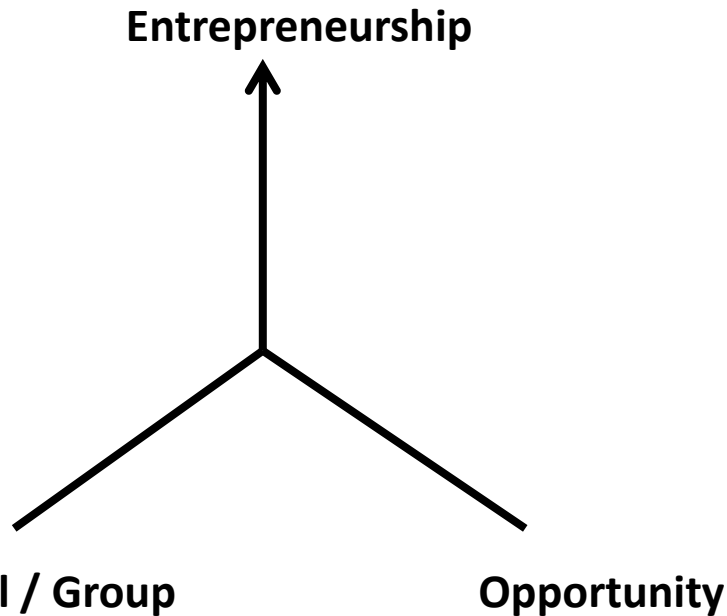


Day 4 - Entrepreneurial teams

Rajiv Vaid Basaiawmoit

ENTREPRENEURSHIP



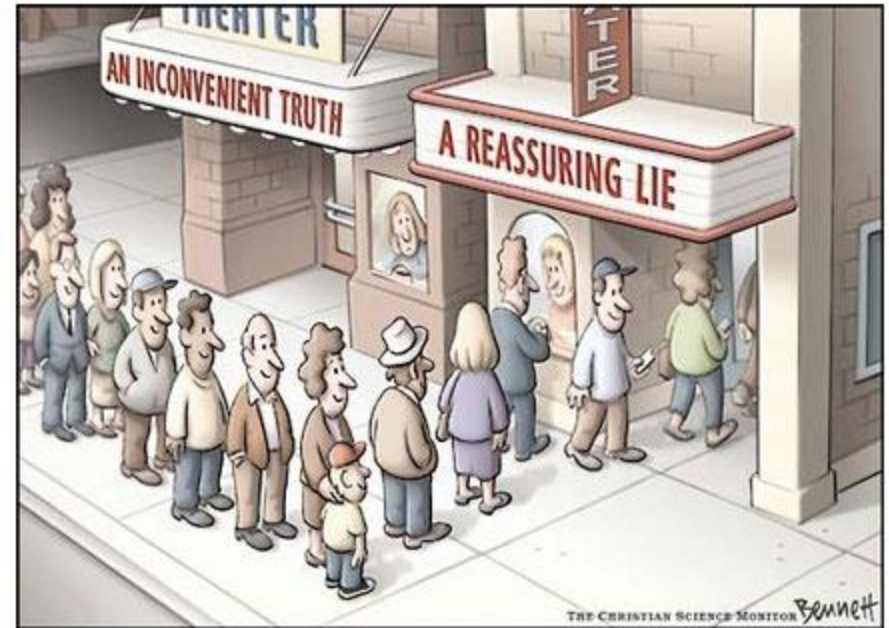
“Entrepreneurship involves the nexus of two phenomena: the presence of lucrative opportunities and the presence of enterprising individuals” -
Shane & Venkataraman (2000, 25: 217-226)

What do these images convey?



Image courtesy: Jessica Bruder

Success: "Fake it till you make it"



Would you rather learn about the 10 steps to success from a Guru or the 10 steps of often committed mistakes or failures of entrepreneurs

