

MUST DO SETs TONIGHT

- Tonight is the last night that I can do sets!!!

Growing Productive Teams

- Good teams are rewarding and productive.
- Good teams are more than happenstance
- Management has a responsibility to ensure workers are in good teams.
- Management must take action to create productive teams

Management by Hysterical Optimism

- Managers often believe that workers will automatically accept the organizational goals (e.g. stock price)
- This is a sign of naive management
- Workers often think corporate goals are arbitrary
- It is not corporate goals that bring workers together

Workers' Goals

- It is not the corporate goals that bring workers together, it is the smaller goals that the workers cultivate that bring them together
- Managers must help workers cultivate meaningful goals

Goal Alignment

- The secret to a good team is not goal attainment (reaching goals)
- Individuals can read goals
- In order for a team to be productive, the team must align their goals
- The purpose of a team is goal alignment

Jelled Team

- A group of people so strongly knit that the whole is greater than the sum of the parts
- More productive than its individuals working independently
- Requires well aligned goals

Signs of a Jelled Team

- low turnover (people are not going anywhere until the work is done)
- strong sense of identity
- sense of eliteness
- joint ownership of the project
- obvious enjoyment

Team vs. Clique (group)

- *If people come together in a way you like, call it a team*
- *If people come together in a way you don't like, call it a clique or group*
- Teams are usually self-forming
- Cliques/groups are usually formed from the outside.

IBM's Black Team

- Notorious testing team at IBM in the 60's
- Formed a distinct personality
- Adversity philosophy
- They wanted and expected to find defects
- As new members joined the team, they adopted it's personality (the personality outlived the original members)

Creating Teams

- You can't make a team jell
- You can take actions to promote jelling, but you can't make it happen – the process is too fragile
- However, it is easy to destroy a jelled team
- *Teamicide*: destroying a working team

Teamicide

- Many ways to ruin a team
 - Physical Separation (see next slides)
 - Time fragmentation
 - Forced quality reduction
 - Phony deadlines
 - Clique control

Teamicide: Physical Separation

- Team member must interact closely
- Separation inhibits communications
- No casual communication
- Examples
 - Classified work w/o a clearance
 - Class projects – no central location

Teamicide: Time Fragmentation

- Workers split their time between many projects
- Inhibits team formation
- Inefficient -- lots of time context switching
- Must interact with too many people
- Example:
 - Class project

Teamicide: Quality Reduction

- Steps taken to meet deadline force quality reduction
- Painful for developers to give up quality (ego)
- Workers developing a shoddy produce don't even want to look at each other
- Finishing and getting away from project becomes goal

Teamicide: Phony Deadlines

- The message is clear:
- The boss
 - has no respect or concern for workers
 - assumes workers are lazy
- No team jells under this situation

Teamicide: Clique Control

- When management fears the energy and power of teams, they set out to destroy the team
- Comes from lack of team-ness of “management team” (which is never really a *team*)
- Example:
 - Software quality group at ARA

Teamicide: Posters

- “Those damn motivational posters”
- Motivational posters insult workers

Teamicide: Overtime

- Some people can't put in overtime (usually because of family, especially young kids)
- When only some team members put in overtime, resentment builds.

Teamicide: Competition

- Examples of competition
 - Merit reviews and raises
 - Praise form some team members
 - Performance measurement in any form
- Any action that rewards team members differently is likely to foster competition.
- Competition breeds resentment.

Teamicide Exercise

- Take a couple minutes to think about what factors have hindered your group from becoming a *jelled team*.
- Everyone share 1-2 factors.

Team Building

- Managers can force a team to jell, but they can provide a fertile environment

Team Building: Team Opportunity

- Good managers provide frequent easy opportunities for the team to succeed together
- Anything that get the team quickly into the habit of succeeding together will strengthen the team
- Examples:
 - Solving small problems
 - Making dinner
 - Sports challenges

Team Building: Open Kimono

- Defensive management drives teams apart, the opposite (open kimono) brings teams together
- If a manager takes no steps to defend himself/herself it demonstrates complete trust
- The manager assume responsibility
- If you fail, your manager fails

Team Building: No Walking Around

- Many managers *manage-by-walking-around*
- Wander through work areas looking for people goofing off
- Does not work with intellectual workers – we all can pretend to be working
- Simply demonstrates you don't trust them
- Managers must trust employees to work

Teambuilding: Breaking the Rules

- Sometimes the biggest advances are made by people breaking the company rules
- Example: Boeing's Skunkworks project
 - Project hidden from management
 - That is: management said no, but project happened anyways
- Allowing team to break rules is a demonstration of complete trust

