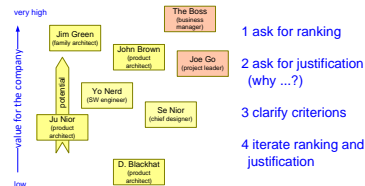


How to appraise or assess an architect?

-



Gerrit Muller

University of South-Eastern Norway-NISE
Hasbergsvei 36 P.O. Box 235, NO-3603 Kongsberg Norway
gaudisite@gmail.com

Abstract

The appraisal of system architect is handicapped by the vague and abstract responsibilities of the system architect. The success criterions for architecting are discussed. An approach to "measure" or assess the architect is described.

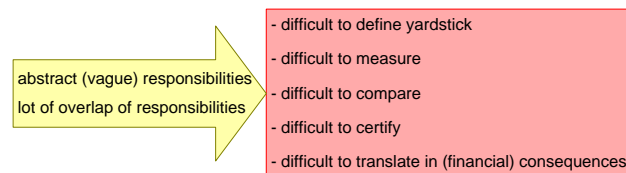
Distribution

This article or presentation is written as part of the Gaudí project. The Gaudí project philosophy is to improve by obtaining frequent feedback. Frequent feedback is pursued by an open creation process. This document is published as intermediate or nearly mature version to get feedback. Further distribution is allowed as long as the document remains complete and unchanged.

All Gaudí documents are available at:
<http://www.gaudisite.nl/>

1 Introduction

The responsibilities of system architects are ill defined. Either the responsibilities overlap significantly with other players in the Product Creation Process, or the responsibilities are very abstract and vague (not specific and measurable), see [2].



How to assess an architect?

Figure 1: The function of an architect is difficult to evaluate

Figure 1 provides the problem statement: *How to assess the architect*, when it is difficult to define a yardstick, measurements, comparisons, or certifications due to the ill defined responsibilities. The financial remuneration, which is normally based on measurements and comparisons also becomes very difficult.

Section 2 formulates the success criteria for architects. These criteria are used in section 3 to describe an assessment method.

2 When is the architect successful?

In [2] the deliverables, responsibilities and activities of the system architect are discussed. Figure 2 summarizes this article. The deliverables of the architect are abstract paperwork or electronic information, no tangible modules or systems. The primary responsibilities are not easily measured: how sound (balanced, well decomposed, consistent, et cetera) is the system specification and design? The architect is spending most of his time on activities which do not result in one of the deliverables and most of the activities do not directly contribute to the primary responsibilities. However all of these activities are indispensable for the role of the architect and together ensure the architecture quality.

Figure 3 shows the architecting function and the criteria for successful architecting. Architecting is the transformation of problem and solution know how and often an already existing architecture into a new architecture. This process takes place in the context of many stakeholders, with their expectations, needs, concerns and constraints. The architecting is done by the product creation team (project leader, engineers, product manager and the system architect), although the architect should take the lead in this process.

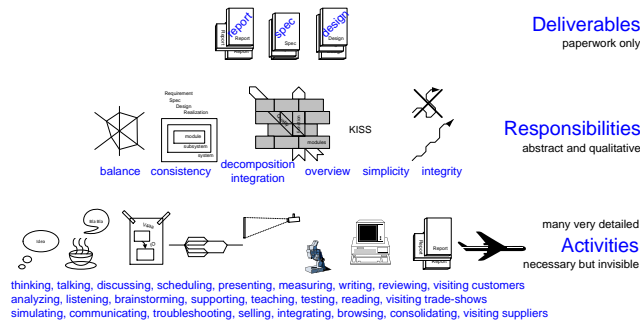


Figure 2: Tangible deliverables based upon many invisible activities

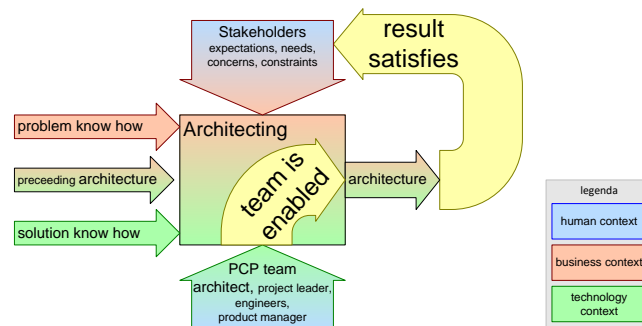


Figure 3: Criteria for successful architecting

The architect has played his role successful if the 2 criteria which are shown are fulfilled:

- the resulting architecture satisfies the stakeholders
- the architect has enabled the product creation team by leading the architecting process.

3 How to assess the architect?

The criteria discussed in section 2 must be explored in order to facilitate the assessment of the architect. Most appraisal systems are based on formalized yardsticks, such as the (generic) function appraisal system, the (specific) job description and the (also specific) personal career development plan.

Figure 4 shows the formal yardsticks at the left hand side. The main issues addressed in the yardsticks are also mentioned.

