Understanding and Measuring Online Social and Relationship Capital

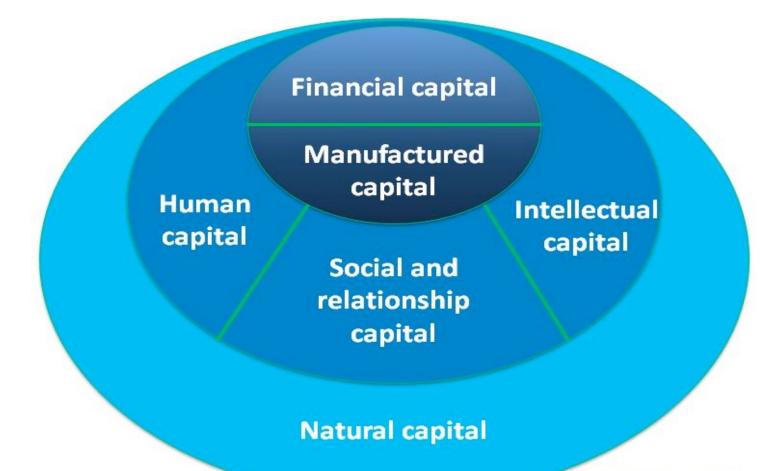
-Gregory D. Saxton, PhD

YORK

UNIVERSITÉ UNIVERSITY



<IR> and the Six Capitals





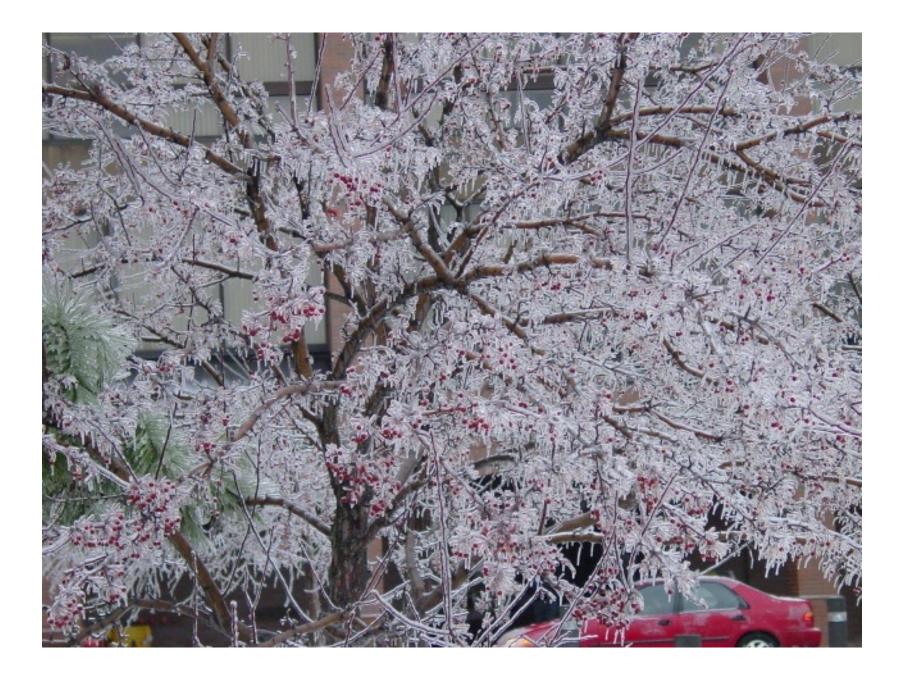




The Importance of Social Capital

"Your corn is ripe today; mine will be so tomorrow. 'Tis profitable for us both, that I should labour with you today, and that you should aid me tomorrow. I have no kindness for you, and know you have as little for me. I will not, therefore, take any pains upon your account; and should I labour with you upon my own account, in expectation of a return, I know I should be disappointed, and that I should in vain depend upon your gratitude. Here then I leave you to labour alone; You treat me in the same manner. The seasons change; and both of us lose our harvests for want of mutual confidence and security."

— David Hume







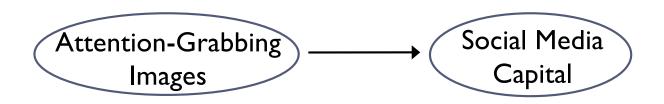




Acquiring, Converting, and Expending Social Media Capital

A Data Analytics Approach

Attention-Grabbing Images







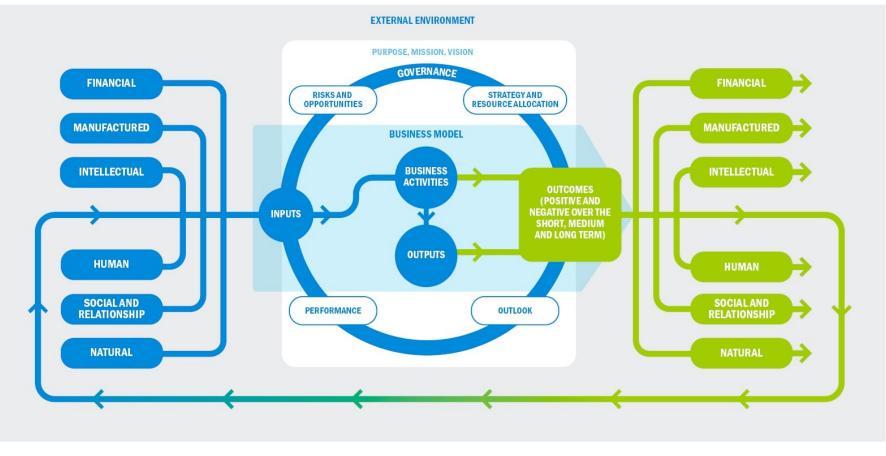
What is this influencer's social capital worth?



Valuing Intangible Assets – First Steps

- Identify strategic intangible assets for your company
- Model causal relations in business model → focus on value creation

Key Skill: Modeling Cause-and-Effect Relationships for Your Intangibles



VALUE CREATION, PRESERVATION OR EROSION OVER TIME

Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

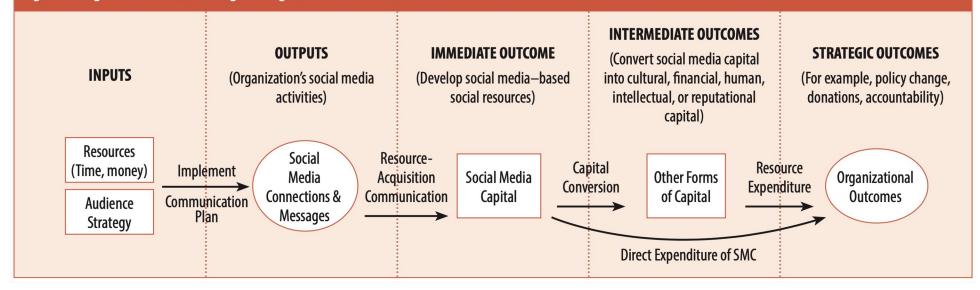
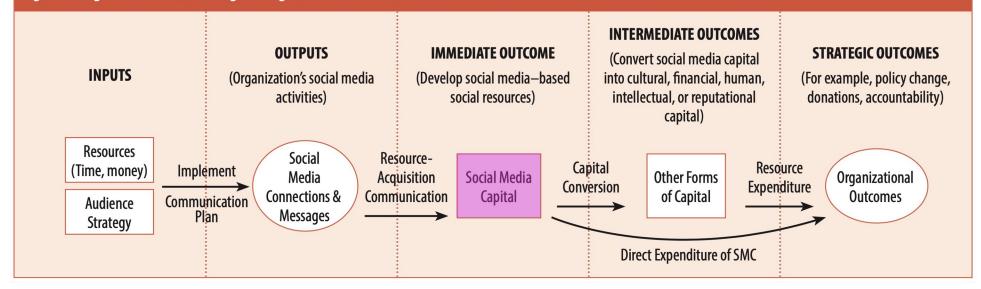
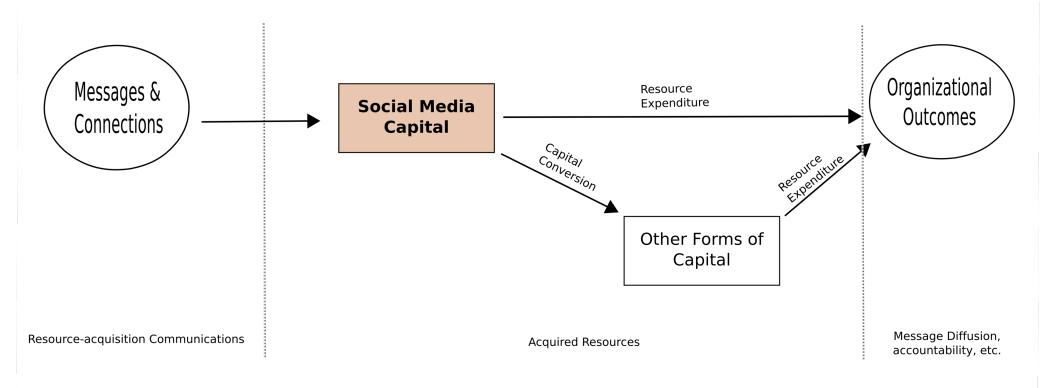


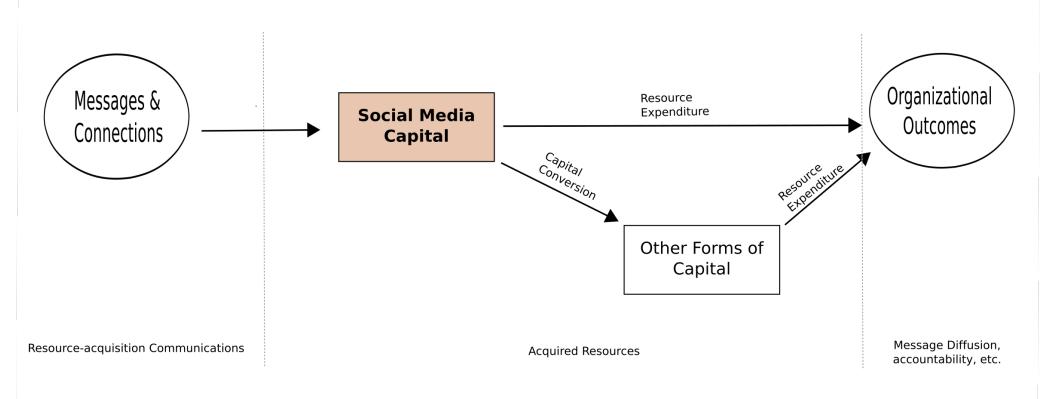
Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use



Proposition 1: SMC is the central and proximate resource acquired through social media efforts.

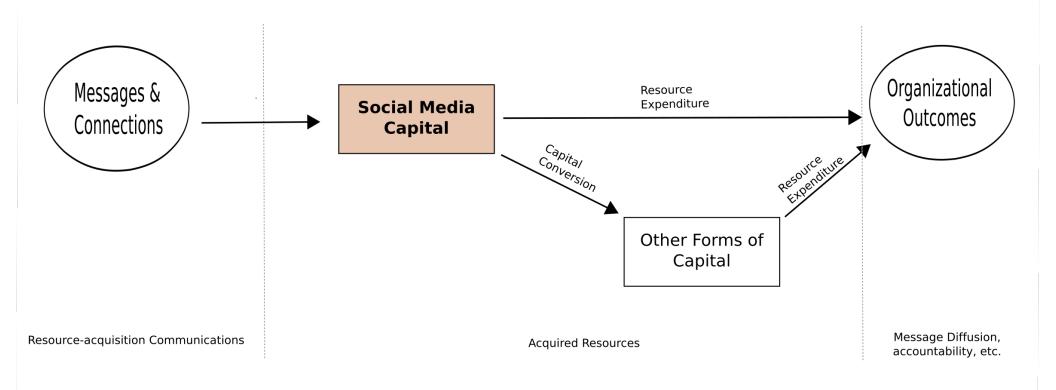


Proposition 2: SMC is directly observable.

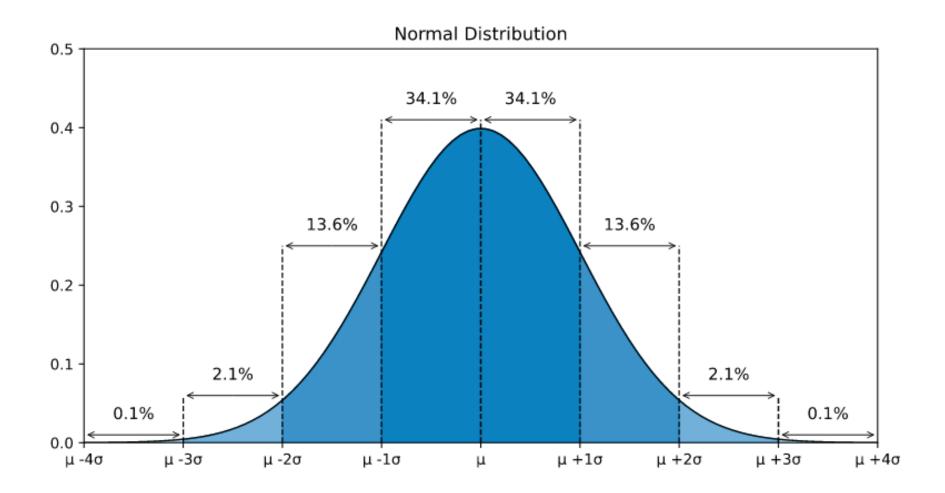




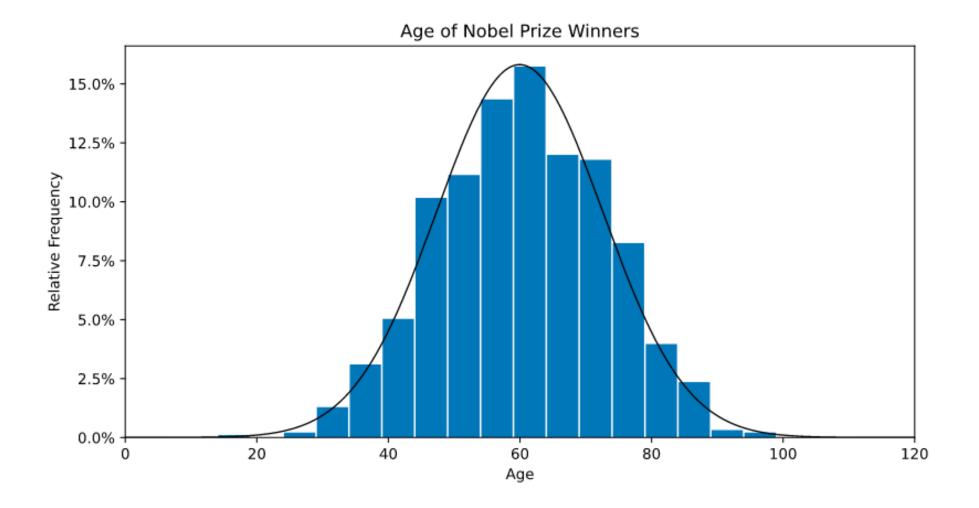
Proposition 3: SMC is accumulated according to a Power Law distribution.



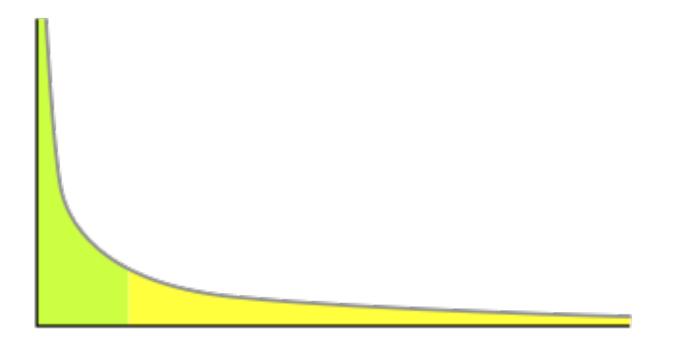
Normal Distribution



Normal Distribution



Power Law Distribution



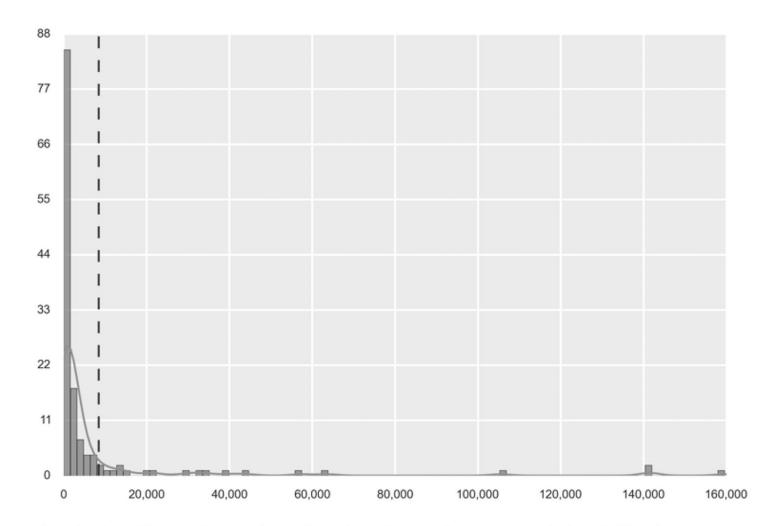
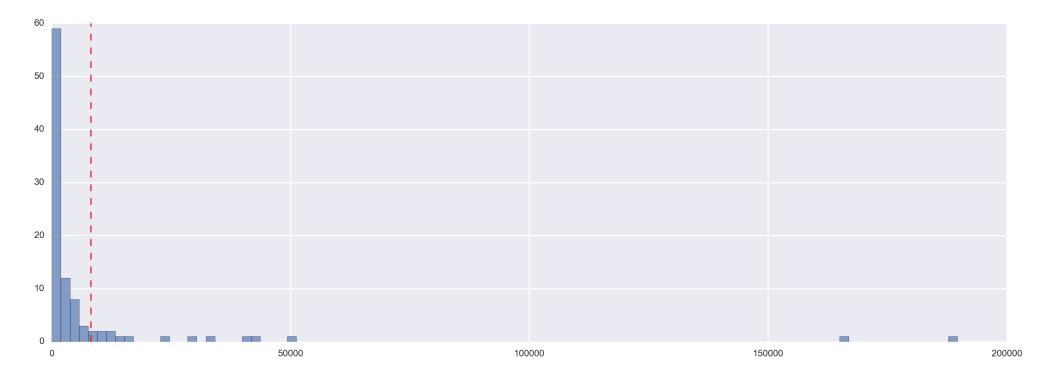


Fig. 2. Histogram, number of Twitter followers of 135 North American Mining Firms, April 2015. Note: Dashed vertical line shows mean value of 8,429 followers; the solid curved line is the kernel density line, or line that reflects the non-parametric probability density function.



