

The background of the slide is a photograph of the Iowa State University campus, featuring the Old Capitol building and a large tree-lined walkway. The entire image is covered with a semi-transparent red overlay.

Capturing (New) Constructs using Content Analysis

Content Analysis PDW, AOM 2024

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IOWA STATE UNIVERSITY



Construct of Interest?

wrds WHARTON
RESEARCH
DATA
SERVICES
The Global Standard for Business Research



New Ways to Measure New Constructs

Construct development: Great way to make contributions to the field!

Examples of new constructs & measures:

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2006, Vol. 31, No. 1, 50-71.

CELEBRITY FIRMS: THE SOCIAL CONSTRUCTION OF MARKET POPULARITY

VIOLINA P. RINDOVA
University of Maryland

TIMOTHY G. POLLOCK
The Pennsylvania State University

MATHEW L. A. HAYWARD
University of Colorado at Boulder

We extend the concept of celebrity from the individual to the firm level of analysis and argue that the high level of public attention and the positive emotional responses that define celebrity increase the economic opportunities available to a firm. We develop a theoretical framework explaining how the media construct firm celebrity by creating a "dramatized reality" in reporting on industry change and firms' actions. Firms contribute to this process by taking nonconforming actions and proactively seeking to manage impressions about themselves.

© Academy of Management Journal
2010, Vol. 53, No. 5, 1131-1152.

A TALE OF TWO ASSETS: THE EFFECTS OF FIRM REPUTATION AND CELEBRITY ON EARNINGS SURPRISES AND INVESTORS' REACTIONS

MICHAEL D. PFARRER
University of Georgia

TIMOTHY G. POLLOCK
The Pennsylvania State University

VIOLINA P. RINDOVA
University of Texas at Austin

The effects of intangible assets on organizational outcomes remain poorly understood. We compare the effects of two intangible assets—firm reputation and celebrity—on (1) the likelihood that a firm announces a positive or negative earnings surprise, and (2) investors' reactions to these surprises. We find that firms that have accumulated high levels of reputation ("high-reputation" firms) are less likely, and firms that have achieved celebrity (celebrity firms) more likely to announce positive surprises than firms without these assets. Both high-reputation and celebrity firms experience greater market rewards for positive surprises and smaller market penalties for negative surprises than other firms.

New Ways to Measure New Constructs

Construct development: Great way to make contributions to the field!

Examples of new constructs & measures:

Organizational Behavior and Human Decision Processes

Vol. 86, No. 1, September, pp. 35–66, 2001

doi:10.1006/obhd.2001.2972, available online at <http://www.idealibrary.com> on IDEAL[®]

Regulatory Focus Theory: Implications for the Study of Emotions at Work

Joel Brockner and E. Tory Higgins

Columbia University

© Academy of Management Journal
2015, Vol. 58, No. 4, 1261–1282.
<http://dx.doi.org/10.5465/amj.2013.0377>

MOTIVATED TO ACQUIRE? THE IMPACT OF CEO REGULATORY FOCUS ON FIRM ACQUISITIONS

DANIEL L. GAMACHE
University of Georgia

GERRY MCNAMARA
Michigan State University

MICHAEL J. MANNOR
University of Notre Dame

RUSSELL E. JOHNSON
Michigan State University

Why Content Analysis?

- **Sentiment Analysis:**
 - Gauge external perception and/or emotional tone



Positive



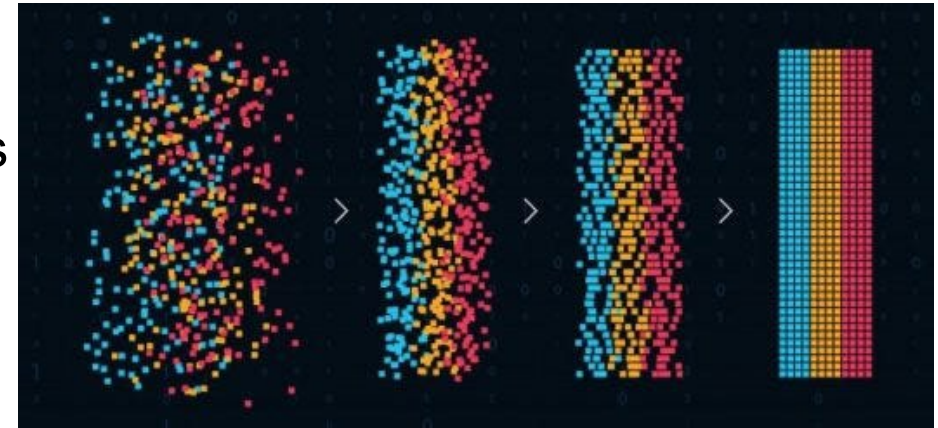
Negative



Neutral

Why Content Analysis?

