

## XP Actuarial SDM Exam Study Manual Introduction

Hey students, this is your instructor Steve.

First, be absolutely sure you have watched the Introduction and initial Process videos on the portal so you are completely aware of WHY the SDM exam is so challenging for students and HOW to better prepare for this exam to give you a very high chance of passing.

Second, to enhance your preparation for SDM, we have added in the following to the study manual:

- **Instructor comments** – these are for simplifying key concepts, connecting syllabus material to key parts of the case study, how to better understand specific material where students often struggle, and examples of how the material could be tested on the SDM exam.
- **Key points** – this is like a super-super-condensed version of the material and can be useful for quick reviews of past material as you study new material
- **Active Study Tips** – the goal of these tips is to give students some options on ways to go deeper into understanding the material rather than only memorizing or passively reading the material. You do not need to attempt all of them, but some of them tips will be identified as critical ways to better learn the material.
- **Connections to other Syllabus Material** – many syllabus items connect very closely with material under the same and different syllabus objectives.
- **Student Questions** – key student questions and answers have been identified at the end of each section of the study manual.
- **Past exam questions** – occasionally, we highlight important past exam questions on the material. These are not only for leaning the material, but also for showing you how the SDM exam can ask very different questions from what you have normally seen on other finance track exams.

Third, you will also notice on the portal that there are important “**Case Study Tools**”. These tools include:

- A case study checklist of about 80 to 90 items highlighted in the case study and how they integrate with the syllabus material
- A case study assignment
- Case study videos tied to the assignment. These are released about a month before the exam
- A document showing you how to combine these items with your own analysis to be very well prepared for the exam

Now let’s get started!

## Strategic Management: Competitiveness and Globalization

### Chapter 3: The Internal Organization

#### Key Points:

- Competitive Advantages have 3 components: resources, capabilities and core competencies
- Core Competency - The activities that a firm performs especially well compared to competitors and which add value to the firm and customers
- 4 Criteria for a Sustainable Competitive Advantage: valuable capabilities, rare capabilities, costly-to-imitate capabilities, non-substitutable capabilities
- Tangible Resources - financial, organizational, physical, technological
- Intangible Resources - primary categories: human, innovation, reputational
- Value Chain activities: activities from raw commodities to finished product/service provided to final customer
- Outsource or not? Does it improve flexibility, reduce risks, or reduce capital investments? Does firm have some competitive superiority over other companies in this activity? Downside is loss of ability to innovate and lose jobs

#### Instructor Comments:

This chapter is mainly focused on analyzing the internal strengths of a firm and how those can become competitive advantages. Some things are easier to see as competitive advantages – a strong brand or efficient production capability. Think of Apple – because of its brand, you know its products are likely to be of high-quality with cool features that are very user friendly.

But some competitive advantages are much more complex. A good example of a more complex competitive advantage is covered in the Corning reading (SDM-180). Over time, Corning has built up a culture that has allowed it (a very large manufacturing firm) to continually find new innovations AND very importantly, be able to reinvent itself. That culture and wide-spread employee belief is a super important competitive advantage to have over other manufacturing firms..

Furthermore, as you go through this chapter, you should recognize that many competitive advantages are less durable (i.e. less sustainable) than others.

This chapter also introduces the concept of the Value Chain. This is the set of processes that go from raw commodities all the way to the final product/service getting into a customer's hands. Be sure to understand what makes a part of the value chain a competitive advantage.

The topic of value chain analysis (and vertical integration) will be covered in a bit more depth in the Vertical Integration study note (SDM-138-14).

**Active Study Tip:** To continue to build on the active study tips in the previous chapters, apply the concepts in sections 3.2 and 3.3 to the same companies.

## Introduction

- Firms need to constantly manage resources in order to increase the value of their goods or services relative to competitor goods/services
- Competitive advantages have a limited life - eventually competitors will duplicate what they have done
- Competitive Advantages are a function of 3 items:
  - (1) Rate of core competence obsolescence due to environmental changes
  - (2) Availability of substitutes for the core competence
  - (3) Imitability of the core competence
- Firms need to both manage current core competencies but also develop new ones

## 3-1 Analyzing the Internal Organization

### 3-1a The Context of Internal Analysis

- Global Mind-Set: the ability to analyze, understand, and manage an internal organization in ways that are not dependent on the assumptions of a single country, culture or context
- To understand the internals of an organization you need to examine its resources and capabilities

### **Components of an Internal Analysis**

- (1) Resources (tangible/intangible)
- (2) Capabilities
- (3) Core Competencies
- (4) Discovering Core Competencies
  - Four Criteria of Sustainable Advantages (valuable, rare, costly to imitate, non-substitutable)
  - Value Chain Analysis – outsource or keep internal?
- (5) Competitive Advantage
- (6) Strategic Competitiveness

### 3-1b Creating Value

- **Value:** measured by a product's performance characteristics and by its attributes for which customers are willing to pay
- Firms create value by innovating - bundling/leveraging resources to form capabilities/core competencies - the stronger the core competencies the greater the value a firm can produce

### 3-1c The Challenge of Analyzing the Internal Organization

- Evidence has shown that 1/2 of organizational decisions fail
- Judgment: the capability of making successful decisions when no obvious correct model/rule exists or when there is no data or incomplete data available

### Conditions Affecting Managerial Decisions about Resources, Capabilities and Core Competencies:

- Uncertainty: relating to a firm's general/external environment and customer needs
- Complexity: resulting from the interrelationships among conditions shaping a firm
- Intra-organizational Conflicts: conflicts may exist among managers making decisions as well as between those who are affected by the decisions

## 3-2 Resources, Capabilities and Core Competencies

- These 3 components (resources, capabilities, core competencies) are the foundation of a competitive advantage

### 3-2a Resources

- Resources alone do not allow firms to generate above average returns - they are combined to form capabilities
- **Tangible Resources:** assets that can be observed and quantified (Ex: equipment, manufacturing facilities, distribution centers, etc.)
- **Intangible Resources:** include assets that are rooted deeply in the firm's history, accumulate over time, are relatively difficult for competitors to analyze/imitate (Ex: brand name, trust between managers/employees, knowledge, etc.)