Followers of Twitter accounts of 100 Organizations of the NPTimes 100 list

Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

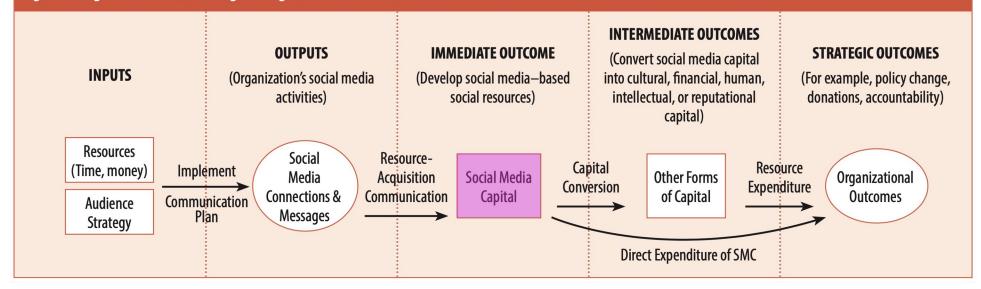


Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

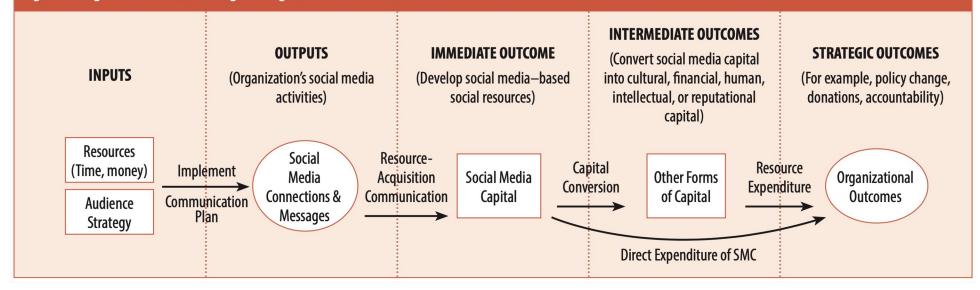


Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

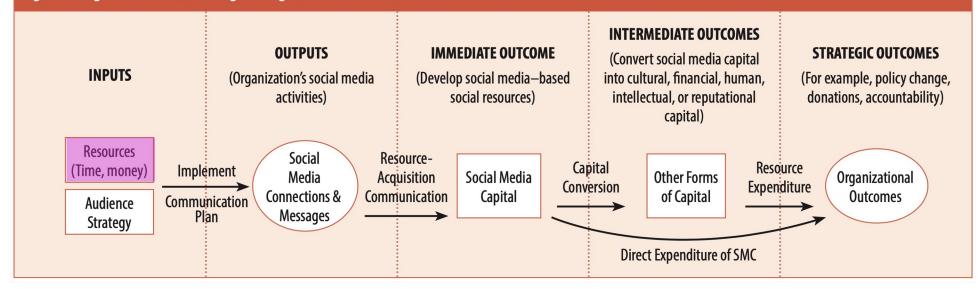


Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

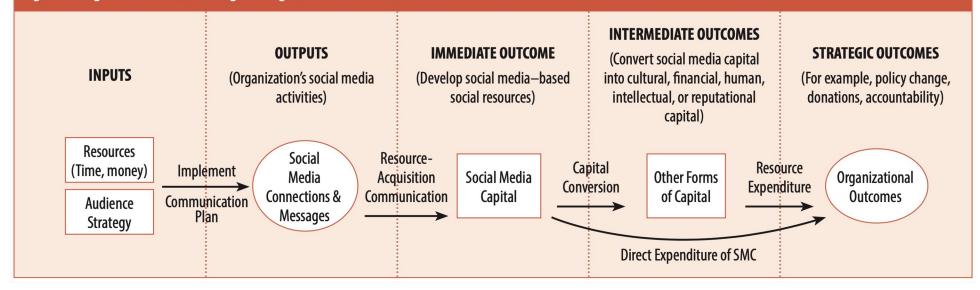


Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

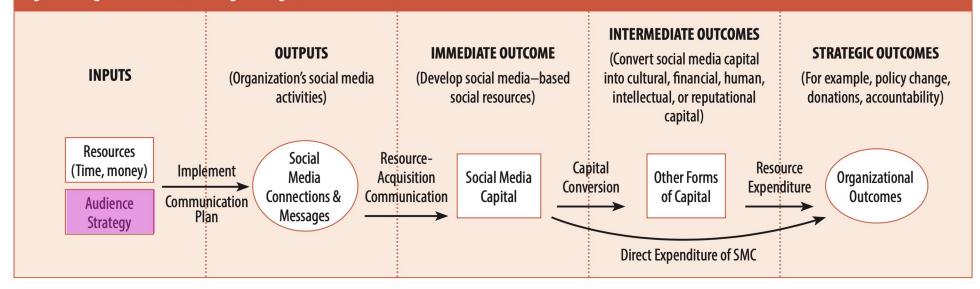


Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

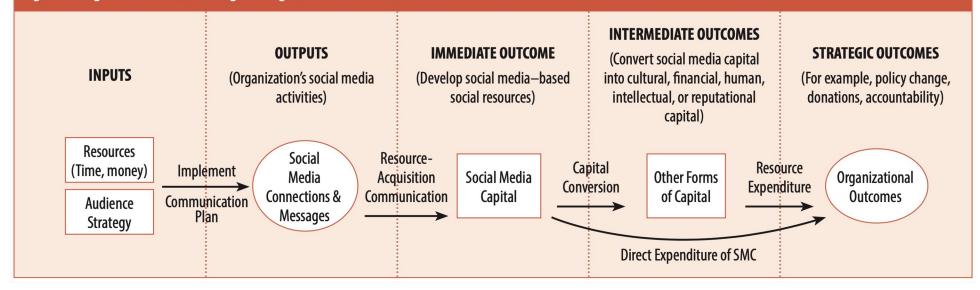
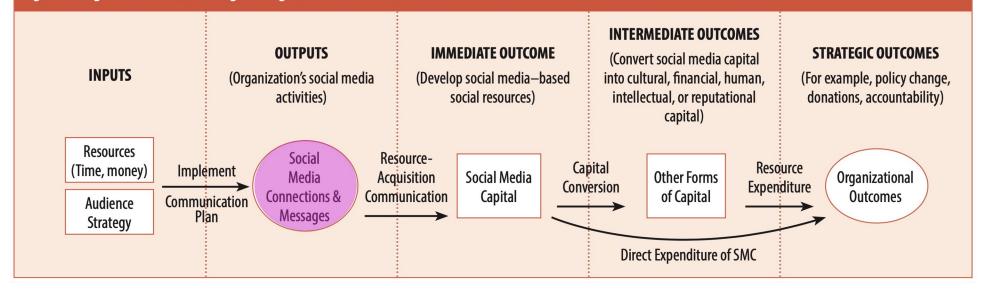
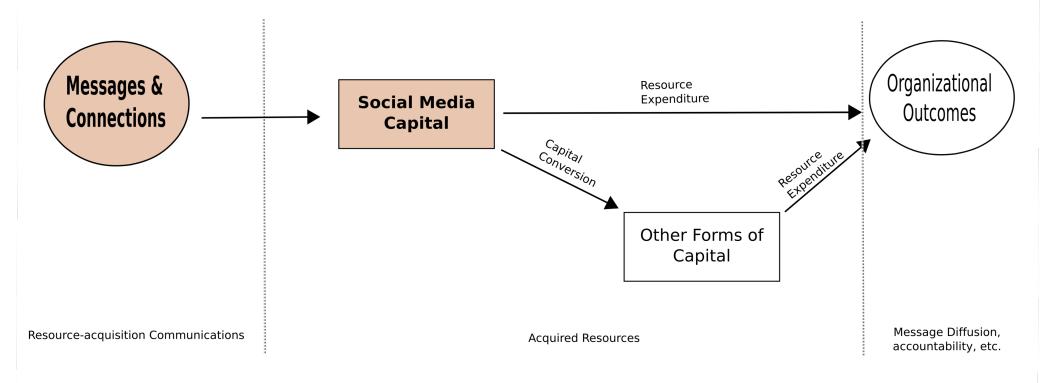
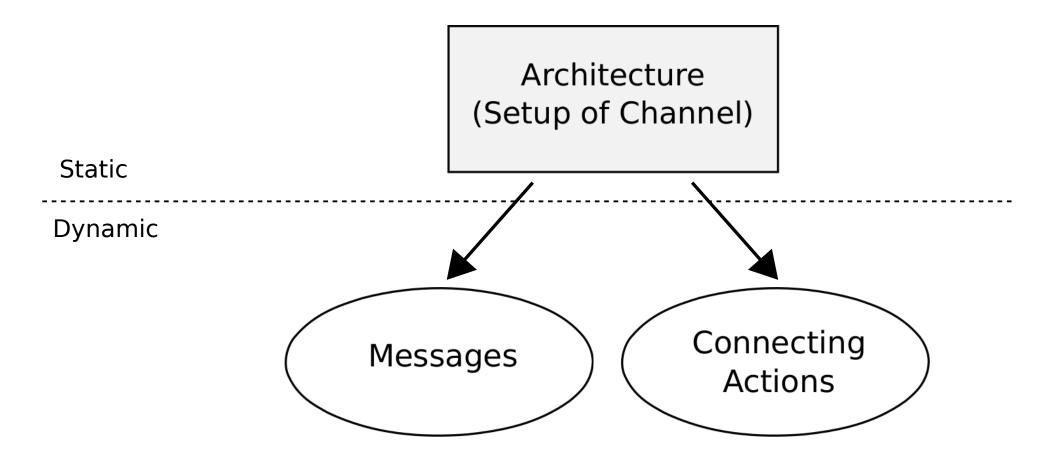


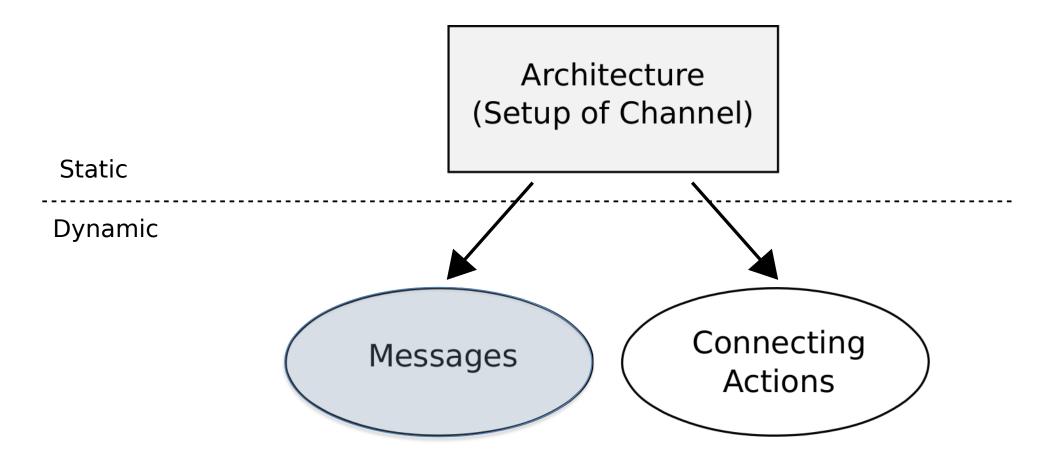
Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use



Proposition 3: SMC can only be acquired through sending messages and making connections.







Search



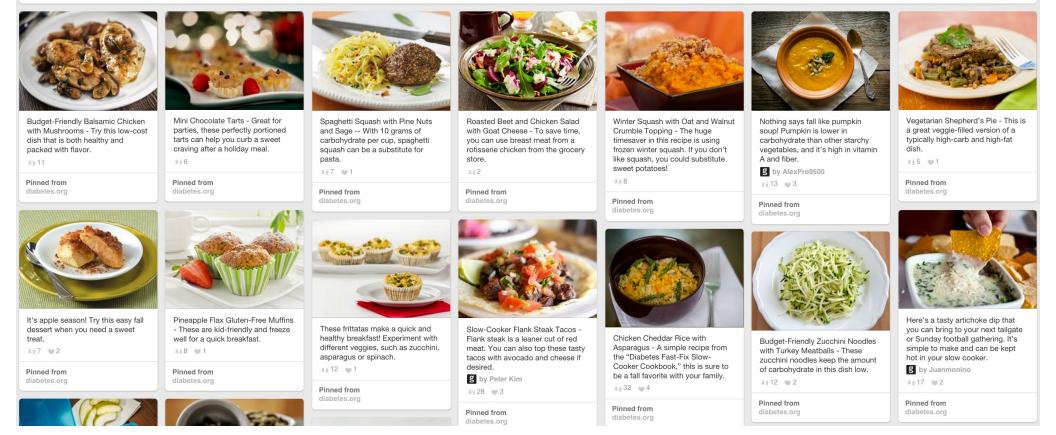
Diabetes-Friendly Recipes

Diet plan, eating plan, meal plan... whatever you call it, choosing what to eat is an important part of your day, especially if you are managing #diabetes.

122 Pins · 6154 Followers

American Diabetes Association









amdiabetesassn -

American Diabetes Association is leading the fight to #StopDiabetes and its deadly consequences, and fighting for all those affected by #diabetes. http://www.diabetes.org

48 posts	1.21k followers	100 following
-------------	--------------------	------------------

November 2014

DIABETES

Follow





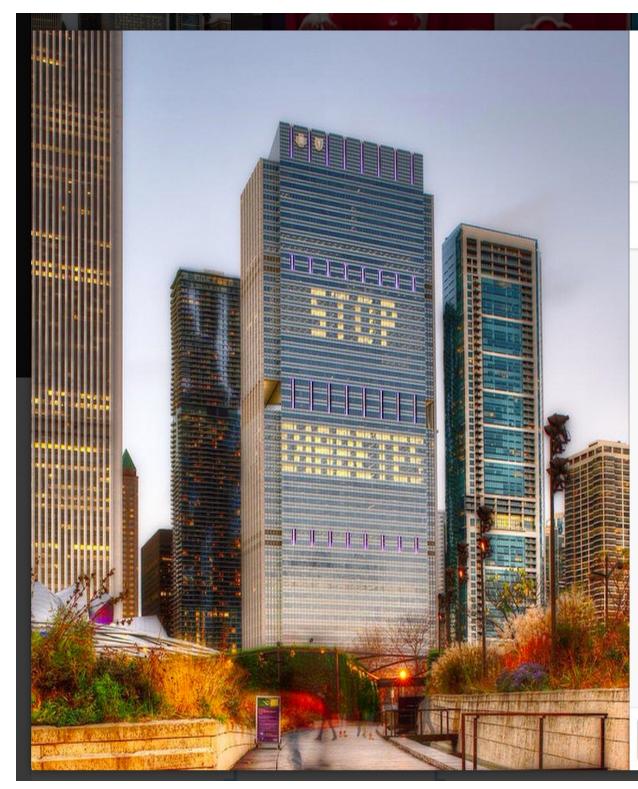
October 2014







👤 Log in





amdiabetesassn

3 weeks ago

We love seeing #StopDiabetes in lights on the Blue Cross Blue Shield Tower in downtown Chicago for #DiabetesMonth!

. diabetes_journey, mylastnamecrump, earthaphotography and 186 others like this.



type1fit

That is too awesome! Love seeing this kind of support!

winkdesserts 05

Check out @appletonpictures! []



ncanz



f

donmofongo

 donmofongo

 Thats look awesome! @liziee_xx
 #ILOVEMYDAUGHTER #GODNEVERFAULT #GODALWAYAISGOOD #FAITH #BELIEVE

liziee_xx

Thank you mom and yes we will always fight and believe that this diseases will be found a cure for @donmofongo

amdiabetesassn

Me agree it looks awasomal Thanks to our local office

Leave a comment...

Follow





aclu_nationwide 🗇 • Follow

aclu_nationwide Thank you to Chiwetel Ejiofor for being in solidarity with us.

📸 : @IndieWire Sundance Studio

Load more comments

pantherita4 exactly why our youth have to have programs that should hep keep them from making those dum decision. We keep talking about reform? Laughable if you dont put the money into pre-vent-ion

adot_rasta Prison and justice reform now

high.rebl I just saw his movie "The Boy Who Harnessed the Wind." It was great.

djcscholarshipfoundation True statement.

 \heartsuit Q \bigtriangleup

 \square

...

 \bigcirc

O

 \bigcirc

C

5,809 likes

Add a comment...



Dolores Huerta organized farmworkers during the Delano Grape Strike. Thousands walked out to demand better pay and working conditions under the slogan she coined: "Si, se puede."



624

11 Comments 100 Shares 23K Views

...





We'll see you in court, @realDonaldTrump.

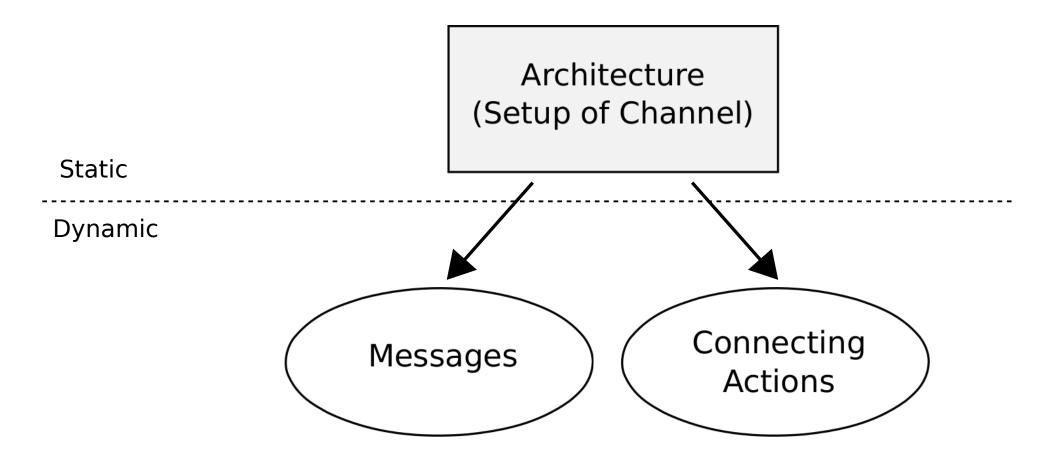


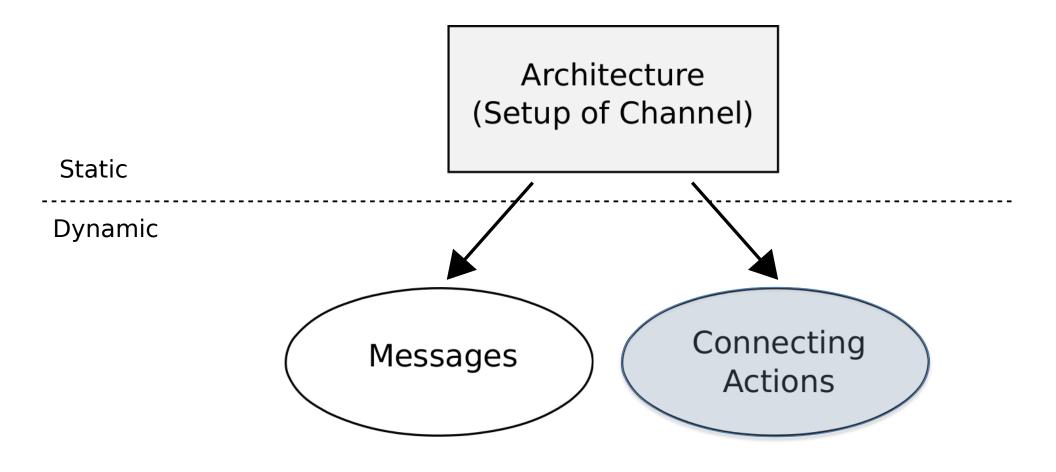
The Hill 🤣 @thehill

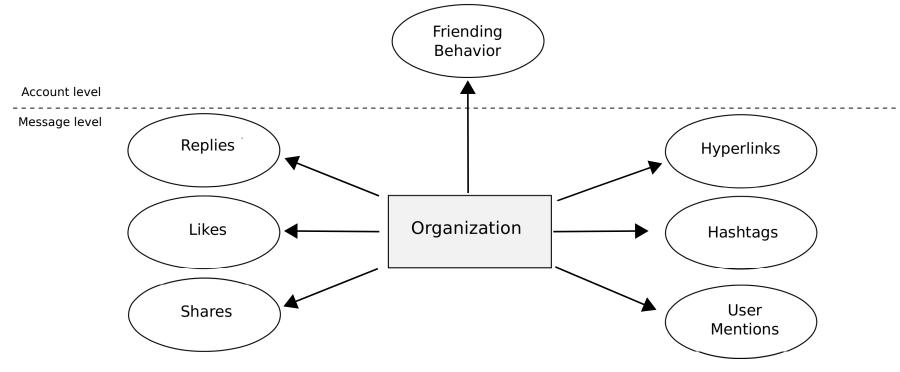
JUST IN: Trump signs order officially banning transgender troops hill.cm/ftdB8vt

7:40 PM - 25 Aug 2017









Interactions with other users' messages

Content in the organization's own messages





.@jtimberlake please RT to help us raise awareness for polycystic kidney disease! #endPKD #kidneymonth



Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

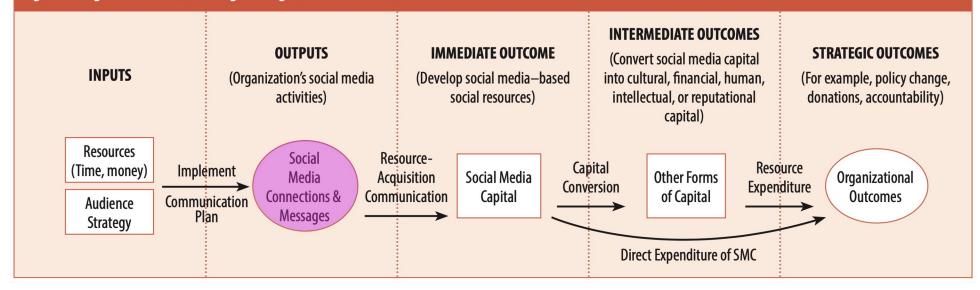


Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

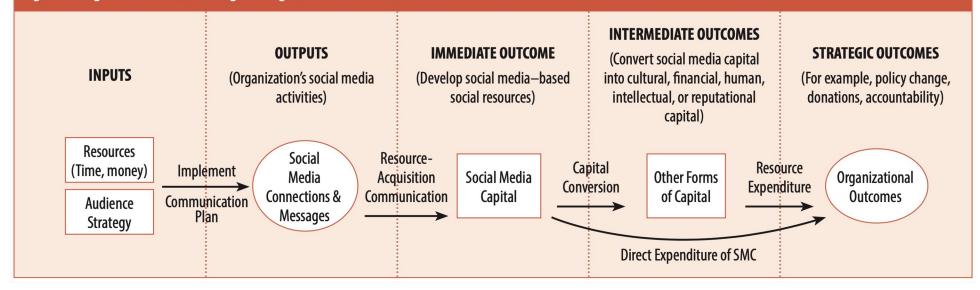


Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

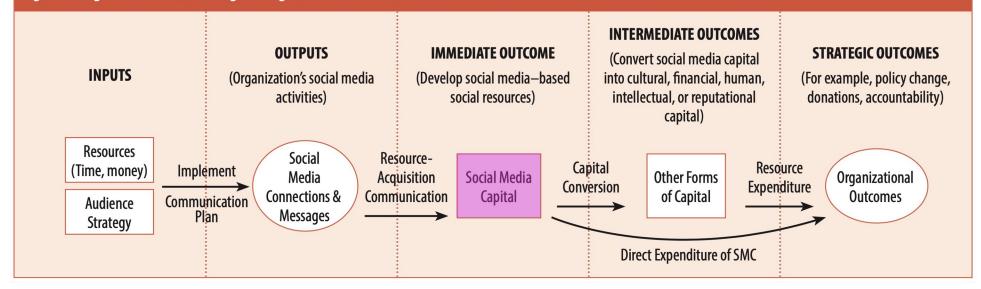


Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

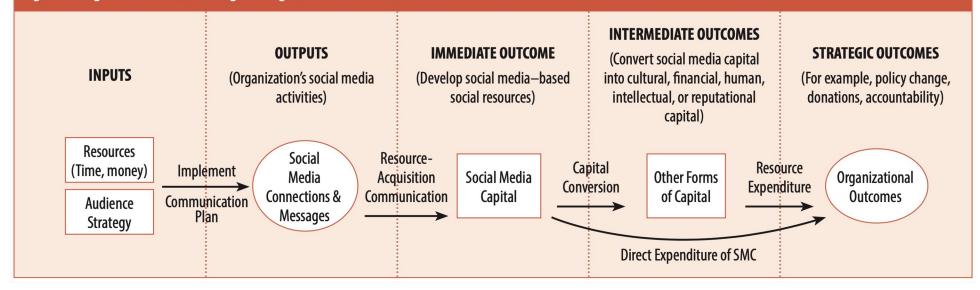


Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use

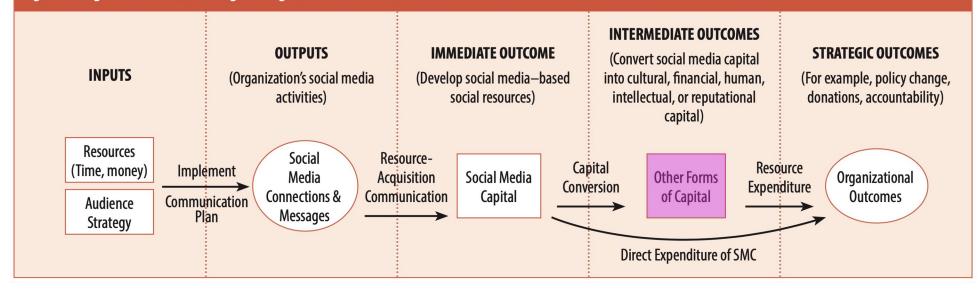
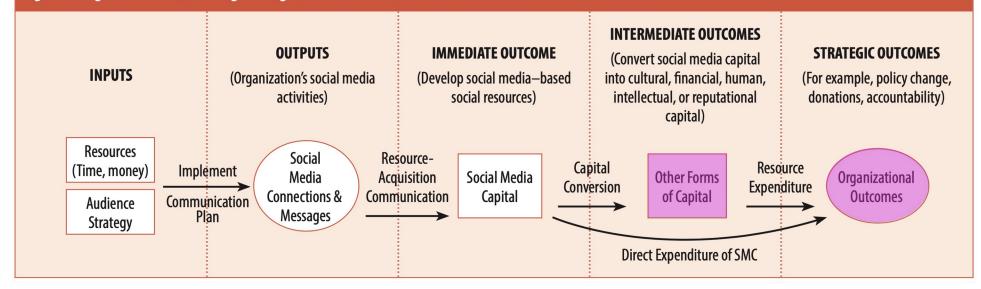
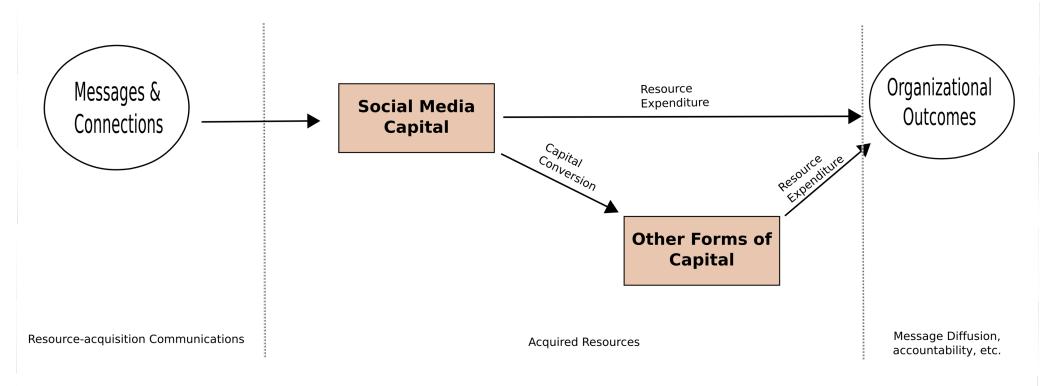


Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use



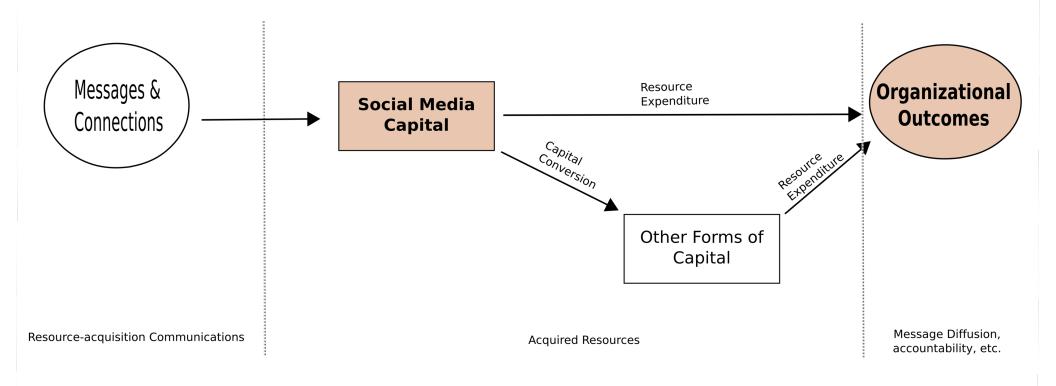
Proposition 4: SMC is convertible into other types of organizational capital.

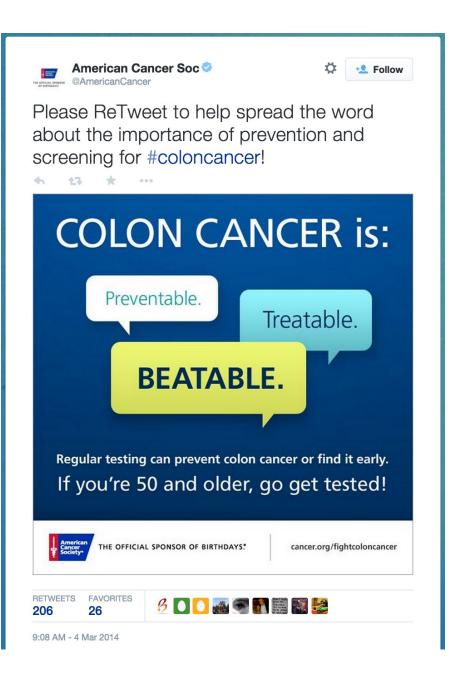


American Cancer Soc @AmericanCancer			
Your gift matters to cancer patients and their families. Donate by July 31 to make an immediate impact: bit.ly/X8ZqTm Please RT			
RETWEETS FAVORITES 55 23 12:30 PM - 29 Jul 2014			
Reply to @AmericanCancer			
<pre>sarvesh singh @3_sarvesh · Jul 29 @AmericanCancer indiegogo.com/projects/save </pre>			
9			



Proposition 5a: Organizational outcomes can be achieved through the direct expenditure of SMC.









Join us! Use your website to protest the #blacklist bills on 11/16: eff.org/r.2Ge #USACensored



11

*

...

American Censorship Day is this Wednesday — And You Can Join In!



By EFF @EFF

This Wednesday, November 16, the disastrous "Stop Online Piracy Act" (SOPA) heads to the House Judiciary committee. In case you need a refresher, SOPA could allow the U.S. government and private...

View on web



Proposition 5b: Organizational outcomes can be reached through the expenditure of other forms of organizational resources converted from SMC.

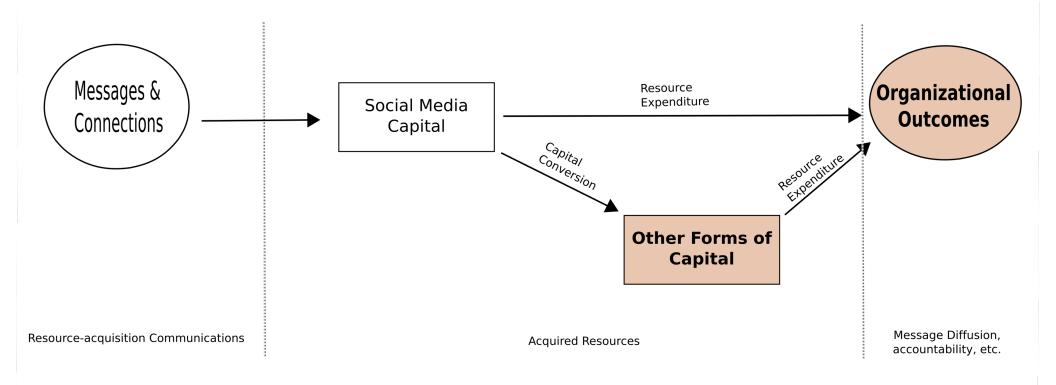
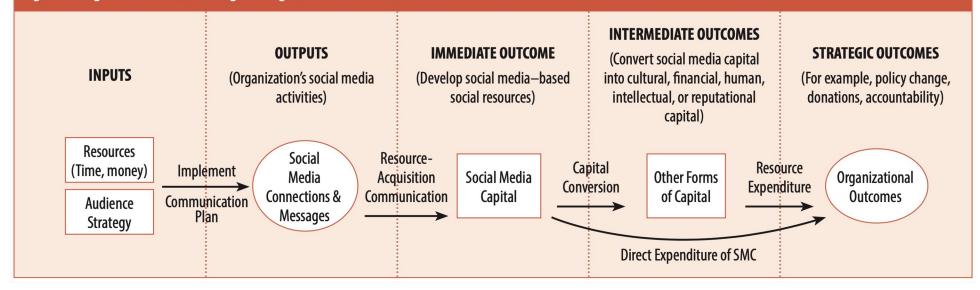
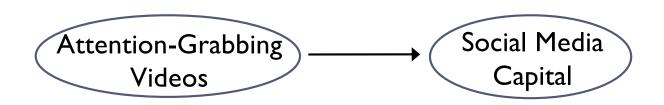


Figure 1. Logic Model for Achieving Strategic Outcomes from Social Media Use



Attention-Grabbing Videos





Example: Fashion Blogger

f 🎔 💿 🖗 🗗 B'

