



# Economic Value of the Advertising-Supported Internet Ecosystem

# Introduction & Agenda

## **John Deighton, Ph.D.**

Baker Foundation Professor of Business Administration  
Harvard Business School



## **Alex Propes**

Director, Public Policy  
IAB



## **Maggie Zhang, Ph.D.**

Senior Director, Video Research  
IAB

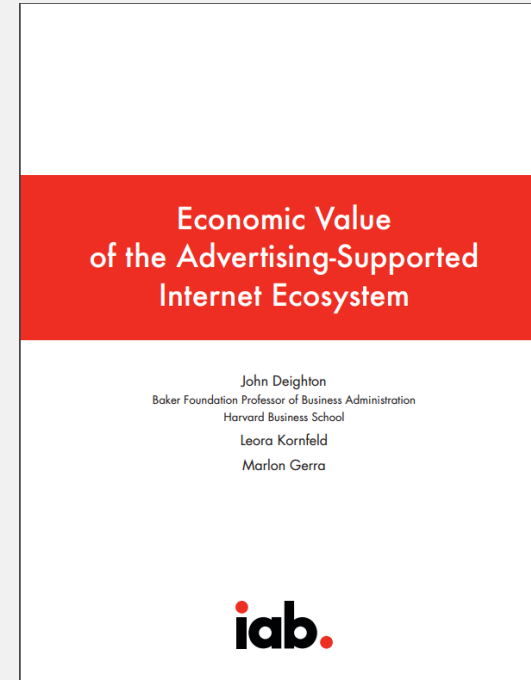


## Agenda

- Study background
- Study findings
- Public policy implications and IAB efforts
- Frequently Asked Questions
- Open Q&A

# Study Background

- IAB has conducted the study “Economic Value of Advertising-Supported Internet Ecosystem” every four years since 2008.
- The most recent study was released in March 2017.
- For the third time, we wanted to understand contribution of the industry to employment and GDP at the national, state and congressional district levels.



For more detail, visit [iab.com/economicvalue](http://iab.com/economicvalue)



# Economic Value of the Advertising-Supported Internet Ecosystem

John Deighton, Ph.D.

*Baker Foundation Professor of Business Administration, Harvard Business School*

Twitter: @HBSMktg

# Study Methodology

**An employment-based methodology by identifying large firms in each layer of the internet and using a range of public and private sources to estimate each firm's revenue and employment as well as estimates of aggregates of small firms and self-employed people.**

**In addition, the report also uses a top-down method based on the U.S. Census Bureau's databases to decide how to allocate the employment to geographies at the state and congressional district level.**

