

# CFE – Strategic Decision Making Exam

Spring 2019/Fall 2019

## **Important Exam Information:**

<u>Exam Registration</u> Candidates may register online or with an application.

Order Study Notes Study notes are part of the required syllabus and are not available

electronically but may be purchased through the online store.

Introductory Study Note The Introductory Study Note has a complete listing of all study

notes as well as errata and other important information.

Case Study The case study will be provided with the examination.

Candidates will not be allowed to bring their copy of the case

study into the examination room.

<u>Past Exams</u> Past Exams from 2000 - present are available on the SOA website.

Updates Candidates should be sure to check the Updates page on the exam

home page periodically for additional corrections or notices.

## 1. Topic: Introduction to Strategic Management

## **Learning Objectives**

The candidate will understand and apply strategic management concepts and frameworks to corporate financial and ERM business problems.

#### **Learning Outcomes**

The Candidate will be able to:

- a) Evaluate and apply strategic management concepts, recognizing factors that affect development and implementation of strategies:
  - i. Analyze the firm's external environment and the internal organization
  - ii. Describe and apply models such as Porter's five forces
  - iii. Define types of business-level strategies and recommend an appropriate business-level strategy for a given situation
  - iv. Explain the impact of competitive dynamics on strategic management
- b) Evaluate commonly used business growth strategies and their application under different economic, risk and business environments:
  - i. Critique and evaluate internal/organic and external/inorganic growth strategies
  - ii. Assess and recommend growth strategies under different business situations and market opportunities including innovation and market disruption

- Organizational Behavior, Hitt, Michael, Miller, C. Chet, and Colella, Adrienne, 4<sup>th</sup> Edition, 2015
  [Candidates may also use 5<sup>th</sup> Edition]
  - o Ch. 13: Organizational Structure and Culture
- Strategic Management: Competitiveness and Globalization, Concepts, Hitt, Michael, Ireland, Duane, and Hoskisson, Robert, 12<sup>th</sup> Edition, 2017
  - o Ch. 1: Strategic Management and Strategic Competitiveness
  - Ch. 2: External Environment: Opportunities, Threats, Industry Competition, and Competitor Analysis
  - Ch. 3: Internal Organization: Resources, Capabilities, Core Competencies and Competitive Advantages
  - o Ch. 4: Business- Level Strategy
  - Ch. 5: Competitive Rivalry and Competitive Dynamics
  - o Ch. 7: Merger and Acquisition Strategy (sections 7.1-7.4)
  - o Ch. 9: Cooperative Strategy
  - o Ch. 13: Strategic Entrepreneurship
- SDM-138-14: When and When Not to Vertically Integrate

- SDM-179-19: Strategy to Beat the Odds
- SDM-180-19: Corning Incorporated: The Growth and Strategy Council
- SDM-181-19: PPS.tv and China's Online Video Distribution Market

#### 2. Topic: Accounting and Value Measures / Managerial Accounting

#### **Learning Objectives**

The candidate will understand measures of corporate value and their uses in corporate decision making.

#### **Learning Outcomes**

The Candidate will be able to:

- a) Assess various measures that firm can use to assess value and recommend appropriate measures to evaluate corporate value
- b) Assess how performance metrics and incentives could impact key business decisions and create value for shareholders:
  - i. Explain how managerial accounting can impact strategic decisions
  - ii. Explain and recommend methods a firm may use to allocate its costs and how these methods impact the perceived performance of a firm or its component lines of business

- Accounting for Decision Making and Control, Zimmerman, Jerold, 9<sup>th</sup> Edition, 2014
  - o Ch. 1: Introduction (background)
  - o Ch. 2: The Nature of Costs (background, including Appendix)
  - o Ch. 4: Organizational Architecture
  - o Ch. 5: Responsibility Accounting and Transfer Pricing
  - o Ch. 7: Cost Allocation Theory
  - o Ch. 9: Absorption Cost Systems
  - o Ch. 10: Criticisms of Absorption Cost Systems Incentive to Overproduce
  - o Ch. 11: Criticisms of Absorption Cost Systems Inaccurate Product Costs
  - o Ch. 12: Standard Costs Direct Labor and Materials
  - o Ch. 13: Overhead and Marketing Variances
  - o Ch. 14: Management Accounting in a Changing Environment
- Strategic Management: Competitiveness and Globalization, Concepts, Hitt, Michael, Ireland, Duane, and Hoskisson, Robert, 12<sup>th</sup> Edition, 2017
  - o Ch. 10: Corporate Governance
- SDM-172-18: CFO Forum: Market Consistent Embedded Value Basis for Conclusions, April 2016
- SDM-173-18: Milliman Research Report: 2016 Embedded Value Results Europe

#### 3. Topic: Advanced Topics in ERM

## **Learning Objectives**

The candidate will understand the ERM processes that consider all types of risks and their use in setting a risk-return strategy in any industry.