cupcakes and cashmere

FASHION FOOD BEAUTY TRAVEL DECOR DIY SERIES MOTHERHOOD VIDEO SHOP

Q

About

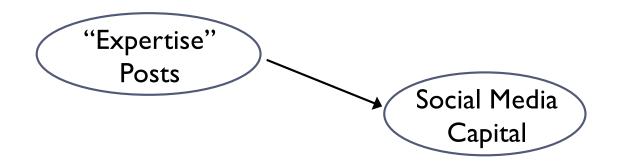


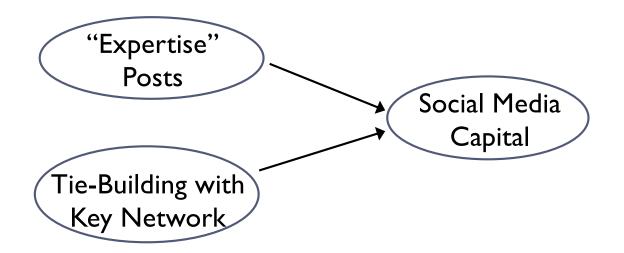
Example: Fashion Blogger

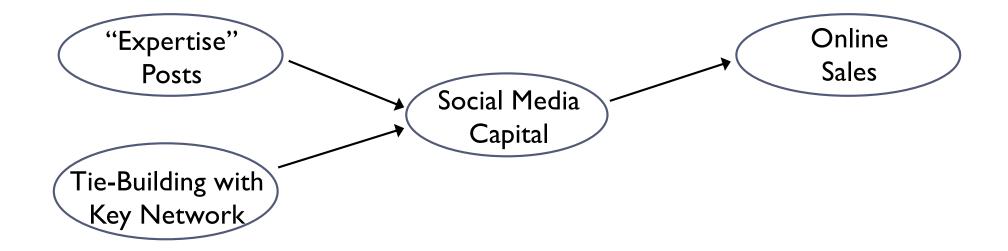
Example: Fashion Blogger

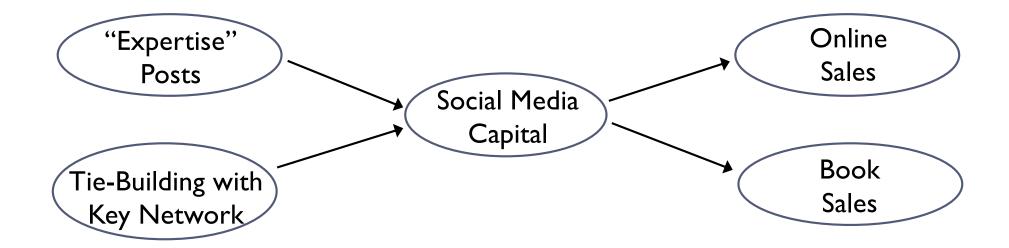














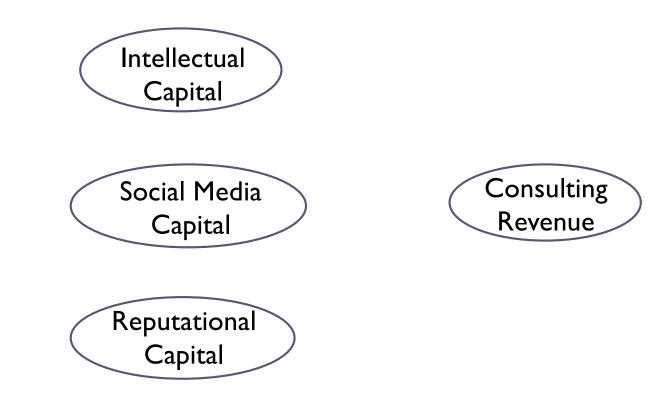
Intellectual Capital

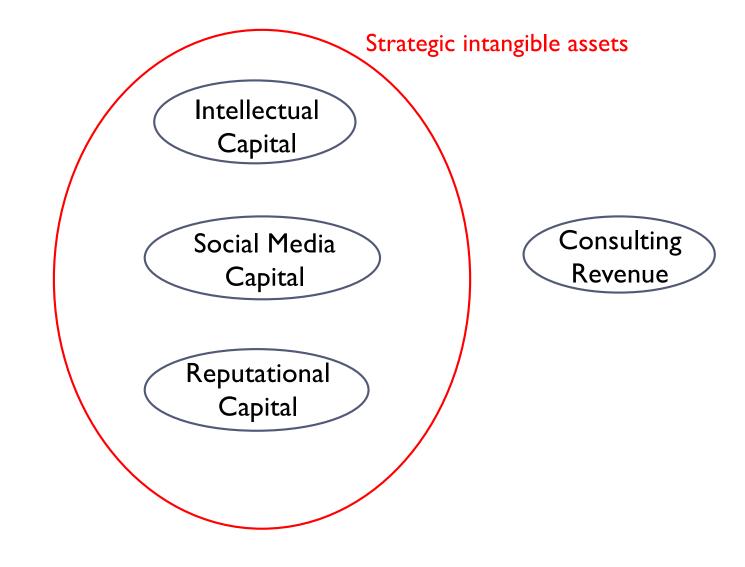


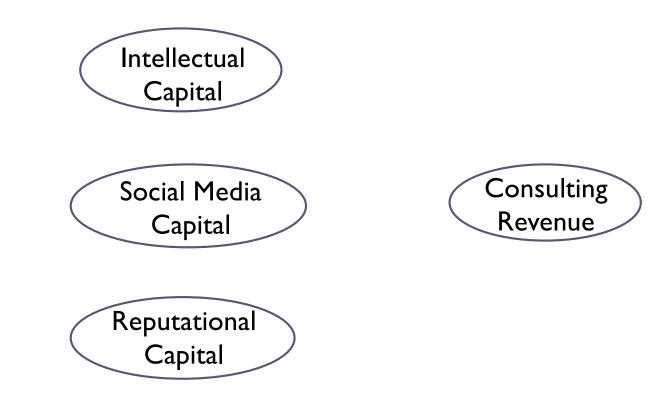


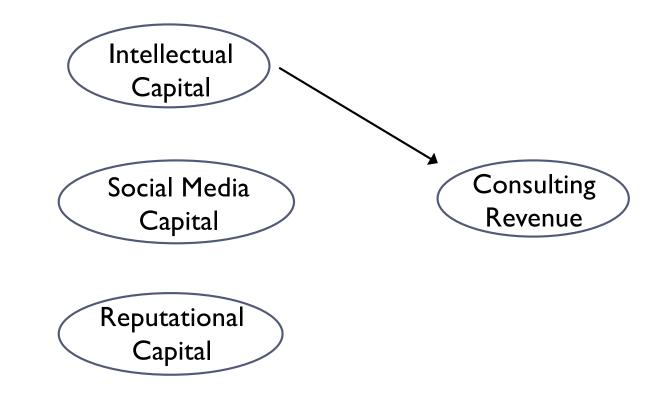
Social Media Capital

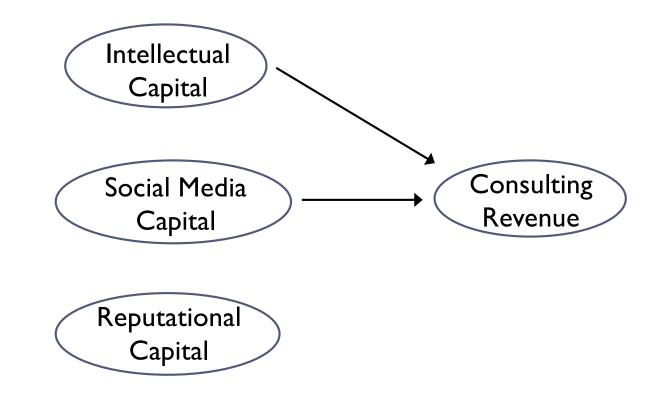


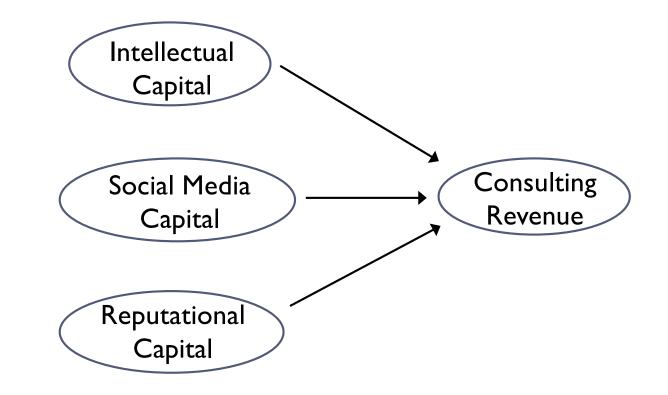


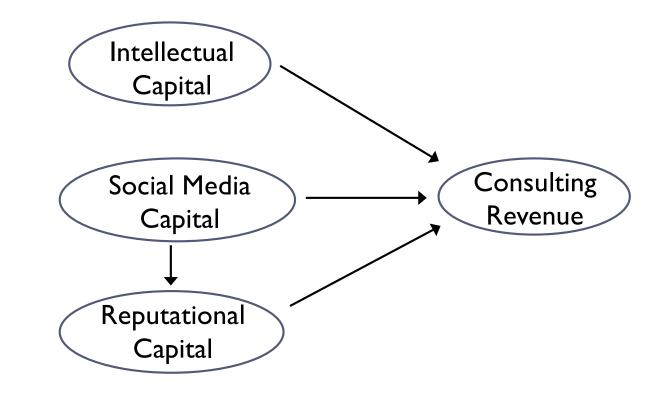


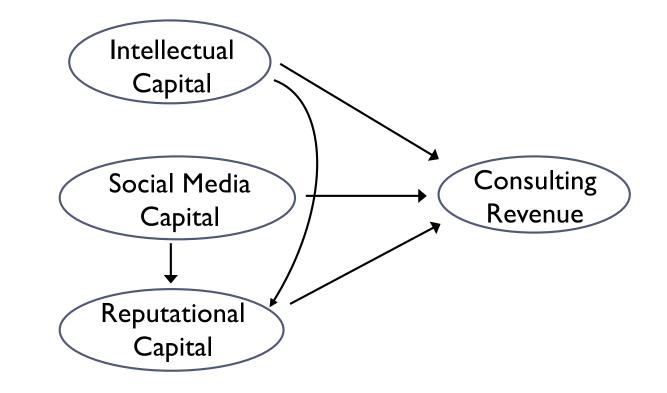


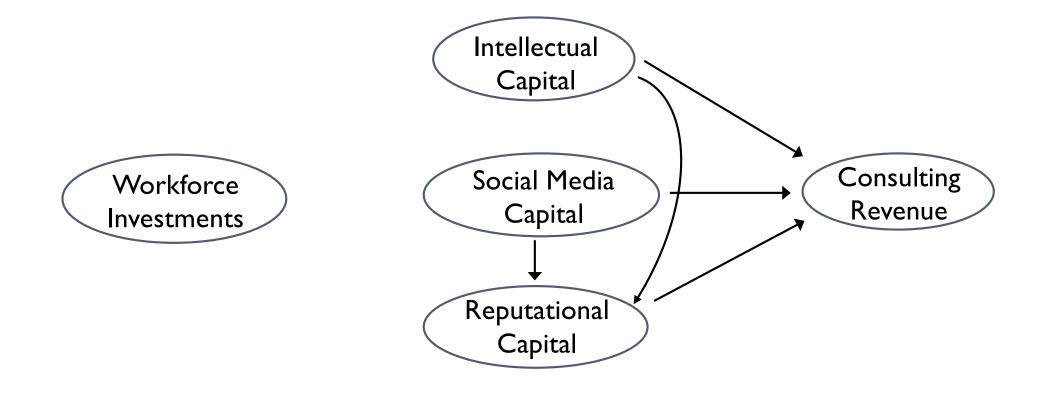


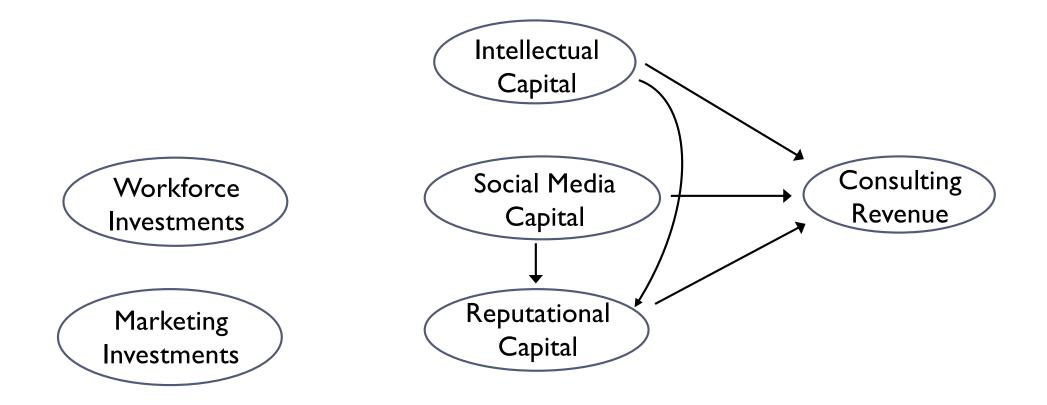


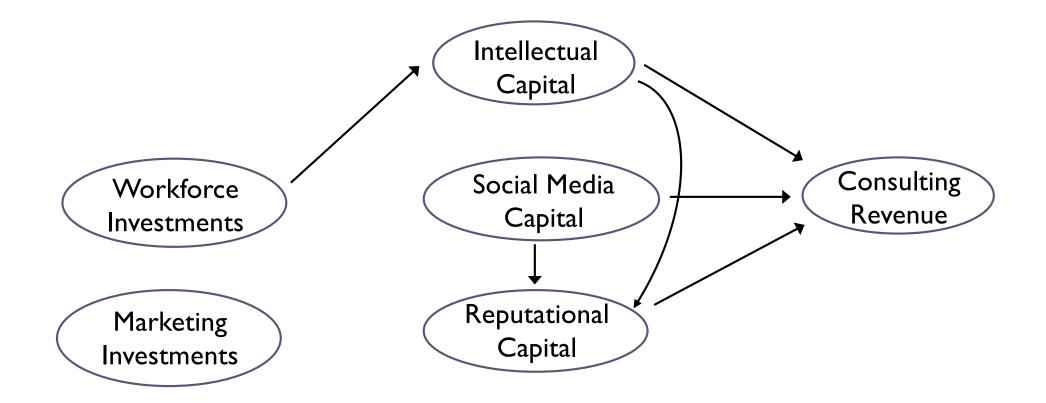


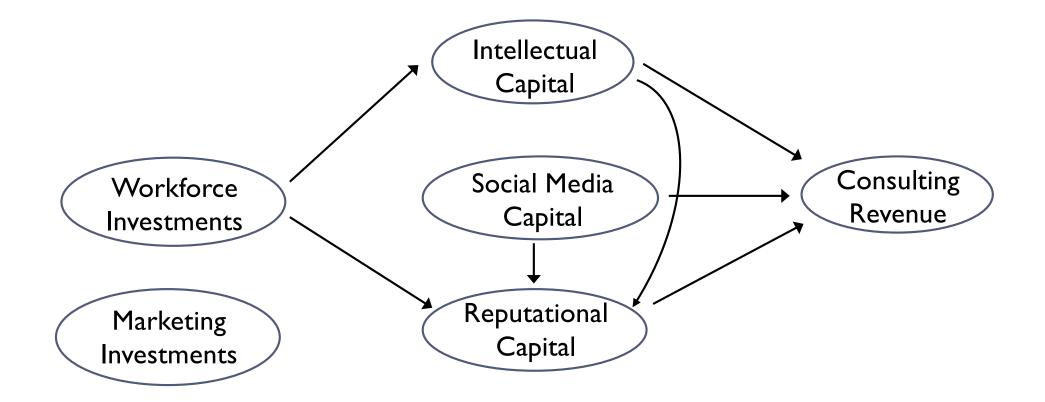


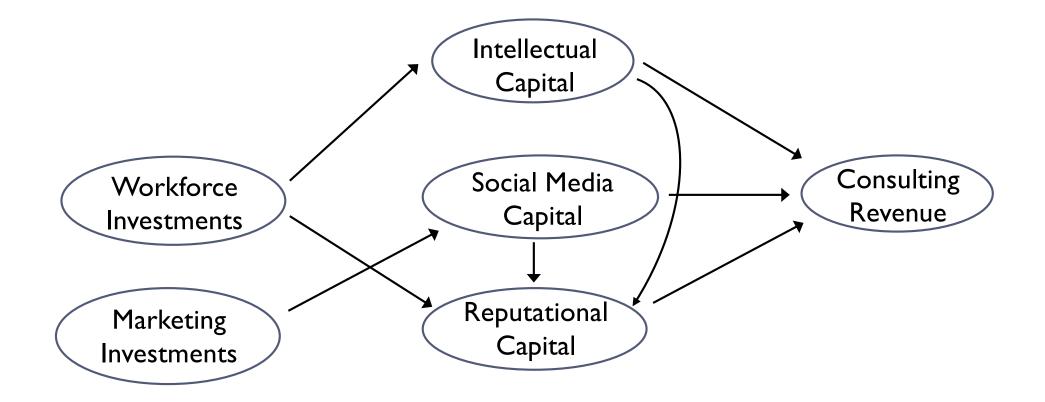


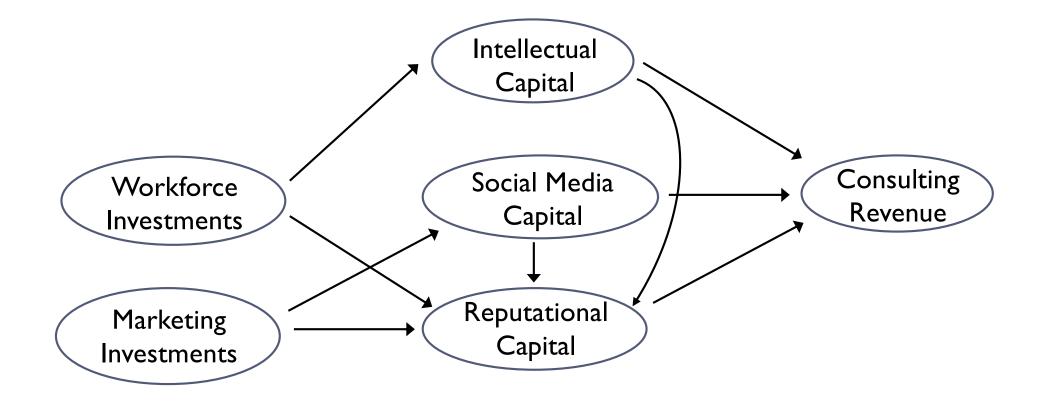


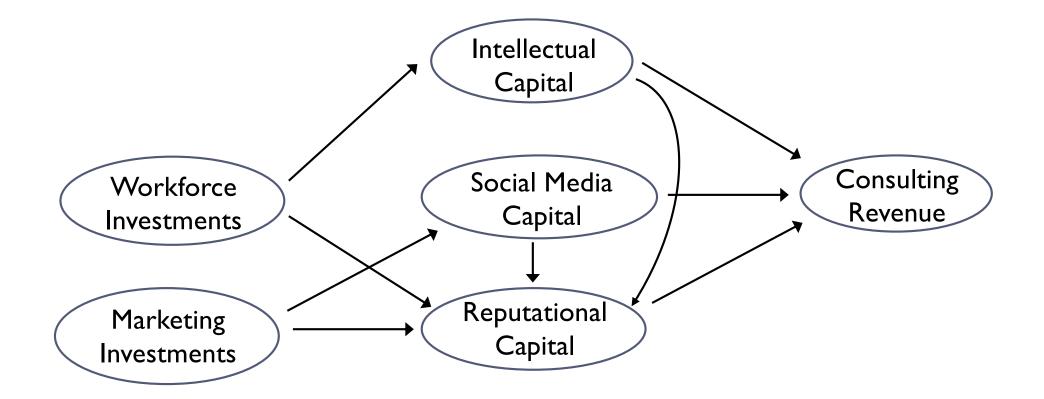




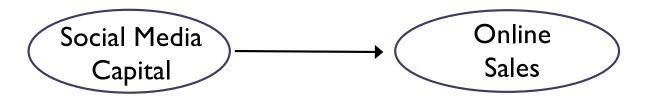






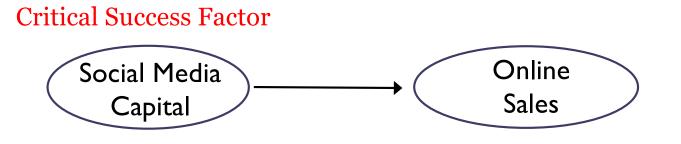


We have our model – now we have to develop *measures*



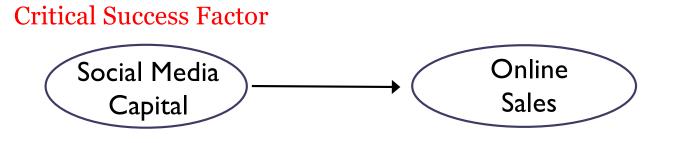
Conceptual

Observational



Conceptual

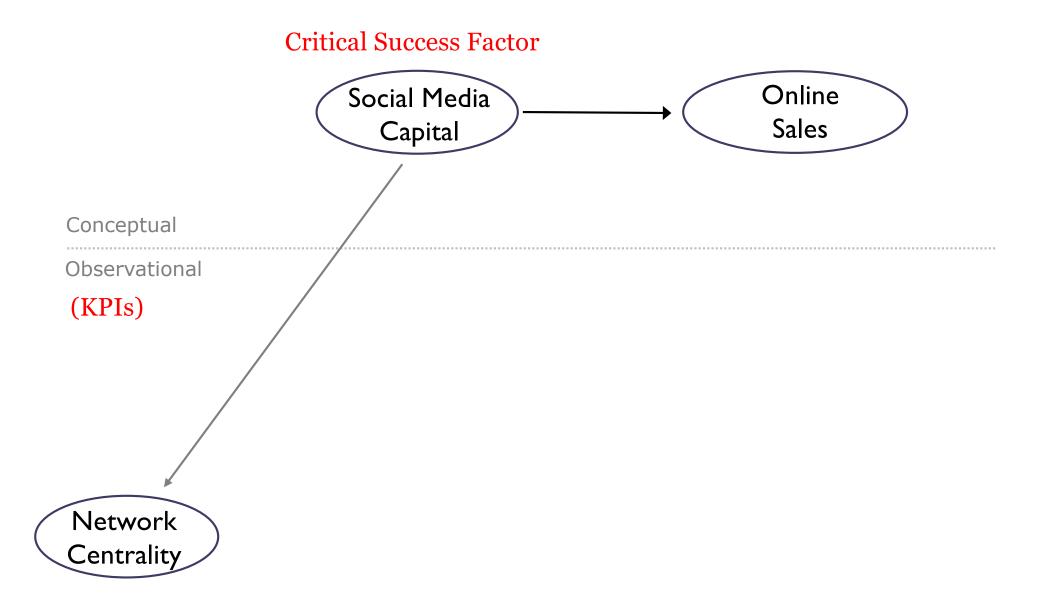
Observational

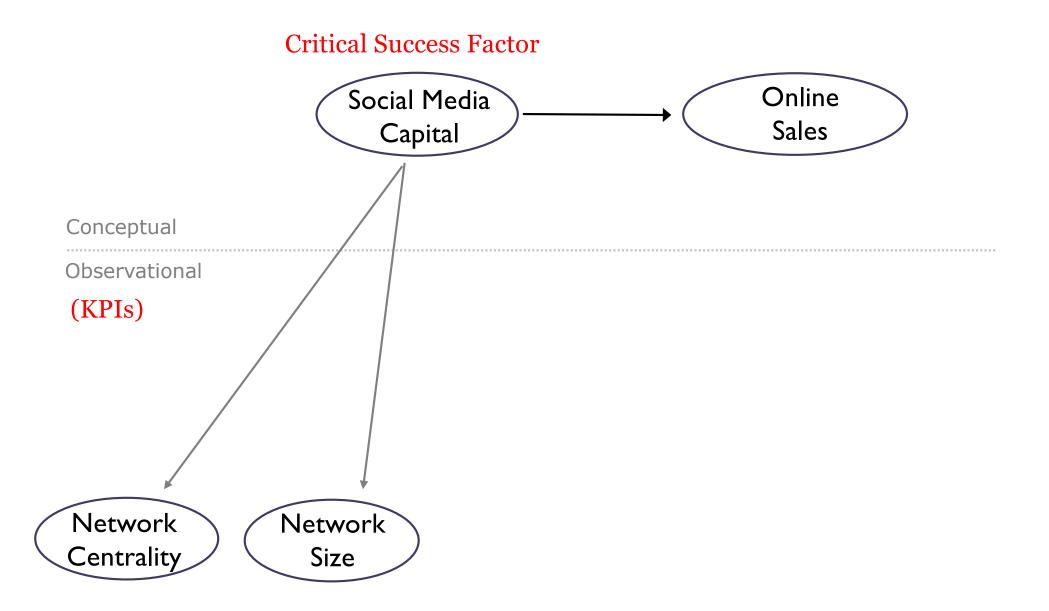


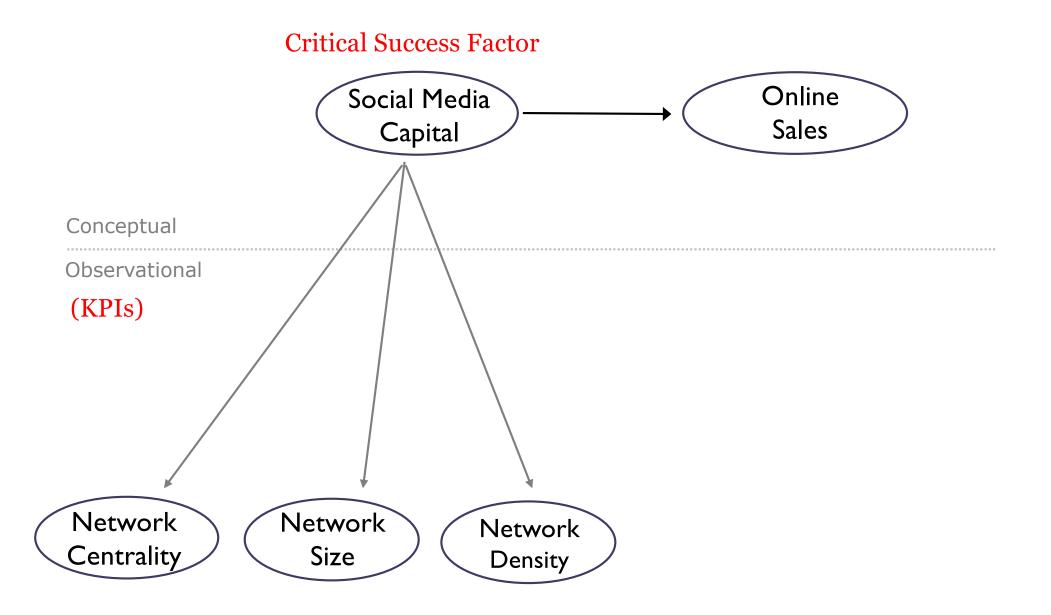
Conceptual

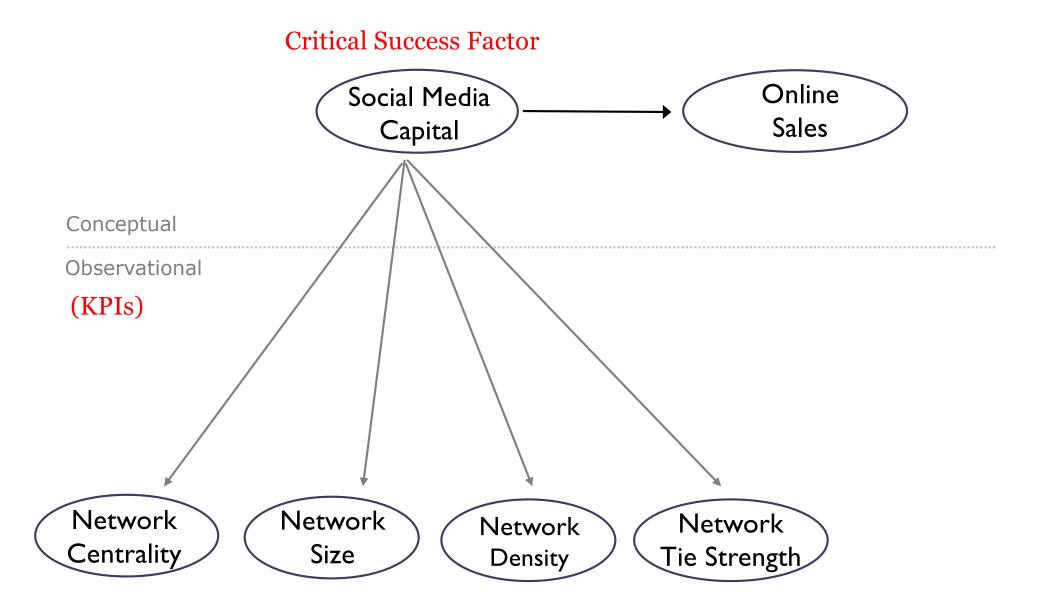
Observational

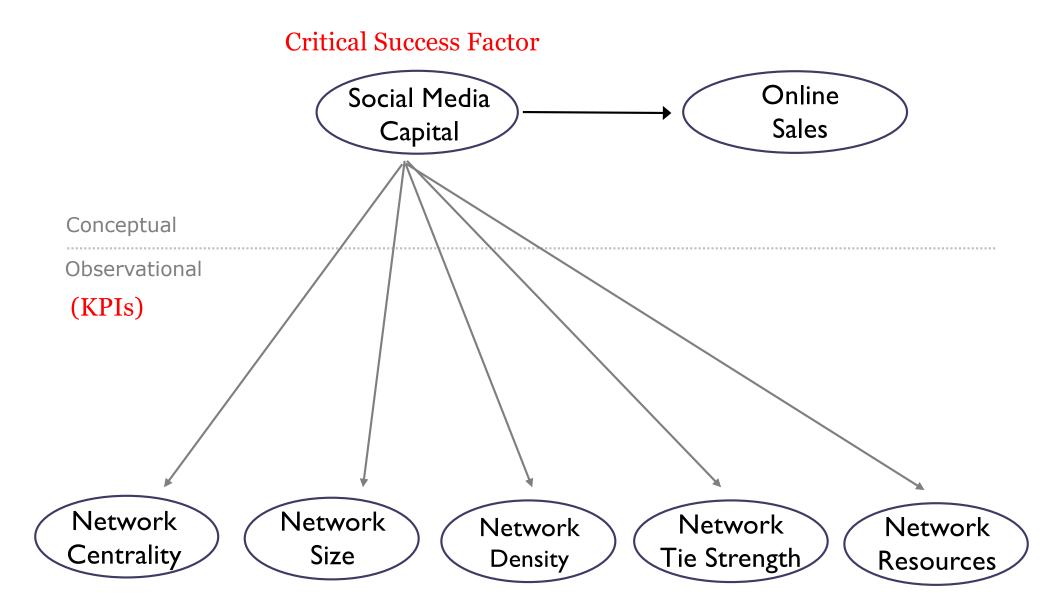
(KPIs)

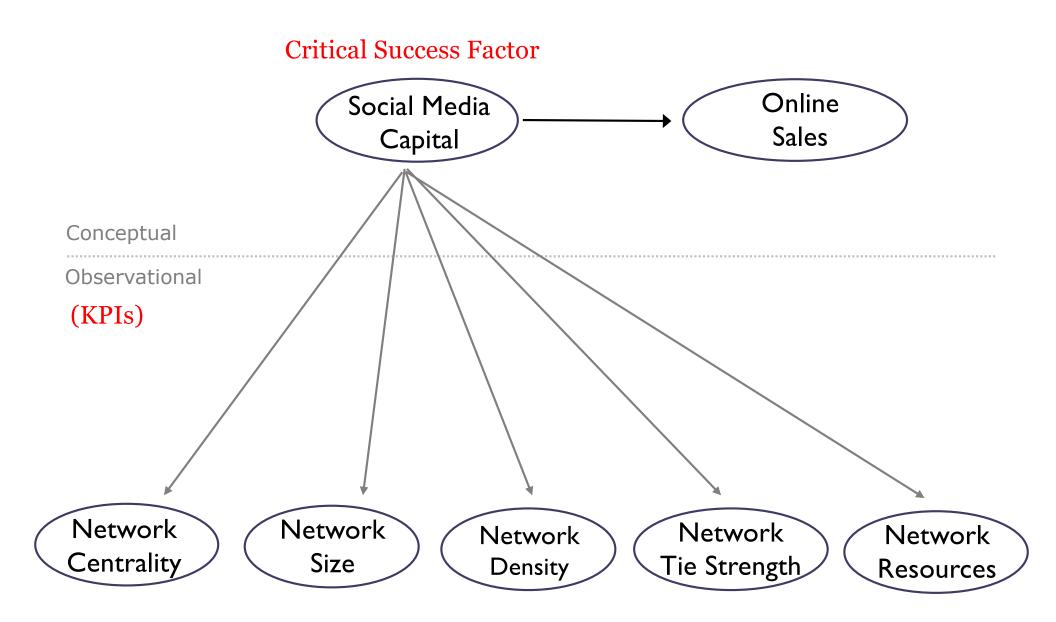












Dimensions of Social Media Capital

