERS
MAKE GREAT CALLS

NOEL M. TICHY

*bestselling author of *The Leadership Engine* and
*Control Your Destiny or Someone Else Will**

AND

WARREN G. BENNIS

*bestselling author of *On Becoming a Leader* and *Leaders**

HiPPO



Geek



Geeks vs. HiPPOs

Clinical Versus Mechanical Prediction: A Meta-Analysis

William M. Grove, David H. Zald, Boyd S. Lebow, Beth E. Snitz, and Chad Nelson
University of Minnesota, Twin Cities Campus

136 studies of expert vs. algorithmic prediction
(HiPPO) (Geek)

Experts Clearly Better

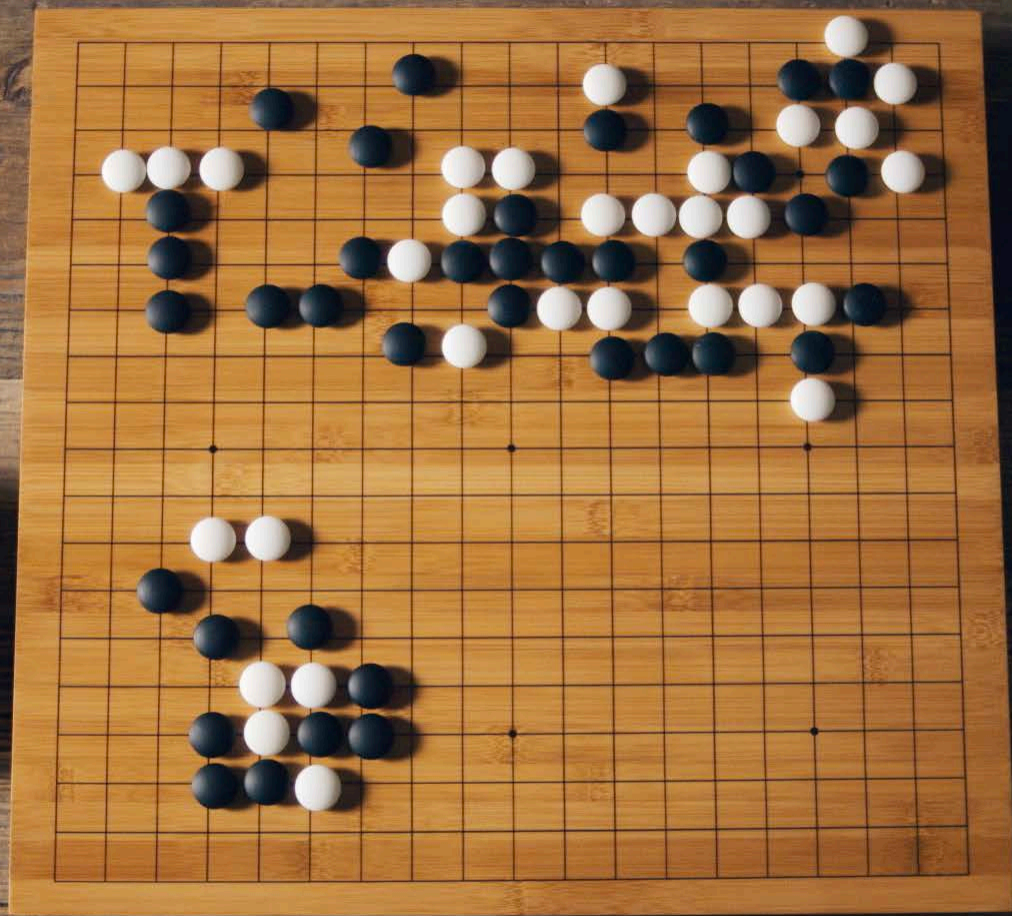
Tossup

Algorithm Clearly Better

8 (6%)

65 (48%)

63 (46%)



