

1. Record Nr.	UNISA996465959303316
Titolo	Empirical Methods and Studies in Software Engineering [[electronic resource]] : Experiences from ESERNET // edited by Reidar Conradi, Alf Inge Wang
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2003
ISBN	3-540-45143-9
Edizione	[1st ed. 2003.]
Descrizione fisica	1 online resource (VIII, 284 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2765
Disciplina	005.1
Soggetti	Software engineering Education—Data processing Computers and civilization Management information systems Computer science Software Engineering Computers and Education Computers and Society Management of Computing and Information Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Method Chapters -- Empirical Research Methods in Software Engineering -- Challenges and Recommendations When Increasing the Realism of Controlled Software Engineering Experiments -- Empirical Studies in ESERNET -- Software Engineering Knowledge Repositories -- Using Empirical Studies during Software Courses -- Practical Experiences in the Design and Conduct of Surveys in Empirical Software Engineering -- Experience Chapters -- Post Mortem – An Assessment of Two Approaches -- Evaluating Checklist-Based and Use-Case-Driven Reading Techniques as Applied to Software Analysis and Design UML Artifacts -- Effectiveness of Code Reading and Functional Testing with Event-Driven Object-Oriented Software -- Experimentation with Usage-Based Reading -- Functional Testing, Structural Testing and

Code Reading: What Fault Type Do They Each Detect? -- COTS Products
Characterization: Proposal and Empirical Assessment -- Reuse Based
Software Factory -- Appendix and Author Index -- Appendix –
Glossary.

Sommario/riassunto

Nowadays, societies crucially depend on high-quality software for a large part of their functionalities and activities. Therefore, software professionals, researchers, managers, and practitioners alike have to competently decide what software technologies and products to choose for which purpose. For various reasons, systematic empirical studies employing strictly scientific methods are hardly practiced in software engineering. Thus there is an unquestioned need for developing improved and better-qualified empirical methods, for their application in practice and for dissemination of the results. This book describes different kinds of empirical studies and methods for performing such studies, e.g., for planning, performing, analyzing, and reporting such studies. Actual studies are presented in detail in various chapters dealing with inspections, testing, object-oriented techniques, and component-based software engineering.