The observable, measurable dimensions of an organization's SMC are relational, *network* measures, and include the organization's **network size** and **network position**, the strength of the organization's **network ties**, and the **embedded resources** and **norms of reciprocity and trust** manifest in the organization's network(s).

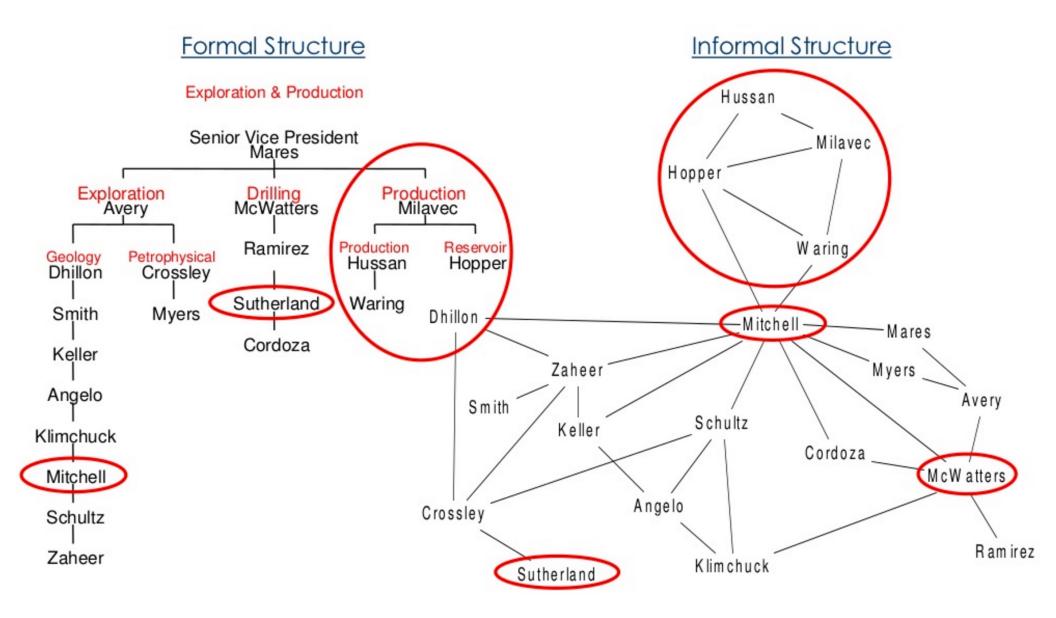
A World of Networks

- Many new phenomena "make more sense when viewed through the lens of network structures."
- "Network analysts see the world as a collection of interconnected pieces."
- Networks matter they have structures that influence behavior
- Carbon analogy: graphite or diamond?
- 6 Degrees of Separation
- Network phenomena:
 - Contagion, diffusion, virality
 - Social capital

Air conditioners in Philadelphia row houses



Hierarchical vs. Network View



Analyzing Networks: SNA

- New set of norms and skills required
- Social Network Analysis (SNA)
- Relational data
- Two main elements:
 - Nodes, vertices, entities, items, or agents
 - Ties, edges, relationships, connections, or links
- Many different types of ties

Representing Network Data

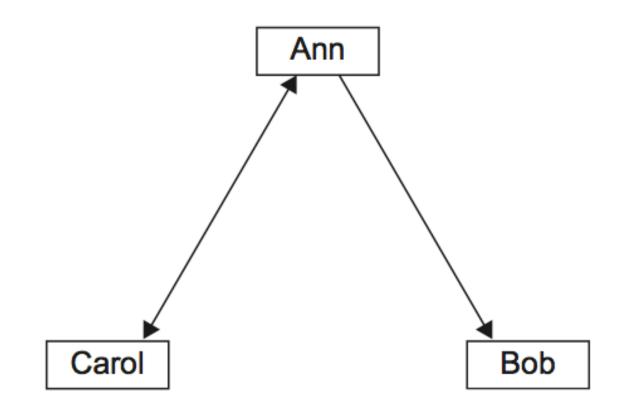
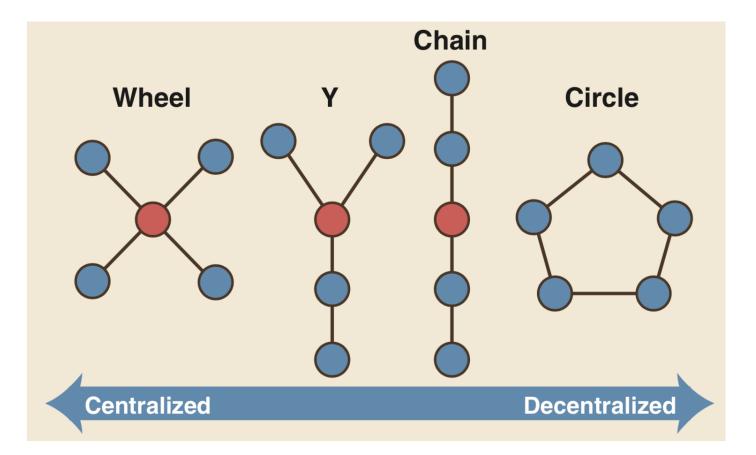
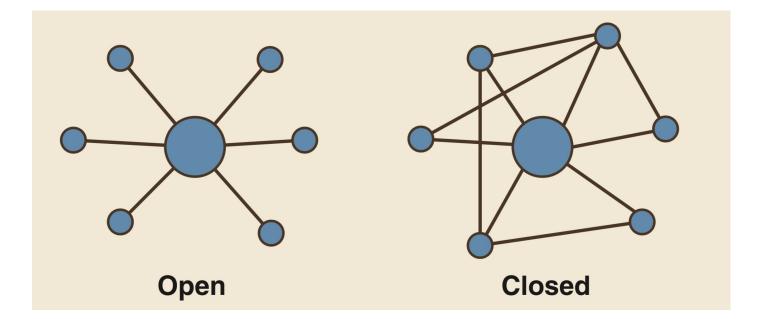
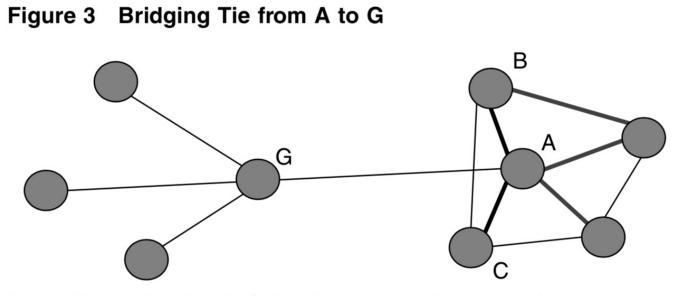


FIGURE 3.2 The directed, binary network described in Tables 3.1 and 3.2 represented as a network graph. Arrows indicate the direction of the connection (e.g., from Ann to Bob).







Note. Removing the A-G tie disconnects the network.

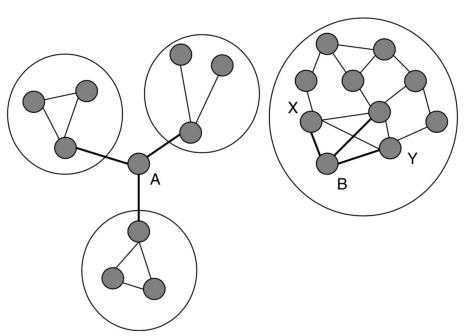
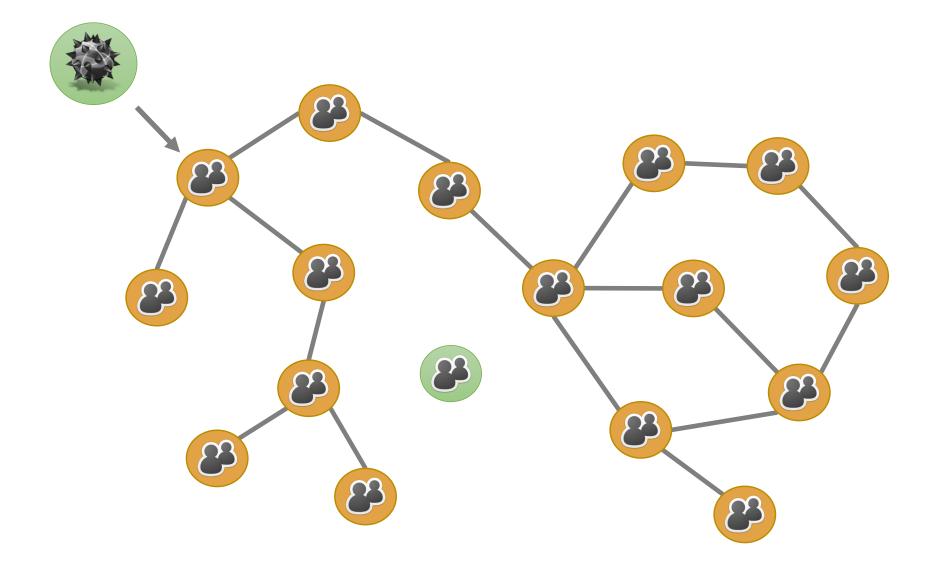
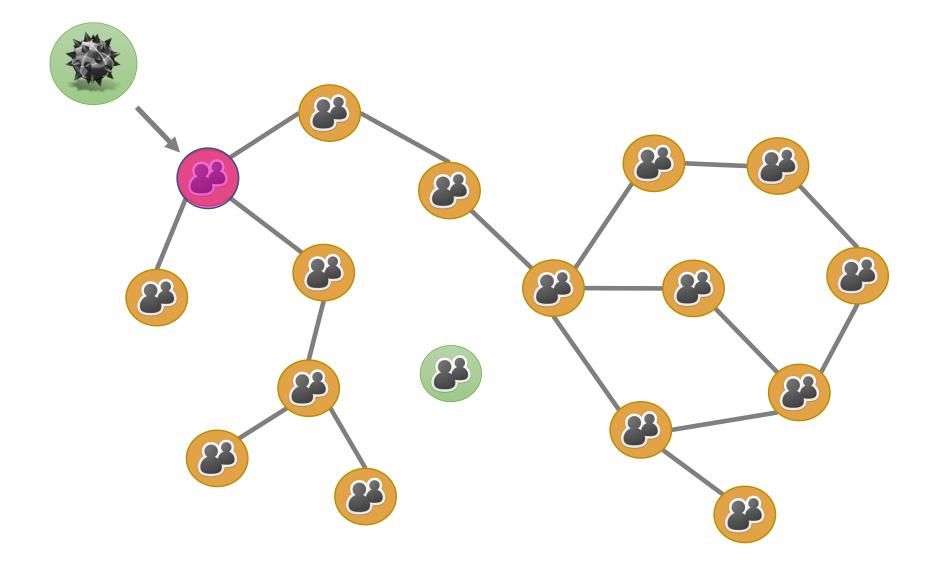
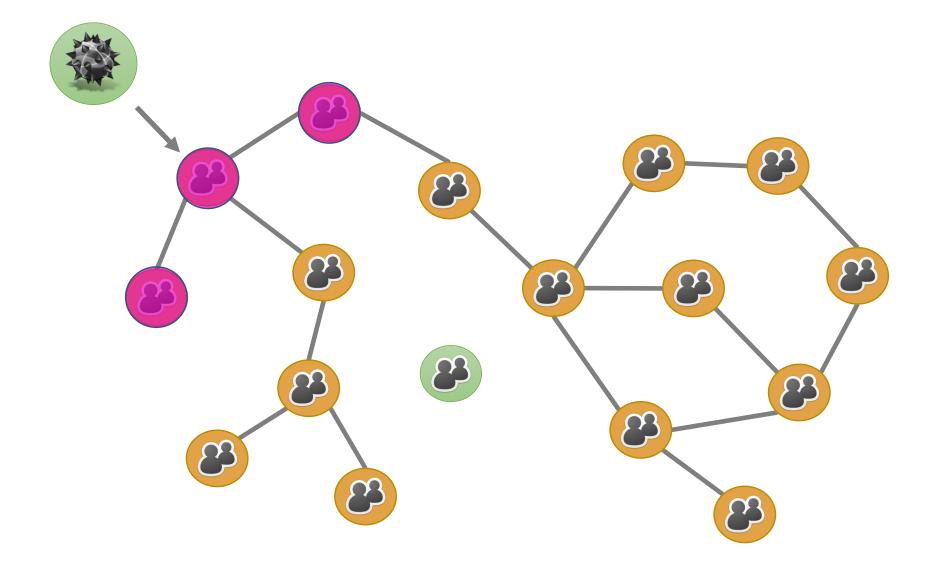
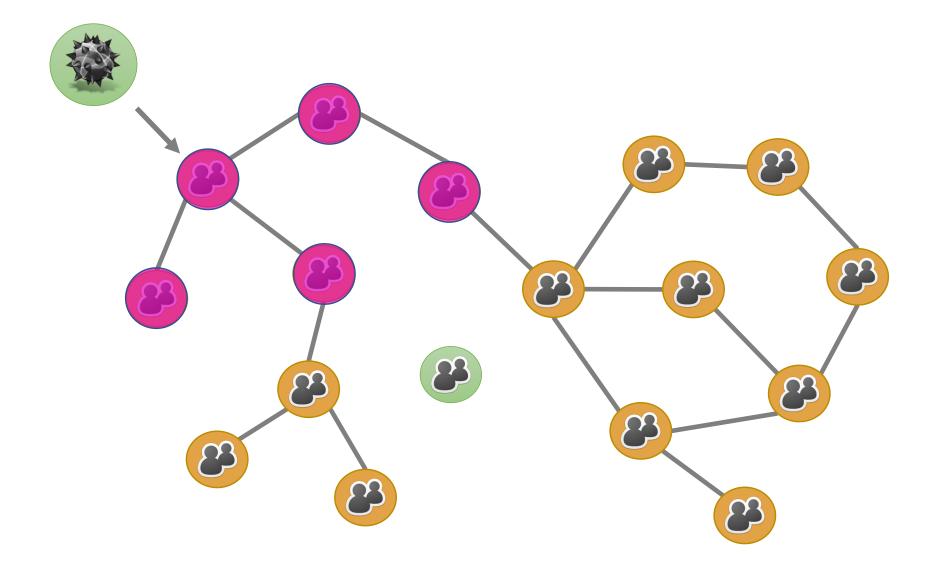


