Chapter 12

Agile Maturity: 
The First Step to Information Technology Project Success

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ABSTRACT

Information technology (IT) projects are not adding value to organizational strategies. This is due to the high failure rates of these projects. Agile is perceived as a possible solution to this dilemma and preliminary evidence indicates that this is actually the case. To enhance the success rates of IT projects, agile principles need to be adopted and this can only be done through a process of maturity. The purpose of this chapter is to highlight the importance of agile in IT project success and to show how agile maturity can be achieved through the application of maturity models. Agile maturity models themselves are not the answer as organizations themselves should be agile mature. This is achieved through a new way of thinking and working. The conclusion is that there should be a new way of managing IT projects in order to achieve value.

INTRODUCTION

The ultimate goal of any information technology (IT) department or division is to provide a stable environment that enables organisations to perform their core function. In the case of financial institutions, the core business is to provide banking services without the interruption of these services. This is becoming more pertinent with the move from traditional banking services to online services such as Internet banking.

The problem is that IT services need to be upgraded and to replace older infrastructure and software. This can only be done through the interruption of services, which causes customers some level of inconvenience. To minimise this interruption, the notion of continuous delivery comes to the fore. Continu-
ous delivery can be defined as a software engineering approach where teams produce software in short cycles, ensuring that the software can reliably be released at any time. The aim of continuous delivery is to build, test and deploy software quicker and more frequently. This building, testing and deployment of software is achieved through IT projects that are aligned with the organisational strategies and that should provide value at the end of the day.

The process of achieving continuous delivery is a journey in which organisations have to shed the old skin of the waterfall method to deliver software and to grow a new skin of agile adoption. This ultimately leads to DevOps (development and operations) and continuous delivery.

The purpose of this chapter is to underline the importance of agile methods during IT project execution as well as the positive impact of mature agile principles on continuous successful delivery of IT initiatives.

Literature as well as various studies indicate that IT projects or initiatives are failing at an alarming rate and that organisations do not necessarily reap any benefits from these initiatives. Studies such as the Chaos Chronicles and the South African Prosperus reports indicate that a mere 30% - 40% of IT initiatives are successful. These studies also indicate that smaller initiatives are more likely to be more successful. The results highlight that initiatives that embrace agile principles are more successful. The conclusion is that small initiatives plus agile principles equals the successful delivery of IT initiatives.

The problem that the majority of large organisations face is that IT initiatives are not perceived as small initiatives and therefore the logical assumption is that the application of agile principles will not necessarily solve the problem at hand. The challenge is therefore to provide organisations with agile principles that are scalable and applicable to any type and size of IT initiative. The only way to achieve this is to improve the maturity of agile practices within the organisation.

The objectives of the chapter are as follows:

1. The first part of the chapter focuses on success rates of IT projects and what the success factors are that have a positive and negative impact on success. The rationale for this section is that organisational leaders first need to understand the problem at hand before they can determine or think of a possible solution.
2. The second part of the chapter focuses on agile and principles of agile. The main focus is to understand why organisational leaders should support the introduction of agile as a possible solution. The obvious reason is that there is evidence that success rates are improved when agile is employed, but are there other reasons why organisations should employ agile, such as improved worker morale or better quality software.
3. The third part of the chapter deals with what is meant by agile maturity. The objective is to identify the different maturity models and to determine how organisations should embark on a maturity process. A second objective is to determine whether agile maturity implies scalability and also improved success rates.
4. The fourth part of the chapter focuses on the maturity of the organisation itself. Organisations must be mature to embrace the notion of agile. This section deals with what organisational enablers should be in place to ensure the successful deployment of agile principles. The rationale is that although organisations might be mature in agile, the focus is still very much process-driven. Agile maturity itself does not mean anything if the organisation is agile tone-deaf.