

A Study of a Mentoring Program for Knowledge Transfer in a Small Software Consultancy Company

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Abstract. Mentor programs are important mechanisms that serve functions such as career development as well as knowledge transfer. Many see mentor programs as an efficient, inexpensive, flexible and tailored way of transferring technical knowledge from experts to less experienced employees. We have investigated how a mentor program works in a small software consultancy company, and propose that the learning effect of the program could be improved by introducing methods to increase the employees level of reflection.

1 Introduction

Small software consultancy companies have to leverage their position in the market to stay ahead of their competitors. In order to survive, the solutions provided by their consultants have to be of such quality that makes their customers return to the company when they need assistance with a new project, and the solutions should ensure a good reputation for the company that attracts new customers.

To ensure high quality in the systems developed, companies are dependent on a good software development process. The main parts of this process can be planned out in advance and used collectively in a firm in order to ensure quality, but in every project you will probably run into situations where it is important to be able to improvise in order to keep the project on tracks. This is especially true for small software intensive companies in turbulent environments [1]. In these situations experience play a major role in coping with the different challenges.

Experienced developers recognize many different problems and often know the appropriate solutions straight away. For new developers however, this is often not the case. Also if the company is dependent on remaining agile and changing their process in accordance with the demands of their customers, the experienced developers may loose their ability to see the best solution. In these circumstances a company has to have a good strategy to manage their collective knowledge.

Wickert and Herschel [2] examine various challenges that small businesses face when implementing knowledge management [3] efforts. Small businesses often do

not have the time and resources that larger companies have to implement large knowledge management efforts, yet they are more vulnerable to knowledge erosion through leaving of key employees. In such an environment it becomes vital to share knowledge to prevent knowledge erosion and staying up-to-date. One suggested solution is mentoring programs which can have an effect in leveraging personal knowledge and sharing knowledge between projects. Such programs can often be more effective than training and written documentation [4].

In this paper we describe an ongoing research project to improve the mentor program in a small consultancy company. The main purpose of the mentor program in this company is knowledge transfer, particularly concerning the software development process and project management. We have focused on how the mentor program supports learning, and changes that could increase the learning effect of the program.

The organization of the paper is as follows: First, we present theory on mentor programs and learning as a part of mentoring. Then, we present the research approach used in this work. We present a small software company where we have conducted a study on a mentoring program, present findings and results from initial interviews, and our work with improving the program. Finally, we conclude and present future work.

2 Mentoring Programs and Learning

In this section, we present work from management theory on what a mentor program is, how mentor programs can be designed, and how learning can take place in mentor programs.

Kram [5] suggests that existing theory predicts that effective mentoring should be associated with positive career and job attitudes. In a literature review, Ragins et.al [6] show that empirical studies supports this proposition. They also present results from a survey that indicate that persons in dissatisfying or marginally satisfying mentor relationship express the same or worse attitudes than people not involved in a mentor relationship at all. One of their conclusions is that it is clear that good mentoring may lead to positive outcomes, but bad mentoring may be destructive and in some cases worse than no mentoring at all.

2.1 What Is a Mentor and Protégé?

According to Kram [5], mentors are generally defined as “individuals with advanced experience and knowledge who are committed to providing upwards mobility and career support to their protégé”. A protégé literally means “a person under the patronage, protection, or care of someone interested in his career or welfare” [7]. This is usually a younger employee who lacks experience in one or more fields.

2.2 Formal and Informal Mentoring Programs

According to a literature review of mentoring by Ragins et.al. [6], comparisons of non-mentored and mentored individuals yield the consistent result that individuals