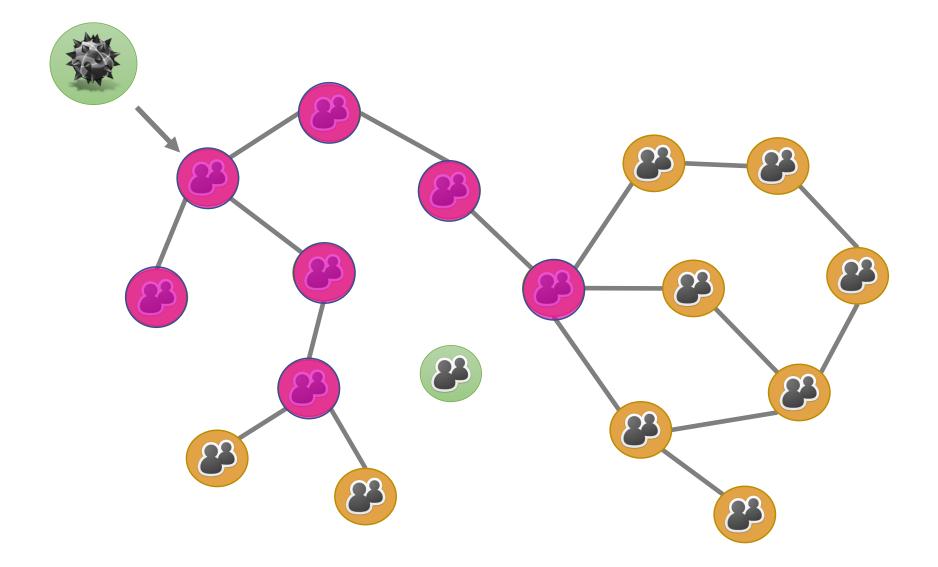
Figure 4 Node A's Ego Network Has More Structural Holes than B's

