The Social Web

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brand nations at the world’s best companies
social media at a glance

the social anthropology perspective

what is relationship

network perspective of the giants

Q&A
The usual suspects

- **Google+**
  - Founded: 1998 Sep
  - 25+ M members
  - ~26K employees

- **LinkedIn**
  - Founded: 2003 May
  - 100+ M members
  - ~1300 employees

- **Facebook**
  - Founded: 2004 Feb
  - 750+ M members
  - ~2000 employees

- **Twitter**
  - Founded: 2006 Mar
  - 175+ M members
  - ~400 employees

Just launched
June 28, 2011

market share of social networks

created by Priit Kallas
www.dreamgrow.com
growth rate of Google+

What is social media

- The usual suspects

- The less usual suspects
  - The blog blogosphere: ~150-200 M blogs (via BlogPulse)
  - Online communities
  - Media sharing: flickr, youtube, etc.
the world is more complex: functional perspective

▪ It’s a huge ecosystem of tools & services
▪ The social media revolution

but social is not new…

▪ Humans have been social since they were caveman
▪ Cyber-anthropology of social media: shift the focus from technology → relationship
▪ From the relational perspective, there are only 2 major types of social media
  • social network
  • community
▪ Social in the pre-digital era
how do social networks form?

A story of how Bob’s social network was built

Bob
how do social networks form?

Social networks form naturally within communities as people establish relationships.

Social network maintains relationships as people move between communities.

what do real social network data look like?

[Visual representation of a global social network map]
communities vs. social networks (on/offline)

- **Social Network**
  - Held together by *pre-existing interpersonal relationships* between individuals
  - You know everyone in your network (ego-network), people who are connected to you directly
  - Each person has only one social network, despite there are many social network platforms
  - Structure: Network

- **Community**
  - Held together by some *common interests* of a large group of people
  - Most people, especially new members, do not know majority of the members in the community
  - Any one person may be part of many communities at any given time
  - Structure: Hierarchical, overlapping & nested

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Social Network
Facebook, Linkedin, etc.

Community
Flickr, Yelp, Wikipedia, Youtube, Digg, etc.

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Social Network
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lifecycle of relationships

1. creating a weak tie
   - disconnected
   - do something bad
   - weak tie

2. building tie strength
   - do nothing
   - strong tie

3. maintaining relationship

Easy!
All it takes is an “hello”

what is relationship
the components of a relationship

- **Relationship from the sociology perspective**
  - A tie or a connection between two entities (e.g. people, companies, cities, or even nations)
  - **Tie strength** = strength of the relationship

- **Prof. Mark Granovetter identified 4 components of tie strength**
  - **Time**: amount of time spent together
  - **Intensity**: emotional intensity and the sense of closeness
  - **Trust**: intimacy or mutual confiding (transparency)
  - **Reciprocity**: amount of reciprocal services

- **Strong relationships requires more time & attention**

the attention economy

- **We only have 24 hours a day**
- **We only have fixed amount of attention**
- **How many meaningful relationship can we have?**
~150: the Dunbar number (or Dunbar limit)

- Prof. Robin Dunbar found a relationship between brain size of primate species and group size of those species.
- Extrapolate data from 38 primate species to human neocortex ratio → Dunbar number = 148 (~150).
- Verified by surveying pre-industrial villages/tribes.

Does Dunbar limit still applies in modern society?

- Order our relationship from the strongest (immediate family) to the weakest (acquaintance).
- This creates a relationship profiles for each person.
- In pre-industrial villages & tribes, people only know ~150 people.
Dunbar’s limit may not apply in modern society b/c:
- incentive and necessity for social cohesion is substantially lower
- communication (an important part of socializing) is much more efficient

But our brain hasn’t changed for millennia…

we can have more than 150 friends

if have fewer strong ties

attention shift from stronger ties to weaker ties
we can have more than 150 friends

We can shift our time/attention around, but the total amount of time/attention remain roughly the same

If have weaker strong ties

The area under the yellow relationship profile equals the area under the blue relationship profile.

Attention shift from stronger ties to weaker ties.

network perspective of the giants
Facebook’s irony

- Facebook contains a lot of our strong ties:
  - Immediate families, close relatives, childhood friends, high school buddies, etc.
  - By definition, these stronger ties will demand more attention, and will win more of your limited time/attention. So you won’t have any left for the weaker ties

- Irony: because Facebook is too good at maintaining our strong ties, it created problems for Facebook:
  - The conflict of social sphere:
    - people from different communities may not mix
    - information for one group of friend may not be appropriate for another
  - In the presence of strong ties, weaker ties are harder to develop into strong ones

the network effect on Facebook

- The utility for getting on Facebook ~ n*log(n), where n = # of users
  - Once enough people are on it, the benefit is so great that you must get on it

- Stickiness:
  - The more connected a user is, the more utility he derives from the network \( \rightarrow \) the less likely he is to leave the network

- Not everyone on Facebook can talk to everyone else

- Facebook connections are bidirectional
The utility for getting on Facebook is approximately \( n \log(n) \), where \( n \) = number of users.

- Once enough people are on it, the benefit is so great that you must get on it.

Stickiness:
- The more connected a user is, the more utility he derives from the network, and the less likely he is to leave the network.

Positive network effect: The bigger network always wins, because the rich gets richer at a faster rate!

What kind of user would you attract first?
- Answer: You want to get users who have lots of friends, since they are the ones who can bring the most friends to your network.

But Facebook is very cohesive, or sticky:
- Users with lots of friends are least likely to leave, they are the hardest to get.
- Users you can get are users with few friends, but they don’t bring many users to your new network.

To break a cohesive network you need to move a huge chunk of their users to the new network in a short time:
- So user only experience a short period of communication outage (lost utility).
what can we learn from Twitter?

- Uni-directionally connected
  - Faster growth rate
    - smaller world
    - information spreads faster
    - more viral
  - Less relevant relationship
    - weaker ties
    - fragile & less sticky network
    - easier to switch

- Bi-directionally connected
  - Highly relevant relationship
    - stronger ties
    - cohesive & sticky network
    - network effect cost-to-switch
  - Slower growth rate

The main problem with uni-directionality

- The content is very noisy due to negative network effect (network congestion)
curation mechanism for dealing with noise

- Receiver curation
  - Use lists
    - require user (content receiver) to organize their following into lists
    - not very effective
    - people basically search for content

- Automatically inherits both sender and receiver curation
  - no user effort required
  - but user also have no choice
  - this is the reason why content on these platforms have such high signal-to-noise ratio (SNR) at the first place

Uni-directional consent to connect
- To grow fast and break a cohesive network

Circles: it's a very important advance in social web
- Fixes the conflict of social sphere
- A receiver curation mechanism
  - If users spend the time/effort to organize their connections into circles
- A sender curation mechanism
  - If users make use of circles when sharing

Also have a lot of community/relationship building tools
- Spark & Hangout

Biggest problem now = noise
- Users don't organize connections into circles
- By default user share content to public

then comes Google+

twitter: mich8elwu
linkedin.com/in/MichaelWuPhD
the clash of titans

bi-directional consent

uni-directional consent to connect

sender & receiver curation mechanism

receiver curation

huge developer network & biz/partner ecosystem

huge developer network & biz/partner ecosystem
too young to have these external infrastructures

Thank you

Q&A + discussion

Lithium help great companies build brand nations for their most engaged customers. With Lithium, clients turn their customers’ passion into marketing, product development, sales, and customer service assets.