Team Building: Lettering Teams

Build Themselves

- Allow employees to pick which team they belong to
- Gives people the freedom to choose who they work with and what they want to work on
- Empowers employees with responsibility – they can no longer blame anyone but themselves

Team Building: Coaching

- Peer coaching is an important factor in the success of a team
- Without coaching, some get stuck
- Cannot work in a competitive environment (I'm too busy to help you)
- When coaching is rewarded/valued everyone wins

Chemistry for Team Formation

- Some organizations are famous for well-knit teams.
- It isn't luck, it's *chemistry*
- People are at ease, having a good time, enjoying interactions, no defensiveness, no sense that individuals are trying to succeed in spite of others
- Managers provide a fertile environment

Team Chemistry: Cult of Quality

- Only perfect is close enough for us
- Binds team together because it sets them apart from the rest of the world
- People get high on quality and out-do themselves to protect it

Team Chemistry: Provide lots of satisfying closure

- Humans need regular reassurance that they are heading in the right direction
- Good managers break work into pieces and makes sure the completion of each piece can be demonstrated
- Workers get excited near a clear deadline, they sprint, get high from success
- Meeting deadlines renews energy for next step

Team Chemistry: Provide lots of satisfying closure (2)

- How do you feel when you complete a project?
- Imagine working on a project that goes on for years and years with nothing but meaningless artificial deadlines
 - No success of completion
 - No measure of success

Team Chemistry: Team Continuity

- When teams stay together from one project to the next, they start out each new endeavor with enormous momentum
- Management must not break up teams just because a project ends

Team Chemistry: Network Model of Team Behavior

- Structure of team is a network, not a hierarchy
- Managers are usually not part of the team
- Can force a typical hierarchical management chart to a team – teams manage themselves

630 Project Groups

- Team or group?
- What external factors have helped your group be more of a team?
- What actions has the group done to make it more of a team?
- Is there anything you wish you had done?

Making Change Possible

- People hate change
- Because people hate change
- I want to be clear: people hate change
- People really, really, hate change
- People tend to reject change not based on the merits of change, but because it is change... and people hate change.

Change is a huge part of the software industry

- Hardware changes
- Operating systems change
- Requirements change
- **EVERYTHING is constantly changing**

Niccolo Machiavelli (1513)

And it should be consider that nothing is more difficult to handle, more doubtful of success, nor more dangerous to manage, than to put oneself at the head of introducing new orders. For the introducer has all those who benefit from the old orders as enemies, and he has lukewarm defenders in all those who might benefit from the new orders.

Equation for Change

- Unbalanced against change
- Make enemies of those who have mastered the old ways
- Receive minor support from those who *might* gain
- Change leads to uncertain results, avoiding uncertainty is more compelling than potential gain

Responses to Change

- Blindly Loyal (ask no questions)
- Believers but Questioners
 - Skeptics (“show me”)
 - Passive Observers (“What's in it for me?”)
 - Opposed (Fear of Change)
 - Opposed (Fear of Loss of Power)
- Militantly Opposed (will undermine and destroy)

Responses to Change (2)

- The fundamental response to change is not logical, but emotional
- In order to achieve change, must be prepared to deal with the emotions

Making Change Happen

- Software developers tend to rely mostly on rational thought and thus provide logical arguments in favor of change
- But responses to change are emotional
- Logical arguments (no matter how good) are not likely to bring about change

Common Model of Change

- 1) Old Status Quo
- 2) A better way is discovered
- 3) New Status Quo

A Better Model of Change

(1) Old status quo

(2) Introduction of change element

(3) State of chaos

(4) Ideas emerge to transform chaos

(5) Practice and integration of new ideas

(6) New status quo

A Better Model of Change (2)

- This model is important because it warns people to expect chaos
- Often when the chaos arrives people abandon the change and turn back
- If we understand the first step of change is chaos, we are less likely to turn back

Resistance to Change

- The first step of change is chaos (which is very uncomfortable for most)
 - Example: Competent people are all of a sudden no longer competent
- It is the fear of the chaos that scares people away from change

Successful Change

- Change won't even start unless people feel safe
 - People must know they won't be demeaned or degraded for proposing change
 - People won't get attacked for trying to make changes
 - People must be reassured that they won't get degraded or fired for learning how to work with the new system

Understanding Change

- People hate change
- Change is very difficult at first
- Great care and effort must be devoted to change...
- In the software industry, if you can't change you can't survive