RSE AND THE ASPECTS OF COMMUNICATION AND EDUCATION

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I am here today to report about my experiences with adapting SE methods

Special focus will be on communication and knowledge transfer

This talk will be about what worked and what didn't ...



Multi task environment, RSE one of many

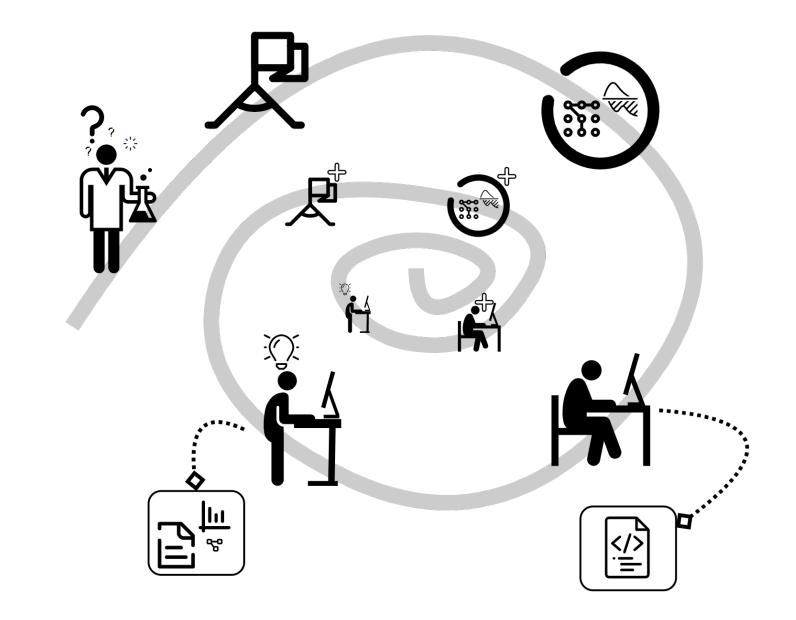
Developers lack experience and formal education

Staff fluctuation

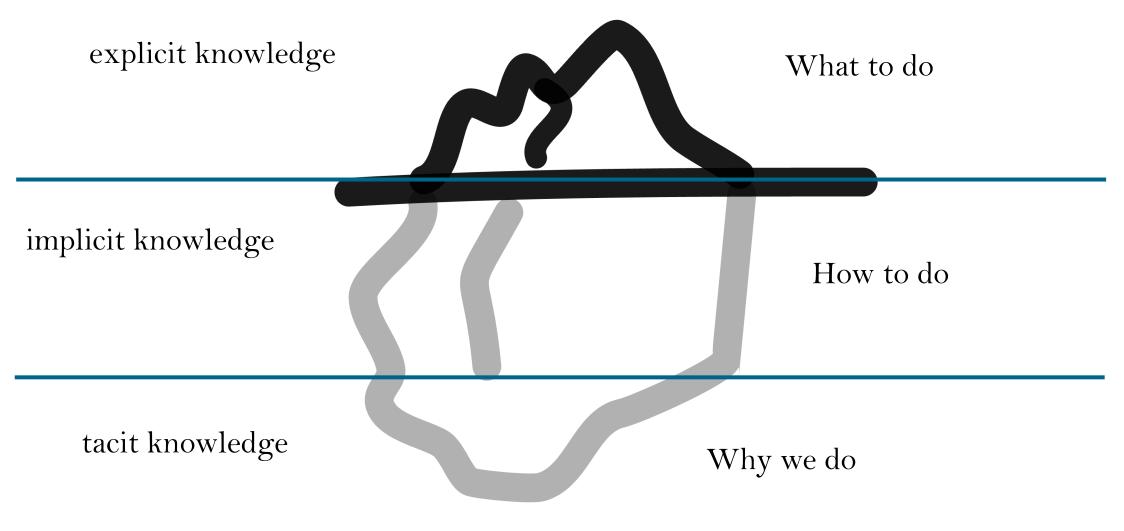
Generating insight

New insights modify goals, priorities and applied methods









Core challenge: transfer experience (implicit / tacit)



"The methods we apply"



Mentor mentee setup is very efficient (implicit/tacit knowledge transfer)

Time and effort intensive

Better efficiency in transfer is crucial

Next on our institutes agenda: communication and didactic trainings



Adapting SCRUM / Agile methods



SCRUM style sprints

Not feasible, needs adaption because:

