

Software Engineering II: Project Organization and Management

Exercise 01 - Team Formation

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Team

Toll

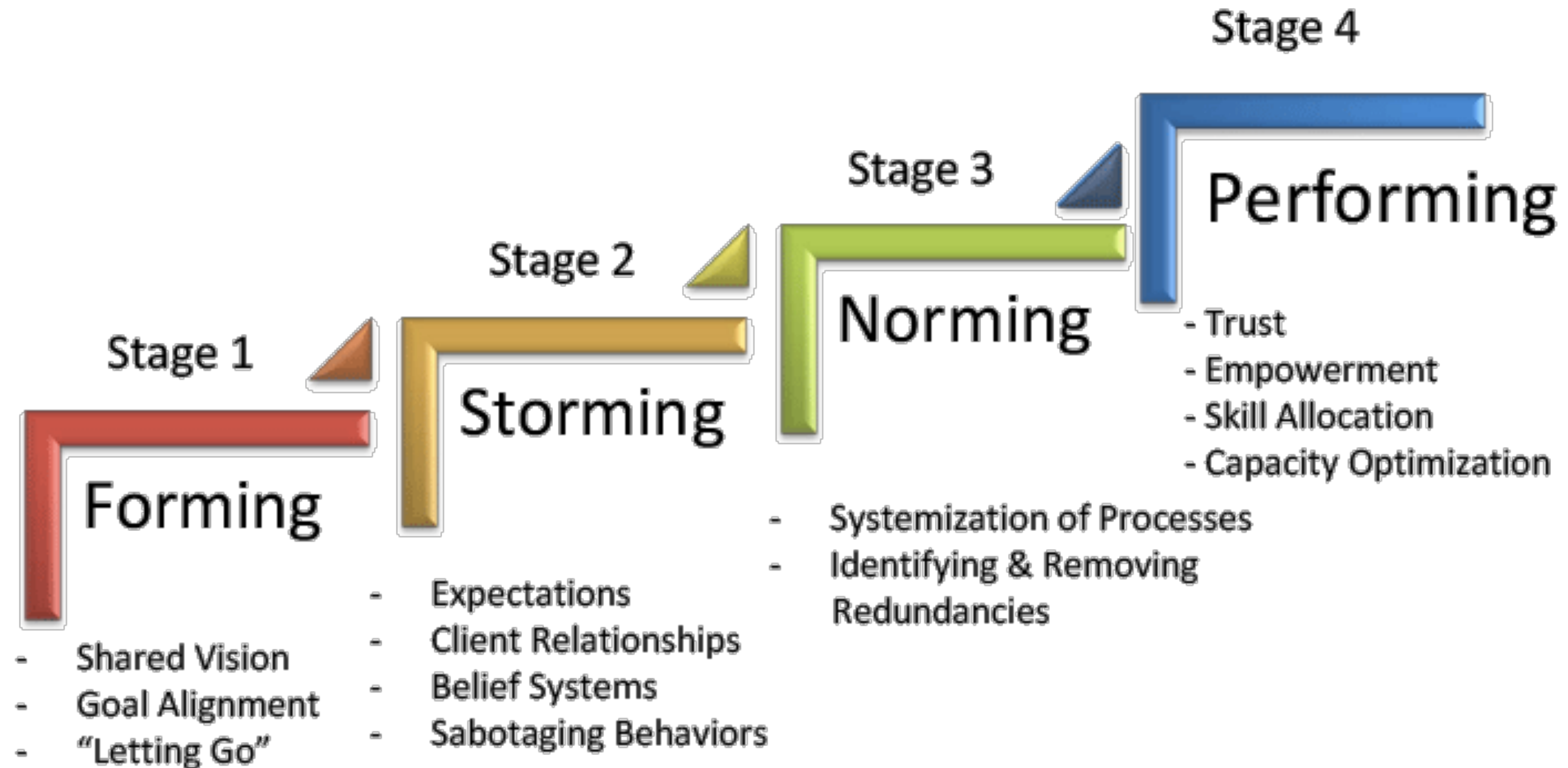
Ein

Anderer

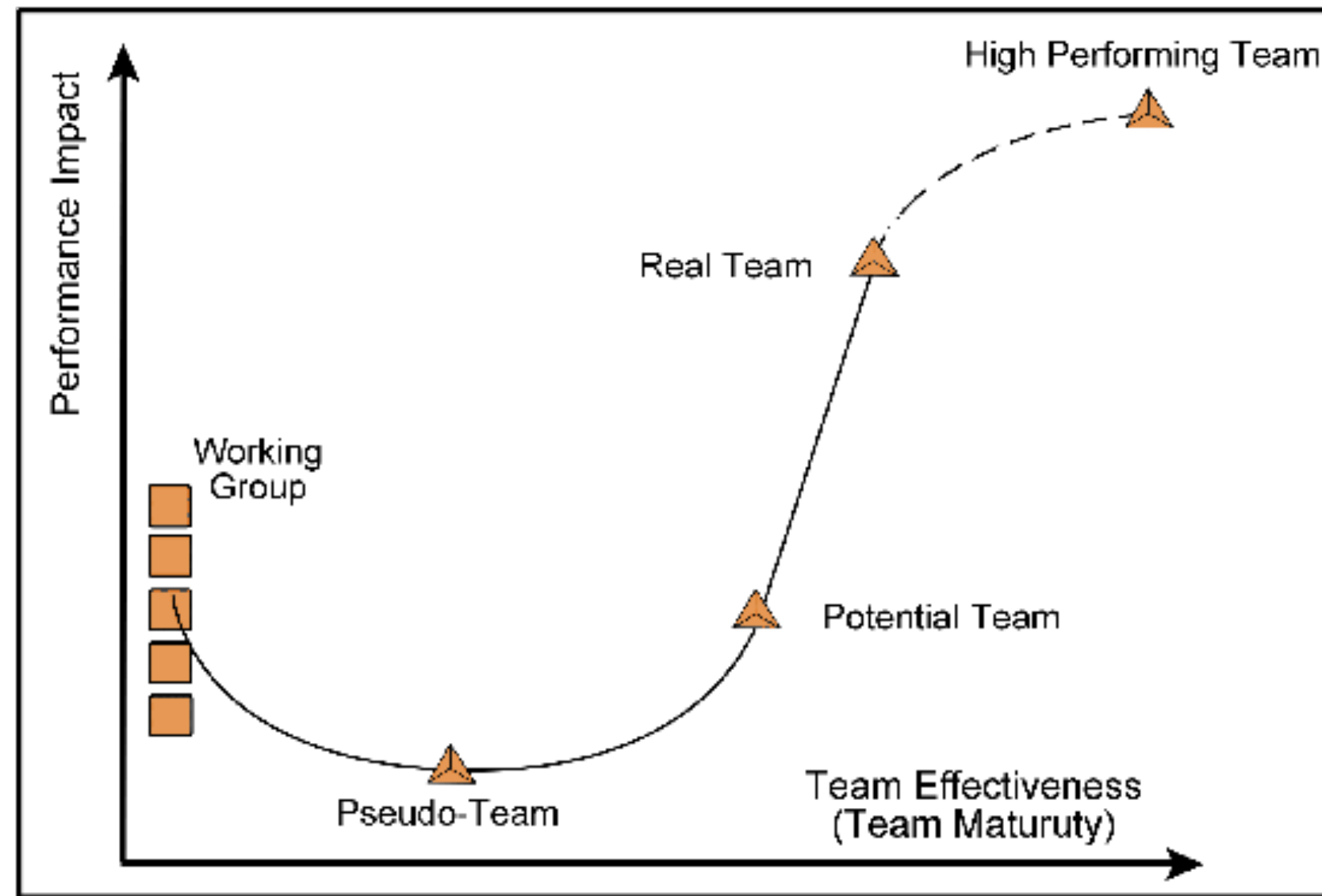
Macht's

*Yeah, somebody else does it!

Stages of Team Development



