



## **Chapter 8**

# **Evaluating Organizational Patterns for Supporting Business Knowledge Management**

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*One approach to managing business knowledge is to generalize problems and solutions within the context they appear, to enable reuse. We have applied a pattern framework adopted from software development, in a project for managing business knowledge. The pattern development process has included the evaluation of the suitability of “candidate” patterns. We present criteria for considering and measuring suitability, since not all knowledge is suitable for reuse.*

## **INTRODUCTION**

In this chapter, we discuss reuse of business knowledge using a patterns-based framework that draws on the Enterprise Knowledge Development (EKD) methodology, Bubenko et al. (1997) and Loucopoulos et al. (1997), and on the application of EKD in the case of deregulation in the Electricity Supply Industry (ESI) sector. This work is part of the ELEKTRA project aiming to tailor EKD to man-

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aging change in ESI companies and to discover patterns of change management for reuse. The paper is based on two project reports and follows on from Prekas et. al (1999) and Brash, Stirna (1999).

Our work is based on the assumption that not *all* knowledge should be documented and reused. How do we decide then what is a suitable? Suitability has to do with both the usage and knowledge parts of a description of the knowledge.

## BACKGROUND TO PATTERNS

Recently, there has been increasing interest in the use of patterns in software development focussing on these ideas:

1. A pattern relates a *problem* to a *solution* to this problem.
2. In pattern identification,
  - not so much to recognize the commonalties among elements but to identify the distinguishing criteria and
  - find the unique characteristics of a problem that distinguishes it from other similar problems.

For the pattern to be effectively reusable, it should satisfy certain criteria, by being a self-contained logical system that is capable of stating that:

1. a problem exists within a stated range of contexts, and
2. in the given context, a solution resolves the given problem.

Therefore, a pattern should possess the following minimum set of properties. It defines the:

- *problem* and the *forces* that influence it that must be resolved. Forces refer to any goals and constraints that characterize the problem.
- concrete *solution* that represents a resolution of all the forces characterizing the problem.
- *context* that refers to a recurring set of situations in which the pattern applies.

## THE ELEKTRA PROJECT

Due to EU directives toward deregulation as well as market, political and social pressures, electricity companies must react to and manage change. The experiences of two electricity companies suggested that this carried out in an unstructured manner, and is situation-dependent.

We address one of the project objectives, “to discover generalized patterns of change management for reusing them in similar settings in other electricity companies”. One task, (the focus of this chapter) in achieving this objective is that the patterns be evaluated to ensure their relevance and completeness for solving specific ESI problems.

ELEKTRA patterns describes regular, repeatable characteristics; formal organizational and informal or contractual relationships, responsibilities, work practices etc.

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