- **Sentiment Analysis:**
 - Gauge external perception and/or emotional tone
- **Uncovering Patterns:**
 - Systematically identify recurring themes and phrases
 - Detect trends over time



- [illegible]

What is Content?



An illustration on a purple background showing a man in a yellow shirt and green pants standing on the left, holding a tablet and gesturing towards a large screen. On the screen, a woman in a green patterned sweater is visible. To the right of the screen, another woman in a green sweater and yellow skirt sits in a grey office chair, gesturing back. Three speech bubbles (two yellow, one green) are floating around the screen, indicating communication. The text 'Example from an Ongoing Research' is overlaid in white.

Example from an Ongoing Research

Firm Communication & Impression Management

Denise Morrison

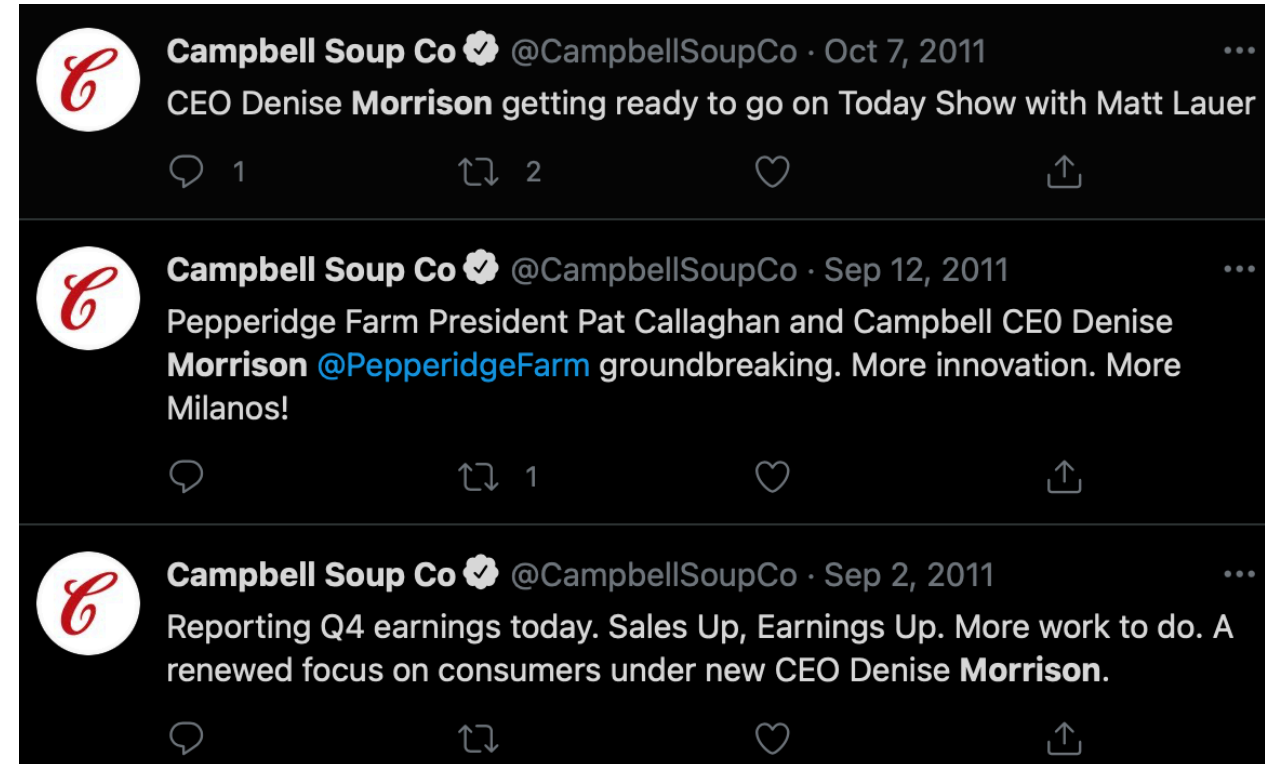
Campbell's CEO
(2011-2018)



