

QSM, Vol. 2: First-Order Measurement

"The wealth of wisdom in this volume speaks directly to individuals who want to improve their own powers of observation—a prerequisite to successfully applying knowledge to improve software quality. . . . a basic primer on how to recognize data, put it in the context of our own prejudices, make sense out of it, and then react to the data sensibly and correctly. Today, and for a long time to come, reading *First-Order Measurement* is a must for all sentient software line and project managers!"

—Shel Siegel, *Software Quality World*

"... brimming with simple techniques and examples of their application."

—Roger D.H. Warburton, *Computing Reviews*

"... delightful . . . peppered with the kind of quotations that software engineers love to tape on their managers' doors in the middle of the night, in hopes of inspiring change for the better. . . . enlightening, practical, humorous, and enormously inspiring. . . ."

—Ed Yourdon, *American Programmer*

"What struck me as amazing as I read *First-Order Measurement* was not that so many software projects fail, but that so many manage to succeed. This book should be required reading for anyone who cares about project success."

—Naomi Karten, President, Karten Associates

"*Quality Software Management* is a software starship that has gone where no-one has gone before; and if there is further to go, Weinberg is certainly not stopping us from going."

—Nicholas Zvegintzov, *Software Management News*

About the Author



Internationally acclaimed author, consultant, and lecturer Gerald M. Weinberg is the winner of the J.-D. Warnier Prize for excellence in Information Sciences, given each year to an outstanding contributor to the theory and practice of Information Science. He is principal of Weinberg and Weinberg, based in Lincoln, Nebraska.

Partial Contents

I Intake

- Why Observation Is Important
- Selecting What to Observe
- Visualizing the Product
- Visualizing the Process

II Meaning

- A Case Study of Interpretation
- Pitfalls When Making Meaning from Observations
- Direct Observation of Quality
- Measuring Cost and Value

III Significance

- Measuring Emotional Significance
- Measuring Failures Before They Happen
- Precision Listening
- Meta-Measurement

IV Response

- Translating Observation into Action
- Observations from the Empathic Position
- Dealing with Swarms of Failure

V Zeroth-Order Measurement

- Projects Composed of Measurable Tasks
- Communicating About Plans and Progress
- Reviews As Measurement Tools
- Requirements As the Foundation of Measurement
- The Wayfinder

Appendices

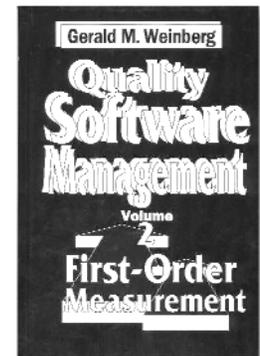
- A: Diagram of Effects
- B: Satir Interaction Model
- C: Software Engineering Cultural Patterns
- D: Control Models
- E: Three Observer Positions

Notes

- Listing of Laws, Rules, and Principles
- Author Index
- Subject Index

Quality Software Management Vol. 2: First-Order Measurement

by Gerald M. Weinberg



ISBN: 978-0-932633-24-8
©1993 360 pages hardcover
\$49.95 (includes \$6 UPS in US)

Use Observation Techniques and Subtle Measurements to Improve Project Management

To consistently produce high-quality software in today's competitive marketplace, managers must have reliable information, obtained through careful observation and measurement. *First-Order Measurement* is a comprehensive guide to the basic measurement activities every organization must perform to manage the software development process.

Many management failures are caused by poor observation. *First-Order Measurement* tells how to observe properly with the aid of a four-step model to break the complex observation process into a series of smaller, simpler, steps. The book also defines the different levels of measurement, and describes the

minimum set of activities in order to start a measurement program.

Numerous examples and diagrams illustrate the author's points, and exercises challenge readers to test their understanding of the concepts. Topics include: the direct observation of quality • visualization of product and process • comparison of cost and value • measurement of failures before they happen • and requirements as the basis of measurement.

This stand-alone text is the second in a series of four volumes in which acclaimed author Gerald Weinberg explores the most difficult aspects of building high-quality software.

Read more about this book at
www.dorsethouse.com/books/qsm2.html