Discover how to optimize business strategies from both qualitative and quantitative points of view.

Operational Risk: Modeling Analytics is organized around the principle that the analysis of operational risk consists, in part, of the collection of data and the building of mathematical models to describe risk. This book is designed to provide risk analysts with a framework of the mathematical models and methods used in the measurement and modeling of operational risk in both the banking and insurance sectors.

Beginning with a foundation for operational risk modeling and a focus on the modeling process, the book flows logically to discussion of probabilistic tools for operational risk modeling and statistical methods for calibrating models of operational risk. Exercises are included in chapters involving numerical computations for students' practice and reinforcement of concepts.

Written by Harry Panjer, one of the foremost authorities in the world on risk modeling and its effects in business management, this is the first comprehensive book dedicated to the quantitative assessment of operational risk using the tools of probability, statistics, and actuarial science.

In addition to providing great detail of the many probabilistic and statistical methods used in operational risk, this book features:

* Ample exercises to further elucidate the concepts in the text
* Definitive coverage of distribution functions and related concepts
* Models for the size of losses
* Models for frequency of loss
* Aggregate loss modeling
* Extreme value modeling
* Dependency modeling using copulas
* Statistical methods in model selection and calibration

Assuming no previous expertise in either operational risk terminology or in mathematical statistics, the text is designed for beginning graduate-level courses on risk and operational management or enterprise risk management. This book is also useful as a reference for practitioners in both enterprise risk management and risk and operational management.

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**ABOUT THE AUTHOR**

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**FEATURES**

* The emphasis in the book will be to provide a much deeper treatment of the entire modeling process, a process that has been used successfully in the insurance field.

* The book will appeal to a broad audience of analysts in both the insurance and banking fields, among others.

* There are ample exercises to further elucidate the concepts in the text.