Riding this "madness" called Entrepreneurship

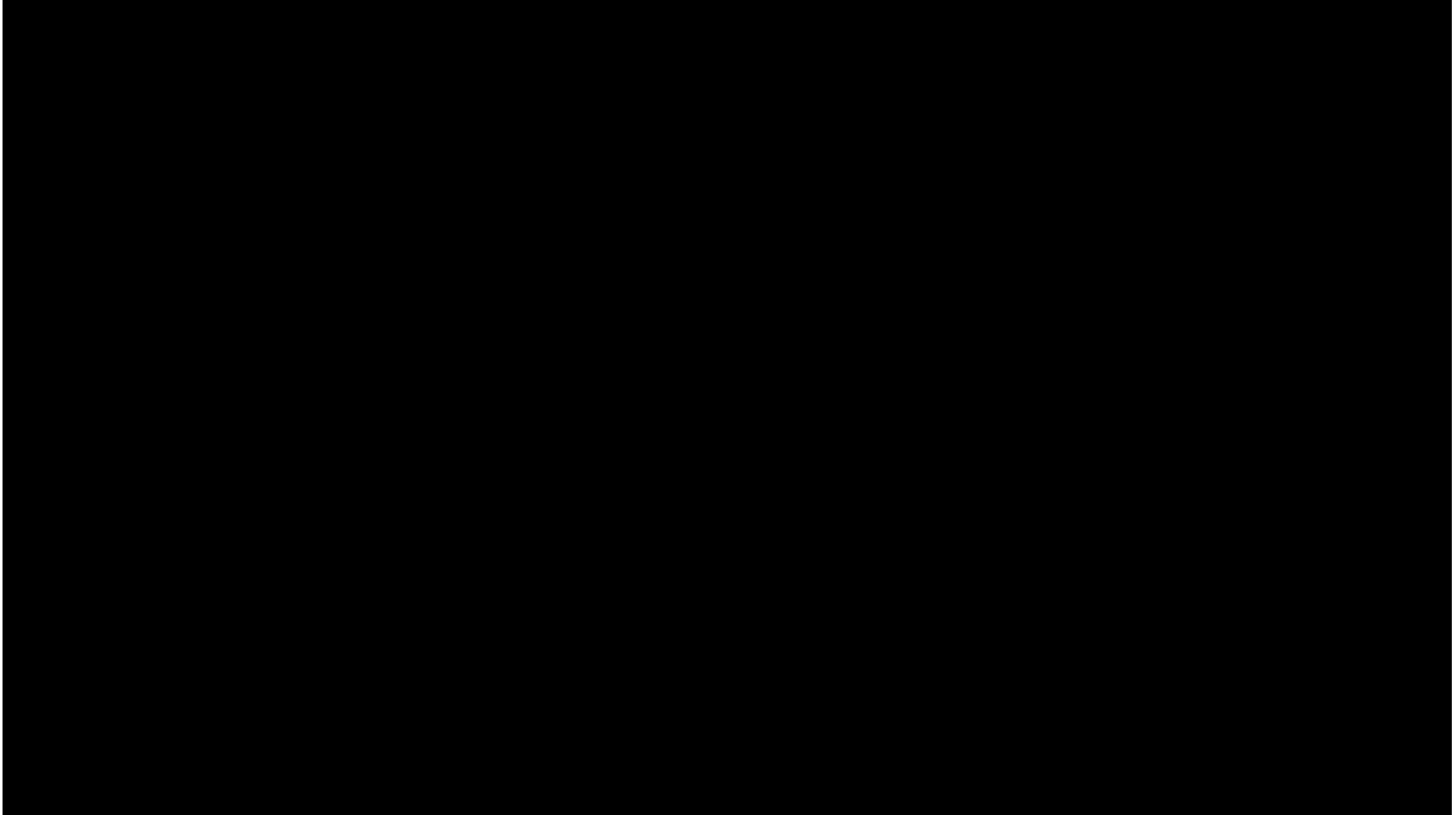


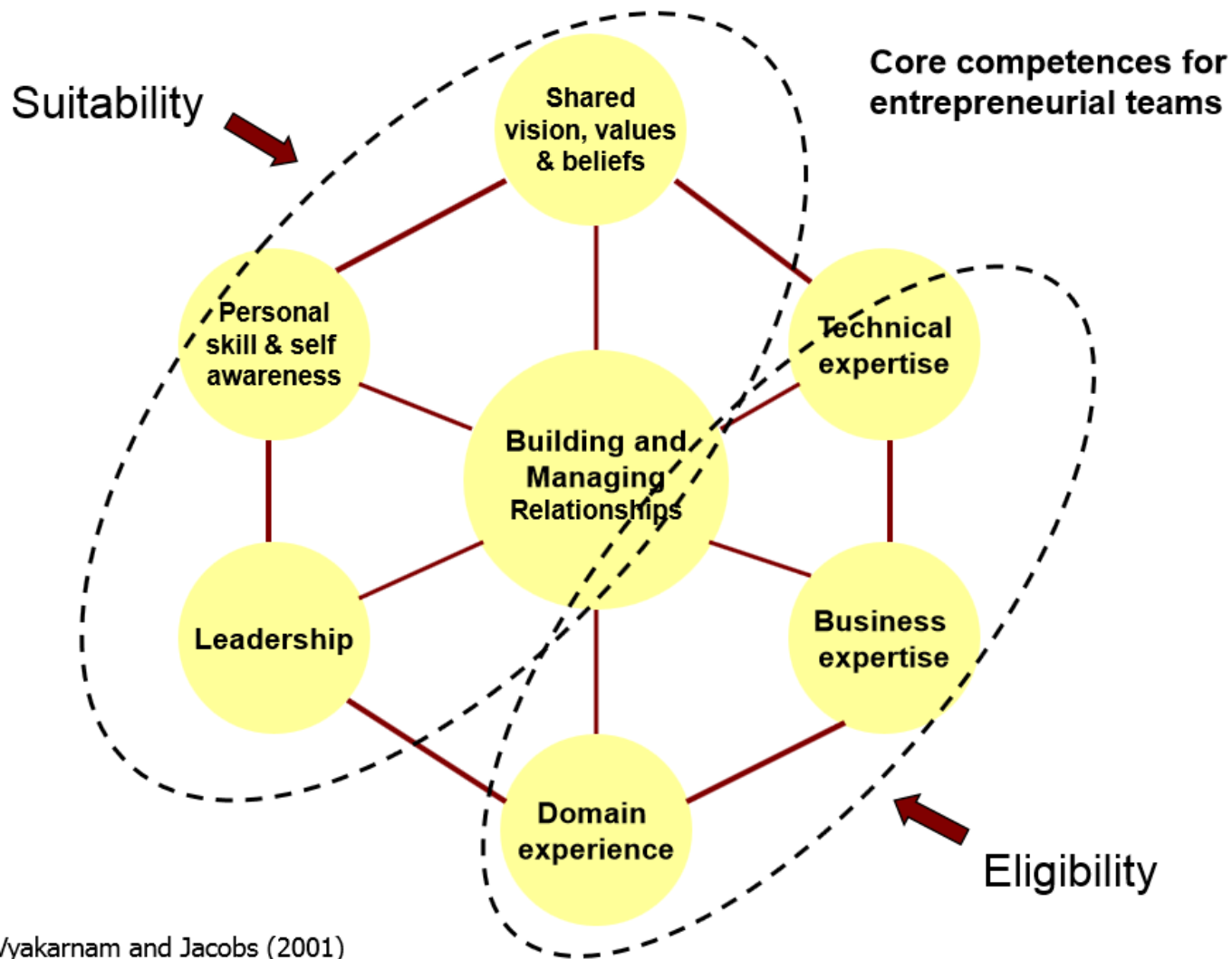
"In Individuals madness is a rarity, but in a group
...it is the rule" *Nietzsche*

Why does one need a team?