Google's AlphaGo AI beats Lee Se-dol again to win Go series 4-1

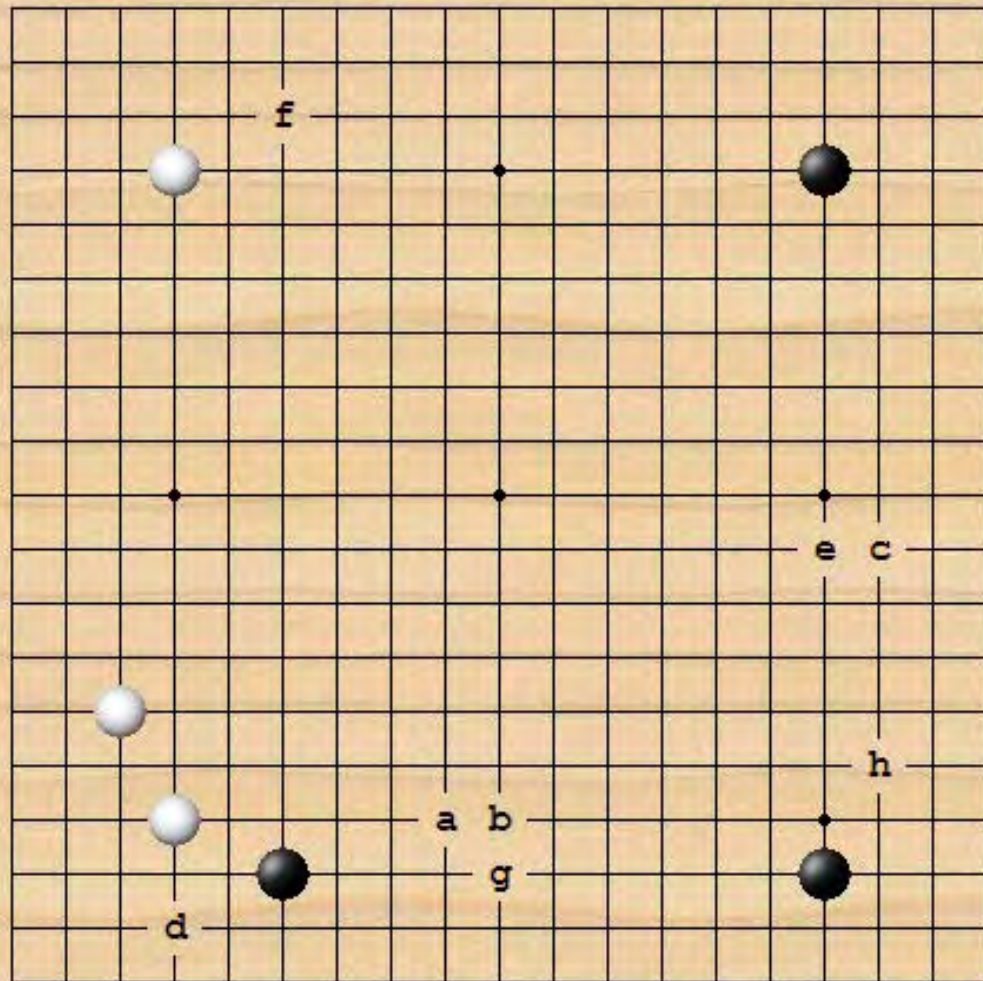
By [Sam Byford](#) on March 15, 2016 05:00 am [Email](#) [@345triangle](#)



