# User Behavior and Social Media Structure

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# Structure

- The decisions made by social media site developers, adminstrators, etc. that are intended to enhance or increase user participation

- Aesthetic elements can be structure if linked to user performance in some way

- Those are not really my focus

# Current Issues

- How can we encourage participation?
  - Quantity
  - Quality
- Is there a schema or model that explains behavior trends in social media?
- Using a model, can a method for increasing participation be determined?

# Current Issues (cotd.)

- Separation of user behaviors
  - Endogenous: behavior triggered by personal preferences
  - Exogenous: behavior triggered by peer influence

Brzozowski, Sandholm, & Hogg (2009)

# My Research Questions

- How does structure of social media systems play a role in user behavior?

- Is there structural diffusion occurring from popular social media (i.e. what do users expect to see)?
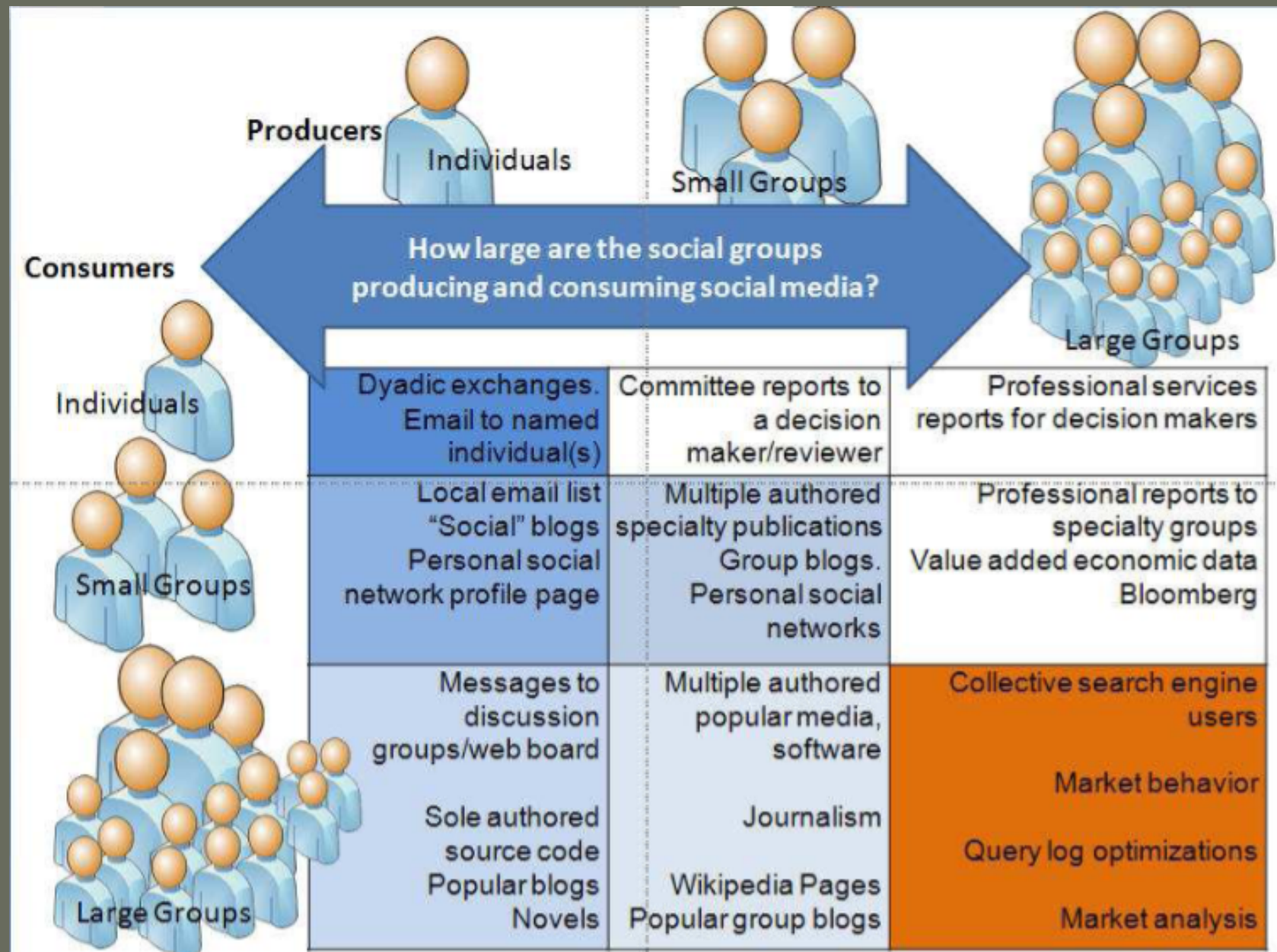
# Dimensions of Analysis

- How does system structure influence:
  - User attitudes
  - Participation rates
  - User behaviors

# An example

- Some social sites through their structure develop user roles
  - e.g. Wikipedia— "vandal hunters"
- Site size facilitates different types of interaction

Smith et al. (2008)

# An example



How large are the social groups producing and consuming social media?

| Consumers \ Producers | Individuals | Small Groups | Large Groups |
|---|---|---|---|
| Individuals | Dyadic exchanges. Email to named individual(s) | Committee reports to a decision maker/reviewer | Professional services reports for decision makers |
| Small Groups | Local email list "Social" blogs Personal social network profile page | Multiple authored specialty publications Group blogs. Personal social networks | Professional reports to specialty groups Value added economic data Bloomberg |
| Large Groups | Messages to discussion groups/web board Sole authored source code Popular blogs Novels | Multiple authored popular media, software Journalism Wikipedia Pages Popular group blogs | Collective search engine users Market behavior Query log optimizations Market analysis |

# An example: analysis

- Attitudes: people have positive attitudes when they have a role and know other's roles

- Participation Rates: people participate more and in niche ways according to their roles

- User Behaviors: there is less social pressure to participate in a meaningful way in large groups (e.g. Wikipedia) than in small groups

Smith et al. (2008)

# Paper Goals

- Synthesis of research in this area
- Identifying structural elements that researchers have linked to desired participation goals
- The development of a model (or at least a pathway towards a model)