Software Process
2016

Intro

Course goals

Given the UvA decides to have tailor made software developed for the UvA the ideal successor of blackboard. Numerous software companies are willing to do this. How to determine which companies are likely to develop high value software for the UvA?

Course goals

A friend calls you to invite you to work on his start up company. He has a funding of 300K and you are asked to develop a POC for building a news console. You are looking for two, three developers to work with you to make this POC in six months. How can you determine which group of developers will get the job done?

Course goals

You are an architect in a Dutch company. Part of the development is done in China. The code of the Chinese developers is of low quality. You meet the developers and are convinced of their technical aptitude and believe this is due to how you work together. How to change the way of working to get good quality software?

Setup

- Organization, coordination, control
- Empirical software engineering
- How much planning (up front design)

- Work forms:
  - Group assignments
  - Individual reading assignments

Reading assignments

- Study ractices and principles of our field, for which there is a clear scope and a good body of evaluation

- Starting points: Making Software / Leprachauns

- You Select The Topic

- TUESDAY TOPIC PRESENTATION

- FIRST DELIVERABLE: END OF THIS WEEK

First group ass.

- Analyze failed engineering case
- Look from perspective of "good" software engineering

- Two weeks
- Group of …

Group work

Big assignment
  -> big groups
    -> coordination and control issues
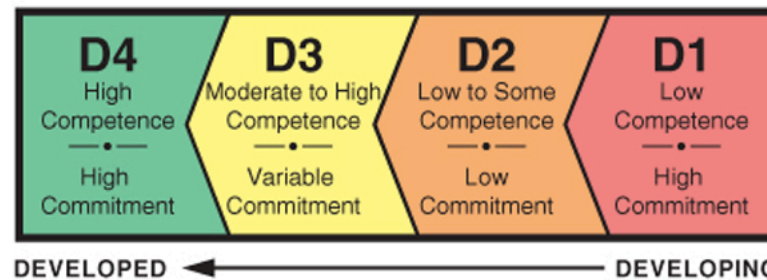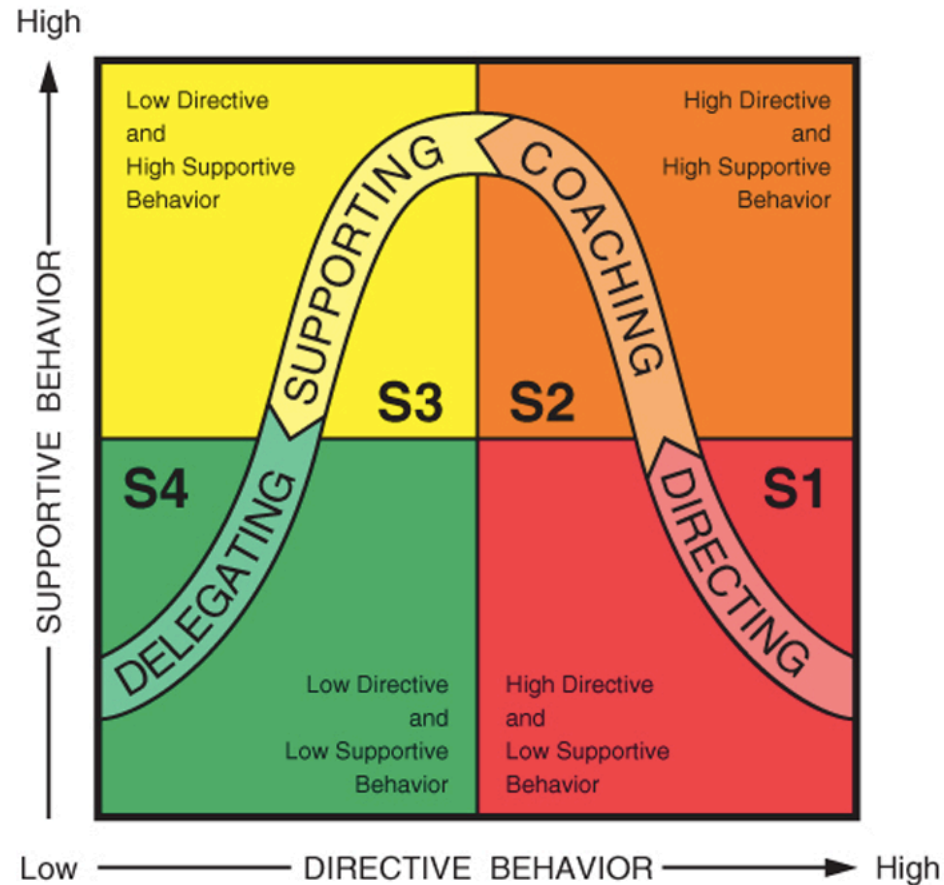   -> active experimentation
        -> reflection

Required: make transparant indvidual contributions

How to make big groups work

- Hierarchy, Anarchism, Groups

- Usually a blend

- How will you make a big group of students work?
  - Game theory….
  - Competence
  - Motivation…

Situational Leadership® II Model

High

SUPPORTIVE BEHAVIOR

Low Directive and High Supportive Behavior

SUPPORTING

COACHING

High Directive and High Supportive Behavior

S3   **S2**

S4   **S1**

DELEGATING

DIRECTING

Low Directive and Low Supportive Behavior

High Directive and Low Supportive Behavior

Low ——— DIRECTIVE BEHAVIOR ——→ High

D4
High Competence
———•———
High Commitment

D3
Moderate to High Competence
———•———
Variable Commitment

D2
Low to Some Competence
———•———
Low Commitment

D1
Low Competence
———•———
High Commitment

DEVELOPED ←——— ———→ DEVELOPING

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Course goals

You get a presentation of a software company in the course Software Process. They tell you they are successful and then give you an impressive presentation on their philosophy and best practices. How could you establish if they are really as good as they say they are?