The Benefits and Limitations of Knowledge Management in Global Software Development

Dingsøyr T[1], Rolland KH[2] & Jaccheri, ML[2]

[1]SINTEF ICT, [2]Dept. of Computer and Information Science

Key Points

- We want to study GSD in multiple industries and contexts, including Open Source Software teams
- Main RQ: What are the benefits and limitations of ’Knowledge Management’ in globally distributed development teams?
  - Much research on KM, but not much in a GSD context
  - Need for more explorative and empirical (in a broad sense) research on the phenomena
- Why a Knowledge Management focus?
  - Software development is a knowledge-intensive activity, therefore improvement implies better KM within and across teams
  - Coordination in distributed teams relies on KM
  - The dynamics of today development environment
  - (Dingsøyr, 2003)
- Research still on a planning stage

Mixed methods approach

- Quantitative methods
  - E.g.: approaches from software metrics (Mockus, 2002)
  - As a basis for selecting interesting cases and issues within specific cases
- Case studies
  - In-depth understanding of phenomena (Stake,1995)
  - The usefulness of selecting ’critical’ and a-typical cases (Stake, 1995)
  - Multiple sources of evidence (Yin,1994)
- Analysis of data material
  - Theoretical induction (cf. von Krogh et al., 2003)

Challenges and concluding remarks

- How to study a global phenomena?
  - Local vs. global
  - Explorative vs. rigorous
  - Qualitative vs. Quantitative
  - Generalizable across multiple cases vs. In-depth understanding of phenomena
- We submit that a mixed methods approach is best suited
  - Captures different aspects of phenomena
  - Not always fruitful to compare individual projects

References used in the presentation

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