Team Productivity and Performance



Forming > Storming > Norming > Performing

Team



Together
Everyone
Achieves
More

What is an Icebreaker?

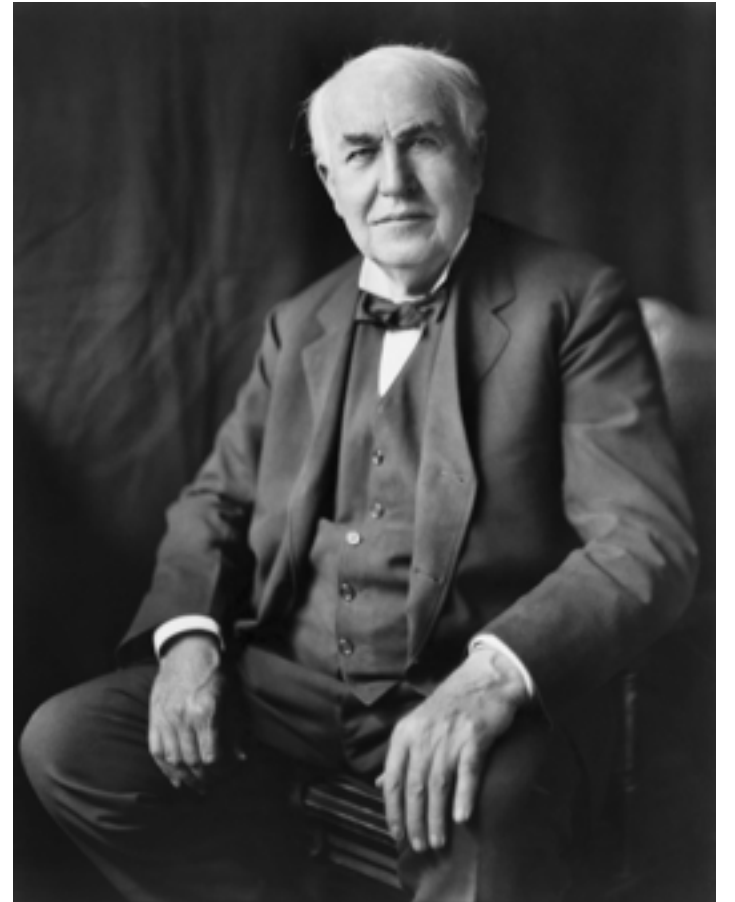
A ship designed to break through ice so that it, or other ships coming behind, can navigate on frozen seas.



