Chapter VIII
Web Application Process–Oriented Design for Internal Users

INTRODUCTION

As more times underlined within this book, when the application is turned to the inside, users of the company that do not need information of contour in comparison to those necessary for the carrying out the task of the process, the alone design of the process is enough to come up to the final application. It is necessary, however, to submit the initial design to a transformation that allows making it suitable to the requests of whom will have called then to implement the application. In this process of passage from a high-level design (what is that aim to define the business processes) up to the final implementation of the application, of course, both the business experts and the IT experts are involved, each of them needing different levels of detail. The business experts, understanding the problems present in the company, try to delineate its underlying processes in a clear and unambiguous way; to do, the use of the BPMN™ notation (OMG, 2006) is a great help. Among the receivers of the documents produced by the business analyst there are the IT experts that will have to realize the final application on the base of such documentation.

The business experts, for the role they have, do not worry about the specific functional requirements of the final application, and they do not think in a structured
way about the final application. The schema of the realized process, as it is right, does not keep in mind the particular implications that it will have on the application. The only analysis of the process realized by the analyst of business surely is not enough to aim the realization of the final application to support the process, but it subsequently goes refined up to come to a level of detail suitable to such purpose.

The identification of the functional requirements of the application and the basic application modules are, instead, the most important competences of IT designers. These elements are determined, carefully examining the model provided by the business experts having as a goal to specify the functional characteristics of the application to make them available to the end users and identify the data classes that must have managed from the information system, necessary to the application for its operation.

The business experts and the IT experts work, therefore, with different goals, and it usually happens that the model of process realized by the business expert has been very different from those required to satisfy the needs of the IT designers. The business experts, in fact, put also in evidence tasks that, practically, they do not have a confirmation in the application such as, for instance, tasks purely manuals, or they tend to represent different elementary operations using just one task, or it still does not exactly provide for the input and the output information of every task belonging to the process.

In this perspective, the open issues, identified during the definition of the methodological guidelines proposed in Chapter VI really do not exist because the design of the user experience is practically nonexistent.

It is particularly important, however, to provide some methodological guidelines that give the possibility to pass, in a structured way, from the high-level design realized by the business experts to a more detailed design that, as input, can be used for the implementation.

The methodology of refinement proposed is composed of two steps, each of which is set at a different level of abstraction (Figure 1). In the first step, more methodological than technological, the BPMN™ design is subject to a refinement process up to come to the definition of the workflow BPMN™ or rather of a drawing of a realized process using the same notation BPMN™, but that it represents all of the necessary details to the following phase of implementation.

The second step focuses, instead, on an implementation level and, taking as input the workflow BPMN™ realized in the first step, it allows determining the applicative modules that will constitute the final application.

At this point, according to the actual tendencies of the technology, we have preferred to use the portlet technology as reference technology to pass to the real implementation. Really, the methodological guidelines provided in the step 2,
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