An Analysis of Techniques and Methods for Technical Debt Management: a Reflection from the Architecture Perspective

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Introduction and context

• Research context: use of architecture to help evaluate a product (to be commercial)
• Research context: Architecture as a product view: what’s the value of product?
• Architecture at design time: as devised
• Architecture at development time: actual
• Need for indicators/predictors -> technical debt management helps
Technical debt management SMS

Paper main focus versus technical debt management theme

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Interdependencies

An example
Useful concepts complexly related

• Time to market
• Uncertainty
• Release management

History, and future matters: scenarios
Lack of frameworks, guidance...
Issues

• Technical debt management is promising for helping characterize the actual product architecture

• We lack frameworks, it is difficult to apply technical debt management
  – How to work on the architecture side considering also (the history of) code
Discussion

• How can we make run in parallel technical architecture management and technical debt management?

• How can we better “deploy” and “leverage” technical debt management for improving the characterization of architecture “as it is”?

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Questions?

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