**The study was conducted during the second half of 2016.**

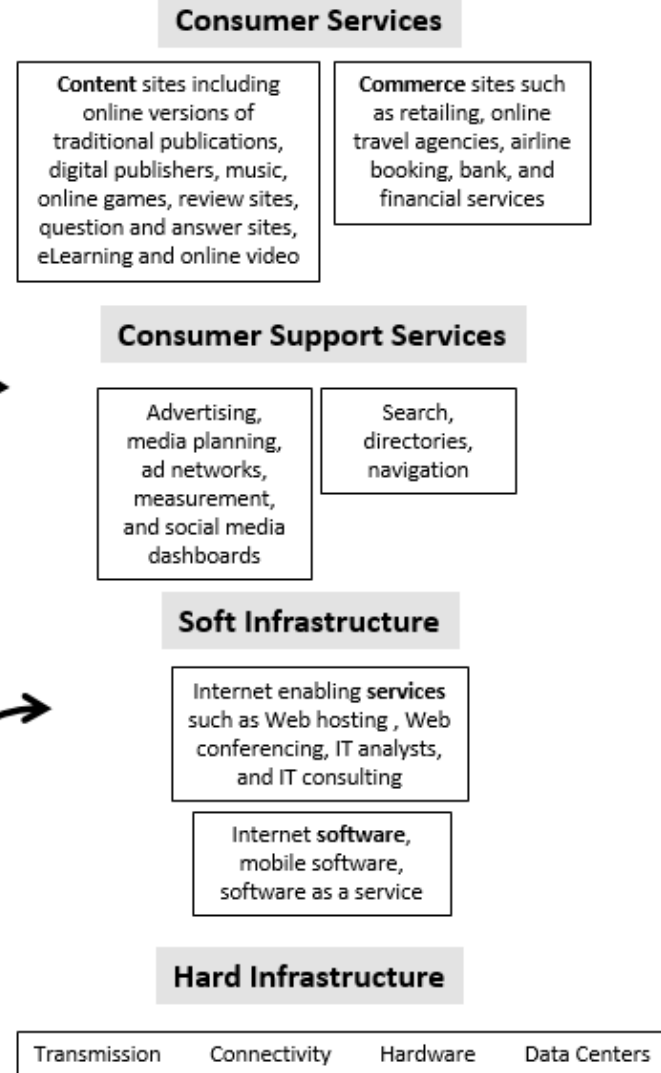
# The Infrastructure of the Internet

Mobile, video, e-commerce, on-demand platforms, user-generated content, music.

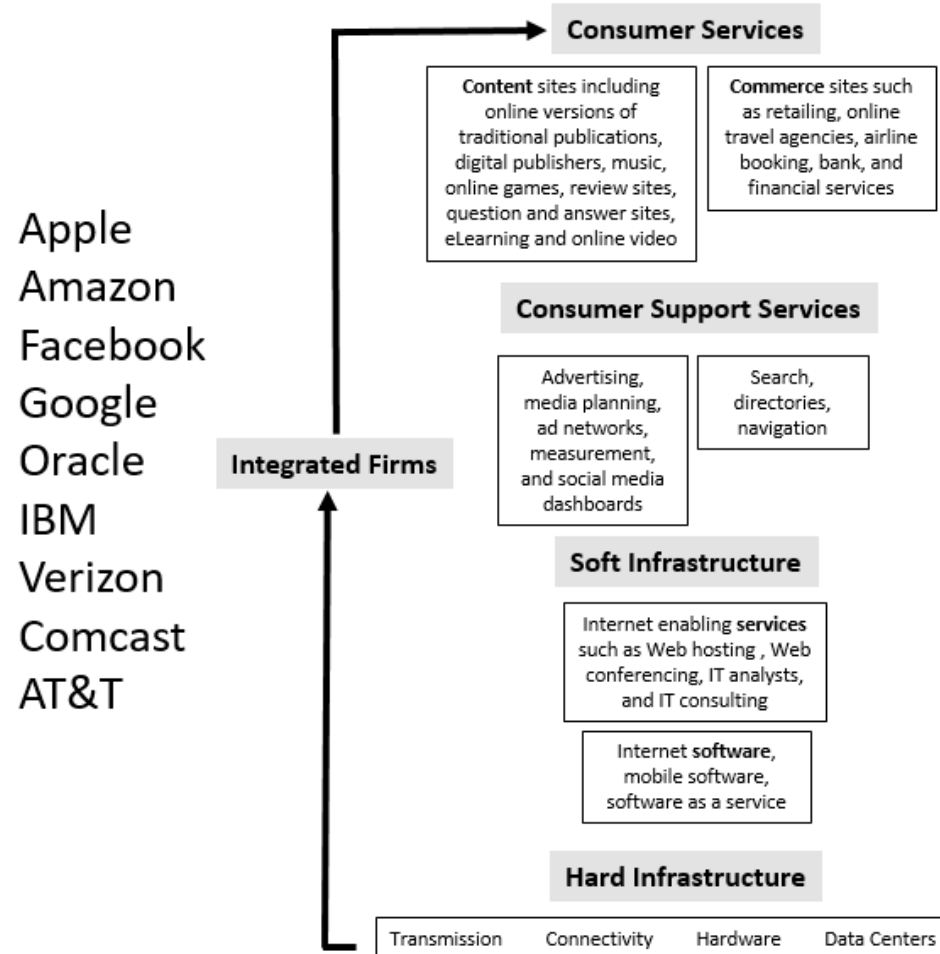
Verticals such as financial, e-learning, travel, healthcare, shipping, e-government, programmatic marketing, attribution.

Enterprise IT is giving way to cloud and network services. Video and mobile place new demands on the supply chain.

