



Karen Mackey

Stages of Team Development

Everyone wants to work with team players. Check out the advertisements for employment opportunities and you'll find "must be a team player" is high on most software engineering job requirements. This is the case even though software engineering is thought of as a solitary activity that attracts a large number of introverts. Nevertheless, most software-related jobs are not solitary and frequently require working with others in a team setting. But how do individuals form into teams?

LEADERSHIP STYLES AND STEREOTYPES

When we come together to work on a problem, we are labeled as a team but we rarely start out as a well-jelled one. In fact, many people can't even agree on what makes a good team player. Pat Heim, organizational development consultant, describes some of the difference in perceptions of what constitutes a team player based on our gender culture in her video, *Invisible Rules* (1998, www.heimgroup.com). She describes that young boys tend to play more sports and become more accustomed to a hierarchical team structure. Thus men are more accustomed to a command-and-control leadership and team style. Young girls, on the other hand, tend to play together with dolls in a more relationship-focused manner. Therefore, women grow more accustomed to an egalitarian playing field and are more prone to discussing how to resolve a problem. Imagine the conflict if a hierarchical boss tells an egalitarian subordinate to do something, and she wants to discuss it. He might perceive this action as insubordinate, yet she might be-

lieve she's providing the right support to work out the problem. While these behaviors tend to be stereotypical around genders, they nevertheless represent the kinds of differences people bring to teams.

These differences are the challenges that team members must work through to become a well-jelled team. It's not enough to hurl the vindictive, "he's not a team player," at someone—a current popular technique that in essence means someone is not doing what you want them to do. Rather, we need to invest the time to describe the particular behaviors and responses that we are looking for and work out our personal differences.

THE ROLE OF CONFLICT IN TEAMS

A group of people actually goes through well-defined developmental stages on their way to becoming an effective team in the same way children go through well-recognized stages on their way to becoming adults (1998, www.heimgroup.com). Bruce W. Tuckman labeled these stages forming, storming, norming, and performing in an article in *Psychological Bulletin* (Vol. 63, 1965, pp. 384–399). In the forming stage, people act in a socially appropriate manner. They tend to focus on their territories, do things the established way, and indulge in fingerpointing at upper management. Not a lot gets done in this phase.

As the forming phase unfolds, though, clumps of people begin to gather in the hall or in offices after a meeting to disagree with someone or something. This kind of covert complaining goes on until someone has the courage to open up the conflict to the rest of the team. This is the beginning of team

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conflict—the storming phase.

In the storming phase, people challenge each other, get defensive, and fight. They argue about who is right instead of the right thing to do. Heim says that every group of people that comes together will experience conflict—the question is whether or not they will deal with it (1998, www.heimgroup.com). Trying desperately to avoid this conflict, either by a team leader's edict or by a participant's withdrawal from the group, can keep the team stuck in a form of adolescence. Avoiding conflict impedes the group from moving beyond storming.

In the storming phase, people are busy having differences and learning how to deal with them. People begin to gain confidence in bringing up issues without going on the attack and blaming others. They also learn to listen to others' concerns without going on the defensive and counterattacking. Successfully dealing with conflict gives the team members a sense that they can bring problems to the group, and that the group will deal with them. Once this trust begins to take root, the team begins to move into the norming phase.

In this phase, the team finally starts to jell. People are able to put issues out for group consideration, and the group establishes ground rules and its own norms for acceptable behavior. Group pressure replaces management directives to make things happen, and the team begins to get things done. At this point, the team is poised to move into the performing phase.

In the performing phase, the group is highly functional and flexible. They can diagnose and solve problems. The team leader becomes just another team member. People who have worked in such teams report that they get a lot out of the experience, but it's hard to get to this stage and stay there. The team can easily fall back into the forming stage if they get a new leader or if a substantial number of new people join the team. Tom DeMarco and Tim Lister's classic *Peopleware* (2nd ed., Dorset House, 1999) has a whole section devoted to teamicide describing the many ways teams in the performing stage can be killed off.

Team development phases have two dimensions. The task dimension deals with how work is organized and what activities are needed to carry it out. Standards and quality organizations usually focus on this dimension. For example, the Software Engineering Institute's Software Capability Maturity Model

breaks the software-development task into five key process area levels (see www.sei.cmu.edu). The task dimension is typically referred to as *software process*.

The interpersonal dimension encompasses the human issues of trust, support, and openness instead of a cover-your-assets posture. In this dimension, team members grow, starting from dependency through conflict to cohesion and inter-

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dependency. Curiously, this dimension is known in psychology as *process*, which might explain why some people react differently when they hear the phrase software process.

Not surprisingly, the biggest hurdle for growth along the interpersonal dimension is conflict—the keystone in moving a team from the storming to the norming phase. Skills to constructively handle conflict are typically not part of a software engineer's training. Many companies provide this sort of training, especially those that are CMM Level 3 certified, because Level 3 requires training on how to work as a team.

There's a huge body of knowledge and a whole industry built around team building. Moving this wisdom into software engineering teams isn't happening all that fast. Typically these team skills are not part of a software engineer's formal training, so people get it through their work environment. However, when companies downsize, one of the first things to go is the training budget, and thus ready access to this education. Consequently, many of us will be in the situation of developing the necessary skills and experiences through on-the-team training. So keep in mind as a final take-away thought that the next time you're working in a team—even a team of two—and conflict begins, you should step back, take a deep breath, and look on the positive side. Dealing with conflict is a necessary step in building a team, so move forward through the exchanges and be assured that the team-jelling process is unfolding in the right direction. ❖