The function appraisal systems, such as defined by Hay Management, are based on parameters as *scope of control*, *impact* and *freedom of thinking*. The Hay

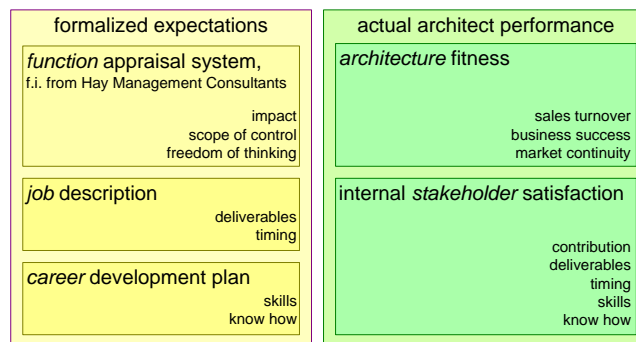


Figure 4: Yardsticks for architect assessment

management system is calibrated over multiple companies, domains and functions, by the active participation of the Hay Management company.

The experience is that the architect function does not easily fit in this method. ASML has defined all their functions in this system, with a multiple ladder approach and were able to fit the *system engineer* function in an acceptable way in this model. Other companies are struggling more with the architect function, due to the problems described in section 1.

The reference for the individual appraisal is the specific *job description*, which defines the *deliverables* and the *timing*. Deliverables are a poor performance indicator, lots of paper is a sign of a bad architect! However a small amount of paper is not yet a sign of a good architect. Instead of measuring the deliverables the architecture fitness can be assessed, which in turn is a measure for the architecting contribution of the architect.

Complementary is the personal *career development plan*, which defines the desired *skills* and *know how*. The measurement of skills and know how can be done by assessing the internal stakeholder satisfaction.

The right hand side of figure 4 shows the actual architect performance, in terms of *architecture fitness* and internal *stakeholder* satisfaction. The architecture fitness is characterized by parameters such as *sales turnover*, *business success* and *market continuity*. The internal stakeholder satisfaction is characterized by the opinion of the stakeholders of the architects role in terms of *contribution*, *deliverables*, *timing*, *skills* and *know how*.

An informal 360 degree approach can be used to "measure" the internal stakeholder satisfaction with respect to the architect. A subset (3 to 6) of internal stakeholders is interviewed, where the performance of the architect is discussed in terms of *contribution*, *deliverables*, *timing*, *skills* and *know how*, see figure 5.

The stakeholders to be interviewed should have had sufficient interaction with the architect and should have complementary, somewhat overlapping viewpoints. By asking specific, but open questions, the role of the architect can be articulated.

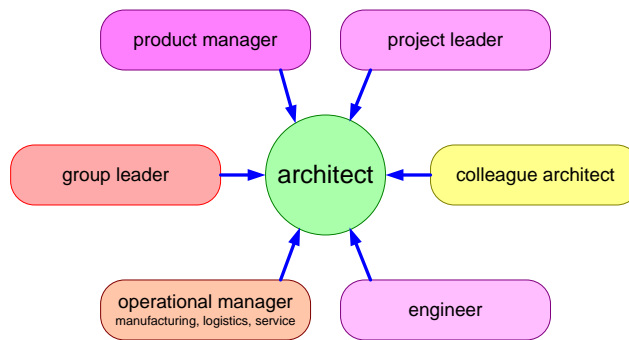


Figure 5: 360 degree assessment

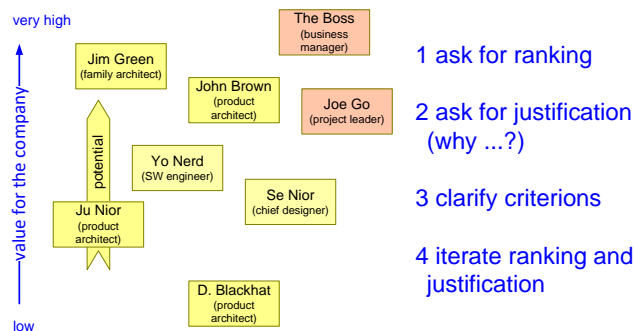


Figure 6: Ranking as trigger for discussions

Assessment is a relative act, in order to provide meaning to the input data, the data needs to be calibrated. This calibration can be done by comparing the architect being assessed with colleagues. It is useful to ask for a ranking with multiple colleagues, both architects and non architects. The ranking question asked to the interviewees has mostly a trigger function: by forcing a one dimensional comparison the performance in different dimensions has to be combined in a single assessment figure.

The relative position and the distance between ranked people will generate new questions: "Why do you think that Yo Nerd has a greater value than Se Nior?". Also the differences in ranking between interviewees gives a lot of insight in the (often implicit) criteria which are used by the interviewees, for instance: "Ju Nior is highly valued by the engineer for his excellent technical solutions, while the product manager criticizes him for not listening to the customer".

References

- [1] Gerrit Muller. The system architecture homepage. <http://www.gaudisite.nl/index.html>, 1999.
- [2] Gerrit Muller. The role and task of the system architect. <http://www.gaudisite.nl/RoleSystemArchitectPaper.pdf>, 2000.

History

Version: 0.1, date: June 3 2003 changed by: Gerrit Muller

- added abstract
- added text

Version: 0, date: May 28 2003 changed by: Gerrit Muller

- Created, no changelog yet