CONFETTI FACTORY
ENGR 301
STUDENT LEARNING OBJECTIVES (SLOS)

- #1 apply knowledge
- #4 broad education (cognitive reasoning methods in examination of problems)
- #5 multi-disciplinary team
- #6 professional and ethical responsibility
- #7 communicate effectively
LEADERSHIP

- Structure
- Culture: Mission and vision
- Goals
- Understand and move through stages of a team
Stages of Team Development

- Stage 1: Forming
- Stage 2: Storming
- Stage 3: Norming
- Stage 4: Performing
Forming

• Team members uncertain about roles and expectations
• Team members try to assess themselves and others
• Reliance on strong, formal leadership
• Guidelines for a successful forming stage:
  – Provide structure to the team by assigning and clarifying task/role
  – Encourage participation
  – Share all relevant information
  – Encourage open, honest communication among team members
Storming

• Deals with power and decision making.
• Members challenge the differences in an attempt to gain their individuality and influence.
• The team members need control and sense of direction.
• Guidelines:
  – Assist the team members to establish methods that support the communication of their different points of view.
  – Determine within the team how the team will make decisions.
  – Encourage members to share their ideas about issues.
  – Facilitate methods to resolve conflicts.
Norming

• Members produce as a cohesive unit.
• Functional relations are established.
• Members work collaboratively to gain and share insight.

Guidelines:
  – Talk openly and honestly about team issues and the members’ concerns.
  – Encourage feedback.
  – Assign tasks for consensus decision making.
Performing

- Members have learned to work together.
- Members skills to define tasks, manage conflict, and work towards producing results.
- The members are committed to the team and its goals.
- Guidelines:
  - Jointly set goals that are challenging and accepted to all members.
  - Continue to look for ways to promote the team’s chances to excel.
  - Keep an ongoing assessment of the team.
  - Acknowledge each member’s contributions.
  - Develop members to their fullest potential.
CHANGE

- Meet all managers
- Policies – change
- Change policy
  - Create urgency
  - Form a powerful coalition (find the leaders, not always supervisors)
  - Create and communication vision
  - Remove obstacles
  - Create short-term wins
  - Build on the change
  - Anchor the change in the culture
RESOURCE MANAGER

- Disclose all information at hiring?
- Accessible for all
- Training
- Life-long development and continuing education
CONFlicting interests

- Does everyone have the resources they need to get their jobs done?
- Internal competition can destroy companies
- Apply now: How to make decisions? Use a decision matrix.
## Decision Matrix

<table>
<thead>
<tr>
<th>Decision Matrix</th>
<th>Time Frame</th>
<th>Innovation</th>
<th>Coolness Factor</th>
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<tbody>
<tr>
<td><strong>Weighting Factors</strong></td>
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<td>10</td>
<td>5</td>
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<tr>
<td><strong>Option A</strong></td>
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<td>4</td>
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<td>Team member 2</td>
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<tr>
<td><strong>Ranking</strong></td>
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<tr>
<td><strong>Weighting Factors</strong></td>
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<td><strong>Option B</strong></td>
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<tr>
<td>Team member 1</td>
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<tr>
<td>Team member 2</td>
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<td><strong>Ranking</strong></td>
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<td>170</td>
<td>180</td>
<td>95</td>
</tr>
</tbody>
</table>

In this case, Option B wins.
DIFFICULT PERSONALITIES

How do you work with an arrogant personality?
- Praise them: psychology – low self-esteem, so promoting self; give them reassurance
- Learn from them and teach them
  - I am interested in developing my leadership skills. How about for next week, I am the leader and you can coach me?
    - You just got control
    - You are making them self-reflect; it will change their approach

How do you work with a dominating personality?
- Volunteer to take notes; put in your own ideas; read notes in review; they think your ideas are their ideas
WORKING WITH PEOPLE

- Networking = for the rest of your life
- Never underestimate the amount of politics and hypocrisy in industry and academia
PROBLEMS ARISE

- Sick kids, car needs repair, and all kinds of other life issues.
  - Everyone has them, but everyone needs to learn to work through it.
  - Be understanding but clear on expectations.
  - Create a contract: day off; fix issue; if late, low quality work, or absent, then termination or other public discipline.
  - If not holding high standards and equally applied = makes everyone else mad.