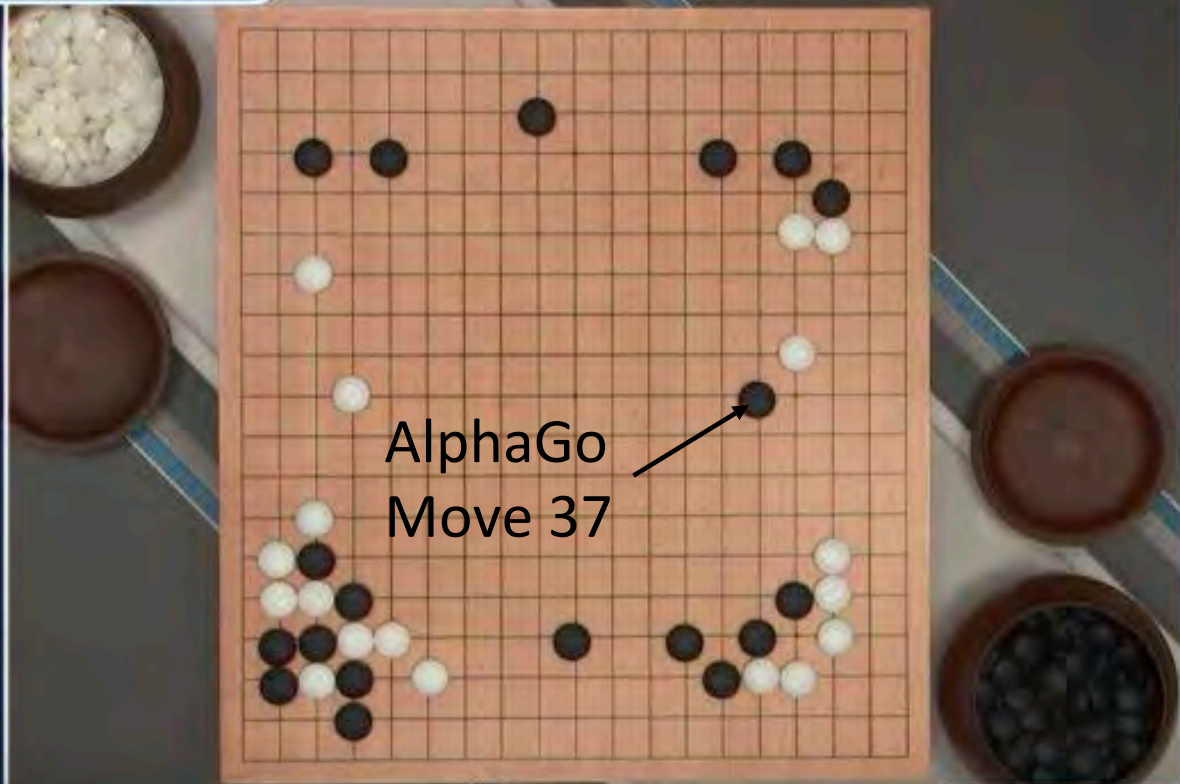
 voicefive

your opinion
COUNTS





LEE SEDOL
01:33:07



Google DeepMind
Challenge Match



ALPHAGO
01:38:39

“I would go as far as to say not a single human has touched the edge of the truth of Go.”