A game, activity, humorous anecdote, etc., designed to relax a group of people to help them get to know each other.

Thomas A. Edison

- Applied the principles of **teamwork** to the process of invention
- Created first industrial research lab (Menlo park)
- Over 1000 patents
- “I haven’t failed, I’ve just found 10.000 ways that won’t work.”
- Now: **parallel innovation management**
—> Who will find the best solution to our problem?



The Marshmallow Challenge



Your task: Build the tallest structure

- **Human Resources:** All the members of your team
Note: If you came late, check out your team assignment in Moodle and make sure to join your team
- **Resources:** 20 Spaghetti sticks, 1 string (1m), 1 marshmallow, 1 tape (1m)
- **Constraints:**
 - The structure has to be **free-standing** (do not hang it from anything, but it can be attached to the ground)
 - The **entire marshmallow** has to be on top
- **Additional resources:** Rulers and Scissors (limited)
- **Team Exercise: Build the tallest free-standing structure with the given resources in the given time following the given constraints**
- Use as much of the material as you want, but **nothing else**
- Duration: **18 Minutes**



Before we start

- Each team sends one member to the front to get the material
- Check the number of resources and its quality immediately when you get it
- You cannot complain later :-)

Let's start and have Fun!

You have now 18 minutes



Determination of the Winner

- We cannot measure all your structures right now
 - **Your team exercise: Use your smartphone and take a picture of your structure, holding the ruler next to it**
 - Upload the picture and the height of your structure in centimeters to the following Confluence page: <https://confluencebruegge.in.tum.de/display/POM15EXAMPLE/Team+Icebreaker+Results>
 - Click Create and add a new page (use your team name as title) with your picture and the height
 - **Constraints:**
 - The ruler and your Marshmallow structure have to be clearly visible on the picture
 - The ruler has to be straight and start on the ground
 - The top of the Marshmallow counts and the measure on the ruler needs to be exactly next to it
- ➔ **If you do not fulfill all constraints, your result is invalid**

Lessons Learned?

short talk: Tom Wujec (award-winning innovator)

http://marshmallowchallenge.com/TED_Talk.html

Lessons Learned in the Ted Talk

- Prototyping matters
- Diverse skills matter
- Incentives magnify outcomes

http://marshmallowchallenge.com/TED_Talk.html

Post mortem analysis

- Also called **Project Retrospective**
- Performed after important **milestones** and at the **end of a project**
—> should also be done for successful projects
- Reveals **problems and solutions** differently than project completion reports alone
 - Understand fellow team members
 - Document good practices & problems
 - Individual & team learning
 - Increase satisfaction & improve outcome of future projects

Summary

- In a team, you can achieve more than the sum of the individuals
- An icebreaker helps in team building because you experience a small project and is a lot of fun
- There are also other team building techniques, e.g. sports activities or going out together
- Post mortem analysis and retrospectives help to improve yourself in future projects

References

- Tom Wujec - “Build a Tower, Build a Team”
http://www.ted.com/talks/tom_wujec_build_a_tower
- <http://marshmallowchallenge.com>
- Norman L. Kerth: Project Retrospectives, Dorset House Publishing, 2001
- Terry Williams: Identifying the hard lessons from projects – easily;
International Journal of Project Management, Volume 22, Issue 4, pp.
273-279, May 2004
- Jon R. Katzenbach, Douglas K. Smith: The Wisdom of Teams: Creating the
High-Performance Organization
- Norman L. Kerth, Project Retrospectives: A Handbook for Team Reviews,
2011