Chapter XV

The BORM Method: A Third Generation Object-Oriented Methodology

Roger Knott  
Loughborough University, UK

Vojtech Merunka  
University of Agriculture in Prague, Czech Republic

Jiri Polak  
Deloitte & Touche, Prague, Czech Republic

Abstract

BORM (Business Object Relationship Modeling) is an object-oriented system development methodology, which has proven to be very effective in the development of business systems. The effectiveness gained is largely due to a unified and simple method for presenting all aspects of the relevant model. The BORM methodology makes extensive use of business process modeling. This chapter outlines BORM, its tools and methods, and discusses differences from other similar development methodologies.
Introduction

Business Object Relation Modeling (BORM) (Knott, Merunka, & Polak, 2003a, 2003b, 2000; Polak, Merunka, & Carda, 2003) has been in continuous development since 1993 when it was intended as a vehicle to provide seamless support for building object-oriented software systems based on pure object-oriented languages such as Smalltalk and object databases. It has now evolved into a robust system development methodology that has been used successfully to develop a wide range of systems of diverse sizes—in particular:

- to identify business processes in Prague city hospitals as a prerequisite for further cost analysis;
- to model necessary properties of the general agricultural commodities wholesale sector in the Czech Republic;
- for business process reengineering in the electricity supply industry;
- for telecommunication network management in the Czech Republic.

Such systems range through all sizes of software development as can be seen in Table 1.

BORM has proven to be effective and beneficial in the process of describing and subsequently understanding how real business systems evolve. Such knowledge is the key for the success of any business and is especially crucial for those employees who are responsible for business development.

Do We Need Another Object-Oriented Design Methodology?

The first and we think the major problem with existing object-oriented methodologies arises in the initial stages of the system development cycle (Bahrami, 1999; Eriksson & Penker, 2000; Goldberg & Rubin, 1995; Cotterrell & Hughes, 1995; Cantor, 1998; Royce, 1998; Rumbaugh, Blaha, Premerlani, Eddy, & Lorensen, 1991). The initial stage of any object-oriented design methodologies should be concerned with two tasks. The first is the specification