- You cannot do it alone – there will never be enough time
- Advantages of skill mixes – diversity strength
- Perspectives – more value than one imagines
- Complexity scaling
- Easier to attract investors when in teams
- Shared burden – financial, social & psychological

LOL – DUH! Its all about Teams



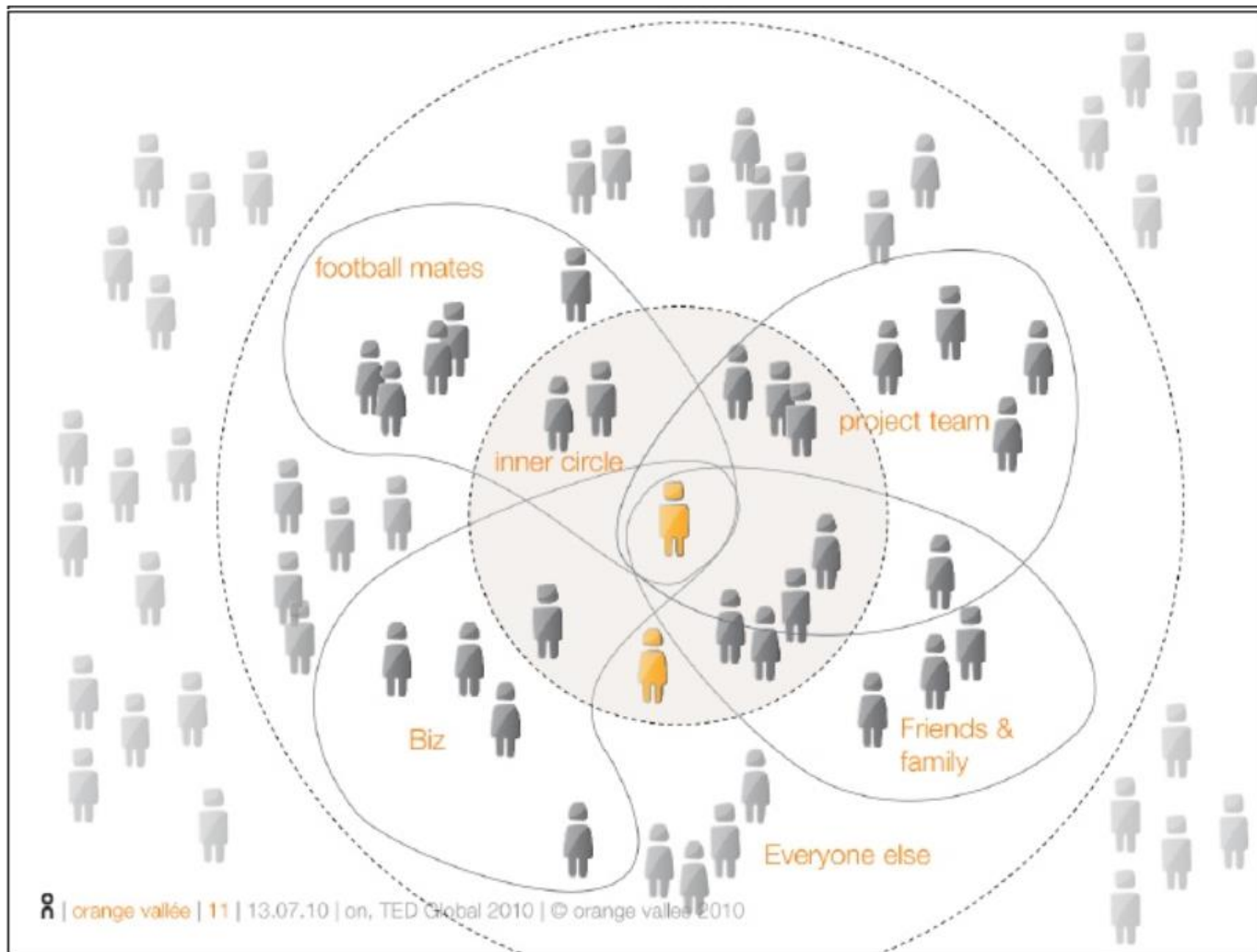


Vyakarnam and Jacobs (2001)

Industrial and Corporate Change, Volume 11, Number 3, pp. 427–449

Strong ties, weak ties and islands: structural and cultural predictors of organizational innovation

