MT engineers
MT engineers

MT management
MT engineers
NASA management
MT management
MT engineers

NASA management

MT management
Tuesday morning
January 28th
1986
MT engineers
NASA management
MT management
groupthink
groupthink: mode of thinking that happens when the desire for harmony in a decision-making group overrides a realistic appraisal of alternatives. Group members try to minimize conflict and reach a consensus decision without critical evaluation of alternative ideas or viewpoints.
At your table...

Consider decision-making (1-10):

- Are we intentional about how we make decisions?
- Do we proactively seek out information & perspectives from different people, different places?
- Do we disagree enough?
- Do we disagree well?
WHAT TYPE OF MEETING DECISION-MAKING STYLE WILL WE BE USING TODAY?

WILL IT BE AUTHORITATIVE, CONSULTATIVE, VOTING OR CONSENSUS?

SHUT YOUR COFFEE HOLE. WELL PLAYED.
We simply decide without thinking much about the decision process.

Jim Nightingale
dysfunction
dysfunctional disagreement
also
dysfunction
dysfunctional agreement  dysfunctional disagreement
Always disagree

Lack of trust

Us vs. them

Personal conflict

Dysfunctional agreement
always agree

lack of honesty

always disagree

lack of trust

meeting after the meeting

lacking skills

us vs. them

personal conflict

dysfunctional agreement
dysfunctional disagreement
sweet spot
Group intelligence is not strongly tied to either the average intelligence of the members or the team’s smartest member.

-Thomas Malone, MIT Center for Collective Intelligence
The Two Traits of the Best Problem-Solving Teams

Harvard Business Review
April 2, 2018
Alison Reynolds & David Lewis

<table>
<thead>
<tr>
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<th>LOW Psychological Safety</th>
<th>HIGH Psychological Safety</th>
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<tr>
<td>HIGH Cognitive Diversity</td>
<td><strong>OPPOSITIONAL</strong> cautious controlling flexible hierarchical reasoned resistant</td>
<td><strong>GENERATIVE</strong> curious encouraging experimental forceful inquiring nurturing</td>
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<tr>
<td>LOW Cognitive Diversity</td>
<td><strong>DEFENSIVE</strong> cautious conforming controlling directive hierarchical resistant</td>
<td><strong>UNIFORM</strong> appreciative considered controlling competitive flexible hierarchical</td>
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</table>
Groups of diverse problem solvers can outperform groups of high-ability problem solvers

Lu Hong* and Scott E. Page*

*Micrigan Business School and Complex Systems, University of Michigan, Ann Arbor, MI 48109-1234; and Department of Finance, Loyola University, Chicago, IL 60611

Edited by William J. Baumol, New York University, New York, NY, and approved September 17, 2004 (received for review May 25, 2004)

We introduce a general framework for modeling functionally diverse problem-solving agents. In this framework, problem-solving agents possess representations of problems and algorithms that they use to locate solutions. We use this framework to establish a result relevant to group composition. We find that when selecting a problem-solving team from a diverse population of intelligent agents, a team of randomly selected agents outperforms a team comprised of the best-performing agents. This result relies on the equal ability, functionally diverse groups outperform homogeneous groups. It has also been shown that functionally diverse groups tend to outperform the best individual agents, provided that agents in the group are nearly as good (1). These results still leave open an important question: Can a functionally diverse group whose members have less ability outperform a group of people with high ability who may themselves be diverse? The main result of our paper addresses exactly this question.
These theorems that when solving problems, diversity can trump ability and that when making predictions diversity matters just as much as ability are not political statements. They are mathematical truths.

Scott Page
What Google Learned From Its Quest to Build the Perfect Team

Project Aristotle
180+ teams
250+ attributes
200+ interviews
“...team members feel safe taking risks and being vulnerable in front of each other.”
Psychological Safety: A Meta-Analytic Review and Extension
Lance Frazier Creighton University
Stav Fainshmidt Florida International University
Ryan L. Klinger Old Dominion University
Amir Pezeshkan University of Baltimore
Veselina Vraceva North Central College
Personnel Psychology 2017, 70, 113–165

Psychological Safety and Learning Behavior in Work Teams
Author(s): Amy Edmondson
Published by: Johnson Graduate School of Management, Cornell University

Psychological Safety, Trust and Learning in Organizations
Amy C. Edmondson, Harvard Business School
May 5, 2003
psychological safety: Sense that people will not be embarrassed or punished for speaking up.
psychological safety: Sense that people will not be embarrassed or punished for speaking up.
psychological safety: Sense that people will not be embarrassed or punished for speaking up.
1. If you make a mistake on this team, it is not really held against you.
2. Members of this team are able to bring up problems and tough issues.
3. People on this team never reject others for being different.
4. It is safe to take a risk on this team.
5. It is easy to ask other members of this team for help.
6. No one on this team would deliberately act in a way that undermines my efforts.
7. Working with members of this team, my unique skill and talents are valued and utilized.
8. We have enough disagreement on this team.
9. When we disagree, we do it well.
10. There are never things left unsaid when our meeting finish.
What we can do...

Focus on Relationships.

Clear Expectations:

- What, Why, How
- Decision-Making (divergent → convergent)
- Disagreement done well.
- How will we hold ourselves accountable?
- Reward & Coach
- Agreements / Ground Rules
weekly 90 minute team meeting:

15 minute opening reflection
30-45 minutes updates on action items
30-45 minutes decision – making
15-30 minutes (new items)
15 minutes - closing circle (review agreements, reward)
I am committed to showing up on time, prepared to participate fully. (1:1)
I am committed to being physically, mentally, and emotionally present in order to make my unique contribution to our work.
I will strive to communicate assertively, exhibiting both courage and compassion.
I am committed to helping the team stay on point. (jailbreak, parking lot)
I am committed to championing the decisions of this team as if they were my own.
No interruptions, no electronics.
We will make our decisions by consensus, following:

1. Check Assumptions (3Qs)
2. Sufficient Dialogue (devils advocate, 3rd chair)
3. Call for Decision
4. Everyone Speaks (serial-sharing, power speaks last)
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<thead>
<tr>
<th></th>
<th>low courage</th>
<th>high courage</th>
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<tbody>
<tr>
<td>low consideration</td>
<td>passive aggressive</td>
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<tr>
<td>high consideration</td>
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<td>assertive</td>
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Thank you!