RSE: one of many competing tasks

Lack of long uninterrupted timeframes

Different work schedules and rhythms in teams

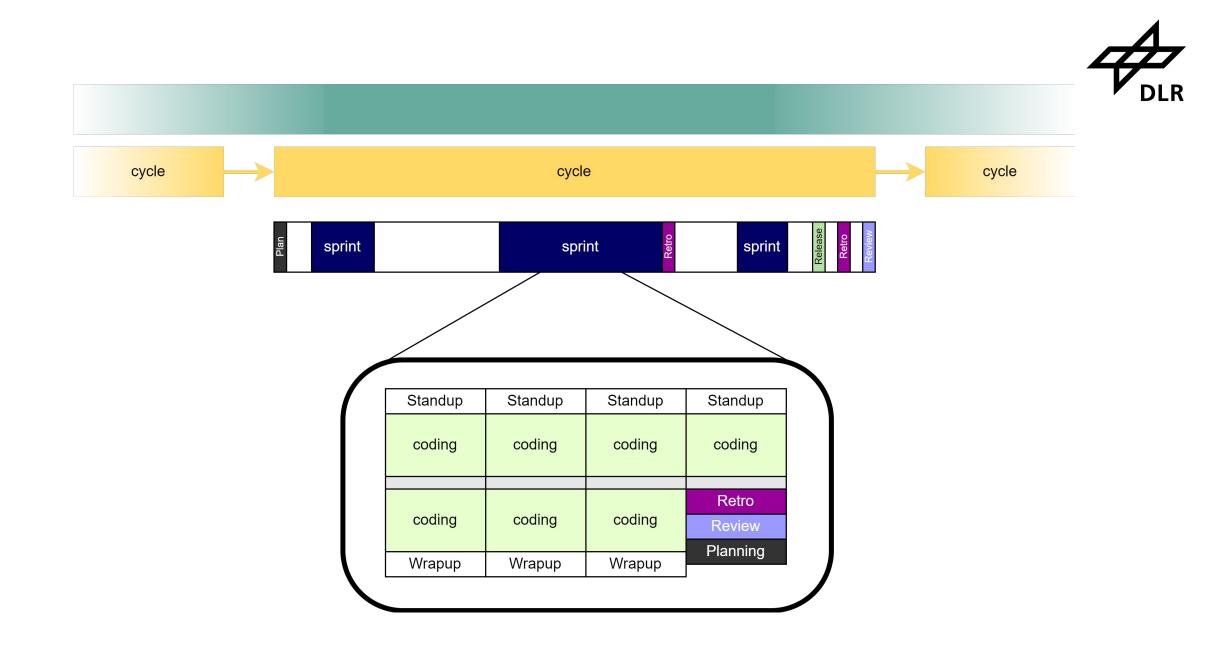


Modified **sprint:** focus time and effort

reserve short timespans (days) in a regular intervalls (weekly to quarterly)

Focus benefits traction and transfering knowledge

Supplemented by development **phases**





Standup meetings

Work well

"What was?" "What will be?" and "What impedes us?"

Start of sprint days & regular meetings



Wrapups at the end of sprint days

Suplement standups

Focus on work athmosphere, what we enjoy and how we work

Tuning the knowledge transfer

Mentor learns what works for the mentee



Retrospectives

Work well when focus on improving work methods & group dynamics

Foster constructive feedback environment

encourages to take ownership as a team

We use the retromat to prepare <u>https://retromat.org/</u>



Scrum **roles** don't work and need modification:



Lead RSE



Products & feedback



RSE developer

Coding & work process

Work process, requirements & every day decisions



Product owner

budget & guidelines



Stakeholder

Scientific methods & feedback



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Effort estimation

T-shirt sizing with non-linear scale works best

improves planning, prioritization & reality checks

regular training mandatory

evaluate estimates after the fact & identify causes for misestimates



"How does NVC fit into the picture?"

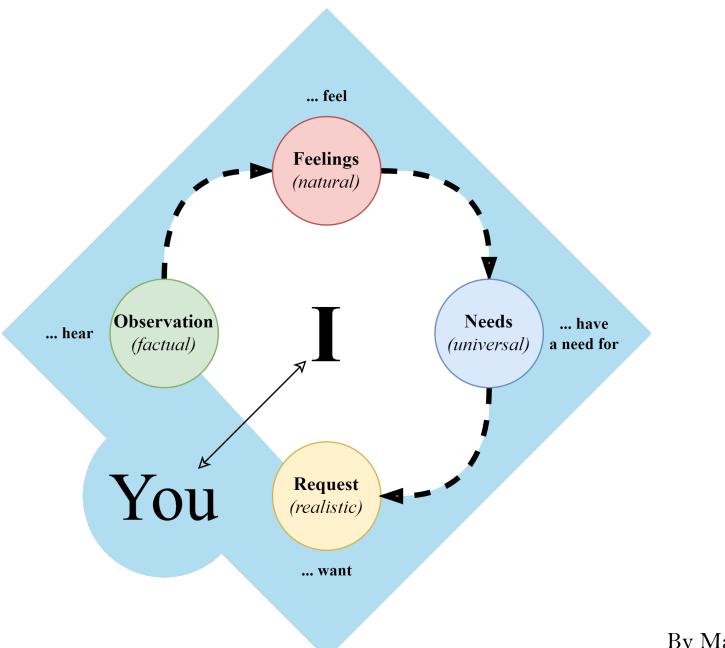


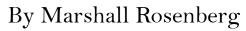
NVC works because:

supports building reciprocal understanding

shifts from focussing on solutions and strategies to needs

deescalates heated discussions





DLR



NVC works best with ...

requirements engineering

retrospectives

educational settings

conflicts (priorities, goals, inter personal, ...)

Very effective method for separating needs from solutions and goals



Challenges with NVC

method easy to understand but needs continuous training

most are unfamiliar with it

continuous training can be challenging



Summary



SCRUM principles work well

Some SCRUM concepts need adaption (sprints, roles)

Effort estimation helps in many ways

NVC is cross-sectional beneficial (e.g. requirements engineering)



Thank you all for your time!

and a big thank you to the organizers of the conference!

I look forward to your questions and individual discussions during the breaks