



# COS 448: Innovating Across Technology, Business, & Markets

Spring 2011

MW 1100-1220 in CS105

Prof. JP Singh

TA: Muneeb Ali

# Advertising

---



- Powers content and ‘free’ service industries, like businesses on the Web
- Hard to know what works
- Hard to measure effectiveness
- Communication technologies make it lot more effective and scalable
- Every medium struggles with who pays for content
  - Nobody likes the answer to be advertising, but it often is

# Advertising

---

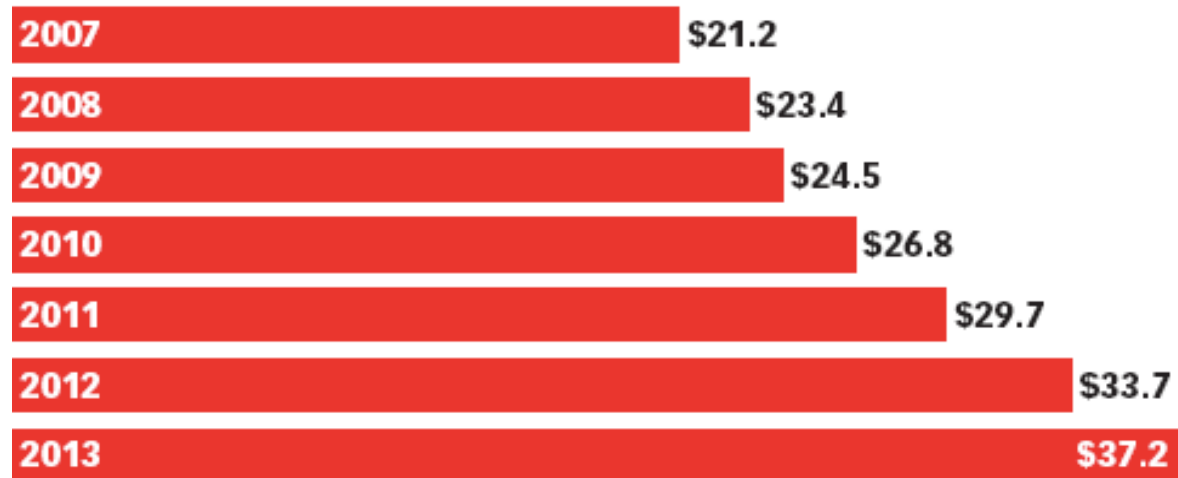


- Trend: advertising becoming more scientific and data-driven, and more targeted
  - E.g. Online
- Becoming increasingly computational
  - Online: billions of opportunities
  - Each is cheap, and very few ‘opportunities’ are effective
    - Cost is measured in cost per ‘mille’ (CPM)
  - Highly personalizable and targeted
  - Lots of data and measurability