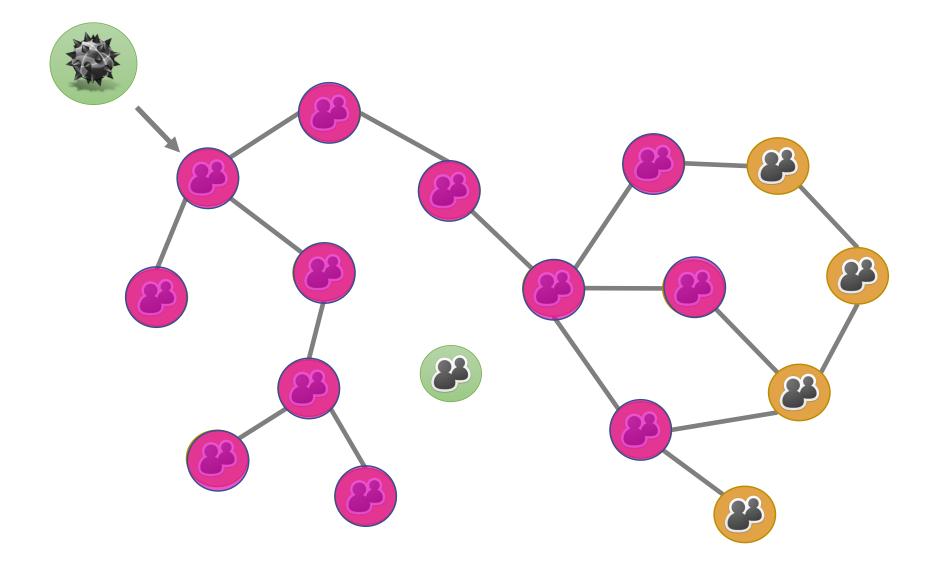


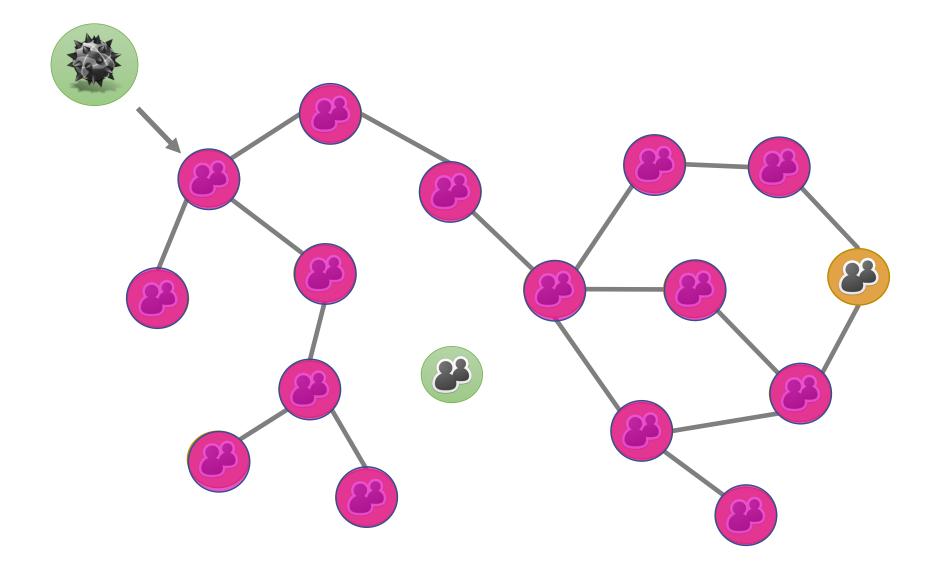


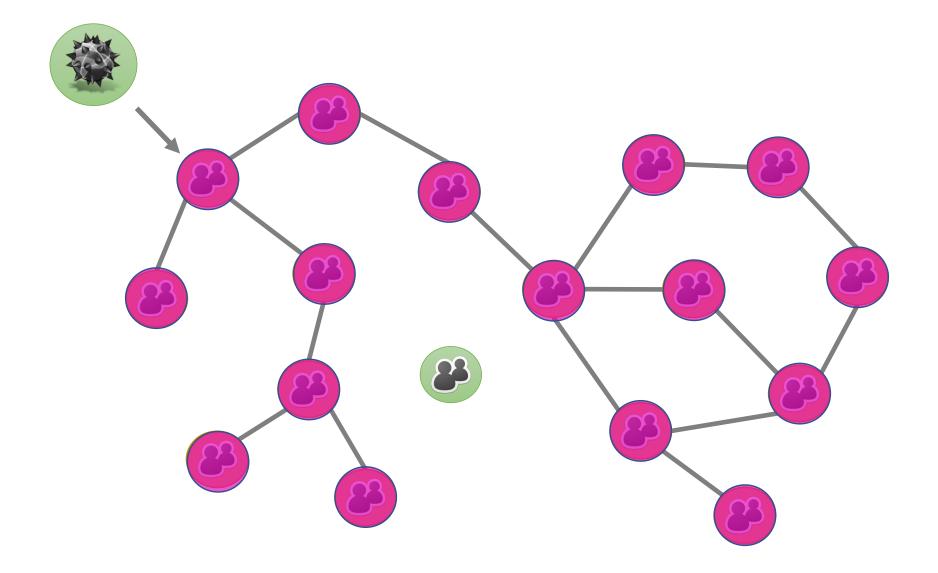


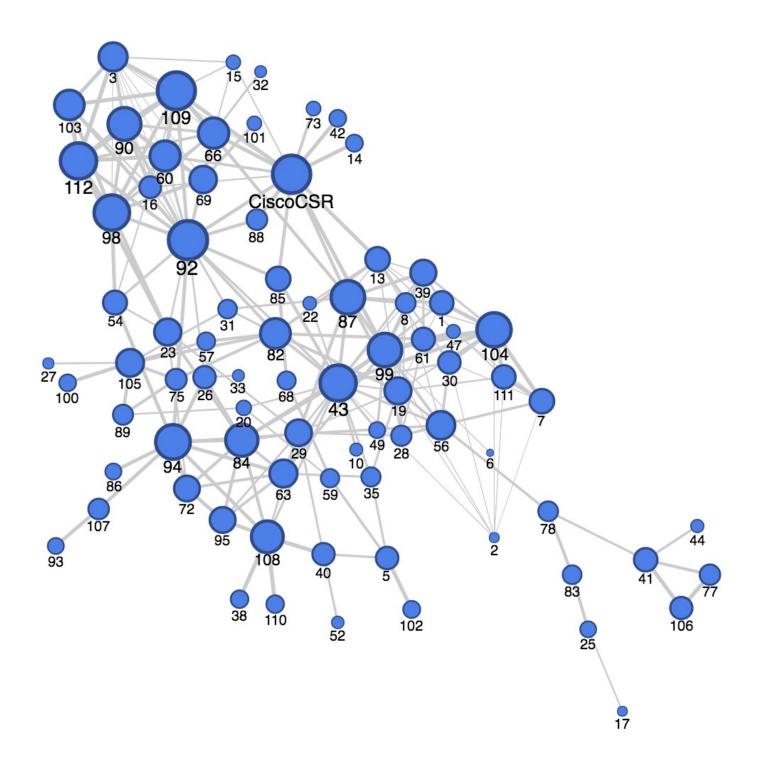


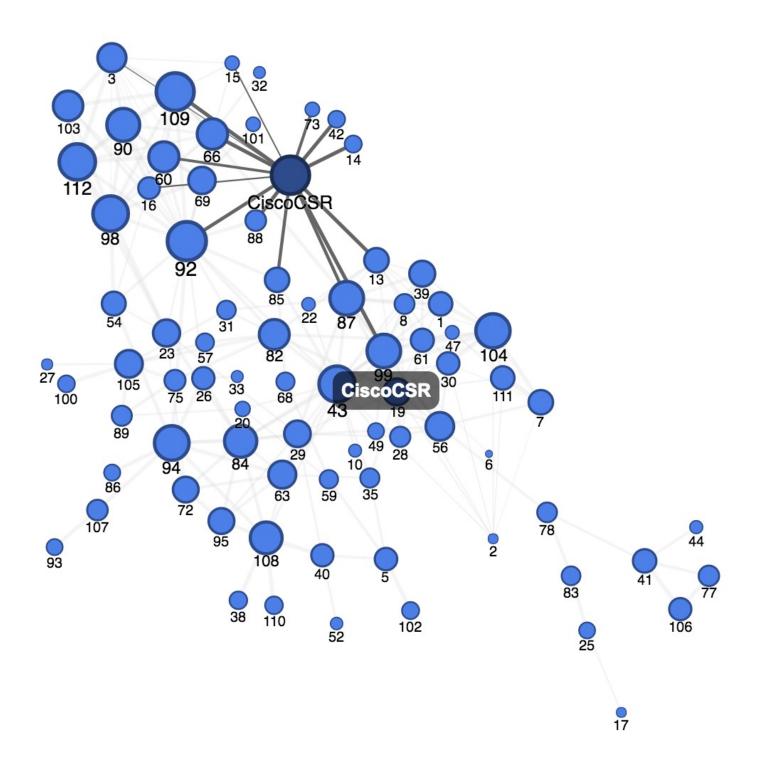


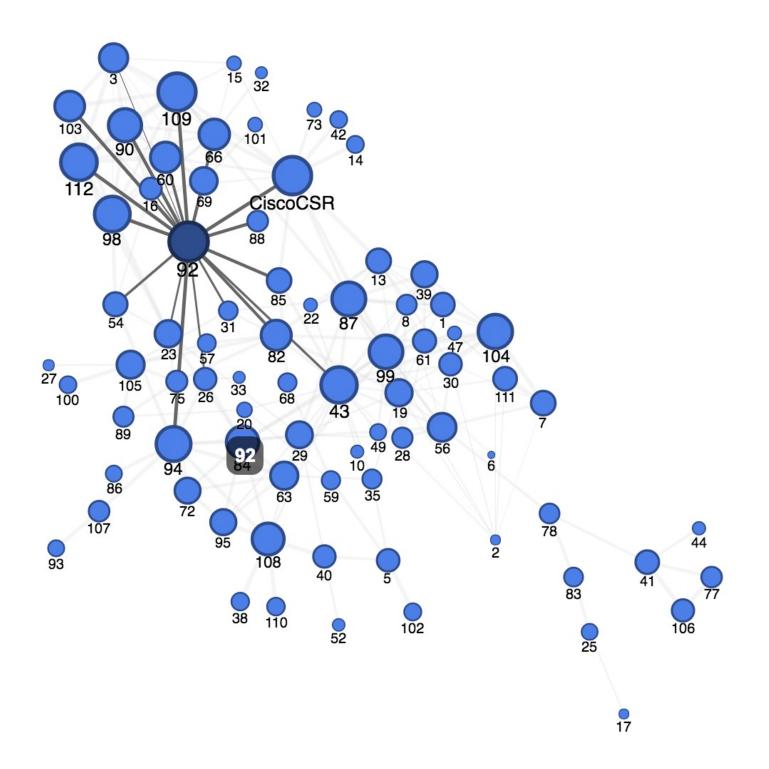




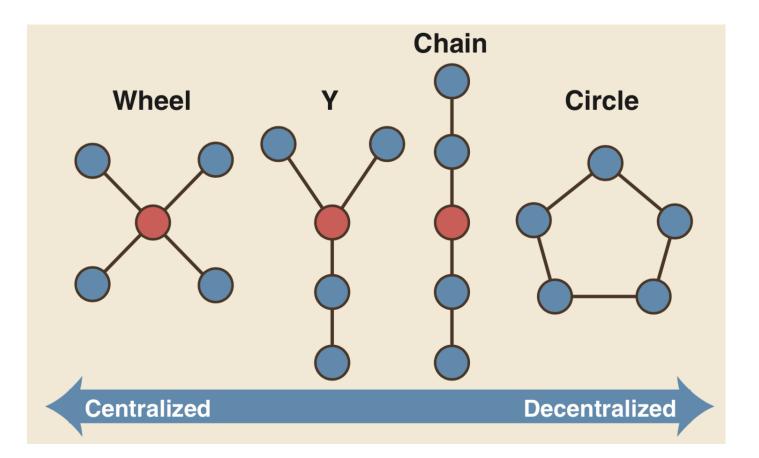


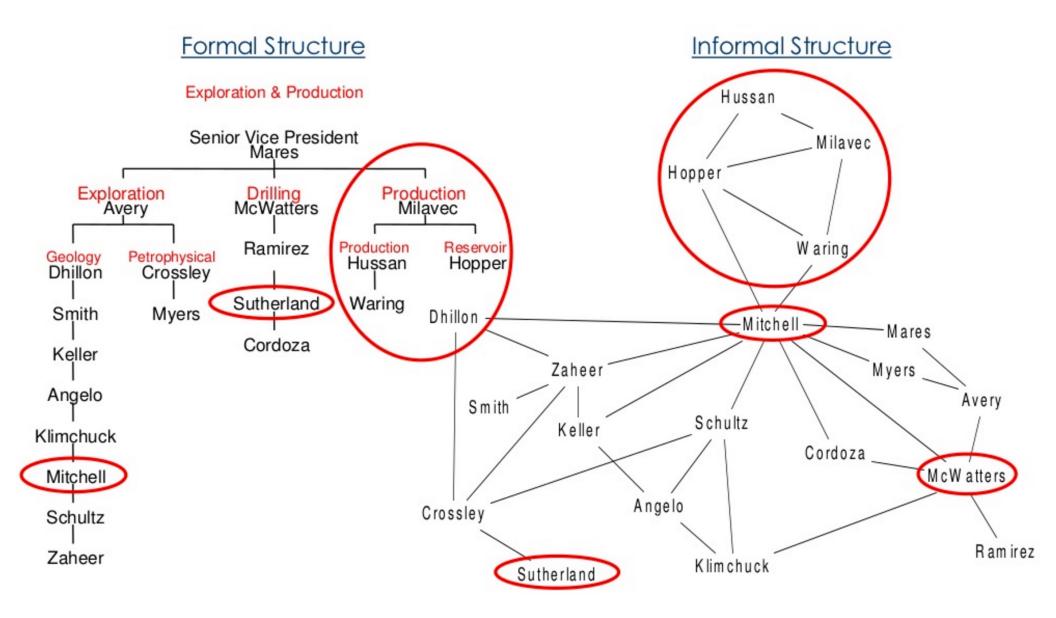


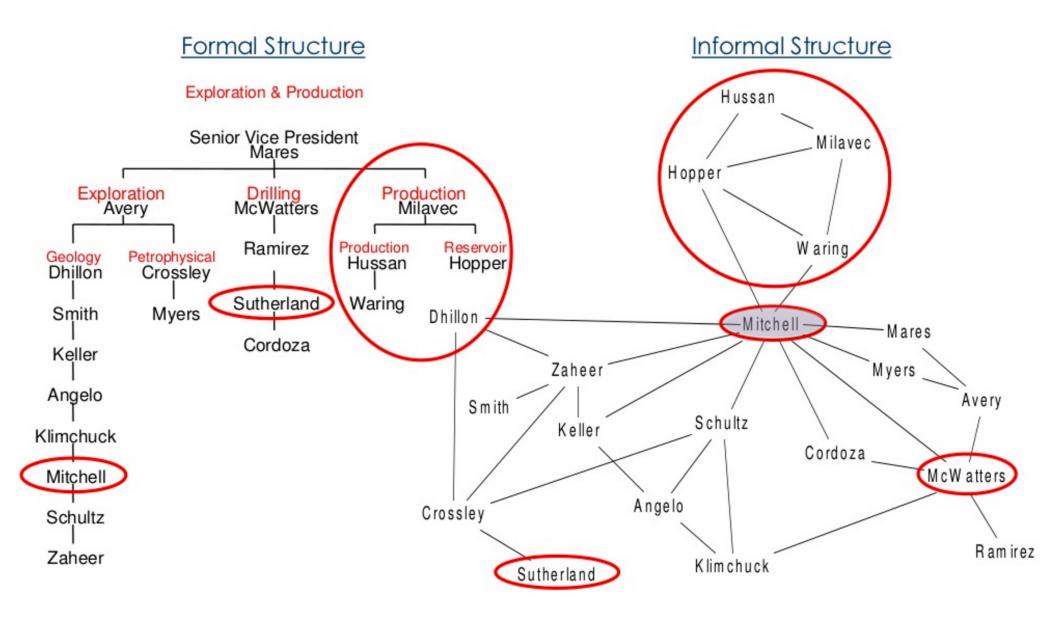


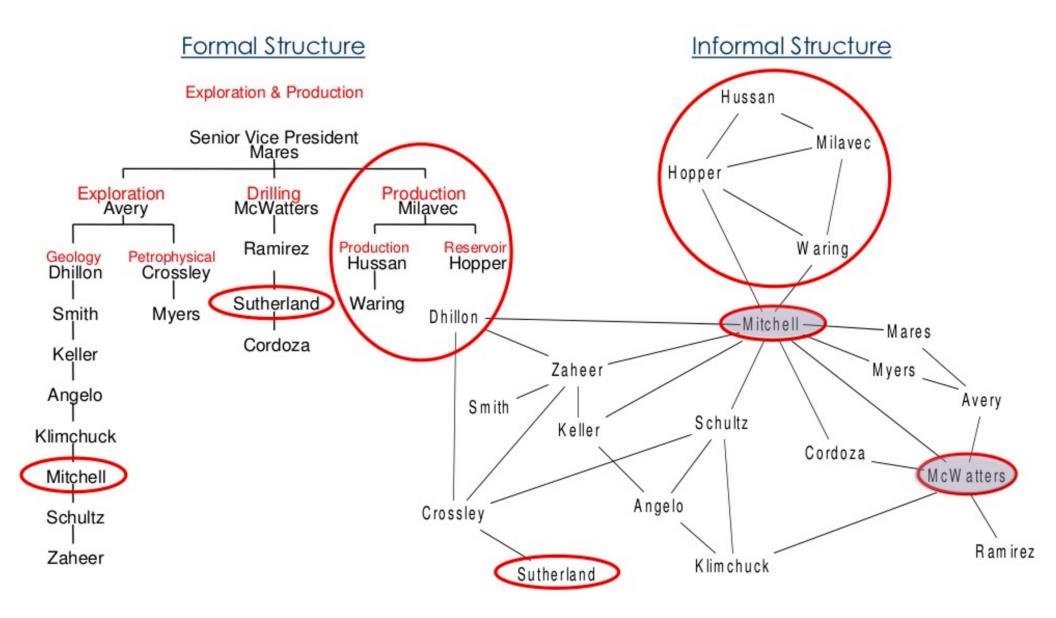


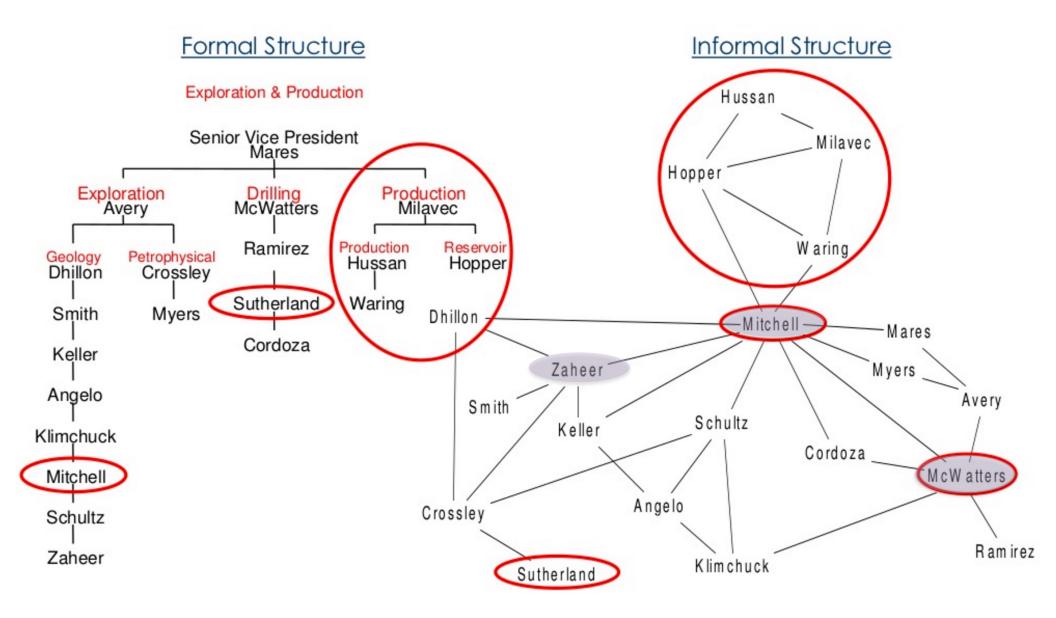
Dimension 1: Centrality

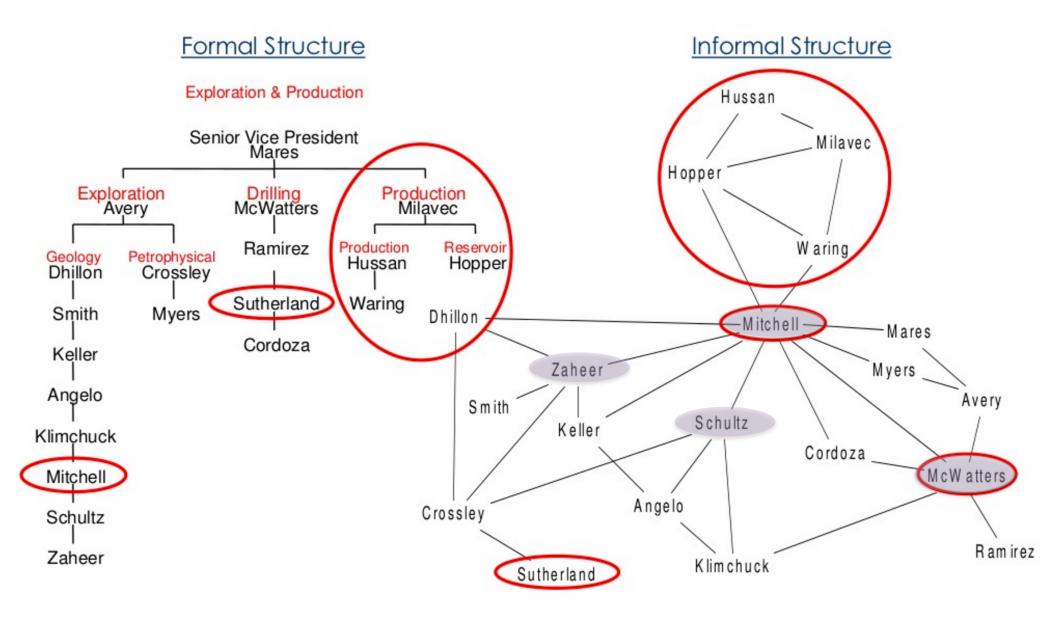


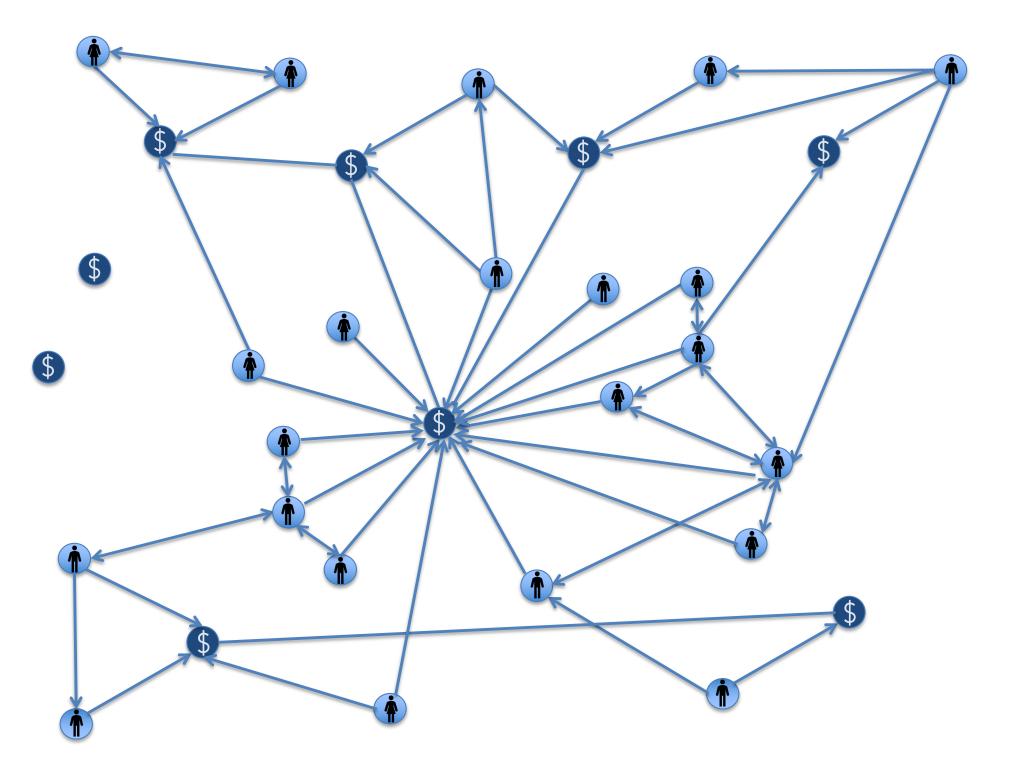


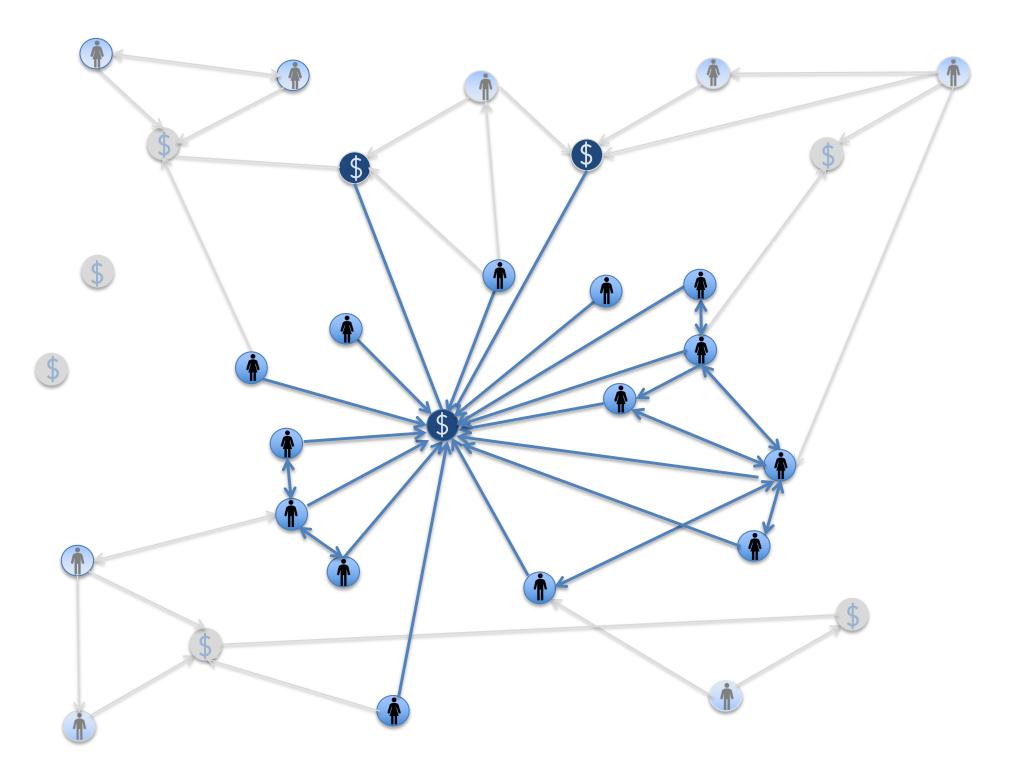


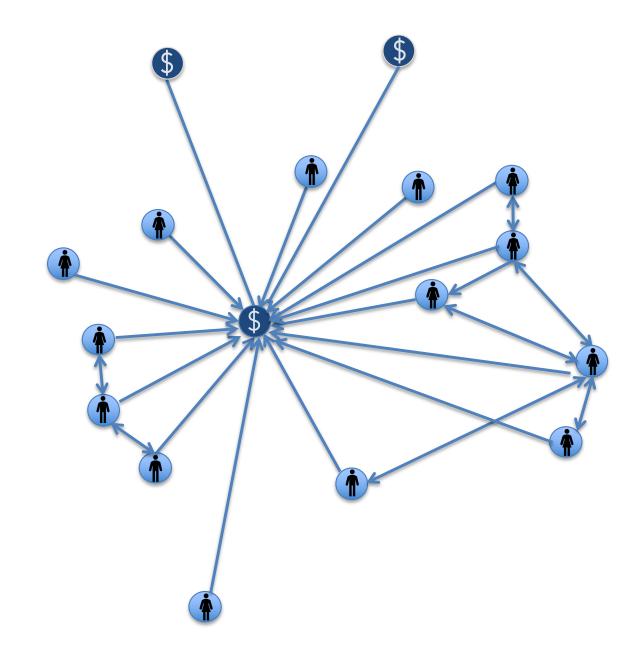




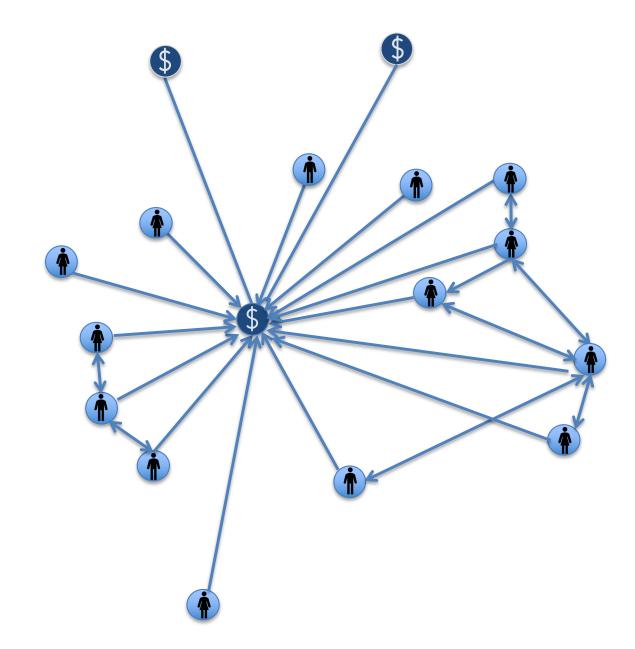




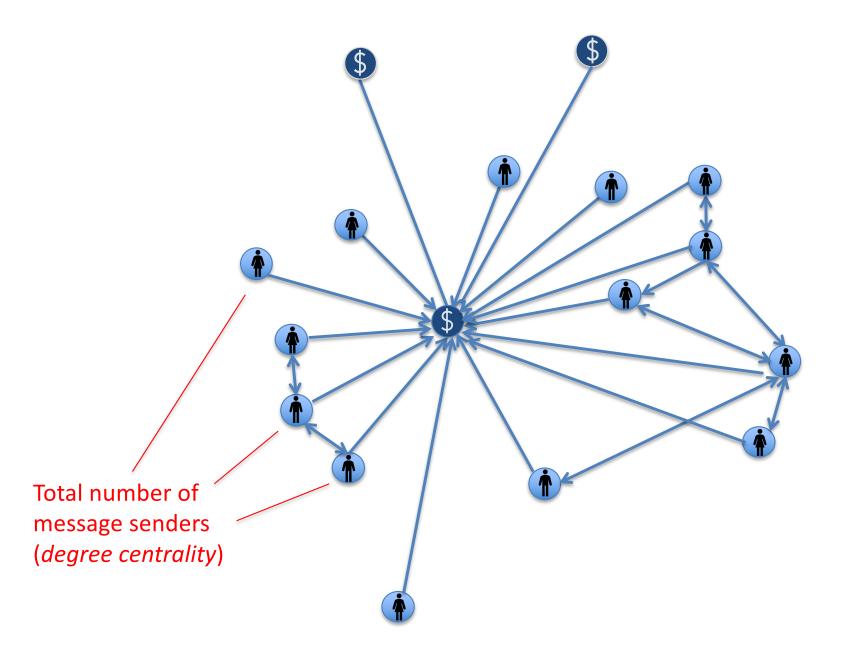


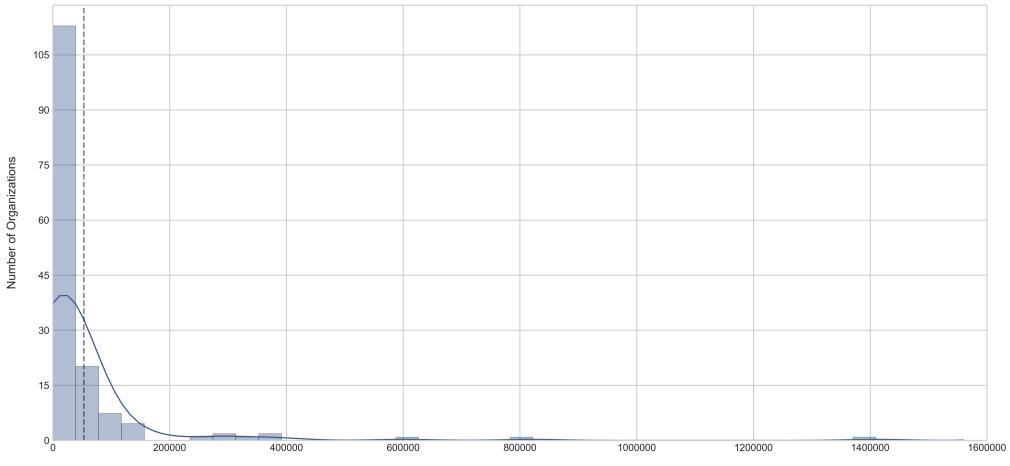


The Ego Network



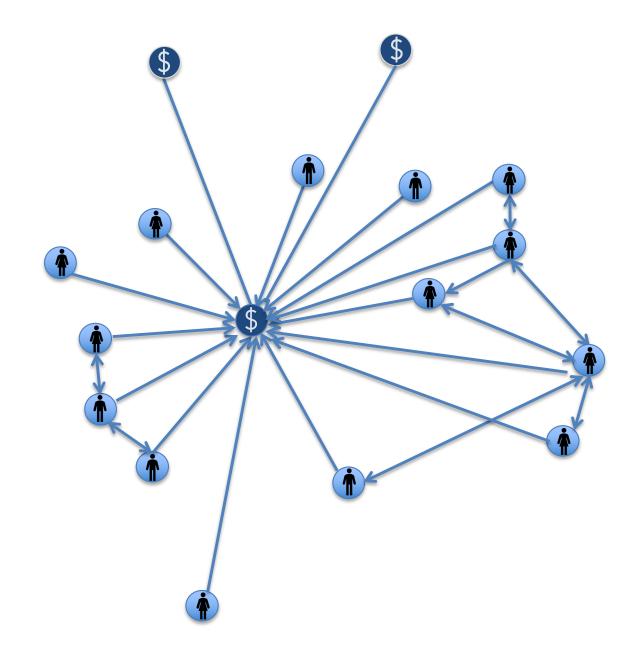
Dimension 2: Size



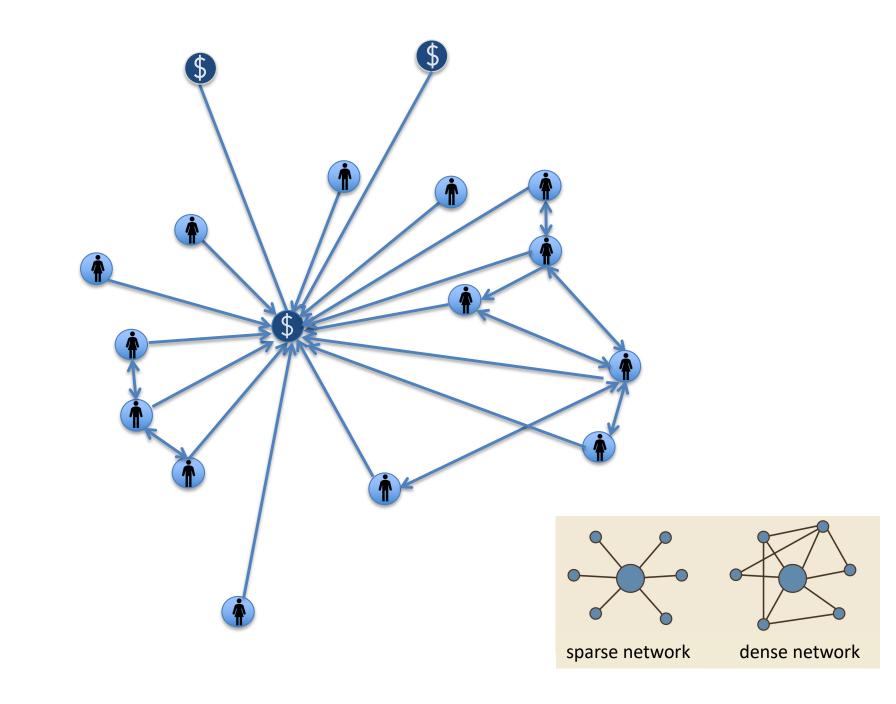


Number of Followers

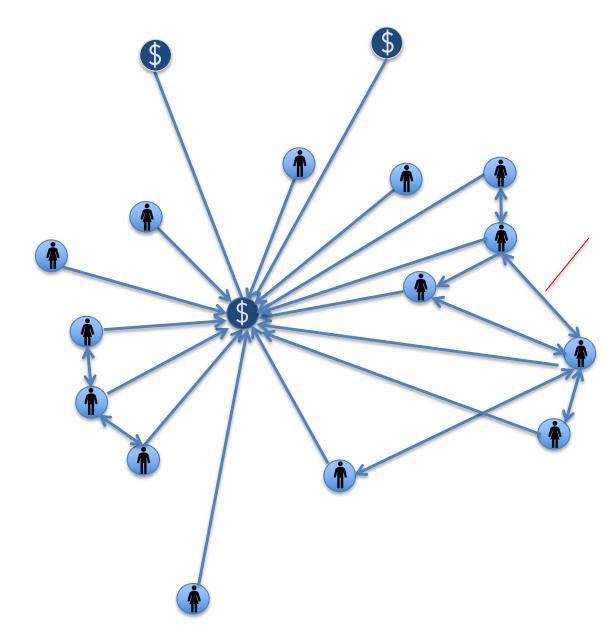
Dimension 3: Density



Dimension 3: Density

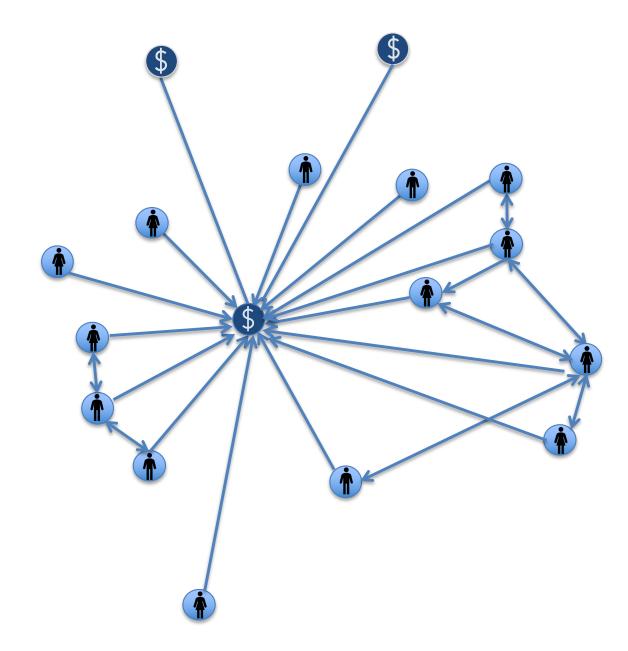


Dimension 4: Tie Strength

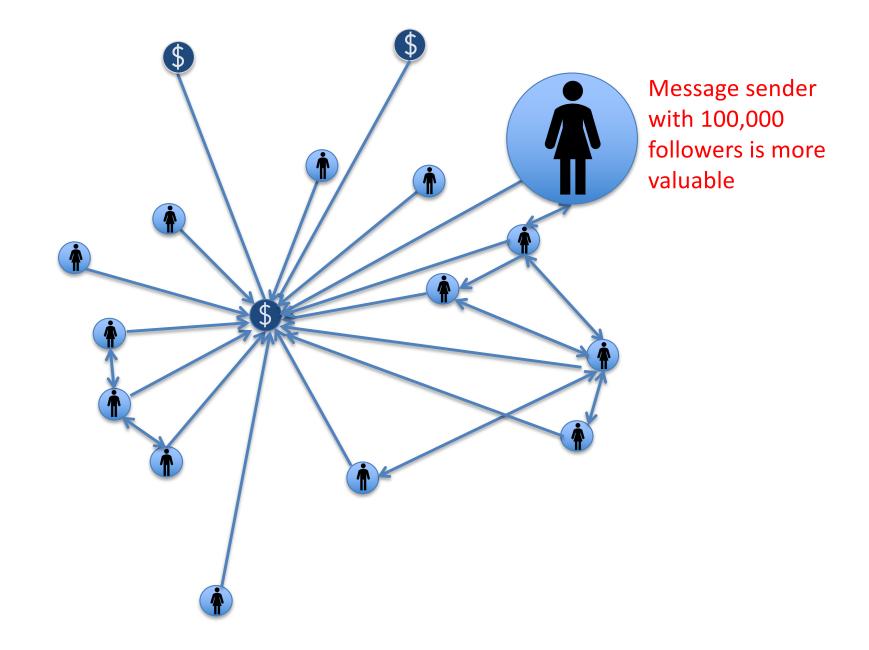


Length, number and/or multiplexity of interactions between two nodes indicates tie strength

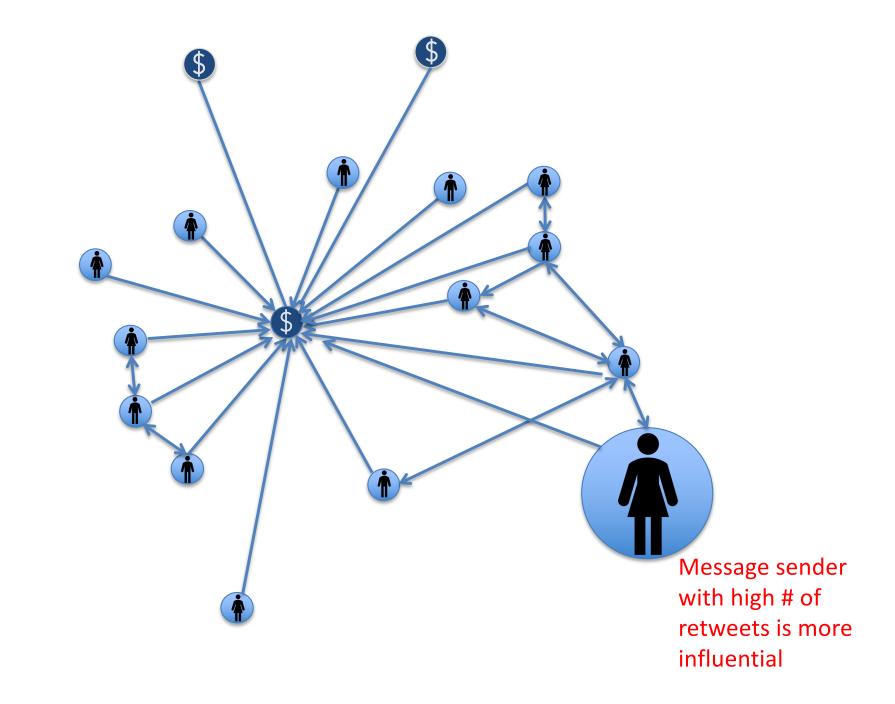
Dimension 5: Embedded Resources & Influence

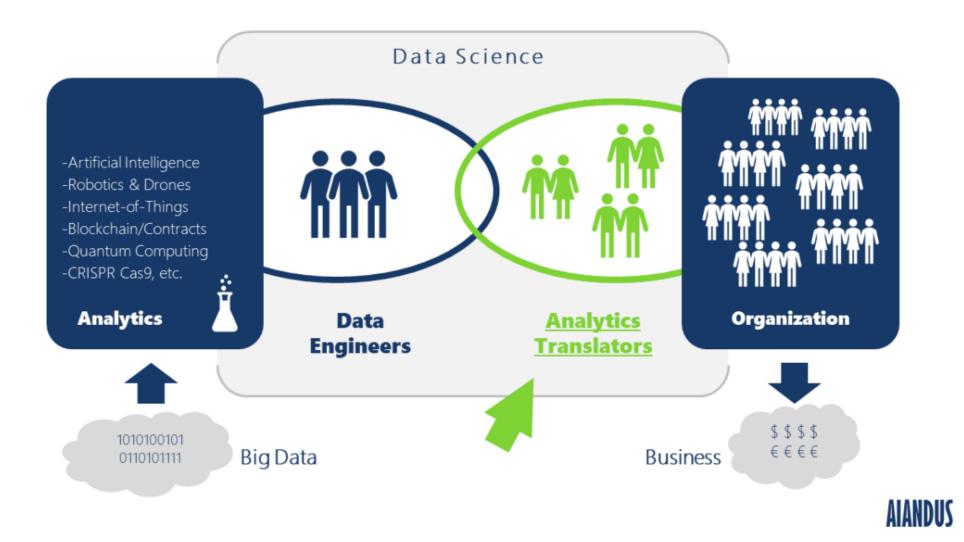


Dimension 5: Embedded Resources & Influence



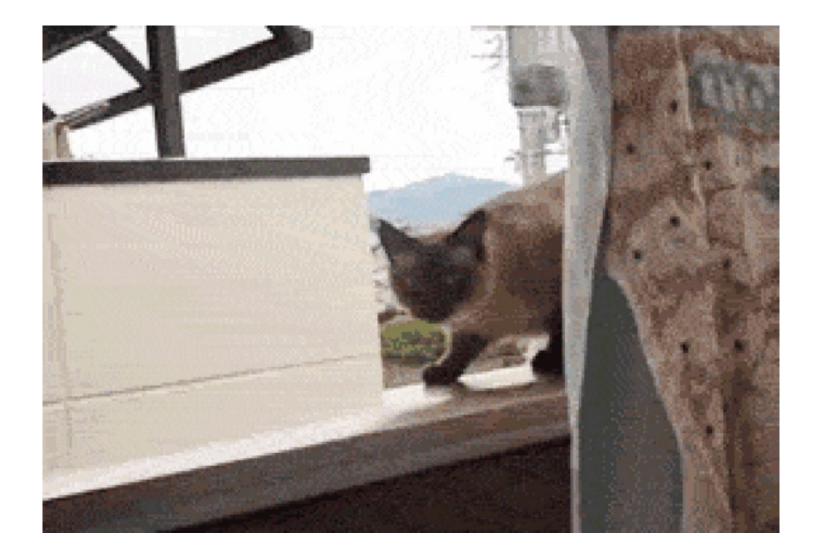
Dimension 5: Embedded Resources & Influence





Social Media Strategy

Practical Insights for Professionals



HAVE A SOCIAL MEDIA STRATEGY: FIND YOUR NICHE

NETWORK STRATEGY:

IDENTIFY KEY TARGETS

CHOOSE A VOICE

Types of Online Presence

- The provocateur/critic
- The curator/filter
- The teacher
- The advice-giver
- The marketer
- The connector
- The advocate

BUILD AND FEED YOUR NETWORK THROUGH MESSAGES AND CONNECTIONSAND THEN MOBILIZE THAT NETWORK

Taking Advantage of Networks

- A portfolio of strong and weak ties is useful to individuals in a network society
- One's position in social networks matters
 - e.g., *centrality* vs. # of connections
- People who can bridge networks (i.e., fill structural holes) are valuable.
- Get people to link to you especially those with high centrality
- Transitive thinking
- Pay it forward
 - Reciprocating can be specific (quid pro quo) or diffuse (generalized)

Who Will Thrive in a Network Society?

- Those who can "act as autonomous agents to cultivate their PLNs and their 'personal brands'"
- Those with bigger and more diverse networks
- Those who are flexible to different contexts
- Those with high levels of social capital
- Those who can manage their boundaries → privacy/disclosure control
- Those who like technology and "use it enthusiastically and nimbly"
- Those who can manage their time well

D

• Those who learn how to learn \rightarrow personal learning networks

Personal Learning Networks and Content Curation

🚯 Home 🔌 Notifications 🎽 Messa	ges # Discover 😏	Search Twitter	Q
New Media & SchopprofitsImage: Constraint of the second s	List members Jeanine Guidry @redheadacademic PhD student. Dutch & American. Redhead. Research interests: social media, nonprofits, health communication, community development & the arts.		Recently added members · view al Image: Second state st
	My tweets: my own. Richard Waters @WatersUSF Assistant Professor of strategic communication at the University of San Francisco's School of Management	Following	
Tweets>List members>List subscribers>	Brooke W. McKeever @BrookeWMcKeever Assistant Professor @UofSC, teaching and researching #PR, #nonprofits, health communication; Ph.D. from UNC; Love my family, traveling, trying new things.	Solowing	Roderick Lee @professorlee1 Following 2014 Twitter About Help Terms Privacy
More lists by @gregorysaxton · View all New Media & Nonprofits New Media & Accounting Create new list	Roderick Lee @professorlee1 Associate Professor of Information Systems in the School of Business Administration at The Pennsylvania State University - Harrisburg.	Following	Cookies Ads info Brand Blog Status Apps Jobs Advertise Businesses Media Developers
	Dr. Jimmy Young @JimmySW Asst Prof. U. of Nebraska-Kearney #SocialWork, #VCU alum, interested in #swTech, #NP, #SM, founder @SM4SW. Tweets are my own, RT's don't=endorsements.	Following	
	Georgette Dumont @GetteInJax I'm a PBS mind living in a Fox News world	Following	
	Giselle Auger @GiselleGator	🗱 🕂 Follow	

Advice for Novice Curators

- Start out with a Twitter list or LinkedIn group
- Find a small niche related to your strategic learning area
- Really understand it
- Share high quality information
- Add value to that content

how about those Linked in groups 3

Conteract with at least five groups per day. Share an industry article you found interesting. Read other group members' posts and give good advice. Then it won't be awkward to send requests to connect -- they'll remember you. >>

. . . .



~ Yasheaka Oakley PR Pro

Some Practical Lessons for PLNs

- There is no online/offline divide
- You need to craft an online persona
- The decentralized knowledge generation of the Internet Age means there is lots of room in the "long tail" for specialized experts
- To build the expertise, you need to create a PLN
- After creating the PLN you need to synthesize the knowledge and also curate the information.
- Be sure to feed your PLN

Key Takeaways

- Understand importance of social and relationship capital
- Linking intangibles to business model \rightarrow modeling
- Mapping concepts to measures
- Multiple measures and dimensions
- Distinguish between expenses and value-creating investments if you want to measure performance and assess growth potential.
- Goal: measure and disclose future value streams
 - Forward-looking rather than backward-looking
- Knowing/learning what is possible
 - You can't rely on computer science staff
 - Be an "analytics translator"
- Add to your conceptual toolbox
 - How are things distributed? Power Law Distribution
 - How are things organized? **Networks**

Nonprofits & Social Media Capital



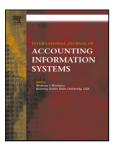
The linchpin of social media's return on investment is social media *capital*—a resource that can be converted or expended toward strategic organizational outcomes. Here, the Social Media Capital for Nonprofits: How to Accumulate It, Convert It, and Spend It

by Chao Guo and Gregory D. Saxton



Contents lists available at ScienceDirect

International Journal of Accounting Information Systems



