Successful outsourcing: Necessary conditions and best practices

Master of advanced Studies thesis MTEC
Johannes Schneider
Status (5-th semester)
Schneider@tik.ee.ethz.ch
Martin Nordio, Prof. Bertrand Meyer(INFK) and Prof. Edgar Fleisch(MTEC)

1. PROJECT DESCRIPTION

Overview
Outsourcing is a difficult endeavor. Many companies try it, some fail and some succeed (partly). In this thesis we want to look at several (Swiss) companies mainly in the field of hardware and (low-level) software design (with a particular focus on Albis Technologies) and come up with conditions and processes for outsourcing. Clearly, there is no unified simple process, but what and how to outsource is highly dependent on project/ business constraints such as timeline, costs, required quality, know-how and production facilities etc. Additionally, outsourcing comes in different forms, e.g. in-house outsourcing, contracting etc. Each form brings its own requirements for successful management.

Scope of the work
Through literature research and primary by interviewing companies, we want to answer general questions like:

- Can we identify specific factors that favor or impede the success of outsourcing projects?
- Can we produce a clear list of dos and donts (not just platitudes, but clear risks and good practices)?

- What tasks are being outsourced and to which destinations?

- Is there a correlation between success rate and development process?

- ...

Apart from this general considerations we also want to look at more Albis Tech. specific questions like

- What business areas (or projects) of Albis are suitable for outsourcing?

- What is the best way for your Albis to outsource?

- Is Albis’ development process suitable for interacting with an outsourcing provider?

- ...

Intended results
The outcome should essentially yield a strategy for Albis for outsourcing, as well as a guide how to do it. We also want to derive scientific findings regarding outsourcing by answering the above questions in more analytic way, i.e. explaining results by suitable models and backing up statements by (statistically significant) empirical data.

2. BACKGROUND MATERIAL

Reading list

• The Offshoring of engineering: Facts, Unknowns and Potential Implications, Committee of Offshoring, 2008.


• Lecture on Distributed and Outsourced Software Engineering, Peter Kolb, Bertrand Meyer, Martin Nordio, 2011.


• (and more...)

3. PROJECT MANAGEMENT

Objectives and priorities

See Intended results. Priorities are the same for the tasks.

Criteria for success

Well designed questionnaire for interview, good literature research, good analysis and understanding of Albis processes

Method of work

See Project steps below.

Quality management

Documentation
Validation steps
Discuss (bi)weekly project state (current results) and future work with Martin Nordio.

4. PLAN WITH MILESTONES

**MILESTONES**

15.10. Fix at least 5 interview partners
20.10. Draft of questionnaire for interviews
10.11. Draft of empirical evaluation of results of questionnaire
2.12. Draft of report (at least of empirical results and analysis)