Sentiment and Venue Choice in Social Media Posting Behavior

David A. Schweidel
dschweidel@emory.edu
@duschweidel
Social Media Data Overload

- Multiple time periods
- Multiple metrics per venue
- Multiple venues, different metrics

“Sentiment and Venue Choice in Social Media Posting Behavior,” under revision for *JMR*, with Wendy W. Moe

“Drivers of Social Media Rebroadcasting: Investigating the Role of Message Content and Influencers,” under review at *JMR*, with Yuchi Zhang and Wendy W. Moe
WHERE

do we post?
What’s Trending on Twitter?

The Colbert Report

1000 Days Global Mentions Count for "Tiger Woods"

Words surrounding "Tiger Woods"
Social Media Posting Decisions

Opinion / Brand Evaluation

Do I post?

What do I post?
- Sentiment
- Product
- Attribute

Where do I post?
- Venue Format
- Domain
Does it Matter Where We Listen?

Distribution of Comments

Observation Month

- Blog
- Forum
- Microblog
- Other

Proportion of Positive Comments

Observation Month

- Blog
- Forum
- Microblog
- Aggregate
Sources of Variation in Sentiment

General Brand Impression (GBI)

Venue

Message topic

Venue-specific shocks
Analysis Overview

• Simultaneous model of expressed sentiment and venue choice
• Predictors of venue choice
  – Message content
  – General brand impression (GBI)
• Predictors of sentiment
  – Venue chosen
  – Message content (attribute and topic)
  – General brand impression (GBI)
Identifying a Common Thread
GBI vs. Offline Survey

- Potential for GBI as a lead indicator

- Correlation with survey (t)
  - GBI = .376
  - Avg sentiment = .008
  - Blogs = .197
  - Forums = -.231
  - Microblogs = .394

- Correlation with survey (t-1)
  - GBI = .881
  - Avg sentiment = .169
  - Blogs = .529
  - Forums = .213
  - Microblogs = .722
## GBI vs. Monthly Close of Stock Price

<table>
<thead>
<tr>
<th></th>
<th>Mean Coeff</th>
<th>% p-val &lt; .05</th>
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<tbody>
<tr>
<td>Constant</td>
<td>-68.09</td>
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<td>S&amp;P*</td>
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<td>GBI(t)</td>
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<td>Adj R-sq</td>
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Perils of Selective Listening

- Index of over/under-estimation of messages mentioning specific product attributes

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<th></th>
<th>Application Compatibility</th>
<th>Documentation/Support</th>
<th>Price</th>
<th>Ease of Installation</th>
<th>Brand Reputation</th>
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<tbody>
<tr>
<td>Blog only</td>
<td>-27.73</td>
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Takeaways

• Social media behavior varies across venue formats
  – Need to account for the source of SM data
  – Neglecting to account for venue can bias sentiment inferences
  – Prevalence of attributes mentioned in social media depends on venues monitored

• Potential to use social media for market research
  – Adjusted measure (GBI) can serve as lead indicator

• At a minimum, social media dashboard should
  – Distinguish among venues and topics
  – Provide links to strategic objectives and benchmarks
Questions?

dschweidel@emory.edu
@denschweidel