Martin Ruef



Slide courtesy: Giles Corbert; presented at TED global – Oxford July 2010

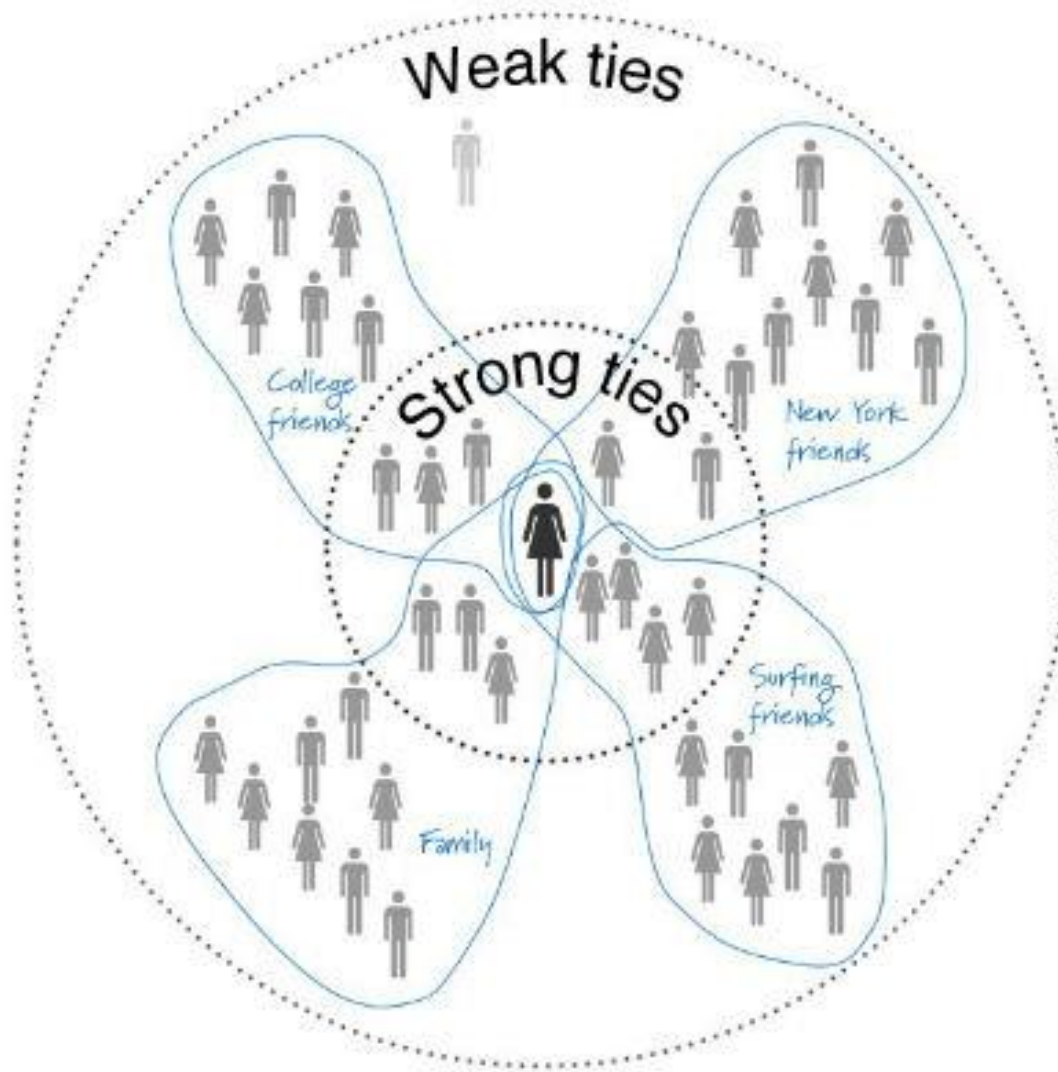


Table 1 Predictors and underlying mechanisms of organizational innovation

	Information	Conformity	Trust	Innovation	Relevant hypotheses
Structural predictors					
Strong ties	0	+	+	0	
Weak ties	+	0	0	+	H1, H7–H8
Directed ties (mimetic)	+	+	n/a	0	H2
Directed ties (expert discourse)	+	0	n/a	+	H3
Network diversity	+	+	+	+	H4
Team size	+	0	0	+	H5
Cultural predictors:					
Team diversity	+	–	(–)	+	H6
Industry LOT	0	+	n/a	–	H9

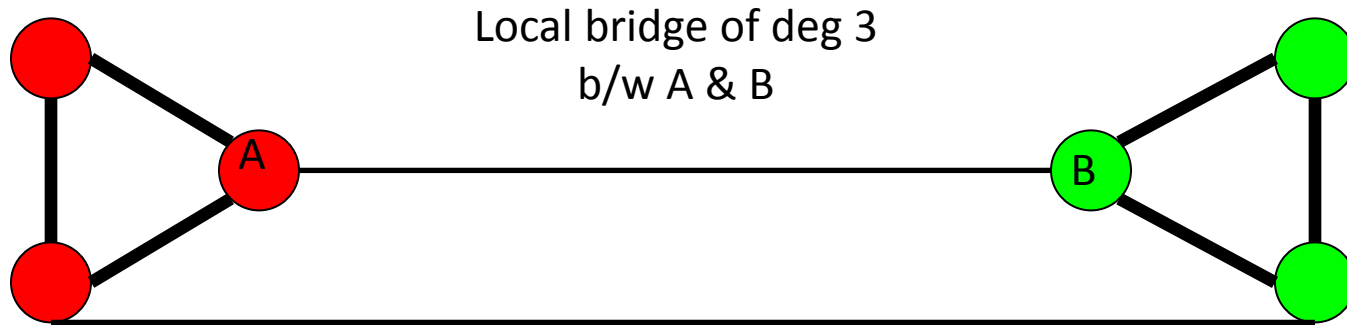
Ruef (2002)

Strong ties / weak ties

Revisits a very influential and still relevant paper – “The strength of Weak ties” - by Mark S. Granovetter, *The American Journal of Sociology*, 1973

- “One of the most influential sociology papers ever written” (Barabasi)
 - One of the most cited (*Current Contents*, 1986)
- Interviewed people and asked:
“How did you find your job?”
 - Kept getting the the same answer:
“through an acquaintance, not a friend”