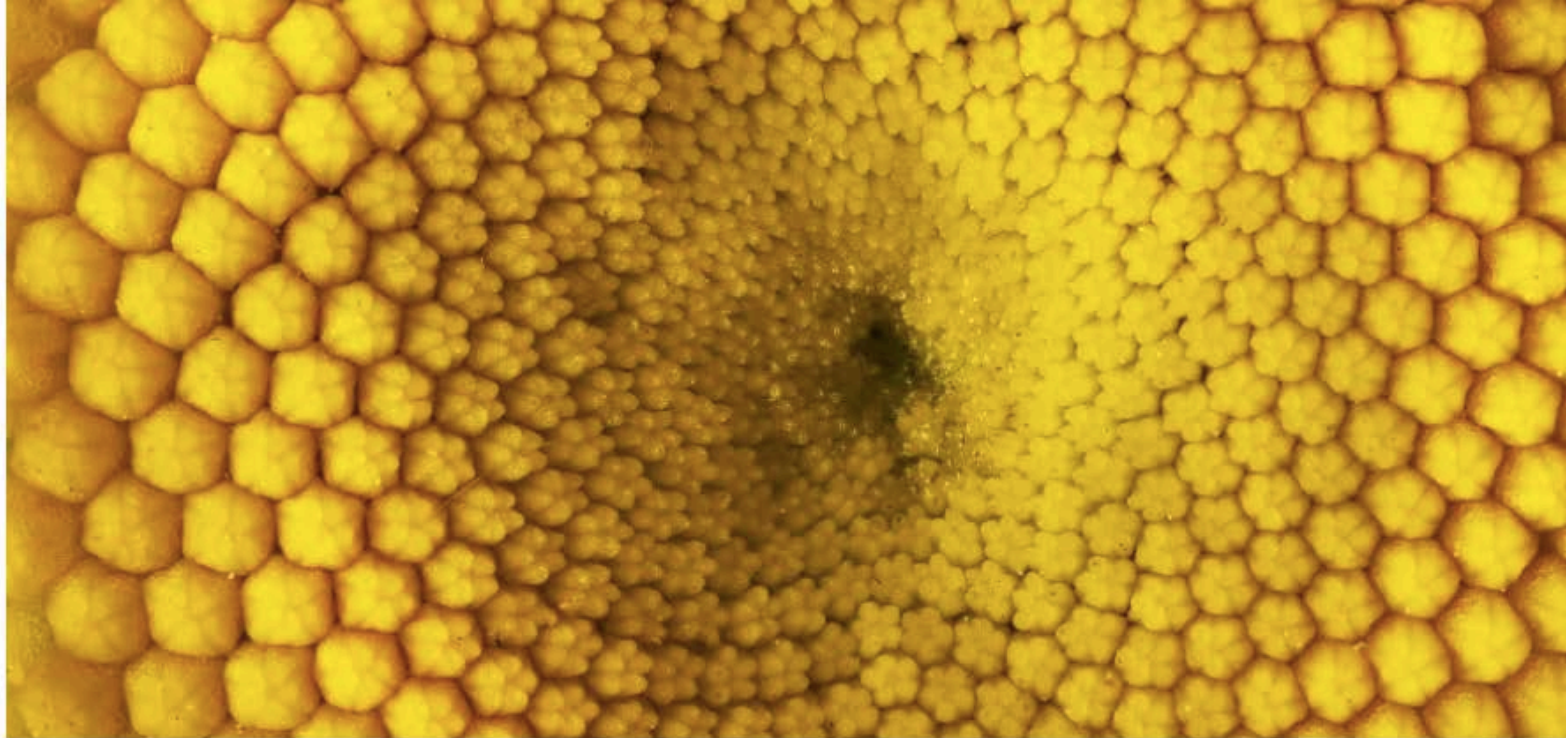
- Go champion Ke Jie

Machines are demonstrating excellent judgment

Companies



Strengthen your core



The Core Competence of the Corporation

by **C.K. Prahalad** and **Gary Hamel**

FROM THE MAY-JUNE 1990 ISSUE

Using the Crowd as an Innovation Partner

by Karim R. Lakhani

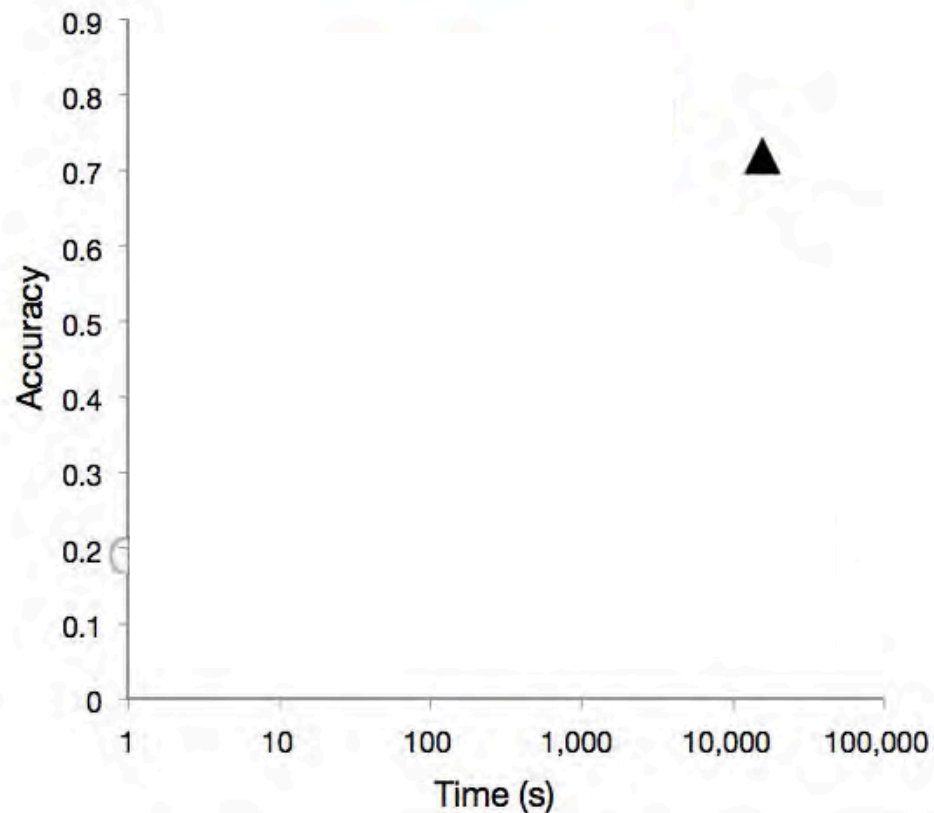
FROM THE APRIL 2013 ISSUE



PHOTOGRAPHY: MICHELE SERENI

ARTWORK: JACOB HASHIMOTO, THE OTHER SUN, 2012, ACRYLIC,
PAPER, TUBES, BANNERS, BOULEVARD GALLERY, LONDON

To answer the most vexing innovation and research questions, crowds are becoming the partner of choice. Apple has turned to large numbers of users and developers distributed around the world to propel