# Market Size for Online Advertising



## US Online Advertising Spending, 2007-2013 (billions)

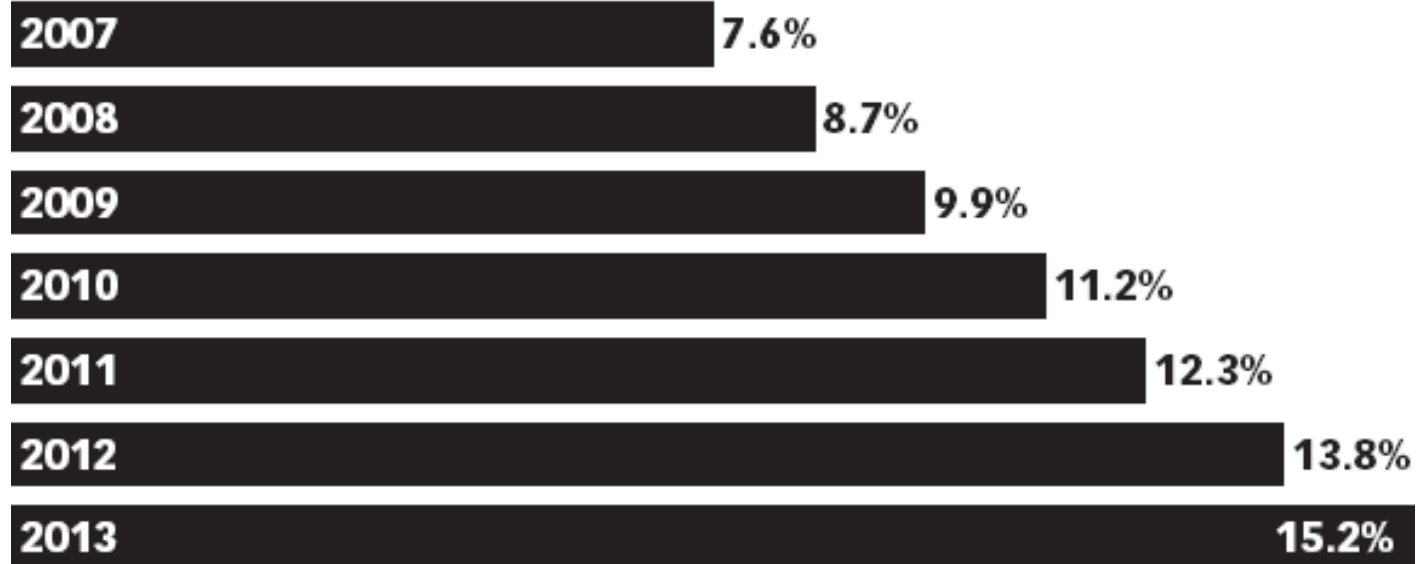


Source: eMarketer, April 2009

# Share of Overall Advertising Spend

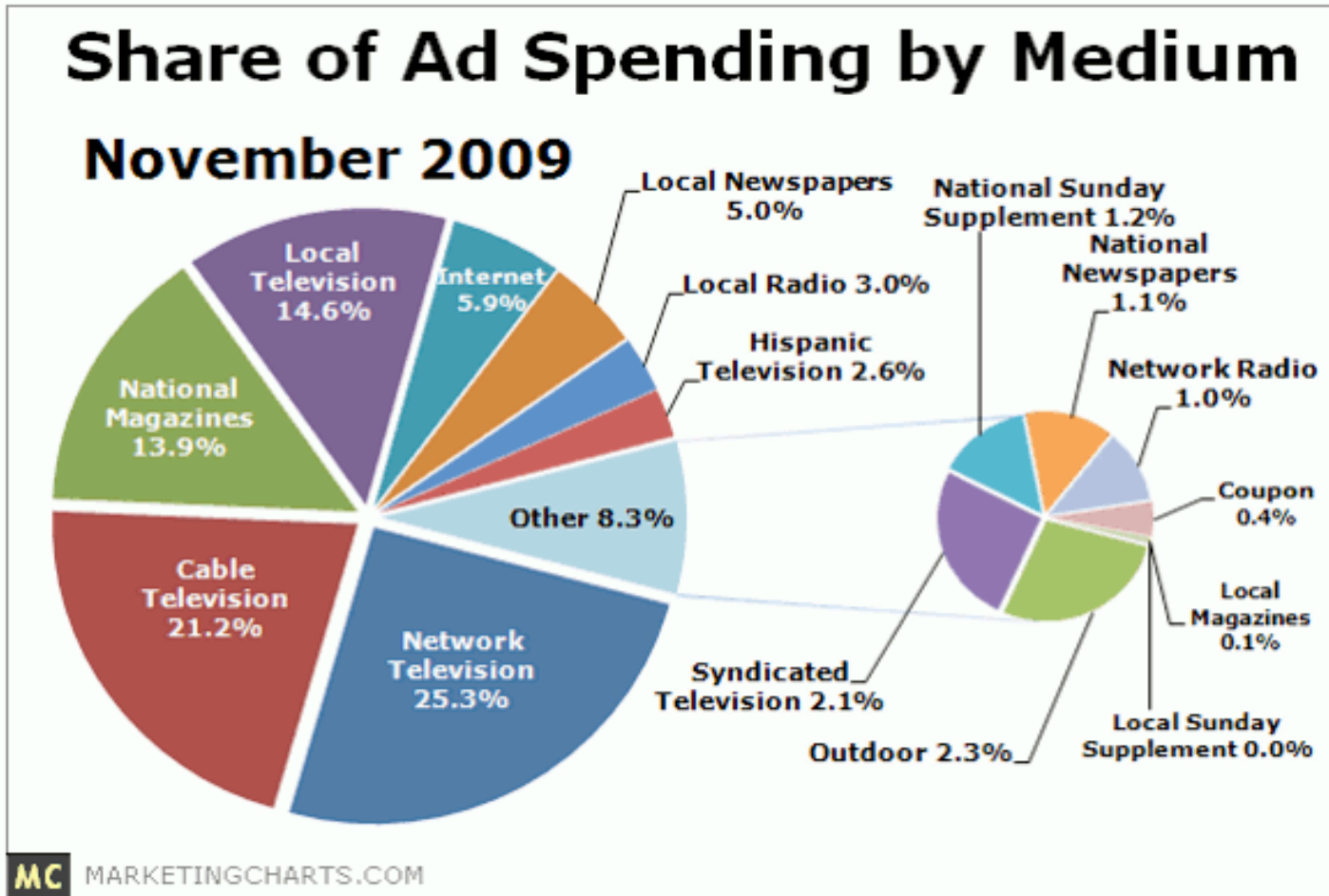


## US Online Advertising Spending as a Percent of Total Media Advertising Spending, 2007-2013



Source: eMarketer, April 2009

# Ad Spending by Medium



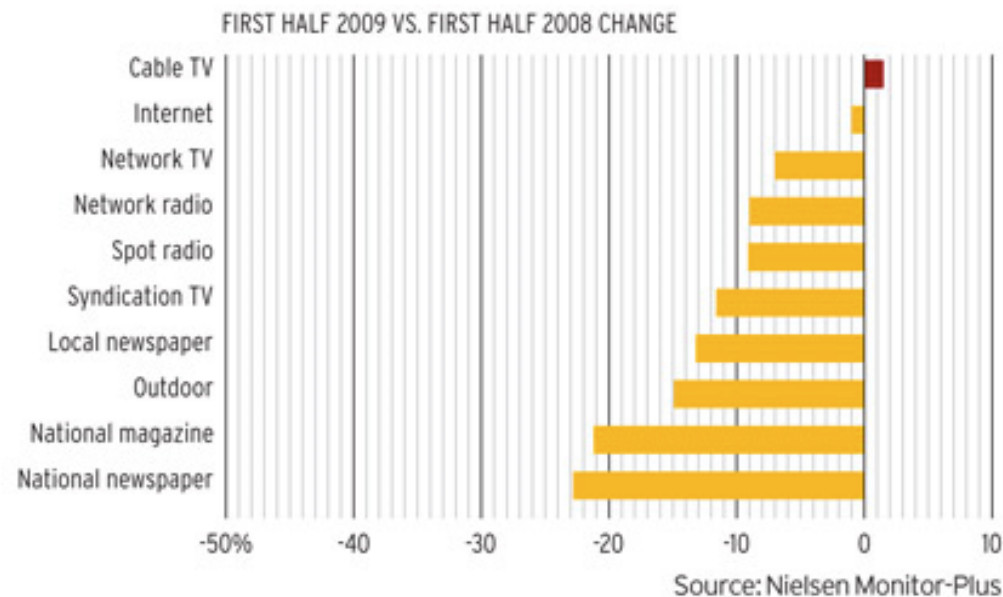
Source: Nielsen Online, AdAcross

# Impact of Financial Crisis



## SPENDING BY MEDIUM

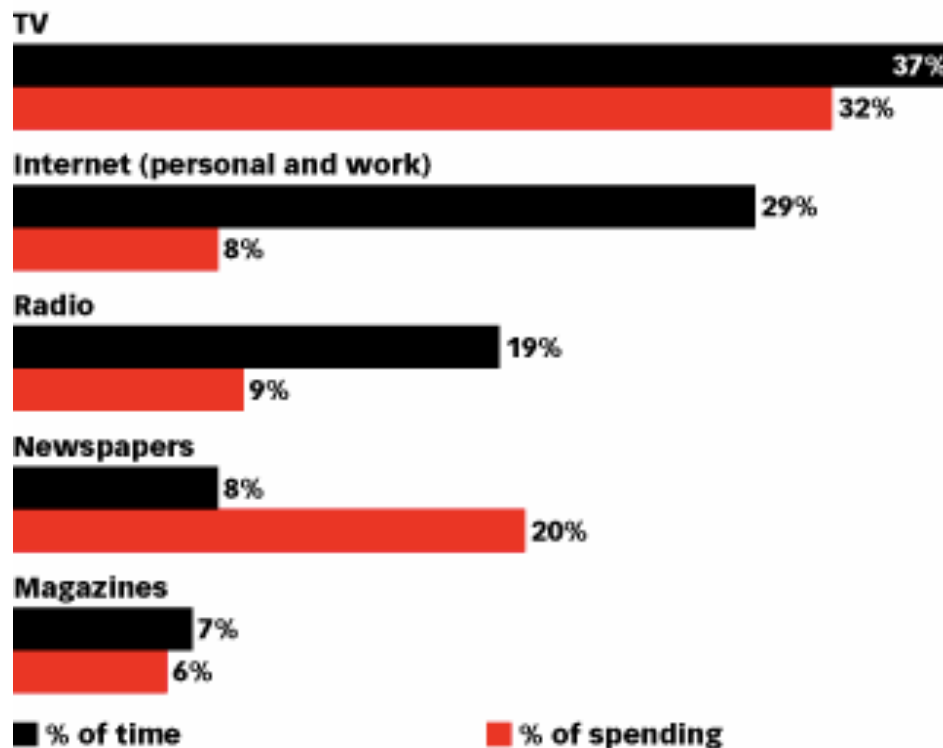
Cable was the only bright spot, as even online outlays declined



# Time Spent versus Ad Spend



## Share of Time in a Typical Week that US Adults Spend with Select Media\* vs. Share of US Advertising Spending by Media, 2007



Note: \*consumer media time does not include time spent using a cellphone, watching DVDs or playing video games  
Source: Forrester Research, "Teleconference: The US Interactive Marketing Forecast 2007-2012," January 4, 2008



# Typical CPMs

---



- Outdoor: \$1-5 CPM
- Cable TV: \$5-8 CPM
- Radio: \$8 CPM
- Online
  - Premium (negotiated sale) Display: \$5-30 CPM
  - Remnant (auctioned) Display: < \$1-\$2
  - Contextual: \$1-\$5 CPM
  - **Search: \$1 to \$200 CPM**
- Network/Local TV: \$20 CPM
- Magazine: \$10-30 CPM
- Newspaper: \$30-35 CPM
- Direct Mail: \$250 CPM

# Types of Online Advertising

---



- Search Advertising
  - Display Advertising
  - Contextual Advertising
- 
- Classifieds, video, mobile
- 
- Guaranteed buys
  - Non-guaranteed (spot market) buys

# Online Ads Market Breakdown