The infrastructure is evolving from backbone-and-branches to edge providers



# New in the 2017 Study: The Integrated Firms

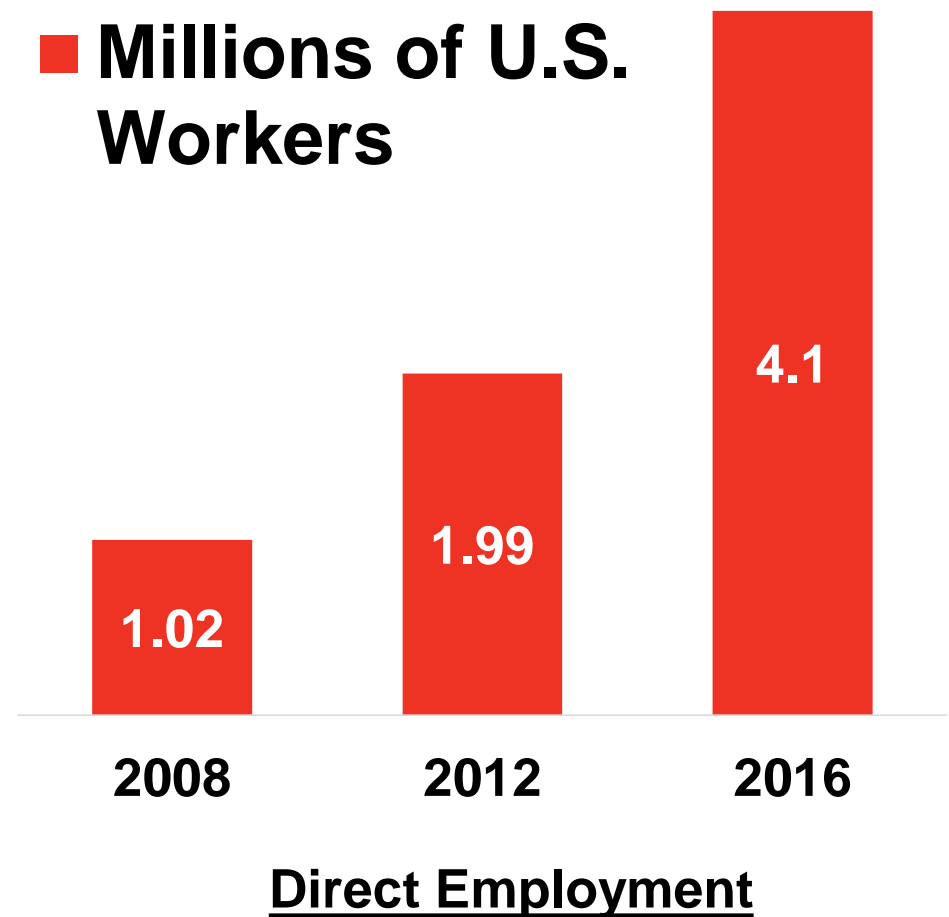


# The U.S. Runs on the Internet

The U.S. economy is increasingly an information economy, its fuel is data, and the internet carries the traffic.

Across three studies at four year intervals, we find that internet-related employment doubled, and then doubled again.

Directly and indirectly over 10 million jobs rely on it, and that number is growing at an accelerating rate.



