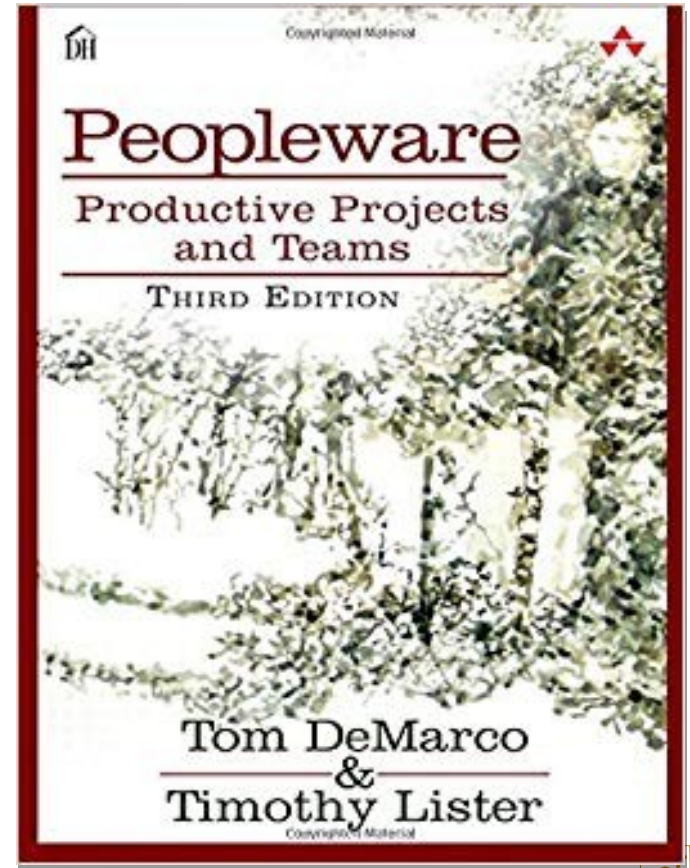# S03 Software Development Teams

Importance of people in software engineering
Understanding team effectiveness
Conflict and conflict resolution
Code of conduct

Q: Why Do Software Projects Fail?

A: People

Peopleware
Productive Projects and Teams
THIRD EDITION

Tom DeMarco & Timothy Lister

Understanding Team Effectiveness

Study of 180 google teams world-wide

- Gathered data on team members (attitudes, skills, personality, etc.)
- Identified factors that correlated with their measure of performance

https://rework.withgoogle.com/guides/understanding-team-effectiveness/

Understanding Team Effectiveness

- Factors:
  - Co-location of teammates
  - Consensus-driven decision making
  - Extroversion of team members
  - Individual performance of team members
  - Workload
  - Seniority
  - Team size
  - Tenure

These **did not** significantly impact the performance measure used by Google.

This does not mean that these are not important factors in other settings or other regards.

1 **Psychological Safety**
Team members feel safe to take risks and be vulnerable in front of each other.

2 **Dependability**
Team members get things done on time and meet Google's high bar for excellence.

3 **Structure & Clarity**
Team members have clear roles, plans, and goals.

4 **Meaning**
Work is personally important to team members.

5 **Impact**
Team members think their work matters and creates change.

re:Work

- Discuss up-front what you are aiming for in this project.
- Plan, and agree on your responsibilities.
    - Don't forget to plan for contingencies!
- Contributions system
    - team mark x f(contrib) = individual mark
    - Team of 3, equal contrib (33/33/33): individual marks = team mark
    - Team of 2, equal contrib (50/50): team mark of 2/3 = max ind. mark
    - Contribution capped at 2/3 (66%).
    - Deciding contributions is the *team's* responsibility.

Conflict Resolution Strategies

Conflict is a part of any work environment.

Working under stress is bound to cause problems.

- Stephanie Ray, 2018, 10 Conflict Resolution Strategies that Actually Work

1) Define Acceptable Behavior
2) Don't Avoid Conflict
3) Choose a Neutral Location
4) Start with a Compliment
5) Don't Jump to Conclusions
6) Think Opportunistically, Not Punitively
7) Offer Guidance, Not Solutions
8) Constructive Criticism
9) Don't Intimidate
10) Act Decisively