Granovetter transitivity



The stronger the tie between A and B, the larger the overlap in their relationship circles

Strong tie =>

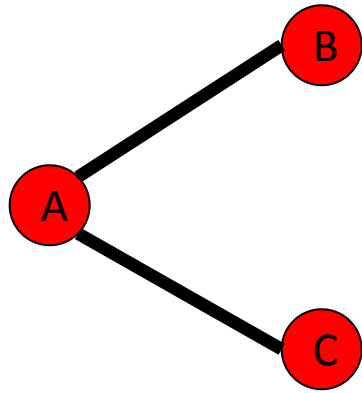
lots of time together => lots of opportunity for B to meet the A's friends

similarity => greater chance that B will be "compatible" with A's friends

physiological need for congruence =>

B will have a natural affinity for A's friends, based on A's opinion of them

The forbidden triad



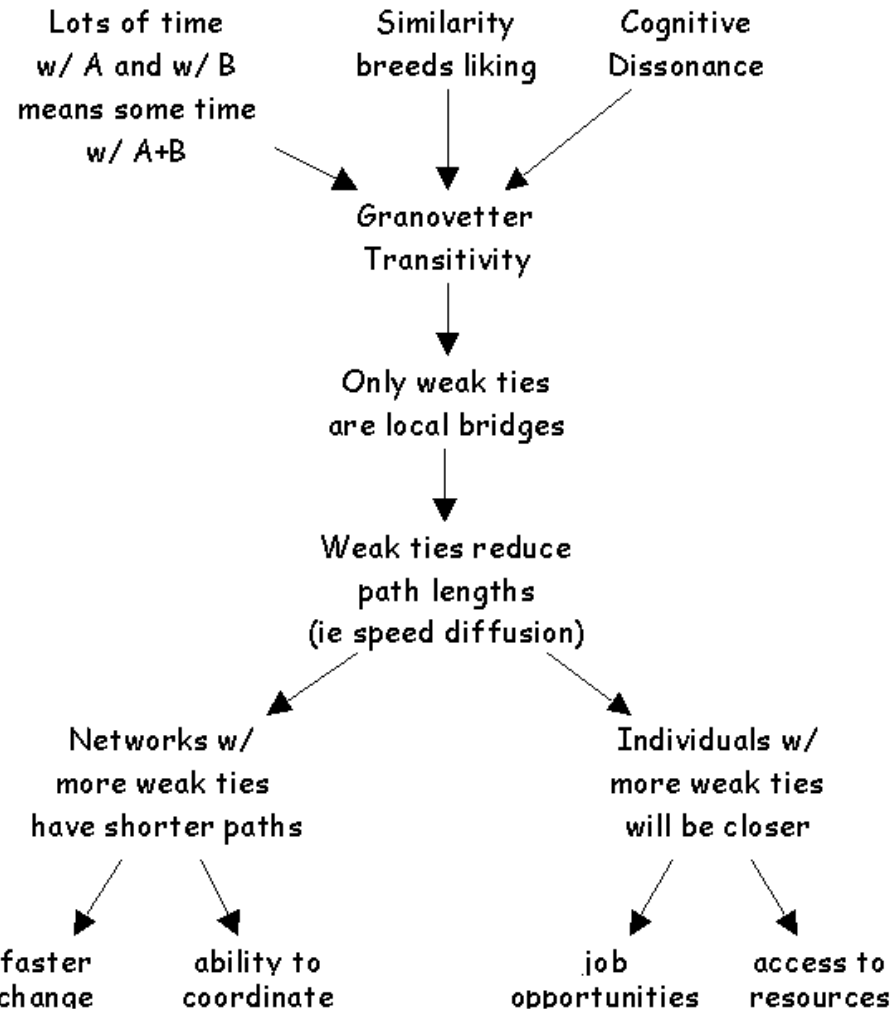
ALL BRIDGES ARE WEAK TIES:

Proof:

If A-B and A-C are strong,
then forbidden triad implies
that B-C is at least weak

If A-B is deleted, then A can
still reach B via A-C-B

- This triad will resolve to a fully connected triad
 - New edge need not be strong
- Alternate: Any time strong tie A-B exists, then all of A's strong ties will be at least weakly connected to B
- Supported by evidence



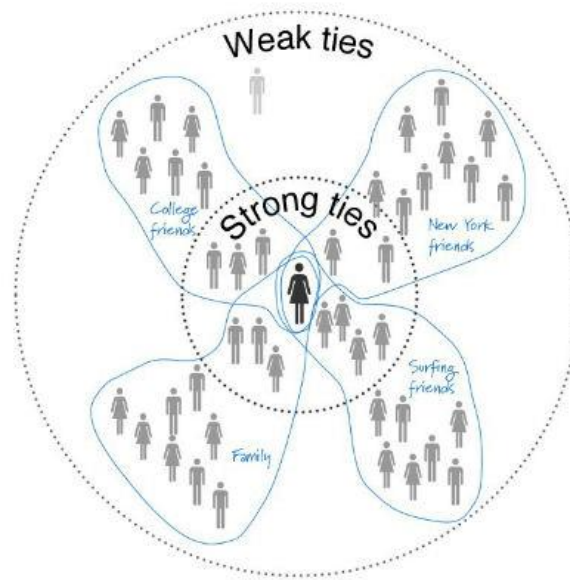
<http://www.analytictech.com/networks/weakties.htm>

Relevance for Entrepreneurial teams

- Strong ties – allow for trust build up, status attainment
 - But +ve influence comes with a cost – pressure for conformity
- Weak ties – allow for more experimentation and fewer concerns for conformity resulting in more innovation

Strong ties / weak ties

- Ruef Hypothesis 1: Actors relying on strong ties as sources of ideas are less likely to be innovative than actors relying on weak ties.



