Social Media
Strategy and Effectiveness

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Why use social media?

- Of ~3.8 billion people in the world, 2.6 billion are social media users.
- Effective way to quickly disseminate critical information before, during and after disasters.
- Used to help prepare communities before disaster strikes and to help them recover afterwards.
- Critical for organizations to have established and trusted social media presence **before** an event occurs.
- Powerful tool already being utilized by:
  - media
  - governments
  - science and engineering organizations
  - individual scientists.
- A social media strategy guides efforts to meet goals.
IRIS is a consortium of ~100 US universities dedicated to the operation of science facilities for the acquisition, management, and distribution of seismological data. IRIS programs contribute to

- scholarly research,
- education,
- earthquake hazard mitigation, and
- verification of the Comprehensive Nuclear-Test-Ban Treaty
IRIS Social Media

Facebook
- Education and Public Outreach (EPO)
- Early Career Investigators (ECI)
- Recent Earthquake Teachable Moment (RETM)
- Research and Facilities
- Undergraduate Intern Program

Twitter
- IRIS_EPO
- RETM
- RETM in Spanish
- IRIS_ECI

YouTube

LinkedIn

Pinterest

Instagram

Reddit
The State of Social Networks

- +2.2 billion monthly users
- If FB were a country it would be the largest country in the world.
- 48% of people observing lent said they were “fasting from technology” – 16% said they were abstaining from FB.

- 336 million active monthly users
- 23% US adults use Twitter (primarily ages 30-64)
- 69 million US users
- 86% of users said they use the site to get news, 74% do so daily
- 83% of world leaders are on Twitter
Why Use Facebook?

- The most ubiquitous (2.2 billion users)
- Can share all types of content (videos, pictures, text)
- 62% of Americans get their news from social media, most from Facebook
- 23% of users check their accounts at least 5 times per day
- Already extensively used by professional organizations and programs

FACEBOOK?
WHY DO I NEED A BOOK FULL OF FACES?
Why Use Twitter?

- **Disseminate information**
  - 336 million active users
  - Extensively used by media

- **Build a network**
  - Median Twitter following 730x larger than the median university department size (Darling et al., 2013)

- **Educate the public**
  - 55% of followers are scientists/science orgs, etc.; 45% public, media, non-scientists (Darling et al., 2013)

- **Influence policy**
  - Extensively used by policy makers (all members of Congress have a Twitter acct)
Theoretical Framework

Practical

1) Objective
2) Audience
3) Content
4) Posting
5) Engagement
6) Evaluation

Modified from Peters et al., 2013
1) Objective
   1) What are you trying to accomplish?
   2) Motivation?
   3) Meet larger goals?
Developing a Strategy

1) Objective

2) Audience
   1) Intended audience?
   2) Age?
   3) Knowledge base?
   4) Special target groups?
Developing a Strategy

- Objective
- Audience
- Content
  - What will you post?
  - Created or shared?
  - What media?
  - Sources?

INPUT

MOTIVATION
- Intellectual value
- Cultural value

CONTENT
- Quality
  - Valence
  - Volume

INTERACTIONS
- Expressing
- Networking
- Sharing

NETWORK STRUCTURE
- Size
  - Connections
- Segmentation
- Distribution

METRICS
Developing a Strategy

- Objective
- Audience
- Content
- Posting Strategy
  - How often?
  - When?
  - Community growth strategies
Developing a Strategy

- Objective
- Audience
- Content
- Posting
- Engagement
  - Community engagement?
  - The “social” part of social media
Developing a Strategy

- Objective
- Audience
- Content
- Posting
- Engagement
- Evaluation
  - Online Metrics
    - Who is engaging?
    - When?
    - Successful post types?
  - Survey of users
    - Yearly

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METRICS
Is a strategy effective?

Facebook
Strategy implemented 1/1/2015

In 16 months
- 3X followers
  o 4095 to 12,800

~32X increase in weekly reach
  o 1500 to 50,000
Is a strategy effective?

- Our Facebook page continues to grow
  - Current average of 624k impressions per month
  - Weekly metrics evaluations and biannual strategy updates
Is a strategy effective?

Twitter
Since Dec 2015

-9X increase in followers
-700 to 6900
-23X increase in monthly impressions
-13k to 320k
~12.7 million FB and TW impressions (July 2017-June 2018)
### How much time?

#### #SciComm via #SoMe
Choosing the best social media channel to share your science.

<table>
<thead>
<tr>
<th>Time on Twitter</th>
<th>Time on Facebook</th>
</tr>
</thead>
<tbody>
<tr>
<td>34% spend 15-30 minutes</td>
<td>The IRIS SM manager spends 15-20 min</td>
</tr>
<tr>
<td>28% spend 30-60 minutes</td>
<td>Can set posts to go out independently</td>
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- **Time on Twitter**
  - 34% spend 15-30 minutes
  - 28% spend 30-60 minutes

- **Time on Facebook**
  - Can set posts to go out independently

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<tr>
<th>Platform</th>
<th>Time</th>
<th>Length</th>
<th>Images</th>
<th>Audience</th>
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<tbody>
<tr>
<td>Twitter</td>
<td>Low</td>
<td>Shortest</td>
<td>Sure!</td>
<td>Peers/Public</td>
<td>18-29</td>
</tr>
<tr>
<td>t</td>
<td>Medium</td>
<td>Short(ish)</td>
<td>Yas!</td>
<td>Public</td>
<td>18-24</td>
</tr>
<tr>
<td>Instagram</td>
<td>Low</td>
<td>Varies</td>
<td>Must!</td>
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<td>18-29</td>
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<td>Facebook</td>
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<td>Varies</td>
<td>Sure!</td>
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<td>25-54</td>
</tr>
<tr>
<td>WordPress</td>
<td>High</td>
<td>Long</td>
<td>Ok!</td>
<td>Peers</td>
<td>21-35</td>
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Conclusions

- Social media provides an effective way to quickly disseminate critical information before, during and after disasters.
- A social media strategy can have statistically significant impacts on efficacy.
- Metric analysis and additional evaluation is an integral part of a successful social media strategy.

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