Contents

Preface xi
Acknowledgments xv
Introduction xvii

CHAPTER 1  Defining Enterprise Risk Management  1
   Risks  4
   Risk Drivers  5
   Controls  7
   Inherent and Residual Risk  8
   Events  9
   Outcomes  9
   Management  10
   Enterprise Risk Management  11

CHAPTER 2  Strategic Objectives  13
   Financial Objectives  14
      Statement of Financial Position  14
      Statement of Financial Performance  15
   Market Objectives  15
      Customers  16
      Suppliers  16
      Competitors  17
      Partners  17
      Regulators  17
   Operational Objectives  18
      Corporate Governance  18
      Human Resources  18
      Management Team  19
      Processes  19
      Systems  20
   Note on the Interdependence of Objectives  20

CHAPTER 3  At-Risk Concept  22
   A Very Simple Distribution  23
A Slightly More Interesting Distribution 24
Location of the Distribution 30
Basic Statistical Measures 32
At-Risk Measure 33

CHAPTER 4  SOAR (the Methodology): Strategic Objectives at Risk 38
SOAR Methodology Components 38
  Strategic Objectives 39
  Execution Resources (The Enterprise Risk Management Office) 44
  SOAR Process 45

CHAPTER 5  SOAR (the Process) 46

CHAPTER 6  Set Metrics for Defined Strategic Objectives 48
Why Measure? 49
Classes of Metrics 50
  Metrics for Strategic Objectives 51
  Metrics for Risk Drivers 52
  Metrics for Controls 53
Setting Metrics 54
  Cause and Effect 55
  Cause-and-Effect Diagrams 59
  Causal Loop Diagrams 59
  Process Flow Charts 60
  Regression Analysis 62
  Sensitivity Analysis 62
  Scenario Analysis 63
Examples of Metrics 65
Setting Target Values for Metrics 66

CHAPTER 7  Observe Metric Values 72
Observation Methods 72
  Gathering Available Data 72
  Calculating Data 75
  Self-Assessment 75
Recording Observations of Metrics 76
Frequency of Observation 77
Triggers 78

CHAPTER 8  Analyze Movements in Metrics 80
Conducting the Analysis 80
  Validating the Data 84
  Validating Metric Choice 89
Reporting Findings 90

CHAPTER 9  React to the Metric Analysis 94
Record the Rationale for Your Reaction 97
CHAPTER 10

SOAR Dashboard
Today's Dashboard
SOAR Black Box Recorder

CHAPTER 11

Existing Enterprise Risk Management Approaches
Six Sigma
Balanced Scorecard
COSO

CHAPTER 12

Regulation and Compliance
Sarbanes-Oxley Act
Basel II
AS/NZS 4360:2004:Risk Management
Organizational Risk Management Policy

CHAPTER 13

Application of the Concept of “Shifting the Distribution”
GE
Bank Treasury Operations
Humans in Daily Life
Airlines
One Other Example

CHAPTER 14

Implementing the SOAR Methodology
Resourcing the Enterprise Risk Management Office
Enterprise Risk Management Officers
Enabling Technology
Applying the SOAR Process

CHAPTER 15

SOAR in Action Example
Step 1. Set (Metrics)
Cause and Effect (and Why, Why, Why?)
Cause-and-Effect Diagrams
Causal Loop Diagrams
Process Flowcharts
Regression Analysis
Sensitivity Analysis
Scenario Analysis
Step 2. Observe (End-of-Year Metric Values)
Step 3. Analyze (Movements in Metric Values)
Step 4. React (to the End-of-Year Analysis)
Step 1. Set
Step 2. Observe
Contents

Step 3. Analyze 159
Step 4. React 161

Conclusion 163
Appendix: SOAR Methodology FAQ 165
Resources 171
Index 173