

Why Developers don't like BPM and how Research can help

Yes, Research probably includes you

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What can you expect
from this talk?

Why BPM?

- > It's only an Example. Think about your Research and your Ideas
- > It's cool
- > Much Research / much time spent

It's cool

- > Formal things can be great
 - > Generation
 - > Reasoning
 - > Proofs
 - > The resulting Tools
 - > (BPM)



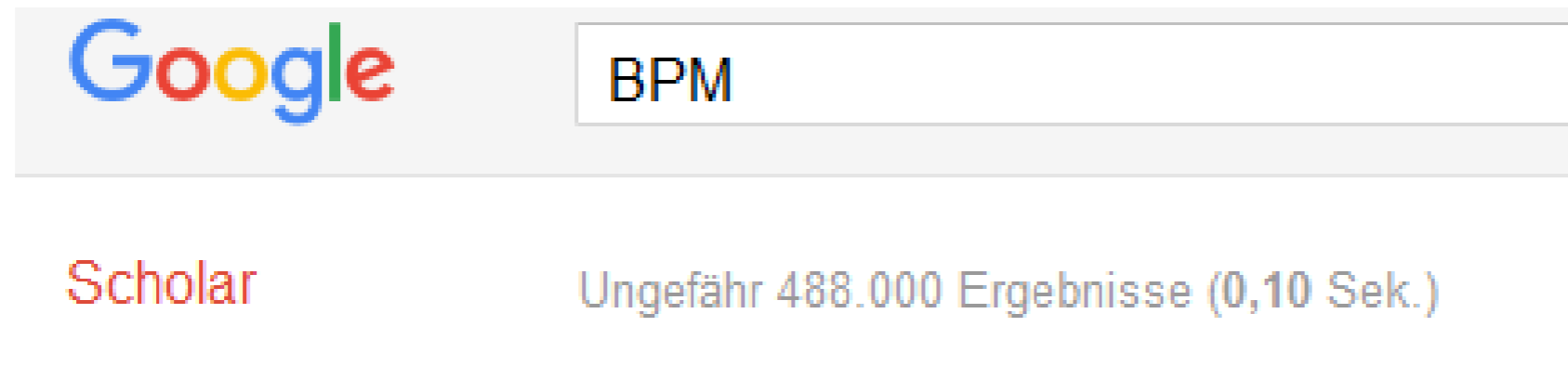
It's not so cool

- > New, (partly unusable) tools
- > Bad integration into existing development tools
- > Huge complexity
- > Most developers/People are not capable of leaving their comfort zone (Social Factors, Conway's Law)



Much Research

- > Look, how many papers!!!



- > At least much theoretical...
- > Empirical is only starting to improve



Not much relevant Research

- > Yes, that's provocative
- > But
 - > No sound metrics definitions
 - > No practical problem statements
 - > Not much evaluation



What does this mean?

- > You need to decide
- > Do you want to contribute something?
- > Or “just” get your PhD?

Contribution?

- > You probably won't revolutionize anything
- > But you will help extend the existing Body of Knowledge
- > Help make the world a better place 😊

Current Affairs

- > Physics/Chemistry/...: If the reality does not match your theory, your theory is wrong
- > How many SE/IS researchers have seriously challenged their results with reality?

How should we start?

- > How to come to a good and relevant theory?
- > First step is to find a good research question
 - > This will be broken down
- > If you haven't worked in industry yet, you are unable to evaluate whether it's relevant or not!

What should we do?