The “Magical” Dunbar Number

Our brains can only keep up with a number of weak tie relationships.

- 150 (this number has stayed consistent over decades research has shown despite the boom in social media)
- It is the inherent/natural limitation of our brain

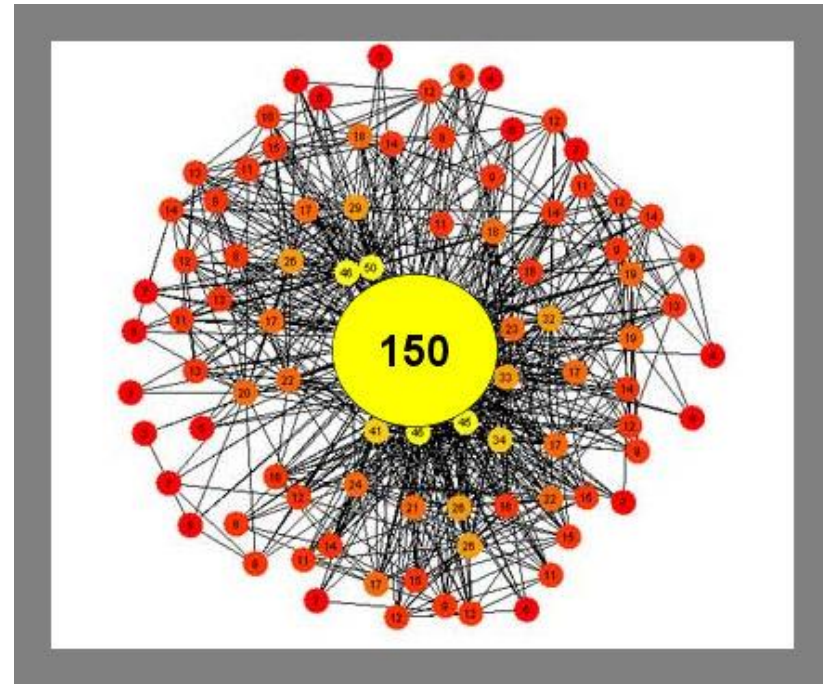
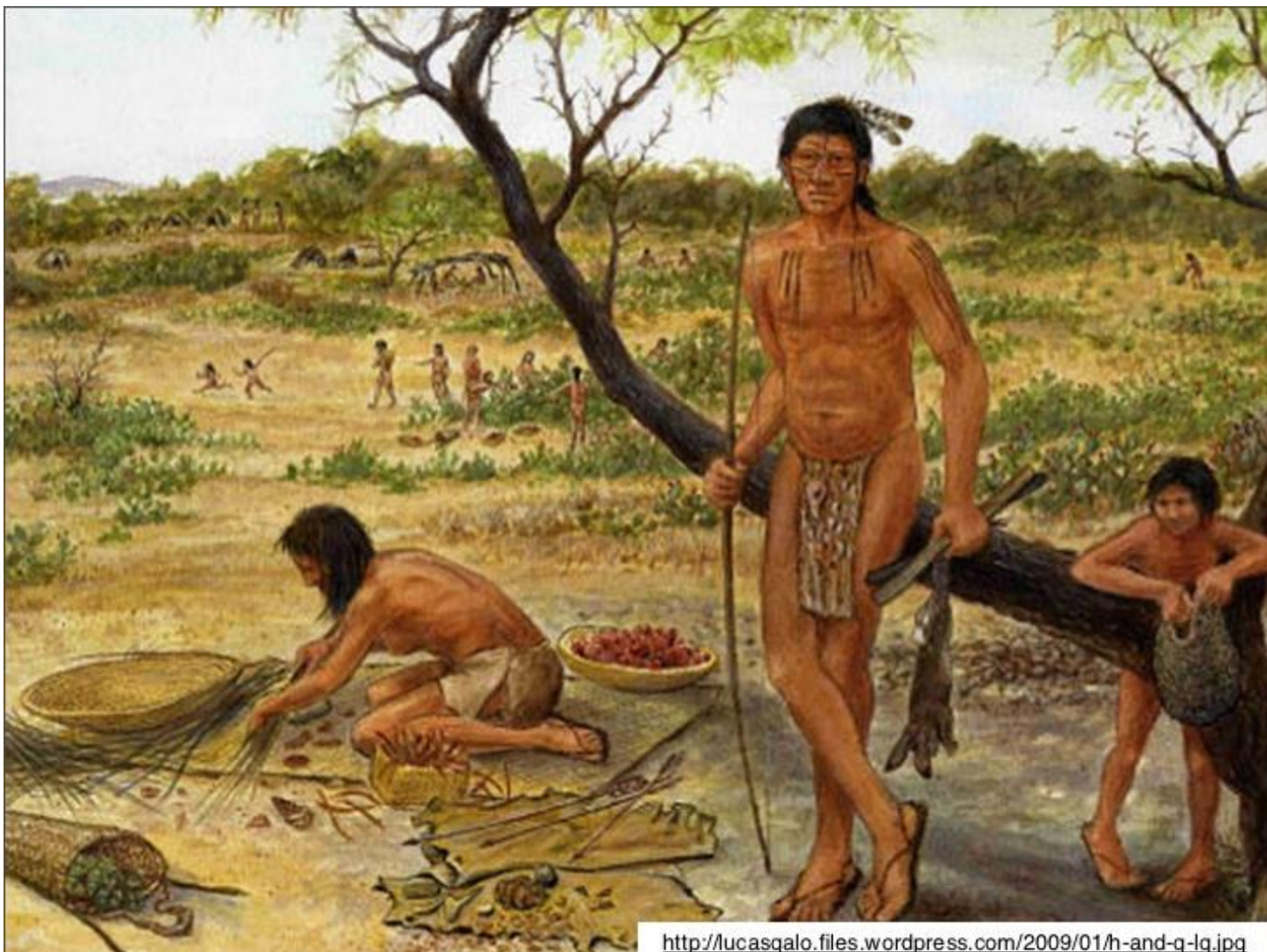


