

Part I

Smarter Business with Case-Based Decision Support

This first part of the book, which consists of the chapter 1 through 3, shows how captured experience stored as a set of cases enables smarter business in different areas such as help-desk support, technical diagnosis and maintenance, intelligent sales support, and software development.

Chapter 1 “Making Smarter Business Decisions in Less Time” gives a brief introduction to Case-Based Reasoning and positions it with respect to related technologies, such as databases, statistics, and expert systems.

Chapter 2 “Case-Based Reasoning Approaches” introduces and compares three different CBR approaches that are implemented in current commercial CBR software: the textual CBR approach, the conversational CBR approach, and the structural CBR approach approach.

Chapter 3 “Selected Applications of the Structural Case-Based Reasoning Approach” describes three applications developed using the INRECA methodology: The case-based help-desk support system HOMER, the Analog Devices sales support application for operational amplifiers, the case-based maintenance application for the high-speed train TGV, and the Fraunhofer IESE experience factory.