

PI ETA CONSULTING COMPANY

Operational Risk Management

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OUTLINE FOR OPERATIONAL RISK MANAGEMENT PROGRAM, A 2-DAY PROGRAM

➤ **Introduction**

- What are Risks?
- Examples of Risks
- Types of Risks
 - Market Risk
 - Credit Risk
 - Operational Risk
- True Purpose of Firm-wide Risk Management
 - Not Just For Regulatory Purposes
 - Not Just to Meet Accounting Standards
 - Not Just for Public Relations Purposes
 - Not Just Because It Is the “in” Thing
 - True Purpose

➤ **Operational Risk**

- Definition of Operational Risk
- Examples of Operational Risk
 - Barings Futures Singapore Fiasco
- Operational Risk Classification Scheme
- Some Operational Risk Mitigating Strategies
 - Training
 - Systems
 - Insurance
 - Outsourcing
- Sound Practices for the Management and Supervision of Operational Risk
 - Developing an Appropriate Risk Management Environment
 - Risk Management: Identification, Mitigation, Measurement, Monitoring, and Control

➤ **Practical Operational Risk Management**

- Real Challenges in Implementing Operational Risk Management and Overcoming the Challenges
- Combined Top-Down and Bottoms-Up Approach
- Flow-Charting Entire Organizational Structure
- Flow-Charting Individual Business Units and Linking These Business Units to the Organizational Structure
- Flow-Charting All Business Processes Within Each of the Business Units
- Identification of Risk Champions Within Each Business Unit
- Defining the Role of Risk Champions
- Operational Risk Management Process
 - Identification of Risks Within Business Processes
 - Mitigation of Risks Within Business Processes
 - Control of Risks
 - Capturing Risk Occurrences Within Business Processes
 - Measurement and Reporting of Risks
 - Monitoring of Risks
 - Periodic Review

- **Using the PERMIT[®]¹ Risk Scorecard**
 - Enterprise Operational Risk Management
 - Formalization of Business Processes
 - Surfacing Risk Hot-Spots
 - Risk Reporting at the Enterprise Level
 - Analysis of Risk Behaviors

- **Operational Risk Quantification and Measurement**
 - Frequency Distribution
 - Severity Distribution
 - Convolution Methods to Combine the Above
 - Computing Operational Value-at-Risk (VaR)

- **Basel II Capital Accord**
 - Managing Operational Risk
 - Calculating Regulatory Capital
 - Basic Indicator Approach
 - Standardized Approach
 - Advanced Measure Approach

For more information, please contact PI ETA Engagement Resource (PEER) Group at
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¹ PERMIT[®] which is an acronym for PI ETA Risk Management Information Technology, is a registered trademark of PI ETA Consulting Company.

PROGRAM FACILITATOR

Dr. Jeffrey C. K. Lim

Ph.D., C.Sci., C.Math., FIMA, FRM, PRM, B.Fel.

Dr. Jeffrey C. K. Lim, certified Financial Risk Manager (FRM²) and certified Professional Risk Manager (PRM³), is currently the Managing Director of PI ETA Consulting Company, a Treasury & Financial Risk Management Consulting Company.

A Chartered Scientist (C.Sci.⁴), a Chartered Mathematician (C.Math.⁵) and an elected Fellow of the Institute of Mathematics and Its Applications (IMA), U.K. (FIMA), Jeff earned his Ph.D. in Stochastic Financial Modeling from the University of Cambridge in England. Jeff's research interest at Cambridge was in the area of Arbitrage Opportunities occurring in the Mispricing of Financial Options, and his original research culminated in the publication of his doctoral dissertation entitled: "Multi-period Mean-Variance Option Portfolio Strategies".

Jeff was an authorized Securities & Financial Derivatives Representative in London, having been certified by The Securities and Futures Authority (SFA) in England, where he started his career as a Derivatives Analyst with Nomura International in London, England. He subsequently joined NatWest Markets from London, England to become its Head of Currency Structured Products for South and South-East Asia. Jeff then moved to American Express Bank to become its Director of Structured Products, prior to assuming his current position.

Jeff has also contributed to the development and enhancement of talent and infrastructure for Singapore's financial center as a guest Professor at the National University of Singapore's Center for Financial Engineering, where he was responsible for the curriculum of its Master of Science degree program's core modules in Financial Derivatives and Treasury Management. In addition, Jeff has also been invited by the Nanyang Technological University and the Singapore Management University to share his expertise in a similar capacity. In recognition of Jeff's expertise and experience in the field of Treasury and Financial Risk Management, the University of New South Wales Asia appointed Jeff to be its first Adjunct Professor with the university's Division of Business and Humanities.

At PI ETA Consulting Company, Jeff was Principal Inventor in two of the Patents that the company currently holds – one in Treasury & Financial Risk Management Systems, and the other in Knowledge Management Systems.

Professionally, Jeff is a Fellow of both The Global Association of Risk Professionals (GARP), U.S.A. and The Professional Risk Managers International Association (PRMIA), U.S.A. He is also a Fellow of the Cambridge Philosophical Society, U.K. and a Life-time Member of The Cambridge Society, U.K. Jeff is also honoured to be a Fellow of The Cambridge Commonwealth Society, U.K., having been previously awarded the Cambridge Commonwealth Trust and the Shell Group of Companies Doctoral Research Scholarship.

² The *Financial Risk Manager* (FRM) designation is awarded by The Global Association of Risk Professionals (GARP), U.S.A.

³ The *Professional Risk Manager* (PRM) designation is awarded by The Professional Risk Managers International Association (PRMIA), U.S.A.

⁴ The *Chartered Scientist* (C.Sci.) designation is awarded by The Science Council, U.K.

⁵ The *Chartered Mathematician* (C.Math.) designation is awarded by The Institute of Mathematics and Its Applications (IMA), U.K.

As a special recognition of Jeff's professional achievements, on 9 April 1999, Barons Who's Who conferred Jeff with the Barons Fellowship status, making him a Barons Fellow (B.Fel.). This award by their Charter, is limited to only the top 10% of those selected for publication in Barons Who's Who International.