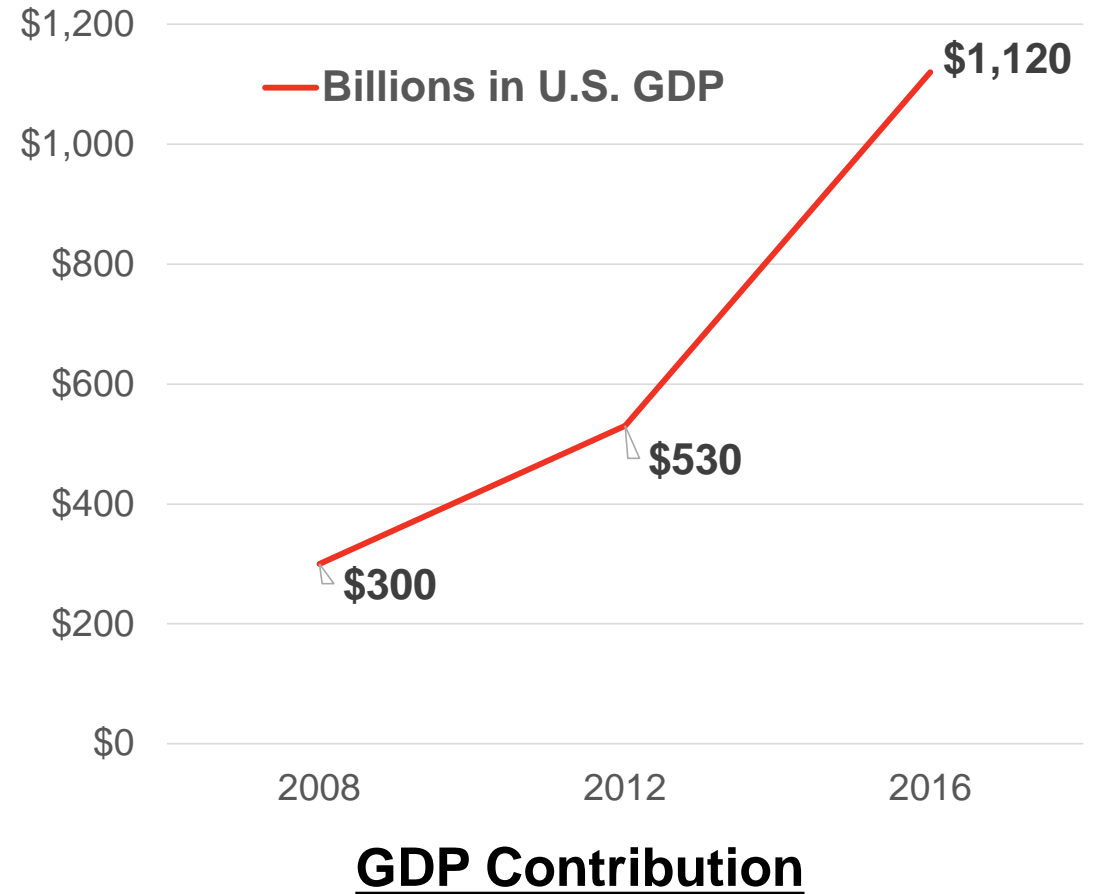


# GDP Contribution over \$1 Trillion

**\$1.121 trillion contribution for the U.S. economy in 2016, more than double its previous contribution to the U.S. GDP.**

**The industry currently accounts for 6% of the U.S. GDP, markedly higher than when it was at 3.7% in 2012.**

**This growth represents a 20% compound annual growth rate from 2012 to 2016—far outpacing the overall U.S. GDP average of 4% over the same four years.**



# The Internet is Still in its Take-off Phase

The pattern over the three IAB studies suggests that the Internet, though over 20 years old, is still at the take-off stage.

- ✓ The rate of job growth is greater each year than the year before
- ✓ Contribution to GDP grows faster each year
- ✓ New sectors become internet-reliant

# New Industries Have Appeared Since the Last Study

## Online Video

Most significant new source of internet traffic.

Over-the-top transmission gives consumers unprecedented control over what video to watch and when.

## User-Generated Content

Beyond social networking, which has continued to flourish, an industry has emerged of YouTube celebrities, bloggers, and podcasters, their agents and distribution networks, finding application in influencer marketing.

## On-Demand Platforms

They match workers to employers in a range of industries  
Uber, Lyft, Airbnb, Instacart are just a few

# And Others have Boomed Since the Last Study

## E-Commerce

Amazon grew more since 2012 than rival e-retailers  
And so did individuals who sell on eBay, Etsy, and Craigslist

## Cloud Computing

Software as a service allows tech to be consumed more flexibly and without substantial fixed cost. Digital startups and mature businesses can tailor information technology costs to needs.