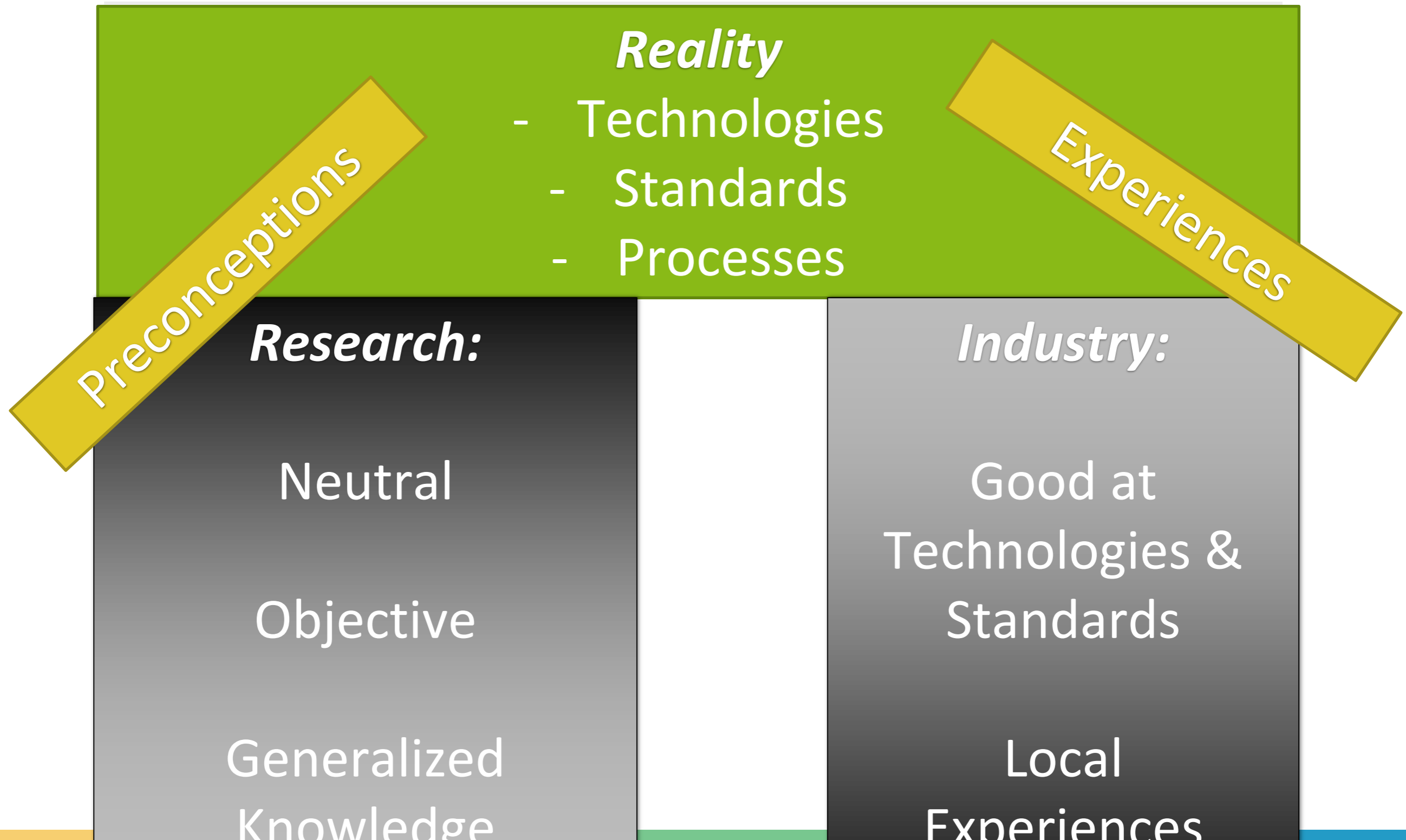
- > How to come to a good theory? 2nd part
 - > Understand:
 - > Make Empirical Research your Main Focus and try to validate or reject your or others claims
 - > Improve:
 - > Build a new tool/artifact
 - > Make Empirical Research whether you improved something

Generalize!

- > In creation of artefacts, students and you are usually not representative
- > Yes, that makes it hard to bring empirical evidence

- > Experiments, Case Studies, ...
- > Perhaps you need to find
 - > An industry partner
 - > Publicly available data (Attention!!!!)

Research & Industry



Freedom of Research

- > You are independent
 - > Do not try to become “industry”
 - > Ask “stupid” questions
- > You can find that
 - > Things are really bad
 - > Your Improvements are no Improvements at all
- > But these are results after all!

Conclusions & Outlook

- > Do the things you like
- > But before you start check that they are relevant (at least in Engineering disciplines)
- > Make empirical Evaluations
- > Try to get into contact with industry early
- > But do not become industry

Thank you for your attention
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Thank you!

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