#### **Learning Outcomes**

The Candidate will be able to:

- a) Identify and assess second-order risk factors:
  - i. Explain the various types of risks that can arise from specific business activities but are not directly specific to the business itself
  - ii. Critique the applicability and relevance of measurement and management techniques for these second-order risks
- b) Explain ERM principles and frameworks:
  - i. Describe the components of a risk appetite statement. Design and develop a risk appetite statement and risk-return strategy
  - ii. Evaluate a company's ERM processes in its ability to adapt to emerging issues and identify strategic opportunities based on risk-return trade-off
  - iii. Evaluate the sustainability of a given business enterprise based on its risk tolerances and appetite
  - iv. Apply risk mitigation strategies in ERM decisions

- The Failure of Risk Management, Why It's Broken and How to Fix it, 2009, Hubbard, Douglas W., 2009
  - o Ch. 7, 9-12
- The xVA Challenge: Counterparty Credit Risk, Funding, Collateral and Capital, Gregory, Jon, 3<sup>rd</sup> Edition, 2015
  - o Ch. 1-3 (background)
  - o Ch. 5.1.1-5.2.7, 6.2.1-6.2.9, 6.6.1-6.6.6, 14.1.1-14.5.2 & 17.1.1-17.4.7
- SDM-106-13: Chapters 5-6 of Credit Risk Measurement In and Out of the Financial Crisis, 3<sup>rd</sup>
  Edition by Saunders and Allen
- SDM-108-13: Ch. 2 and 3 of Liquidity Risk Measurement and Management, Matz and Neu
- SDM-153-16: Exploring Risk Appetite and Risk Tolerance
- SDM-169-17: ORSA Quantifying Risk Exposure for Own Risk and Solvency Assessment Reports
- SDM-182-19: Chapter 10, Probabilistic vs Deterministic Modeling Tools (pp. 187-201) and Chapter 13, Using Total Cost Measures to Manage Risk (pp. 252-257) of Supply Chain Risk Management: An Emerging Discipline, Schlegel and Trent, 2014
- SDM-183-19: Chapter 1 of System Reliability Theory: Models, Statistical Methods and Applications, 2<sup>nd</sup> Edition by Rausand and Hoyland

## 4. Topic: Decision Modeling and Optimization

#### **Learning Objectives**

The candidate will understand how to apply decision making models to general managerial decisions within specified business constraints.

## **Learning Outcomes**

The Candidate will be able to:

- a) Apply fundamental techniques and frameworks of management science to make informed business decisions:
  - i. Apply linear optimization models to managerial decisions
  - ii. Develop decision trees, scenario tests, and simulation models
- b) Apply statistical and quantification methods to analyze managerial decisions with uncertain conditions:
  - i. Apply probability distributions to business situations with random variables
  - ii. Construct optimization models utilizing probability theories
- Evaluate business situations and describe how quantitative and statistical methods can improve decision making

- Data, Models and Decisions: The Fundamentals of Management Science, Bertsimas, Dimitris and Freund, Robert, 2004
  - o Ch. 1: Decision Analysis
  - o Ch. 2: Fundamentals of Discrete Probability (background)
  - o Ch. 3: Continuous Probability Distributions and their Applications (background)
  - o Ch. 5: Simulation Modeling: Concepts and Practice (sections 5.1-5.9)
  - o Ch. 7: Linear Optimization (sections 7.1-7.8)
  - o Ch. 8: Nonlinear Optimization (sections 8.1-8.6)
  - o Ch. 9: Discrete Optimization (sections 9.1-9.5)
  - o Ch. 10: Integration in the Art of Decision Modeling (sections 10.1-10.4)
- SDM-180-19: Corning Incorporated: The Growth and Strategy Council
- SDM-181-19: PPS.tv and China's Online Video Distribution Market

#### 5. Topic: Communication and Organizational Behavior

## **Learning Objectives**

The candidate will understand the role that organizational behavior and communication play in organizational decision making and efficacy, as well as learn how ineffective communication is a risk to organizations.

#### **Learning Outcomes**

The Candidate will be able to:

- a) Apply best practice techniques to structure and communicate ideas logically and persuasively:
  - i. Explain differences between good and poor communication techniques and their implications
  - ii. Apply techniques to structure ideas logically
  - iii. Develop clear fact-based messages that can be communicated persuasively
- b) Evaluate the impact of human behavior factors on the effectiveness of decision making processes within organizations:
  - i. Explain the role of cognitive biases on making suboptimal individual decisions
  - ii. Evaluate the role of organizational behavior on organizational decision-making processes and efficacy
- c) Evaluate the importance of communication to the decision-making processes:
  - i. Explain why communication is strategically important to organizations
  - ii. Describe how information is communicated within organizations
  - iii. Describe organizational and individual barriers to effective communication
  - iv. Identify the risks of ineffective communication
  - v. Explain how to overcome communication barriers and minimize risks of ineffective communication

- The Pyramid Principle: Logic in Writing and Thinking, Minto, Barbara, 3<sup>rd</sup> Edition, 2010
  - o Ch. 1: Why a Pyramid Structure?
  - o Ch. 2: The Substructures within the Pyramid
  - o Ch. 3: How to Build Pyramid Structure
  - o Ch. 5: Deduction and Induction: The Difference
  - o Ch. 8: Questioning the Problem-Solving Process
- Organizational Behavior, Hitt, Michael, Miller, C. Chet, and Colella, Adrienne, 4<sup>th</sup> Edition, 2015
  [Candidates may also use 5<sup>th</sup> Edition]
  - o Ch. 9: Communication
  - Ch. 10: Decision Making by Individuals and Groups
  - o Ch. 11: Groups and Teams

- o Ch. 12: Conflict, Negotiation, Power and Politics
- SDM-184-19: Leaders as Decision Architects
- SDM-185-19: HBR Outsmart your Own Biases
- SDM-186-19: A Case Study in Combating Bias
- SDM-187-19: 20 Cognitive Biases that Screw Up Your Decisions
- SDM-188-19: Explaining Enron: Communication and Responsible Leadership