Image: <http://theviralloop.wordpress.com/2011/01/27/the-dunbar-number/>

More reading (if interested):

<http://www.snowdontate.com/documents/StrongtiesweaktiesandDunbarsnumber.pdf>



<http://lucasgalo.files.wordpress.com/2009/01/h-and-q-lq.jpg>



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Strength of Directed Ties

- *Hypothesis 2: Actors relying on ties directed to the concrete activities of other individual or corporate actors are less likely to be innovative than actors relying on weak ties.*

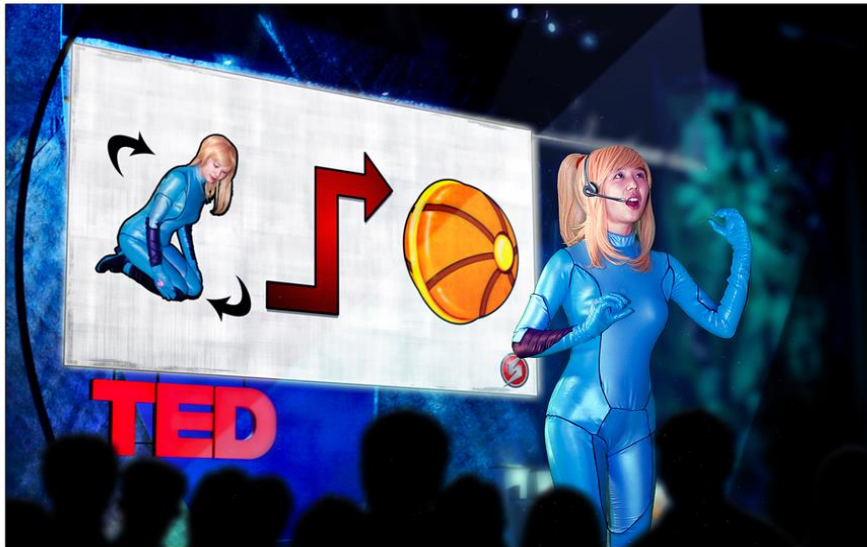
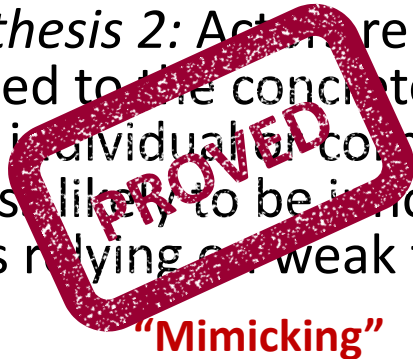
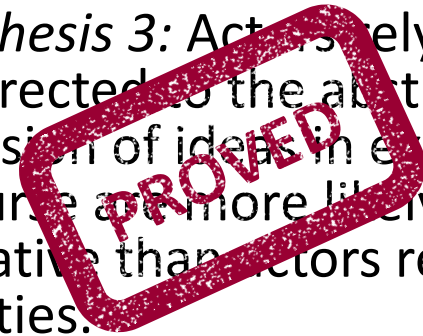


Image: <http://hugyucom.deviantart.com>



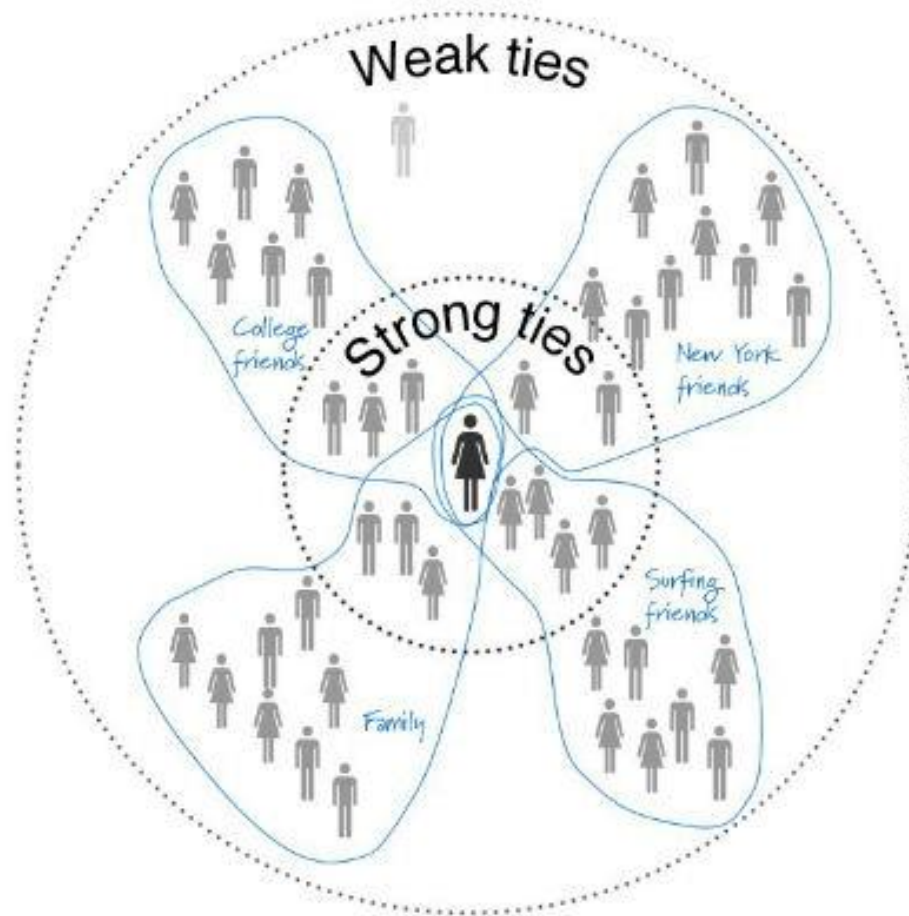
Image: <http://www.businessinsider.com/sodastream-primo-flavorstation-2011-10>

