

Risk Analysis Training DVD

TRAINING DVDs COVERING:

Monte Carlo Simulation with Risk Simulator

- Applied simulation statistics
- Choosing the relevant distributions
- Correlated and truncated simulation
- Interpreting simulation results
- Multidimensional simulation and profiling

Forecasting with Risk Simulator

- Box-Jenkins ARIMA modeling
- Multivariate regression analysis
- Stochastic process forecasting
- Time-series forecasting and nonlinear extrapolation

Optimization with Risk Simulator

- Continuous optimization
- Decision analysis tools
- Integer optimization

Real Options Analysis with Real Options Super Lattice Solver

- Basics of real options analysis
- Integrated risk analysis process and volatility estimates
- Solving different real options using SLS including abandonment, American, barrier, Bermudan, chooser complex custom, contraction, European, expansion, sequential compound, switching, multi-asset and multi-phased complex sequential compound and many others

Analytical Tools

- Distributional fitting
- Hypothesis testing
- Nonparametric bootstrap simulation
- Sensitivity analysis, tornado charts and spider charts

RO Real Options
Valuation

TRAINING DVDs

The training DVD comprises 10 DVDs and cover the following main topical areas:

- **Monte Carlo Simulation with Risk Simulator**
- **Forecasting with Risk Simulator**
- **Optimization with Risk Simulator**
- **Real Options Analysis with Real Options Super Lattice Solver**
- **Analytical Tools**

As part of the DVD Training set, you will receive 10 DVDs, a workbook with the slides and examples covered in the DVDs, and the following two books: “*Modeling Risk: Applying Monte Carlo Simulation, Real Options Analysis, Forecasting, and Optimization, 2nd Edition*,” by Dr. Johnathan Mun (Wiley Finance, 2006), and “*Real Options Analysis: Tools and Techniques, 2nd Edition*,” by Dr. Johnathan Mun (Wiley Finance 2005), and the relevant training models CD used in the lessons.

The lessons are developed and taught by Dr. Johnathan Mun, the creator of both the Risk Simulator and Real Options Super Lattice software, professor of finance and economics, author of many books on risk and real options, and CEO of Real Options Analysis, Inc. This is particularly important in terms of consistency and expertise as you learn the course material from the same person who developed the software, wrote the books and consults for major corporations.

In each DVD, there is an introduction to the topics to be covered, as well as learning outcomes of each module. Each DVD is divided up into various modules or chapters, and are summarized below:

DVD 1: Introduction to Risk Analysis

- Chapter 1: Introduction to the Training DVD
- Chapter 2: How are business decisions made?
- Chapter 3: What is risk and why should risk be considered?
- Chapter 4: Overview of Risk Analysis software applications

DVD 2: Monte Carlo Simulation with Risk Simulator

- Chapter 1: Overview of the Risk Simulator software
- Chapter 2: Profiling, assumptions, forecasts and running simulations
- Chapter 3: Interpreting the forecast statistics
- Chapter 4: Simulation run preferences and seed values
- Chapter 5: Running reports, saving and extracting simulation data

DVD 3: Advanced Simulation Techniques

- Chapter 1: Correlating and truncating distributions
- Chapter 2: Alternate parameters
- Chapter 3: Multidimensional simulations
- Chapter 4: Distributional fitting and choosing distributions
- Chapter 5: Due diligence and pitfalls in simulation

DVD 4: Simulation and Analytical Tools

- Chapter 1: Static tornado and spider charts
- Chapter 2: Dynamic sensitivity analysis
- Chapter 3: Hypothesis test on different distributions
- Chapter 4: Nonparametric bootstrap simulation
- Chapter 5: Precision control

DVD 5: Forecasting

- Chapter 1: Overview of forecasting techniques and data types
- Chapter 2: Forecasting without data
- Chapter 3: Time-series analysis forecasting
- Chapter 4: Nonlinear extrapolation
- Chapter 5: Multivariate regression analysis
- Chapter 6: Stochastic processes
- Chapter 7: Box-Jenkins ARIMA

DVD 6-7: Real Options Analysis: Theory and Background

- Chapter 1: Introduction to real options: what, where, who, when, how, and why
- Chapter 2: Sample applied business cases
- Chapter 3: Overview of different options valuation techniques: closed-form models, partial differential equations, and binomial lattices
- Chapter 4: Risk-neutral probability technique
- Chapter 5: Solving a basic European and American call option
- Chapter 6: Using Excel to solve basic American options
- Chapter 7: Solving basic abandonment, expansion, contraction, and mutually exclusive chooser options

DVD 8-9: Real Options Analysis: Application with SLS Software

- Chapter 1: Overview of the different SLS modules
- Chapter 2: Estimating Volatility (GARCH, Log PV Asset, Log Cash Flow Returns, management assumptions)
- Chapter 3: Solving options with changing inputs and customized exotic options
- Chapter 4: MSLS: Multiple sequential compound options
- Chapter 5: MNLS: Solving mean-reverting, jump-diffusion, and dual-asset rainbow options using trinomial, quadrinomial, and pentanomial lattices
- Chapter 6: Framing real options—structuring the problem
- Chapter 7: The next steps...

DVD 10: Optimization with Risk Simulator

- Chapter 1: Introduction to optimization problems
- Chapter 2: Continuous optimization
- Chapter 3: Integer optimization

EXPERTISE

Dr. Johnathan Mun is the software’s creator and teaches the **Risk Analysis, Real Options for Analysts, the Real Options for Managers**, and other related courses. He has consulted for many Fortune 500 firms on risk analysis, valuation, and real options, and has written many books on the topic, including *Real Options Analysis: Tools and Techniques, 2nd Edition* (Wiley Finance, 2005); *Real Options Analysis Course: Business Cases* (Wiley Finance, 2003); *Applied Risk Analysis: Moving Beyond Uncertainty in Business* (Wiley, 2003); *Valuing Employee Stock Options Under 2004 FAS 123* (Wiley, 2004); *Modeling Risk: Applying Monte Carlo Simulation, Real Options Analysis, Forecasting and Optimization* (Wiley, 2006); and others. He is the founder and CEO of Real Options Valuation, Inc., and is responsible for the development of analytical software products, consulting, and training services. He was formerly the Vice President of Analytics at Decisioneering, Inc., and was a Consulting Manager in KPMG’s Global Financial Strategies practice. Before KPMG, he was the head of financial forecasting for Viking, Inc. (an FDX/FedEx Company). Dr. Mun is also a full professor at the U.S. Naval Postgraduate School, a professor at the University of Applied Sciences and Swiss School of Management (Zurich and Frankfurt), and has held other adjunct professorships at various universities. He has a Ph.D. in finance and economics, an MBA in business administration, an MS in management science, and a BS in applied sciences. He is certified in Financial Risk Management (FRM), Certified in Financial Consulting (CFC), and Certified in Risk Analysis (CRA). He currently resides in California.