Example

Twitter

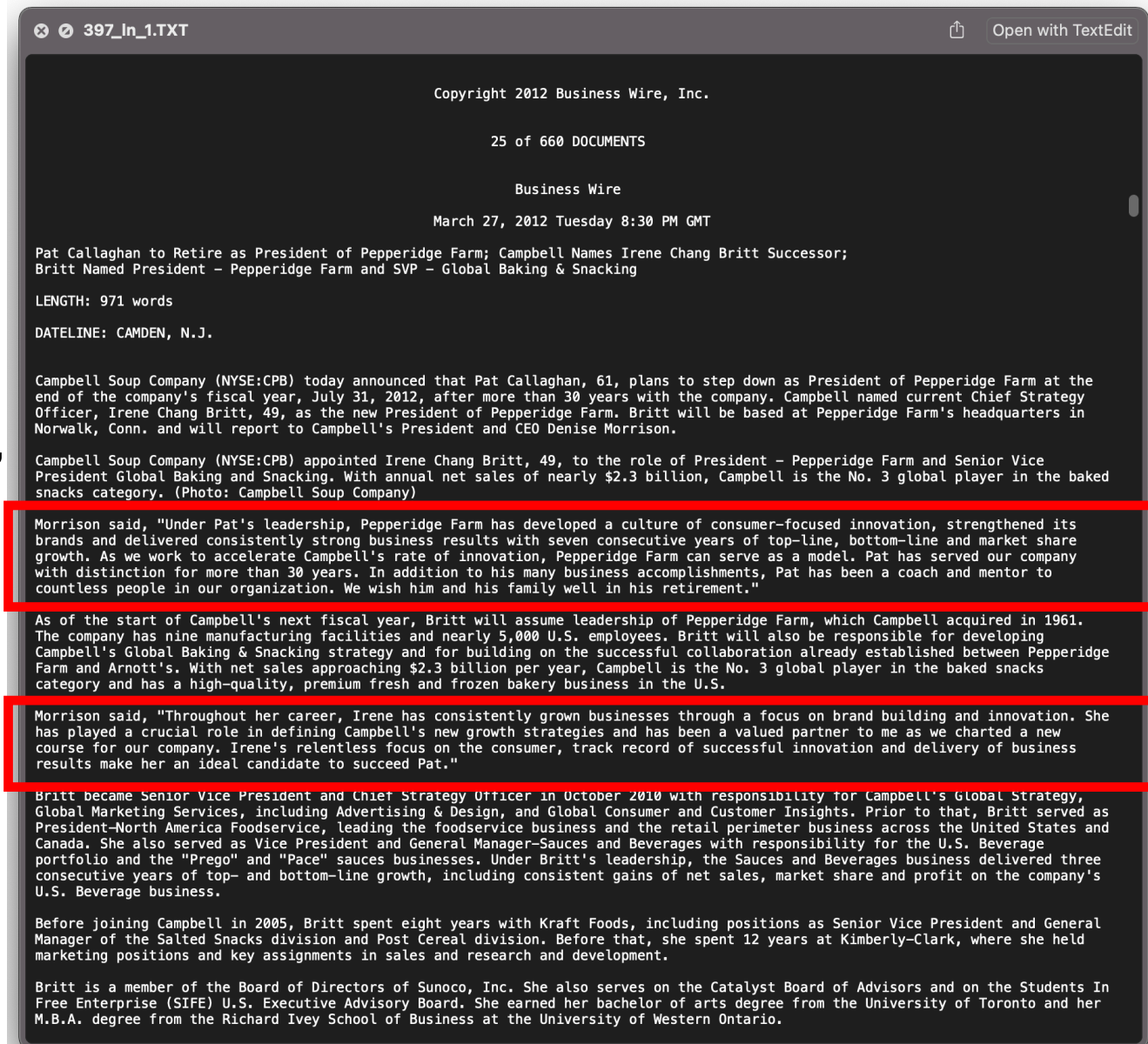
- Denise Morrison became the new CEO in August 2011.
- The firm immediately started featuring her on Twitter.
- Notice the positivity and action in the language.



