Chapter 6
Software Development
Standardization
“CMM/DSDM Case”

INTRODUCTION

Pijl et al. (1997) point out that strict adherence to software quality standards could be counterproductive if tailoring for specific types of systems is not possible. They also argue that current quality standards are focussed on standardization processes and procedures, whereas innovative projects require creativity. However, as has been pointed out in Chapter 2, standardization can be beneficial to creativity when one does not have to focus on basic quality issues. On the other hand standardization could impede creativity when it limits the number of possible solutions. Therefore one should not focus on standardization of processes alone. As Mintzberg (1984) argues there are other coordination mechanisms such as standardization of skills, outputs and communication.

The second case study is about process standardization within a software development department. We will investigate how this process standard was chosen and implemented and what its effects were on business performance.

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CASE DESCRIPTION

Introduction

In shortening timeframes and with lower costs, flexible information systems have to be developed and supported. This has consequences for the application development processes. By employing a standardized development methodology, an BPR program was launched that intended to accomplish fundamental changes in the way Business and IT created new software products.

This BPR program, called INSPIRATION\(^1\), was launched in August 2000 following two benchmark studies carried out by Gartner\(^®\) and Compass\(^®\) at the end of 1999 that showed that there was ‘room for improvement’ within the Software Development functions of FINCORP. The function in question was the IT Development organization, part of the Dutch retail division, that consisted at that time of 2000 staff (including software developers, project managers, application supporters, line managers).

A number of external benchmark studies in 1999 and 2000 showed that, compared to other companies, development costs of software were much higher. A second issue was the discrepancy between requirements defined by the business departments and the final product. In other words the alignment between the business departments and its software development organization could improve as well\(^2\). The overall picture was:

- Concerns about IT productivity and increasing costs
- Insufficient project / budget control, limited steering options, projects delivered late
- Barriers between business departments and IT development and IT support departments
- Lack of a structured development process as several methods were used
- Inefficient allocation of employees to projects by IT project management
- Application-technology old and complex
- Hardly any reliable measurements

As a consequence, the central issue throughout the Inspiration program has been the quality of the software developed for the Business Unit that in its turn influences the quality of services the bank can offer its customers. Furthermore, the Inspiration target was to achieve a 20% improvement in productivity (Harmsen and Kleijnen, 2003). The total costs of the whole program, which ran four years in succession, added up to 5-7% of the yearly budget available for this Business Unit. A payback period of the program was calculated of 24 to 30 months.

In the past another initiative to standardize the software development process was introduced called “OA” but this utterly failed because of lack of support from both management and staff. Before the merger of FINCORP, the ‘Method/1’ (Andersen, 1988) waterfall approach was used in Company 1 and another method called “SOMA” was used in Company 2. Although ‘Method/1’ was the would be company standard it was not widely accepted and with the failure of OA, each contracting party that developed software for FINCORP tried to introduce its own process and tools.

For this reason, when Inspiration was launched, staff in general was very skeptic indeed. A key difference in the implementation strategy of Inspiration compared to previous initiatives was that it refrained from “Theoretical guides like Method/1 or exercises with no links to reality such as ‘OA’” as said by of the interviewees. At the start of 2001 no standard development methodology was used, whereas at the