- *Hypothesis 3: Actors relying on ties directed to the abstract discussion of ideas in expert discourse are more likely to be innovative than actors relying on weak ties.*



"Abstracting essence of an expert discourse"

DIRECTED TIES

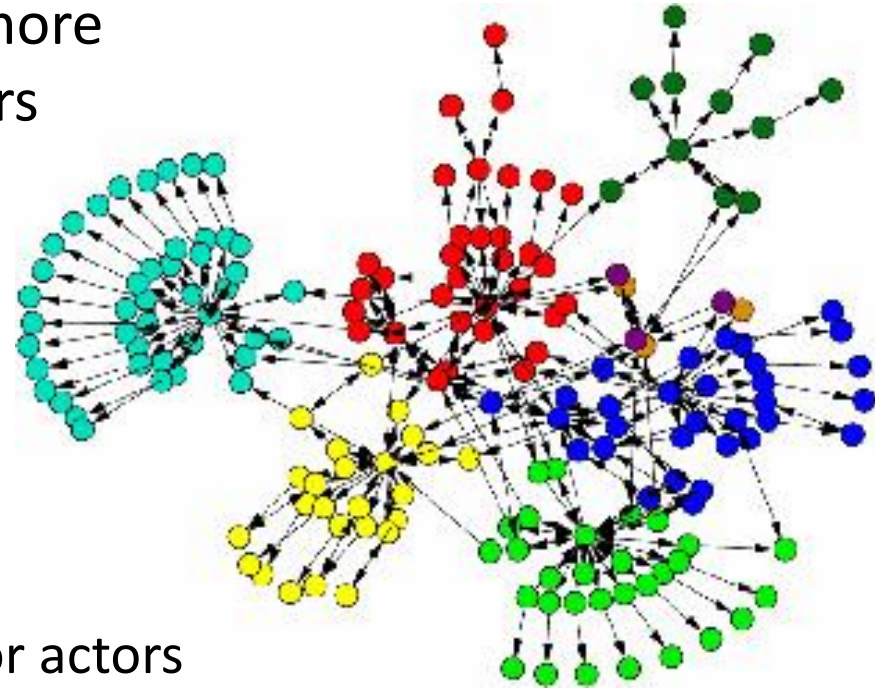


Network Diversity

- Hypothesis 4: Actors embedded in a diverse set of network ties are more likely to be innovative than actors relying on homogenous ties.

Complete Heterogenous ties =
Maximum Information Entropy >>>
3X more innovative than >>> social
networks with completely
homogenous ties (No Info. Entropy)

- *Hypothesis 6:* Entrepreneurial teams or actors drawing on a diverse set of functional roles are more likely to be innovative than those drawing on homogenous roles.



Team Structure & Internal Ties

- *Hypothesis 5:* Large entrepreneurial teams are more likely to be innovative than small teams or solo entrepreneurs.



Sometimes Bigger is Better

Team Structure & Internal Ties

- Hypothesis 7: Entrepreneurial teams composed of weak ties are less likely to be innovative than teams involving members with limited prior acquaintance.
- Hypothesis 8 : Entrepreneurial teams composed of strong ties are less likely to be innovative than teams involving members with weak tie relationships.

Cultural Embeddeness

- Hypothesis 9: Actors (or entrepreneurial teams) with extensive experience in an industry are less likely to be innovative than those with limited experience

H6, H7, H8 – Martin Ruef (2002)

Variable	Model 1
<i>Cultural embeddedness</i>	
Years of industry experience	–0.016 (0.007)**
Diversity of experience	0.019 (0.013)
<i>Team composition</i>	
Number of entrepreneurs	0.029 (0.056)
Role diversity	0.043 (0.041)
Strong ties ^a	–0.229 (0.179)
Weak ties	–0.066 (0.200)
–2 log likelihood	1338.91
Number of cases	421

^a‘No ties’ represent the omitted structural category.

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$.

In team context: S-T networks **Less innovative** << than W-T networks and WT networks **less innovative** << than no prior relationships

H6, H7, H8 – Martin Ruef (2002)

- Hypothesis 7: Entrepreneurial teams composed of weak ties are less likely to be innovative than teams involving members with limited prior acquaintance.
- Hypothesis 8 : Entrepreneurial teams composed of strong ties are less likely to be innovative than teams involving members with weak tie relationships.
- Hypothesis 9: Actors (or entrepreneurial teams) with extensive experience in an industry are less likely to be innovative than those with limited experience

PROVED

Here are your teams.....

Check Excel file in Related folder....