Example

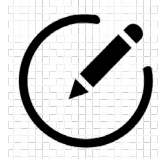
Press releases

- The same pattern holds with press releases, though at a lower volume.
- She has multiple, paragraph-sized quotes in several press releases.
- Notice the action and change language.



Our Construct

CEO Prominence in Firm Communication



How do we define it?

The frequency and centrality with which a CEO is mentioned in firm communication



How do we measure it?

Firm press releases + Social media channel

Data Sources

LexisNexis, Factiva



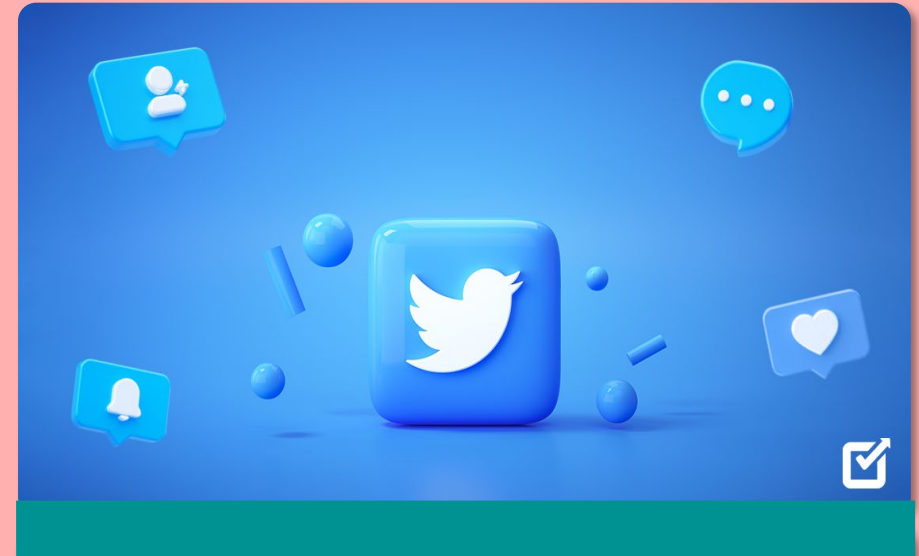
Twitter API



Measurement

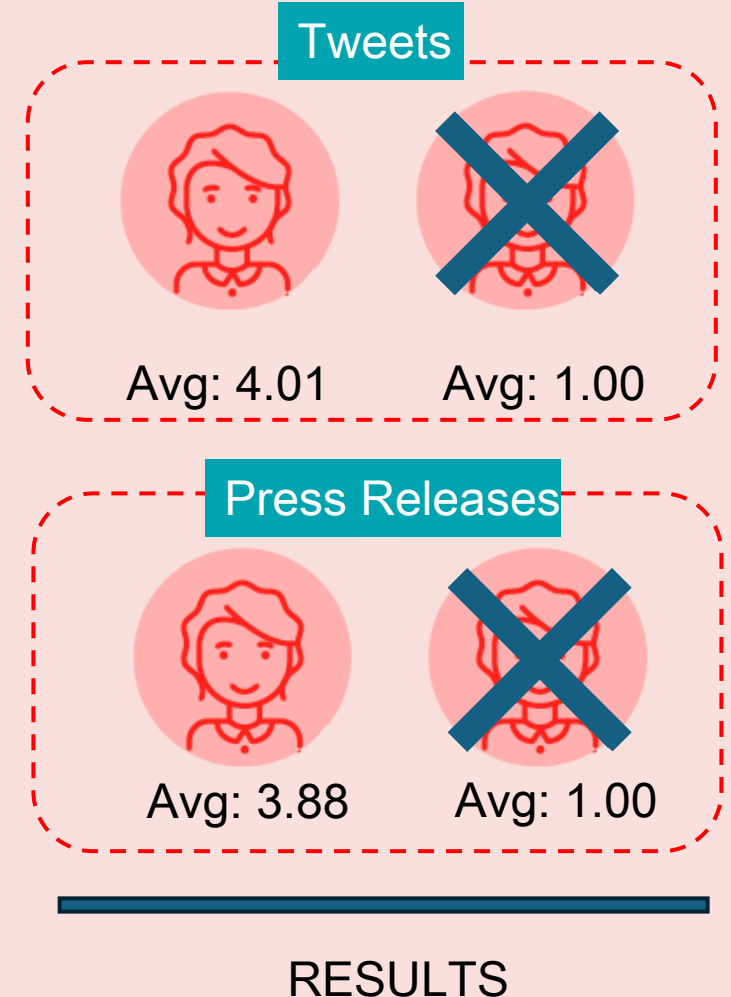
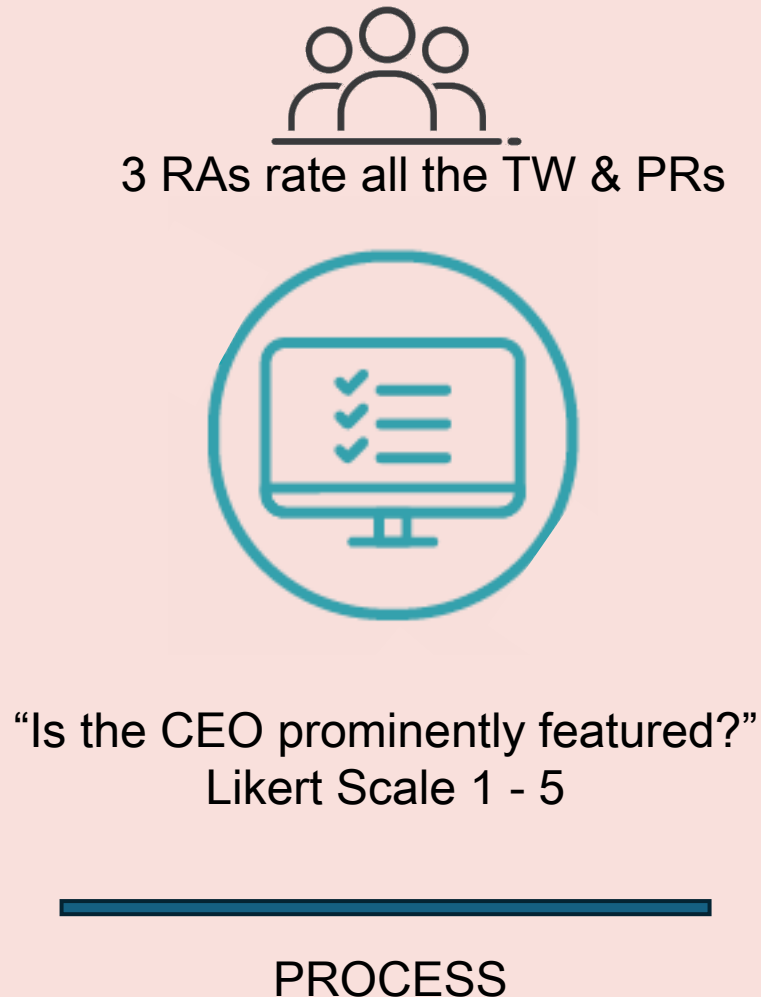
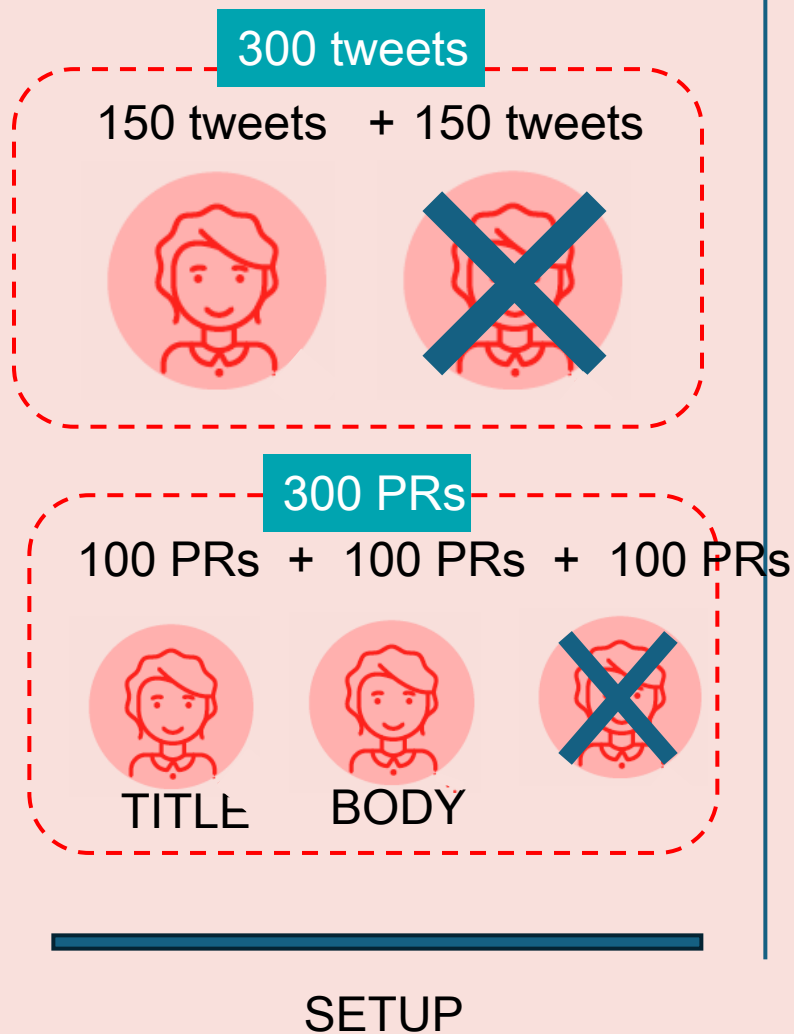