## New Infrastructure

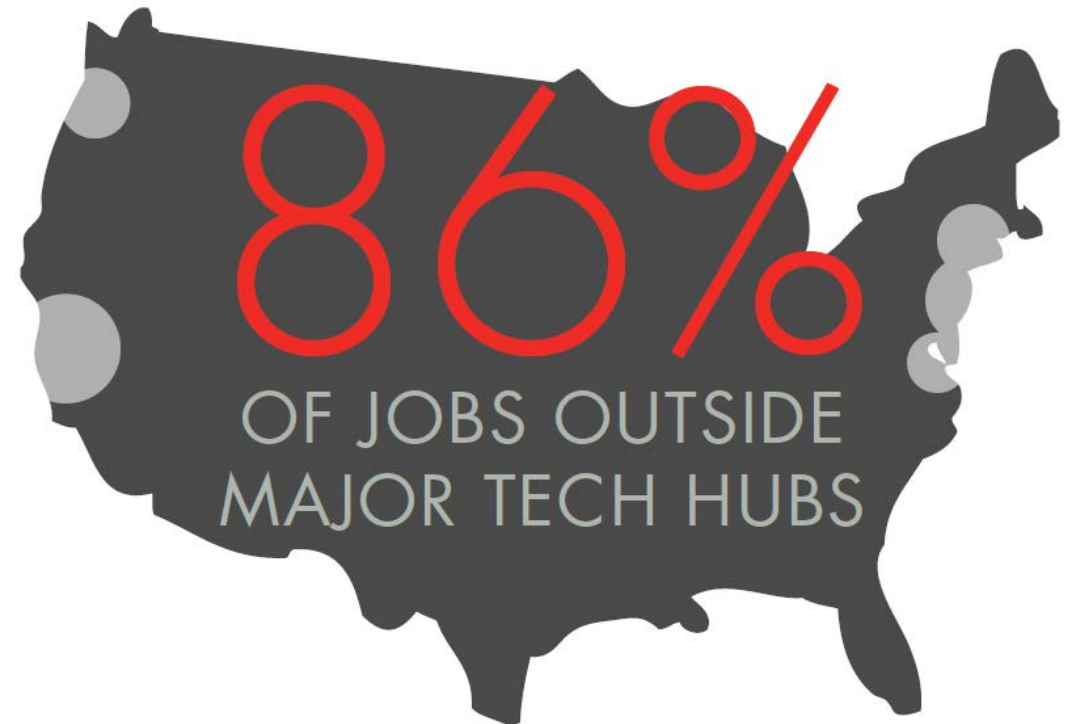
Much of the internet's data no longer travels on the backbone. Instead it moves on the edge of the network, from data suppliers to distribution nodes and on to homes.

# Jobs Growth Benefitted the **Entire** U.S.

**The Bay Area of California  
accounted for 4% of the jobs**

**Other tech centers – Manhattan,  
Seattle, Virginia, Boston –  
accounted for another 10%**

**But 86% of the jobs are found  
spread across every state and  
county of the nation**

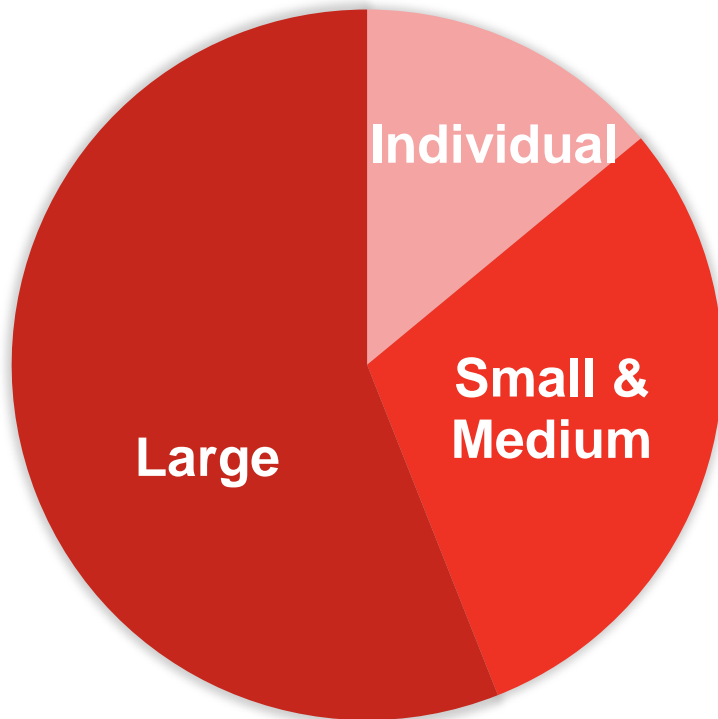


# Not Just Large Firms

**Large firms** made up a little over half of the internet's employment base in 2016

**Mid-sized and small firms** accounted for 30%

**Self-employed workers** such as sellers on Etsy individuals trading on eBay, Craigslist sellers, on-demand economy workers, and freelance individuals doing coding, content creation, and other services for web sites made up 14%