- Apply this concept now.
  - Setup rules and consequences for team: if the founding fathers did it, so can you.
  - If late, owe a Starbucks; smile and say, “Grande latte”; standards upheld and no grumpy teammates.
  - If missed a meeting, owe dinner.
ABUSE

- No, you do not have to take abuse. EEOC, a federal agency, will help you with employment issues: harassment and discrimination.
PERSONALITY CONFLICTS

PRIDE

- Purpose – set goals; bond via accomplishments
- Respect – do not have to like each other; do not have to be best friends; respect each other on a professional basis
  - Sun MicroSystems founder, Andy Bechtolsheim, found two people he hated because he knew if the three of them could agree, their product would change the world. They developed Java programming language which changed our interaction with the internet.
- Individual – teams can be demoralizing because people get lost with no recognition, show appreciation and thank team members
- Discuss – even the awkward conversations have to happen; no one understands what caused grumpy face...communicate
- Excellence – always strive to do your best
CAUSES OF CONFLICT

- Differences in
  - Personality
  - Values
  - Perspectives
  - Goals
  - Departmental Allegiance
- Ambiguities about responsibilities
SIX STEPS TO MANAGE TEAM CONFLICT

1. Clarify and identify the cause of conflict.
2. Determine the common goal.
3. Determine options.
4. Determine and remove the barriers.
5. Determine solution that everyone can accept.
MAKING PEOPLE HAPPY

- Bell curve of happiness; don’t waste time on never-evers
BELL CURVE FROM AN EMPLOYER’S VIEWPOINT

DON’T BE A “NEVER-EVER, THEY WANT TO GET RID OF YOU
DOCUMENTATION

- Document
  - You must have written evidence; verbal agreements do not hold up
- After three incidents; pattern of behavior; report to authority figure (boss or professor)
- Create MEETING MINUTES

Meeting minutes
- Action item (tasks that need to be done)
  - Ensure high quality → share the vision; discuss end result
  - For example, build a bridge
- Who is responsible
- When it is due
- How long it will take
DISTRIBUTE WORK EVENLY

- 80% of all team members believe they have done 80% of the work
- One member complains did ten things
- One member complains worked for ten hours
- Meeting minutes: action item, who is responsible, when due, and how long it will take
- Do a graphical representation at end of meeting to check
- Might find one is doing ten things that take an hour each; other is doing one thing that takes ten hours; equal distribution and communicated workload
MICROMANAGEMENT

- How do you deal with a micromanager?
- What causes someone to become a micromanager?
- FEAR
  - Send a daily note on what tasks you plan to do
  - Send updates on accomplishments
  - Apply now: Setup buffer deadlines with teammates
    - Never have your deadlines the same as your boss or professor
    - Set deadlines to be at least 24 hours before actual deadline to make adjustments as needed
TOP TEN TEAM BUILDING RECOMMENDATIONS

1. Reflect on these “roles”
   It’s real life; be prepared; take preventative measures; run case scenarios of how you will handle it now and later
TOP TEN TEAM BUILDING RECOMMENDATIONS

2. Share the vision

No one can read your mind. Communicate the end product to ensure quality.
TOP TEN TEAM BUILDING RECOMMENDATIONS

3. Take meeting minutes and ensure even distribution

Action item, who is responsible, when it is due, and how long it will take
TOP TEN TEAM BUILDING RECOMMENDATIONS

4. Document,
document,
document
TOP TEN TEAM BUILDING RECOMMENDATIONS

5. Remember PRIDE
   - Purpose
   - Respect
   - Individual
   - Discuss
   - Excellence
TOP TEN TEAM BUILDING RECOMMENDATIONS

6. Use the stages of team to progress to best performance.
7. Make a contract: discuss policies for success and expectations which includes rules and consequences.
8. Understand and resolve conflict
   Don’t ignore it
   Apply standards equally
TOP TEN TEAM BUILDING RECOMMENDATIONS

9. Use resources and tools like the decision matrix and buffer deadlines.
10. Be an awesome teammate.

Why? Because you cannot design the Boeing 787 all by yourself in your lifetime. If you are an awesome teammate, you will have an awesome team.
SLO # 5: FUNCTION IN A MULTI-DISCIPLINARY TEAM
ROUGH DRAFT DUE MAY 25

• Identify a multi-disciplinary team
  • Discuss what makes it multi-disciplinary

• Identify tools and resources used to make team function effectively
  • Gantt Chart, buffer deadlines, team charter, decision matrix, meeting minutes, documentation, online tools

• Prove team was successful (a simple declaration is insufficient)
Team Charter

- Be sure to note what your role statement assignment is
- Should appear in pretty paragraph summary form in Project Management Section of Proposal
- Policies (rule and consequences) on at least absences, deadlines, and late arrivals
- Goals
- Decision making process
- Meeting plans
- Other preventative measures – now is your chance to take action against things that annoy you when working in teams