Applied Software Project Management

Understanding Change

Why Change Fails

- The short answer: politics
 - Many project problems are bigger than just your project
 - You have to make changes to the way people in your organization work
 - Your ideas on how to improve the way work is done will not always be evaluated rationally

Change is Uncomfortable

- Nobody likes to think that they make mistakes
- Making changes means talking about past mistakes and admitting that they *are* mistakes!
- You may make a great case for change, and still fail to convince people to do it.

Common Excuses

- Because change is uncomfortable, people in organizations will resist it.
- Project managers who try to change their organizations run into several common excuses when trying to implement tools, techniques and practices.

Common Excuses: We Already Build Software Well

- "This is just the way software projects always go."
 - People know that there are problems with the schedule and quality, but think that nobody ever does any better
- If you bring up past failures, you are trying to blame people
- This leads to an environment where it's not possible to admit that projects go wrong

Common Excuses: "Not Invented Here" Syndrome

- People intentionally avoid research or innovations that were not developed within the organization
 - Yes, NIH syndrome really happens!
- The idea that "we're different" leads to immediate resistance to outside ideas
- In some small organizations, it's even worse: "Our 'quirks' mean we're better."

Common Excuses: It's "Too Theoretical"

- When ideas don't make intuitive sense, they are dismissed as merely academic
- Many "hands-on" managers must personally see a practice in place before they will accept its value
- Especially common in small teams facing growing pains

Common Excuses: It Just Adds More Bureaucracy

- Any work other than programming is wasteful "busywork" that keeps the "real work" from getting done.
 - "If I just add more programmers, it will fix all of our schedule and quality problems!"
- Planning the project, writing down requirements, and holding inspection meetings is seen as just pushing paper around.

Common Excuses: You Can't Give Me More Work!

- Asking someone to review a document or make an estimate is asking them to do more work.
- When you change the way other people work, they may just say no.
- For no good reason.
- And if they have more power than you, they may get their way.

Common Excuses: It's Too Risky

- A manager who backs a change puts his reputation on the line.
- It's safer to let a project fail in a way it's failed before than to make a change that might not work.
 - "Too risky" means risk to the manager, and usually not risk to the project.

How to Make Change Succeed

- Progress comes from making smart changes
- Understand how people in your organization think about and react to changes
 - Prepare your organization
 - Sell your change
 - Account for common excuses in your "pitch"

Prepare Your Organization

- "We've always done it like this."
- Be positive about the work that's already being done
- Take credit for the changes
- Make the changes seem straightforward

Prepare Your Organization

- Build support from the team
- Show that the changes will save time and effort
- Work around stragglers
- Stick to the facts

Plan for Change

- Create a vision and scope document
 - Similar to the document for software projects, except it describes the scope of the change
 - Inspect and approve the document to build consensus
 - Add the changes to the schedule

Push for Consensus

- Get project team members on board first.
 - Managers are more likely to approve a change if the entire team (especially the programming staff) is behind it.
- Help people recognize the problem, then show that you have a solution.
- Organizations do not change overnight.