Methods, Difficulties and Practical Solutions in Implementing CMMI® High Maturity Levels
5th Doctoral Symposium in Informatics Engineering
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agenda

- introduction
- background and related work
- case study methods and goals
- findings
- conclusions and future research
motivation
- customers demand CMMI level 5 (defence and healthcare)
- levels 4 and 5 practices are complex
- lack of guidance

investigation question:
- are companies following scientific knowledge?
  SEI guidance?
  other practitioners?
introduction

h1 – adoption of levels 4 and 5 by client demand

h2 – follow practitioners and SEI guidance

h3 – dissemination is not 100% effective
background and related work

- capability maturity model integrated
case study methods and goals

- case study:
  - exploratory interviewees
  - documentation analysis
  - tools analysis
  - individual interviews
findings

- lack of guidance
- motivation: respond to customers, improve
- human resources: sponsor; quality; areas; top management; information technologies; process owners; pilot projects; scientific community
- project plan
- theoretical support: trainings, books, IBM taxonomy, SEI documentation...
findings

Monitored Process

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introduction related work methods and goals findings conclusions and future
conclusions and future research

- tools: balanced score card, goal question indicator metric, Ishikawa tools, Six Sigma
- h2 and h3: scientific knowledge needs to be tested in practice, dissemination process improved
- h1: improve performance and quality
  - measurement objectives
- future: dynamic CMMI, agile methods, knowledge and innovation
questions

Thank you for your attention!
references

- images (26-01-2010):
  - http://www.sei.cmu.edu/cmmi/people/steeringgroup.cfm
  - http://www.viaconsultingllc.net/images/360_bridge1.jpg