its growth by creating apps and podcasts that enhance its products. Biologists at the University of Washington used crowds of



Using the Crowd as an Innovation Partner

by Karim R. Lakhani

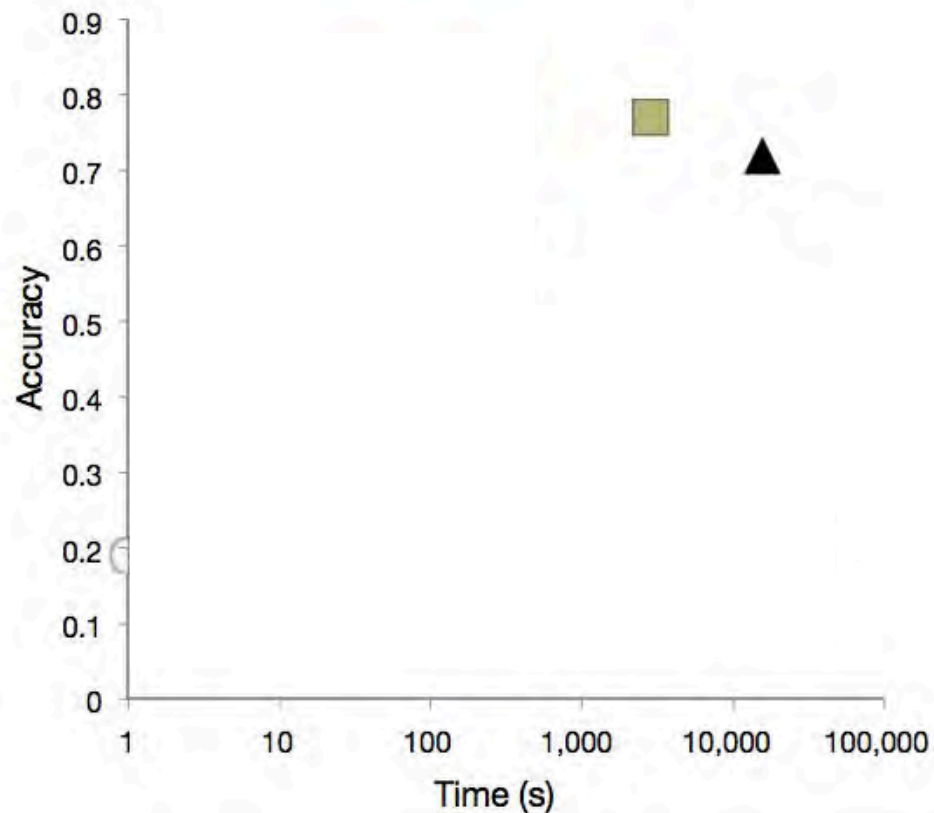
FROM THE APRIL 2013 ISSUE



PHOTOGRAPHY: MICHELE SERENI

ARTWORK: JACOB HASHIMOTO, THE OTHER SUN, 2012, ACRYLIC,
PAPER, TUMBLE, BARNUM BOUSQUILLI GALLERY (LONDON)

To answer the most vexing innovation and research questions, crowds are becoming the partner of choice. Apple has turned to large numbers of users and developers distributed around the world to propel its growth by creating apps and podcasts that enhance its products. Biologists at the University of Washington used crowds of



