

A Model of Team Development

Stage 1: Forming

Stage 2: Storming

Stage 3: Norming

Stage 4: Performing

Frequently an iterative process, phases often overlap

Stage 1: Forming

- Team members begin to discover what behaviors are acceptable.
- Usually highly unstructured environment
- Attempt to identify tasks, how to accomplish them
- Decisions on what information is needed
- Hesitant participation
- Test behavioral assumptions, how to handle each other
- Intellectualizing
- Complaints about organizational issues
- Suspicions, fear, anxiety about new situation
- Minimal work accomplished

Stage 2: Storming

- Some members become overzealous or hostile as a way to express individuality, resist group formation.
- Often infighting, defensiveness, competition
- Often establish unrealistic goals
- Often disunity, tension, jealousy over others roles
- Polarization of team members
- Concerns over excessive work
- Establish pecking order
- Recognize the extent of task requirements, often emotional responses from team.

Stage 3: Norming

- Members accept team, team norms, their own roles, each others idiosyncracies.
- Attempts to patch up previously conflicting relationships.
- Team leader attempts to take charge.
- Anxieties about task outcome and products.
- Confusion over team priorities, usually temporary
- Excessive meetings

Stage 3: Norming (2)

- Distrust and blaming by some; higher level of sharing and confiding by others.
- Jockeying for position
- Stress reactions.
- Sense of team spirit and common goals emerge.
- Moderate work accomplished.

Stage 4: Performing

- Members experience insight into personal and interpersonal processes.
- Constructive self-change occurs.
- Great deal of work accomplished.
- Team becomes capable of diagnosing and solving problems.

Stress and Programmers

Fujigaki:

- Found high levels of stress among Japanese programmers
- Blamed on current tendency to manage programmers with techniques from manufacturing industry:
 - "The software process is not the manufacturing process. The time management system that developed in manufacturing should not be applied to the software process without modifications.
- Suggests that the software process is a learning and communication process. Management's role is to facilitate this learning and communication.

Stress and Programmers (2)

Furuyama, Arai, Iio:

- Measured effects of stress.
- Programmers working under stress make far more mistakes
- 37% of mistakes would have been avoided "by appropriate scheduling and placing no stress on the developers."
- Design particularly vulnerable to stress-caused errors. Found 42% of all design faults directly attributable to programmer stress.

Stress and Programmers

Zawacki: conducted studies on programmers 1979-1993

- Compared with rest of society, programmers had high need to succeed, low need to socialize with other people.
- Alarming drop in job satisfaction from 1979 to 1993.
- Need management better prepared to deal with changing needs of programmers in the 90's:
 - Find ways to improve motivation of programmers.
 - Improve feedback between managers and programmers.
 - Add more people to mix with higher social needs (to match more team-oriented, user-focused approaches of the 90s).

Extroversion (E) and Introversion (I)

E: Other people is source of energy
Sociability charges batteries
Finds breadth more appealing
Multiplicity of relationships

I: Private spaces both mentally and physically
Being alone charges batteries
Likes to work alone or small group
Finds depth more appealing
Limited relationships

Intuition (N) and Sensation (S)

(Differences place widest gulf between people)

N: Innovative, likes metaphor, futurist

Head may seem to be in the clouds, but able to take very complex ideas and see them as a whole.

Usually entrepreneurial, ingenious

S: Wants facts and data, believes in experience

Usually observant about details

Realistic, practical, down-to-earth

Thinking (T) and Feeling (F)

- T: Usually prefer impersonal choice when making decisions
Objective, principles, follow laws and policies
Usually hides feelings; may be thought of as cold or unemotional (not necessarily true, just able to cover up)
- F: Personal basis and experience used when making decisions
Subjective, extenuating circumstances
Persuasive, social values
Often expressive of emotions

Judging (J) and Perceiving (P)

- J: Choose closure over keeping options open
 - May experience a sense of urgency pending a decision
 - Establishes deadlines and takes them seriously
 - Strong work ethic; plans ahead, decisive, "get the show on the road"

- P: Likes to gather more data, decisions frequently left pending
 - Likes to adapt as they go, keep life open
 - Don't think deadlines should be hard
 - Takes a "wait and see" and "something will turn up" attitude

Metzger: Managing Programming People, 1987 (Prentice-Hall)

- A team made up of individuals, each with own personal goals.
- Project management task is to make team out of individuals whereby individual goals reconciled into one goal for project as whole.
- Important to identify project goals at early stage and communicate them to project members.
 - Ought to know what is expected of them.
 - If uncertainty, will determine their own goals.
 - Diverging goals may lead to severe problems.

Debra Tannen: You Just Don't Understand

Differences between male and female communication styles