

Chapter 14

A Successful Case of Software Process Improvement Programme Implementation

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ABSTRACT

This chapter describes the experience of a Spanish software company founded in 2000, which bet strongly on quality as the way to progress towards maturity. The authors discuss the continuous evolution the company experienced through the implementation of quality standards. The actions related to the deployment and improvement of both the management and production processes are detailed. The most significant results and lessons learned during the improvement path are presented. The experience gained from continuous improvement has facilitated the deployment of a knowledge reuse strategy that enables an effort and cost reduction when implementing a new quality standard.

1. INTRODUCTION

“Many are those who want good luck, but few are willing to pursue it. Creating good luck consists in preparing conditions for opportunity. But opportunity has nothing to do with luck or chance: it is always there. Good luck depends on the creation

of the necessary conditions, and the creation of these circumstances depends only on oneself.”

We have used this excerpt from the book “Good Luck” (Rovira & Trías De Bes, 2004) as a reference to illustrate the behaviour of the company whose case is presented in this chapter. The company began its journey in 2000 and today, in spite of the current economic situation, it is an established and recognized company in

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its sector located in the Balearic Islands, Spain. However, it has not reached this stage by chance because it has been lucky, but rather because the company has been able to create the appropriate circumstances. Many factors have influenced the success of the company.

The organization is an innovative company that has committed to quality and excellence from its inception. Along the way, it has had to adapt to the constant technological changes in the ICT sector. These changes have greatly influenced people's habits, forcing companies to develop applications for environments and devices that did not exist a few years ago. Therefore, continuous adaptation to cover both new user needs and development issues and also to offer new services to stay in the market has been required throughout the history of the company. The changes resulting from this situation have taken place throughout the entire structure of the organization, both at top management level, by developing new strategies and in the culture of employees. Making the adjustments to new needs, considering the expectations of all employees, is never easy because of resistance to change.

The chapter is structured as follows: section 2 presents the company background. Section 3 describes the company's evolution, from the beginnings to the current situation. Section 4 details the software process improvement programme the company followed. Section 5 shows the evolution of the processes implemented. Section 6 describes how the knowledge gained through the implementation of best practices recommended by quality standards has been managed and reused. The final section concludes this chapter.

2. COMPANY BACKGROUND

The company began its activity in 2000 with a staff of six. Today, it has 120 employees dedicated to the development of Internet-based marketing and management applications and the implementation of the infrastructure which supports them. The

company provides tailored, unique and global solutions that include consultancy, training and the technology necessary for the evolution of customers' businesses and needs. It has four main business lines:

- **Software Factory and Applications:** Its mission is to provide customers with software development projects based on the latest technologies.
- **Systems, Communications and Security:** Its mission is to provide customers with systems, communications and security projects based on technologies from leading manufacturers.
- **Incoming & Select4U:** Its mission is to provide qualified personnel in key development, systems, communications and security technologies to work directly in the clients' office and under their direction.
- **IT Infrastructure Management:** Its mission is to provide customers with IT infrastructure maintenance services to ensure maximum availability and performance of their systems.

Since the creation of the company, innovation and continuous improvement are the bases of a culture assumed by all those working in the organization, not only to grow as a company, but with the clear objective to share the improvements with customers to help them to innovate in their business through knowledge and technology. Quality applied to all the areas will allow a company to achieve its business objectives, meeting the needs and expectations of its customers.

3. COMPANY EVOLUTION: THE ROAD TOWARDS MATURITY

This section summarizes the evolution that has taken place in the company after incorporating the good practices of recognized models and standards. The commitment to implement several

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