Using the Crowd as an Innovation Partner

by Karim R. Lakhani

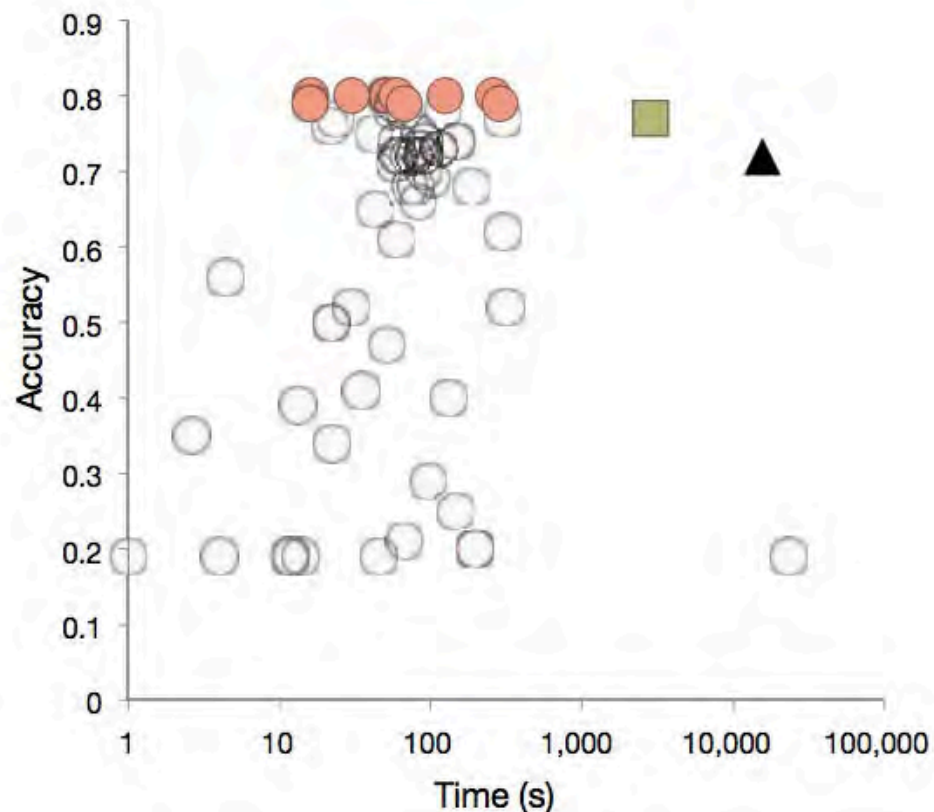
FROM THE APRIL 2013 ISSUE



PHOTOGRAPHY: MICHELE SERENI

ARTWORK: JACOB HASHIMOTO, THE OTHER SUN, 2012, ACRYLIC,
PAPER, TUMBLE, BARNUM BOUSQUET GALLERY, LOUVE

To answer the most vexing innovation and research questions, crowds are becoming the partner of choice. Apple has turned to large numbers of users and developers distributed around the world to propel its growth by creating apps and podcasts that enhance its products. Biologists at the University of Washington used crowds of





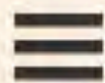
Inside a Moneymaking Machine Like No Other

The Medallion Fund, an employees-only offering for the quants at Renaissance Technologies, is the blackest box in all of finance.

by **Katherine Burton**

November 21, 2016, 12:01 AM EST *Updated on* November 25, 2016, 11:50 AM EST

From **Bloomberg Markets**



Hedge funds

+ Add to myFT

'Crowdsourced' Quantopian dives into algorithms

Hedge fund hopes trading strategies coded by members will disrupt industry

The crowd is surprisingly wise

Industries

There is no substitute for knowing an industry inside and out. Each of our 22 industry practices draws upon McKinsey experts from around the world to pool their industry expertise and develop perspectives, resources and capabilities so that we can prepare our clients for the challenges and opportunities ahead.

