

XP Actuarial SDM Exam Study Manual Introduction

Hey students, this is Steve. I've been working with SDM students for about 4 years now. Here are a few introductory comments to help you with getting SDM:

- Be sure to watch the short videos on the portal on:
 - The Right Mindset for SDM
 - How XP helps on SDM
 - If you previously failed this exam, watch the video on using prior exams BEFORE you look at the SOA solutions for last sitting
- We put a lot of effort into having useful questions, case study tools, and practice exams to help you get this exam – most of these items are released later (mainly to ensure you use them in the best way to peak well for the exam)
- The XP study manual is NOT a replacement for the source material – Instead, it is a more condensed summary and it contains a number of intuitive explanations of the material. You need to have the textbooks! In particular, in many case we have solutions and commentary on text book questions
- About every 2 weeks I send out a short message to students to help guide them along the way – be sure to watch your email for those (my email is steve.scoles@xpactuarial.com)
- ALWAYS feel free to reach out – I am 100% here to help find ways to help YOU specifically pass this exam (see our testimonials on xpactuarial.com to see what I will do to help YOU!)

A few first steps you can do:

- Build about 20 to 40 more hours than usual into your plan for question practice, case analysis, and answering skills over the last 4 or 5 weeks
 - This is where we found students need to improve on for SDM versus the other exams
- Do a short review of how the SDM-version of the case study
 - This helps you better understand the references to the case in the videos and study manual
- Review the material available to you from XP – the next page shows you the different tools you have to use – and consider how you may fit that into your existing approach for studying

As always, feel free to reach out with questions or any ask advice on how to integrate the XP material into your study process

I AM 100% HERE TO HELP YOU GET SDM THIS SITTING!

XP tools aside from the study manual that are all available to you on the portal:

Seminar Videos – I touch on key points in the material and relate them to case study and/or real life situations as this is often how the material is actually tested on the exam. In many cases, I give example problems and solutions.

Audio Cards – flash cards that you can listen to. These work remarkably well. I was skeptical as to how useful they could be, but in post exam-results-surveys, there is a very high percentage of passing candidates that use them – including students that didn't even use them before getting to SDM.. For example, go for a walk and listen to some of the audio cards to strengthen your fluency on a topic

Flash cards – cover the entire syllabus

Key point flash cards – these are the key points from the study manual – can be a useful way to continually quickly review the material that you previously studied ... which can really help you be on top of the material when you start doing more practice

Practice Recall Questions – these are memory/recall questions that cover the entire syllabus

Case Videos – videos on specific questions on the case study companies

Case Study Checklist – about 100 references in the case study that connect with specific syllabus material

Application Questions – these are a combination of medium and hard critical-thinking questions – RELEASED about 6 weeks prior to the exam (as we found that students need to do them closer to the exam to properly PEAK for a critical thinking exam)

Assignments – we have a Business Dynamics (Syllabus Objective 4) Assignment as we found students need a lot of practice on this material

Practice Exams – 4 practice exams that simulate the real thing. They have extensive answer commentary that show the typical errors students make with SDM-style questions

Answering Skills videos – YES, these apply to you very much. After reviewing hundreds of student's practices on SDM specifically, we found a number of areas where students unknowingly and painfully lose marks. The key is not only knowing these mistakes, but also practicing enough so your system 1 won't make these mistakes under exam time limits. (You'll learn about system 1 in Objective 5 of the syllabus!)

Personal Video Feedback from the instructor – using past SOA exam questions (and XP practice exams if needed), I will give you OBJECTIVE & detailed feedback of what you are doing right or need to do to improve on the exams to score maximum marks.

The items in **RED** are released over the final 6 weeks before the exam as we have found that students should be using them closer to the exam to properly PEAK for exam day.

Study Manual Components:

- **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-condensed version of the material and can be useful for quick reviews of past material as you study new material (the Premium pkg. includes key point cards)
- **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. I'm not recommending to do all of them or even 80% or them! Instead, try some of them, particularly the ones 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 seen on other Finance Track exams.

In case you feel a bit overwhelmed with all that we offer, don't worry! Along the way, about every two weeks, I send out **short instructor videos** to guide you through how to make best use of all of the XP tools.

So **PLEASE (!!)** make sure you are getting my emails or you will miss out on this extra regular guidance (my email is steve.scoles@xpactuarial.com)

Don't hesitate to reach out – I specialize in helping students pass SDM and want to help YOU.

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.

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

For the SDM Case Study, we look at strengths & weaknesses for each company as part of the XP SDM case study assignment.

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). And it is covered in a lot more depth in the Competitive Advantage readings in the Porter textbook.

Active Study Tip: To continue to build on the previous chapters, spend some time with a few companies you know and apply these concepts – in particular sections 3.2 and 3.3.

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 activity
- 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.
- The Competitive Advantage textbook goes into much more detail on using value chain analysis

Student Question

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