- 1) Total number of mentions of the CEO across all firm PRs
- 2) Proportion of PRs that mention the CEO
- 3) Count of PRs that mention the CEO in the title

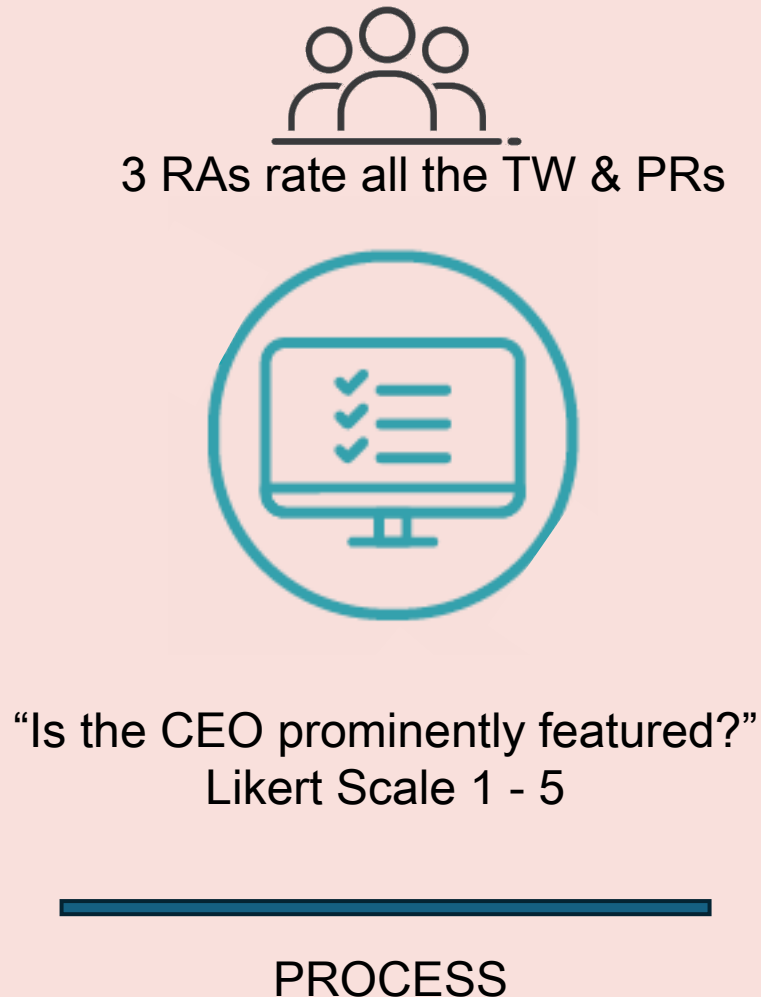
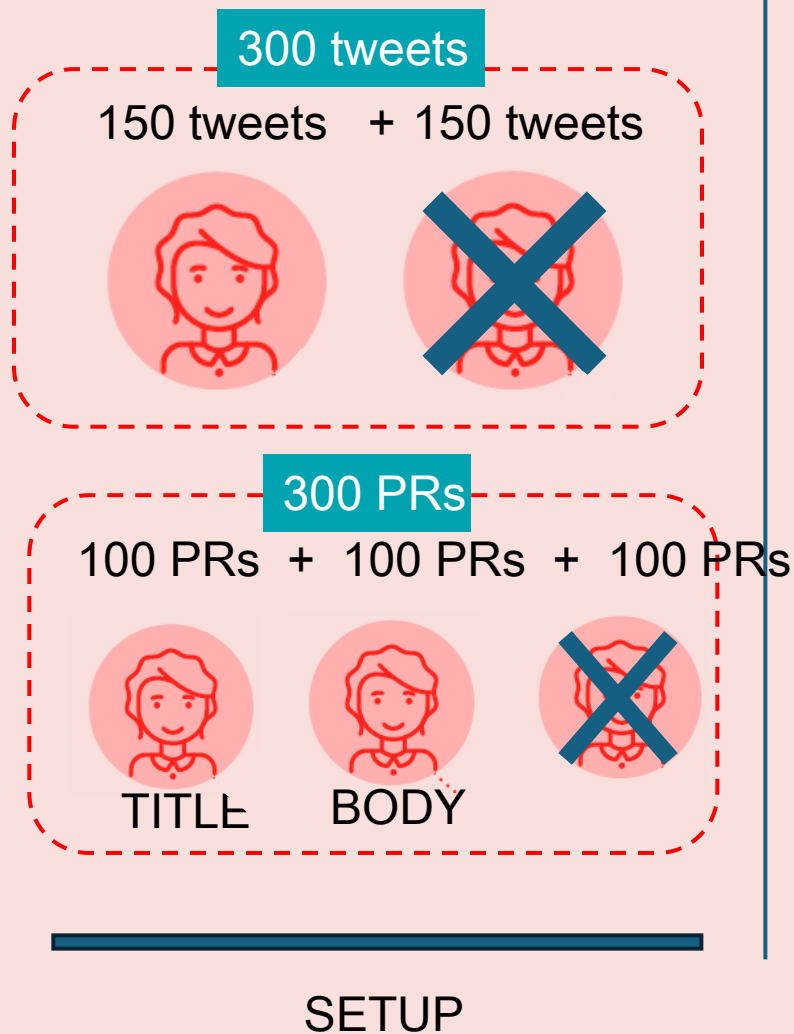


- 1) Total number of mentions of the CEO across all firm tweets
- 2) Proportion of tweets that mention the CEO

Validation of the New Construct

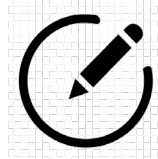


Validation of the New Construct



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How do we measure it?

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Challenges with Content Analysis (When Capturing Constructs)

- **Data quality**
 - Inconsistent data: Variability in data sources can lead to inconsistencies
 - Noise in data
- **Interpretation issues**
 - Subjectivity: Different researchers might interpret the same data differently
 - Contextual understanding: Misinterpreting data due to lack of context
- **Validation challenges**
 - Ensuring reliability & construct validity



Available Tools: LIWC



- Developed by Dr. Pennebaker at UT Austin
- Great at capturing:
 - **Psychological dimensions**
(emotional tone, cognitive processes)
 - **Linguistic dimensions**
(pronouns and function words, language style)



User-friendly,
Broad applicability
(diverse sources of texts)

Dictionary dependence,
Can't capture nuance of
language (e.g., sarcasm or irony)



Available Tools: ATLAS.ti

- Qualitative data analysis software
- Great with:
 - **Robust coding capabilities:** Researchers can assign codes to specific data segments and group these codes into broader categories.
 - **Data visualization:** network views & word clouds



User-friendly,
Multimedia support,
Supports collaboration

Learning curve,
Human coders to check coding
schemes



Thank you!

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