#### Tangible Resources:

- 4 primary categories: financial, organizational, physical, technological
  - Financial Resources: firms capacity to borrow, firm's ability to generate funds through internal operations
  - Organizational Resources: formal reporting structures
  - Physical Resources: sophistication of plant & equipment, attractiveness of location, distribution facilities, product inventory
  - Technological Resources: copyrights, patents, trademarks, trade secrets

#### Intangible Resources:

- 3 primary categories: human, innovation, reputational
- Superior source of capabilities and core competencies (as compared to tangible resources)
- Harder to imitate/understand/substitute and less visible

### 3-2b Capabilities

- Capabilities are built by combining individual tangible and intangible resources together
- Capabilities are based on developing, carrying, exchanging information/knowledge

#### Examples of Capabilities (Table 3.3. in textbook)

- Distribution (Ex: Walmart)
- Human Resources: motivating/empowering/retaining employees (Ex: Microsoft)
- Management Information Systems: effective/efficient control of inventory levels with point-of-purchase data collection (Ex: Walmart)
- Marketing: (Ex: Procter & Gamble, Nordstrom, etc.)

- Management (Ex: Hugo Boss, Zara)
- Manufacturing (Ex: Komatsu, Sony)
- Research & Development: (Ex: Caterpillar)

### 3-2c Core Competencies

- The activities that a firm performs especially well compared to competitors and which add value to the firm and customers

**Instructor comment:** I really like table 3.3 and the material covered in section 3.2. You should apply these ideas/examples to your own company examples. Again, with a bit of practice it starts to become easier analyzing a company's strengths and weaknesses using this terminology.

## 3-3 Building Core Competencies

### 3-3a The Four Criteria of Sustainable Competitive Advantage

- **Valuable Capabilities:** allow the firm to exploit opportunities or neutralize threats in its external environment
- **Rare Capabilities:** capabilities that few (if any) competitors possess
- **Costly-to-Imitate Capabilities:** capabilities that other firms cannot easily develop
  - 3 Conditions for Costly to Imitate:
    - The right organizational culture - depends on when the culture was founded historically
    - Link between core competencies and competitive advantage is causally ambiguous - not easily understood how the competencies translate into the competitive advantage
    - Social complexity - some/all of the competitive advantages are a product of the firm's social phenomena (relationships, trust, friendships, etc.)
- **Non-substitutable Capabilities:** capabilities that do not have strategic equivalents

### 3-3b Value Chain Analysis

- **Value Chain:** template that firms use to analyze their costs and identify multiple ways to implement a chosen strategy

Supply Chain Management ->Operations ->Distribution->Marketing (including Sales) ->Follow-Up Service

- **Value Chain Activities:** activities/tasks the firm completes in order to produce products and then sell/distribution/service the products in ways that create value for customers
- **Support Functions:** the activities/tasks that the firm completes that support the work done to produce/sell/distribute/service the firm's products it produces
- **Support functions include:** Finance, Human Resources and Management Information Systems

- Capabilities become core competencies if the follow occur:
  - (1) the capability allows a firm to perform an activity that creates superior value relative to competitors for its customers
  - (2) the capability performs an activity that the competitors cannot perform
- When you start to disaggregate things, you can start to see where the real opportunities are.

**Instructor comment:** For example, Nike focuses on design and marketing/distribution, but has others do the manufacturing and retail sales

- Nike makes a fortune on its' part and is able to get the other activities (manufacturing & retails sales) at a relatively low cost to them
- E.g. Nike may pay \$0.50 to get a shirt made and then sell it to a retail store for \$15 and that store holds it inventory and eventually sells it for \$30. Also, the store has to invest a lot of capital in building a store, so the final return to the store is not much above-average
- Ultimately, Nike makes very large above-average returns

### 3-4 Outsourcing

- **Outsourcing:** the purchase of a value-creating activity or a support function activity from an external supplier
- Outsourcing can increase flexibility, mitigate risks, and reduce capital investments
- Outsourcing can be effective as very few firms have the capabilities to achieve competitive superiority in each component of the value chain and support activities
- Two concerns with outsourcing:
  - Potential loss of ability to innovate
  - Loss of jobs in the firm

### 3-5 Competencies, Strengths, Weaknesses, and Strategic Decisions

- Firms need the "right" resources ,not just a lot of resources in order to create value
- Core competencies do not last forever and new ones need to be developed over time to survive
- Managers need to study the core competencies and ensure that they do not become core rigidities

### Connections to other Syllabus Material

- The Vertical Integration study note (SDM-134-14) gets into much more detail on value chain analysis and determining what parts of the value chain should be internal or not.

## Student Question

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How do non-substitutable capabilities contrast to non-substitutable products (covered in a five forces analysis)?

- Almost every student I have talked to on this has struggled with this distinction!
- It is important to distinguish between the concept of capabilities versus products when it comes to competitive advantages and five forces analysis
  - For example, Big Ben Bank has a new crypto-currency ETF product – there may be other crypto-currency products offered by other companies that can be a substitute to what Big Ben offers
  - However, according to the case study, Big Ben is a recognized world leader in ETF's giving it a difficult to substitute capability in gaining credibility with customers for a new crypto-ETF product