# Many Benefits are **Free** to Consumers

Entrepreneurs have been building out a market-making infrastructure, including advertising tech

As services move from analog to digital they often move from subscription to free



# IT Infrastructure is Accessible to Startups

**Small firms can now apply information technology resources** once available only to global giants

IT is evolving from enterprise software hosted on a firm's owned hardware to **rented cloud-based services**

As the internet reduces dependence on scale, entrepreneurs with good ideas but limited resources become **a force for disruptive innovation** in the U.S. economy



# This Pace of Growth is Only the Beginning

**Larry Summers:** “Data may be to the 21st century economy what oil was to the 20th, a hugely valuable asset essential to economic life . . .”

## **Prospects for 2020:**

**The internet of things supported by artificial intelligence**

**Especially in the auto industry**

**Fintech in personal investment markets**

**Tech-enabled healthcare markets**

# The Internet Promises...

**A coordinated world that is...**

**FASTER  
CHEAPER  
& BETTER**



**...than the world it is displacing**

# IAB Public Policy: Overview

**Mission:** Lead the advocacy efforts of IAB's membership as they engage all levels of government on key policy issues in order to ensure continued growth of the industry.

**Policy Areas:** Privacy, Security, Taxes, Trade, Copyright, Education, . . .

**More Information:** [iab.com/publicpolicy](http://iab.com/publicpolicy)

# Demonstrating State Impact

## CALIFORNIA'S ECONOMIC BENEFITS

CONTRIBUTES  
**\$168 BILLION**  
TO STATE GDP



Supports  
**478,157**  
Full-Time Jobs  
Across the State



Small and Medium  
Businesses Employ  
**44%**  
of Industry Workforce  
Nationwide

# Demonstrating District Impact

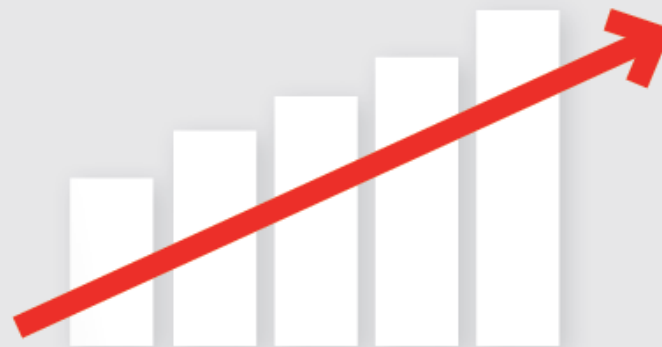
## CALIFORNIA'S 19th CONGRESSIONAL DISTRICT



**53,873**

**CONSTITUENT  
JOBS CREATED**

A 91% increase since 2012



**CONTRIBUTES**

**\$12.23**

**BILLION**

TO DISTRICT GDP

# Interesting Local Findings

- The annual growth rate of employment in the ecosystem is **19.6%** from 2012 to 2016, far exceeding the U.S. total non-farm employment annual growth of 1.8% over the same four years.
- Every congressional district has **at least 1,200 jobs** created by the ad-supported internet.
- The highest growth in ad-supported internet employment of any state was in **Alaska**.
- **Kentucky**, the second largest coal-producing state, has more than three times as many jobs in the ad-supported internet as in the coal industry.

# Advocacy Impact



Randall Rothenberg addresses congressional staff on the value of the advertising-supported internet ecosystem in Washington, DC

# Frequently Asked Questions



# Q&A

❖ Please type your question in the conversation box.

# Thank You!

❖ For additional questions:

- ✓ [Maggie.Zhang@iab.com](mailto:Maggie.Zhang@iab.com)
- ✓ [Alex@iab.com](mailto:Alex@iab.com)



# Economic Value of the Advertising-Supported Internet Ecosystem