PA1308 Self Study Package - Identifying and analysing factors

Nauman bin Ali

Blekinge Institute of Technology

SE-371 79 Karlskrona Sweden

nal@bth.se

July 1, 2013

Abstract

In this study package you will find hints to facilitate development of factor tables in global analysis. It is important to understand what constitutes a "factor" and what is meant by the "impact" of a change in terms of the architecture of the system.

1 Identifying factors that affect software architecture

Identifying and analysing factors

- Categories of factors: organizational, technological and product. (Chapter 3 in [1] provides a list of typical factors in these categories. You may use these lists as a starting point to consider potential factors for your architecture). It may also be helpful to use it as a checklist to avoid overlooking some critical factors.

- Do all the requirements of the system constitute factors relevant for the architecture design? (See Step 1 on page 30 of Hoffmeister et al. [1]).

- How likely is the factor to change? Can you negotiate a change in the factor? (See Step 2 on page 30 of Hoffmeister et al. [1]).

- What is the impact of a change in the factor on the software architecture of the system? (See Step 3 on page 30 and 31 of Hoffmeister et al. [1]). It may be helpful to have a rough sketch of the architecture of system that will facilitate this analysis. The important thing is not to be rigid and only use this "notion" as a starting point.

References

[1] Hoffmeister et al., *Applied software architecture*, Addison-Wesley Professional, 2000.