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# Deregulation Lessons from the Internet

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# Idea 1: Interesting Things Happen When Industries Collide

# Vehicles + Machine Learning



Your Autopilot has arrived

The Tesla Motors Team • October 14, 2015

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# Space + Television

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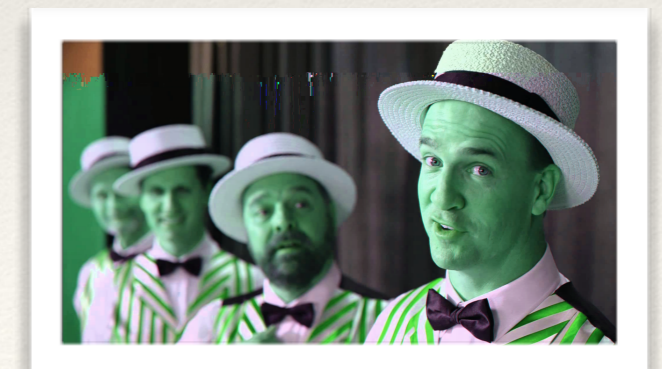
Launch of DirectTV 12

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Broadcast television is the Dominant share of Current Commercial Space Service Revenues

What commercial space marketing looks like:  
“High voice” Peyton Manning, due to cable.



Idea 2: Deregulation is a powerful force of change.

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# What industry?

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Grew slowly for 25 years, fostered primarily by military, scientific, and governmental agency support?

Developed powerful capabilities in research labs, with access by only a select few?

Prohibited a wide range of commercial activities, as incompatible with its core missions?

Had core aspects of its infrastructure controlled by a monopoly, very skeptical of entry and capable of persuading government officials to hinder competition?

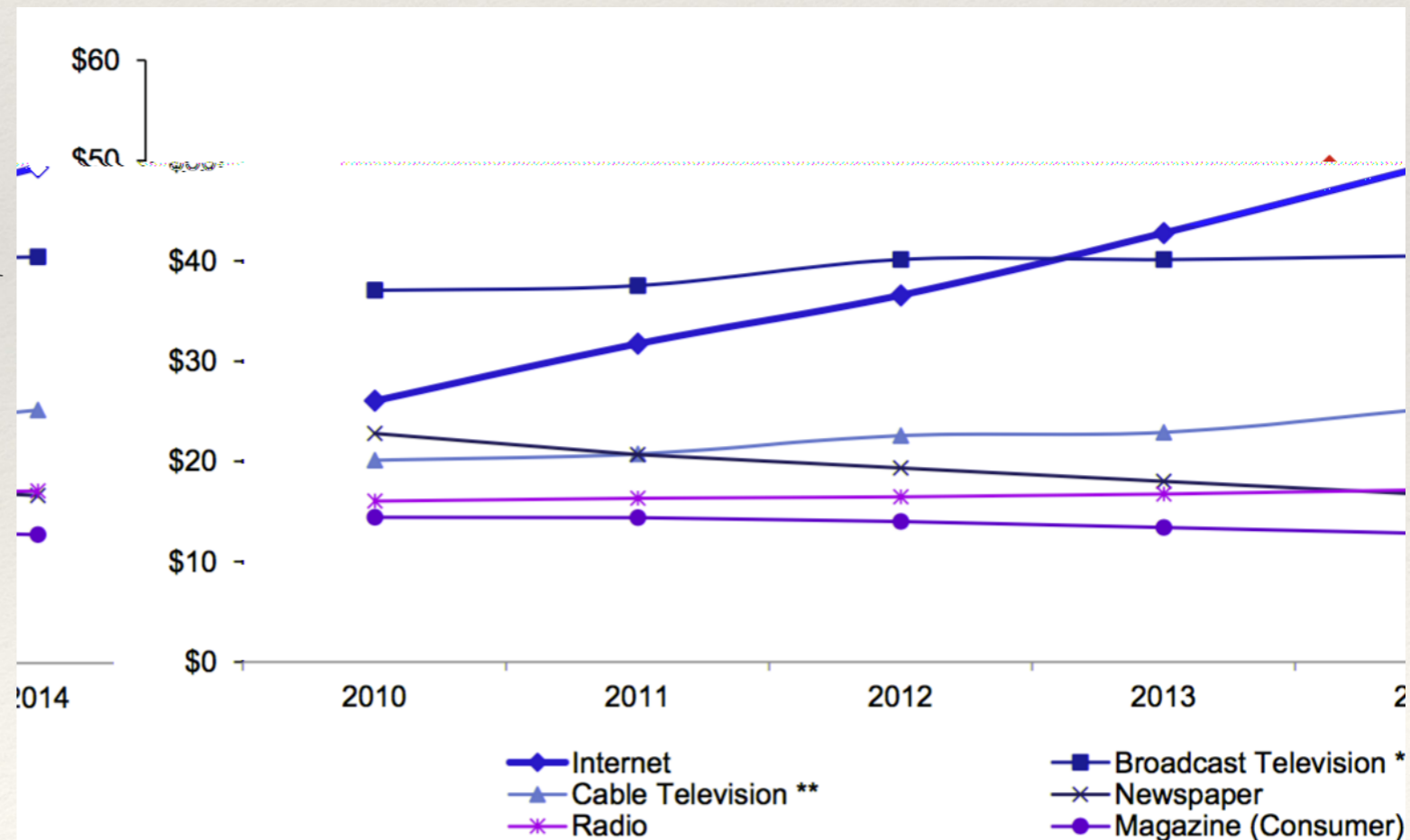
# Internet Has Been Commercial for (only) 20 years



October 1994: Very first Internet Ad

By 2014, Internet advertising surpassed television as the #1 advertising venue in the United States.

Worldwide, more than 2 billion users and rising rapidly.



Sources: IAB/PwC Internet Ad Revenue Report, FY 2014; PwC

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# Key Deregulation Steps

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- ❖ Judge Greene follows *U.S. Justice Department* and breaks up the Bell system in the 1980s,
- ❖ *National Science Foundation* spins off the Internet backbone, and drops its *Acceptable Use Policy*. (1992-1993)
- ❖ *Federal Communication Commission* auctions spectrum and allows wide use of unlicensed spectrum (*mid 1990s onward*)
- ❖ *National scientific laboratories* (mostly) encourage open source usage of its intellectual property - especially *World Wide Web* (CERN, 1990) and *Browser* (1993, NCSA)
- ❖ *U.S. Congress* alters tax code, encouraging venture capital funds. (late 1980s)
- ❖ *Policy consensus* of Congress & Executive Branch encourages end-to-end neutrality, limits Internet taxes, and allows informal governance of Internet standards. (1990s onward)



# Current Efforts

Synthesizing Internet lessons,  
applying to commercial space.

The collision of commercial space  
and high speed Internet access.