journal homepage: www.elsevier.com/locate/accinf

Social media capital: Conceptualizing the nature, acquisition, and expenditure of social media-based organizational resources

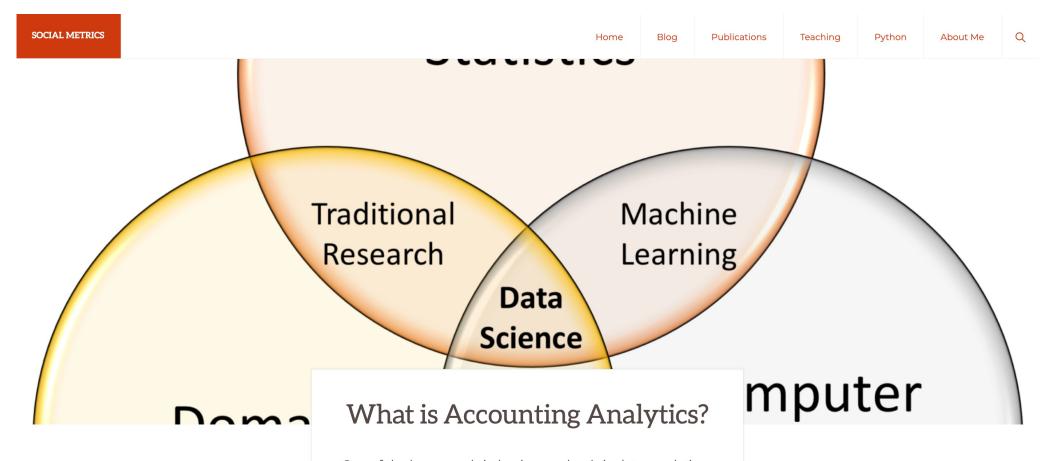
Gregory D. Saxton^{a,*}, Chao Guo^b

^a Schulich School of Business, York University, Room S337L, Seymour Schulich Building, 4700 Keele St. West, Toronto, ON M3J 1P3, Canada ^b School of Social Policy & Practice, University of Pennsylvania, 3701 Locust Walk, Philadelphia, PA 19104-6214, United States of America

ARTICLE INFO

Article history: Received 2 June 2018 Received in revised form 22 October 2019 Accepted 20 December 2019 Available online xxxx

Keywords: Big data Data analytics Resources Social capital Social media Social networks The near-universal organizational participation in social media is predicated on the belief there are some tangible or intangible new resources to be had through tweeting, pinning, posting, friending, and sharing. We argue the linchpin of any payoff from engagement in social media is a special form of social capital we refer to as *social media capital*, and offer a conceptual framework for understanding its nature, acquisition, and expenditure. This paper contributes to existing literature by elaborating a new type of organizational resource and then synthesizing and extending research on the processes through which organizations can translate social media efforts into meaningful organizational outcomes. Understanding this causal chain is critical not only for measuring the return on investment from social media use but also for developing accounting information systems that are both adaptable to social resources and better able to exploit the data analytic and forecasting capabilities of real-time social media data. © 2020 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).



One of the buzz-words in business schools is *data analytics* or, in an accounting school, *accounting analytics*. But what exactly is 'accounting analytics'? How is it different from existing tools and disciplines such as 'statistics', 'computer science', 'machine learning, 'Big Data', or 'managerial accounting'? In this post I will disentangle this emerging field. This is a first crack at this issue — I will continue to edit as the field (and my understanding of it) develops.

Accounting & Data Analytics

Blog

Home

Publications

Teaching

Python

About Me

Q

DATA ANALYTIC APPROACHES TO NONPROFIT ACCOUNTING AND CSR

LEARN MORE

Upcoming Events



Understanding and Measuring Online Social & Relationship Capital

Virtual | Friday January 20th, 12:00 EST In this one-hour webinar, funded by CPA Ontario and the Schulich CPA Ontario Centre in Digital Financial Information, Dr. Saxton will provide an overview of how accounting practitioners should approach and understand digital measures of social and relationship capital, an off-thebooks intangible asset that is little understood yet vital for professional and organizational success.



Valuation in the Metaverse -Digital Assets in Virtual Worlds

Virtual | Friday March 24th, 12:00 EST

In this one-hour webinar, funded by CPA Ontario and the Schulich CPA Ontario Centre in Digital Financial Information, Dr. Veljko Fotak will discuss the valuation of digital assets in virtual worlds. The lecture will cover specific challenges linked to applying "classical" economic frameworks to assets in virtual worlds and cover assets in virtual worlds and cover topics ranging from the pricing of virtual real estate, spanning the role of non-fungible tokens in establishing property rights, touching upon issues related to taxation, to lessons from existing virtual gaming worlds - from Everquest to Eve Online.

Registration



Best Practices of Data

Demonstration in Python

Virtual | Friday April 14th, 12:00 EST

In this one-hour webinar, funded by CPA Ontario and the Schulich CPA

Ontario Centre in Digital Financial Information, Dr. Jerome Niyirora will walk through a demonstration of using Python to develop effective

visualizations. To facilitate the sharing and running of code, we will be using Google's **Colab** tool. More details will

be sent shortly before the webinar.

Visualization: A

Registration



Accounting

Registration

Virtual | Friday Feb. 10th, 12:00 EST

In this one-hour webinar, funded by CPA Ontario and the Schulich CPA Ontario Centre in Digital Financial Information, Dr. Kipp will provide an

Information, Dr. Kipp will provide an overview of the fundamental technologies underlying blockchain, discuss considerations for blockchain

implementation, and highlight the role that accounting professionals can play in adopting blockchain for accounting.

Peeking Behind the Veil: How Journalists Use Leaked Financial Records to Tell Stories with a Global Impact and What You Can Do With

the Information Virtual | Friday April 28th, 12:00 EST

In this one-hour webinar, funded by CPA Ontario and the Schulich CPA Ontario Centre in Digital Financial Information, Will Fitzgibbon will shed light on the ICU's data releases and what it means for corporations' and high net worth individuals' tax oidance and tax evasion practices





Past Events

Registration >



WERINAR on The Audit **Expectation Gap and** Technology

Virtual | Friday December 16th, 12:00 EST

In this one-hour webinar, funded by CPA Ontario and the Schulich CPA Ontario Centre in Digital Financial Information, we will discuss technology's role in the audit expectation gap. Specifically, we will discuss how, when, where, and why technology is used in conducting current audits in the context of the public's expectations of financial statement audits

View Slides >

View Video (forthcoming) >



The Effects of Bots on Market **Reactions to Farnings** Announcement Events Virtual | Friday December 9th, 12:00 EST

Information.

View Slides

View Video (forthcoming)

Analysis Toolpak Virtual | Friday December 2nd, 12:00 EST

This one-hour webinar will present recent academic research that has been funded by CPA Ontario and the Schulich This one-hour webinar, funded by CPA Ontario and the Schulich CPA Ontario Centre in Digital Financial Information, will provide an overview of how the Data Analysis Toolpak, included with Excel, can be used by accounting practitioners to analyze data quickly CPA Ontario Centre in Digital Financial and efficiently in a variety of ways.



Statistics in Excel's Data

Measuring and Analyzing

Reputational Capital Using





Thank you