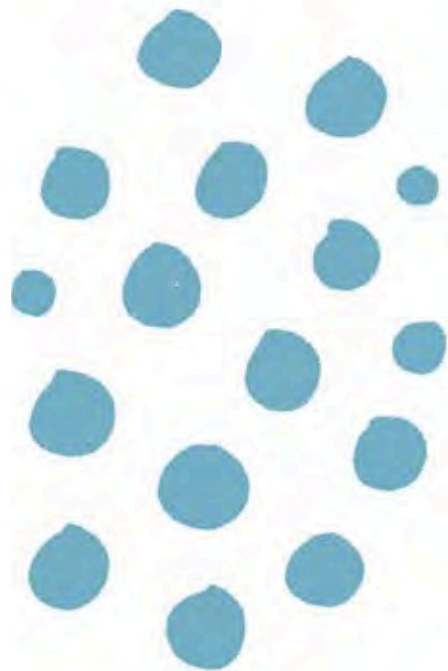
Industry structure determines successful
business models



BUYERS



SELLERS



MACHINE | PLATFORM | CROWD

How Steve Jobs Nearly Blew It

IN 2007, STEVE JOBS WAS IN THE MIDDLE OF WHAT WAS PERHAPS the greatest tenure as a CEO in US corporate history. But throughout that year, his failure to fully appreciate a basic insight from economics threatened to stall his company's momentum.

Apple opens iTunes App Store



By Jason Snell, Peter Cohen

Macworld | JUL 10, 2008 5:27 AM PT

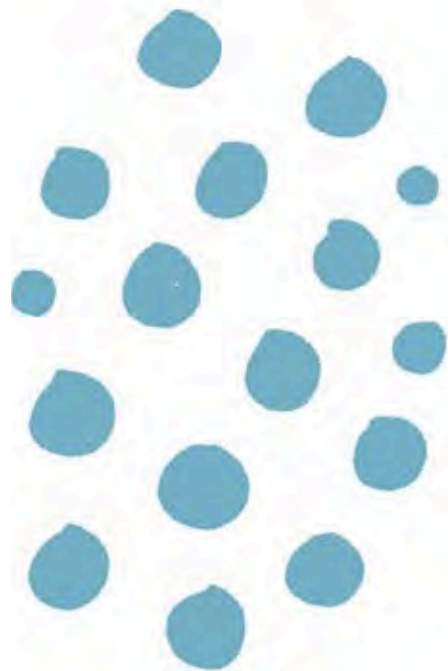
Apple opened the App Store on Thursday, providing access to 552 iPhone and iPod touch applications to users of iTunes.

To run and install the software, users will need a device using the iPhone 2.0 software, currently only available to purchasers of new iPhone 3G models.

BUYERS



SELLERS



Apple captures more than 103% of smartphone profits in Q3 despite shrinking shipments

By [Mikey Campbell](#)

Thursday, November 03, 2016, 05:00 pm PT (08:00 pm ET)

Apple raked in more than 100 percent of all smartphone industry profits during the third quarter of 2016, despite owning roughly 12 percent of the market, according to new estimates published Thursday.



Uber shares growing financials to distract from negative publicity

Posted Apr 14, 2017 by [Alex Wilhelm \(@alex\)](#), [Katie Roof \(@Katie_Roof\)](#)



Next



Crunchbase

Uber

FOUNDED

2009

OVERVIEW

Uber is evolving the way the world moves. By seamlessly connecting riders to drivers through apps, they make cities more accessible, opening more possibilities for riders and more business for drivers. From their founding in 2009 to their launch in over 400+ cities today, Uber's rapidly expanding global presence continues to bring people and

NEWSFLASH: CLASSPASS IS IN MAJOR EXPANSION MODE—IS YOUR CITY NEXT?

CLASSPASS

[LOGIN TO CLASSPASS](#)



TRANSFORM YOUR
WORKOUT WITH ONE
ALL-ACCESS PASS

ClassPass gets you into the best studios in your city. Take unlimited group fitness classes with just one monthly membership.

Platform Advantages

- Network effects / demand side economies of scale
- Control of user interface and user experience
- Control of ecosystem
- Crowd-based discovery
- Data and algorithms for
 - Matching
 - Pricing
 - Personalization
 - Trust

***Platform economics determine
successful business models***

Second Machine Age Hypotheses

- The optimal division of labor between **minds** and **machines** is shifting rapidly
- The **crowd** is often (usually?) more capable than the **core**
- Value creation is moving from **products** to **platforms**

**HARNESSING
OUR DIGITAL
FUTURE**

**MACHINE
PLATFORM
CROWD**

**ANDREW McAFEE
ERIK BRYNJOLFSSON**

Thank You!

**Andrew McAfee, MIT
amcafee@mit.edu
@amcafee**