Capstone Integration Manual

For use in conjunction with *Strategic Management* 5th edition by Frank Rothaermel

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CAPSIM Capstone – Mapping Strategy Content to the Simulation Using Rothaermel/*Strategic Management* 5th edition's framework

Purpose Statement: The goal with the following exercises is to better integrate basic strategy frameworks – often taught as business capstone classes – into the Capsim Capstone simulation. Strategy, by nature, can seem abstract because it describes how to piece together many seemingly disparate decision making processes into one cohesive direction for the firm. To successfully manage a firm's strategy, teams must consider their competitors, wider environmental shifts, marketing, R&D, operations, HR, customers, suppliers, finance, and various stakeholder concerns.

Capsim provides the opportunity to put this cohesive strategic decision making into practice. However, learning Capstone – the competitive landscape of the sensor industry, the various operational decisions, forecasting, planning R&D, etc. – can be overwhelmingly detailed for many students. As instructors, it can be difficult to connect the more abstract strategy frameworks of how to put all the decisions together as a cohesive whole (the forest) for the numerous specific decisions (the trees) that teams must make in each round. A common challenge for students and professors alike is to make more concrete the connections between the content in the strategy textbook, lectures, and frameworks with the exercises in the Capstone simulation. Student often give course feedback that states they wish they better understood how the strategy textbook and Capstone simulation fit together.

What follows is a set of questions, discussion points, exercises, and answers for many of the chapters in the Rothaermel (5e) text within the context of Capsim Capstone simulation. It is important to note that some strategy content maps onto Capstone better than others; due to the trade-offs of complexity and usability inherent in simulations, Capstone core content does not cover all the strategy topics with equal weight. Here is our guide to Capsim-Rothaermel connections by chapter:

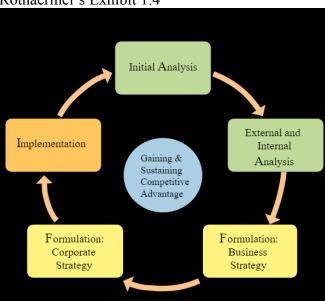
Textbook Chapter	Capstone Application
1 – What is Strategy?	AFI Framework
2 – Leadership and Process	AFI Framework
3 – External Analysis	Porter's 5 Forces
4 – Internal Analysis	Resource-Based View
5 – Advantage and Models	Performance and Advantages
6 – Business Strategy	Generic Strategies
7 – Innovation and	
Entrepreneurship	
8 – Diversification	
9 – Alliances, M&A	
10 - Global	
11 – Design and Control	
12 – Governance and Ethics	Stakeholders and Boards of Directors

Chapters 1 and 2: Strategy and Leadership

The AFI Framework

The Analysis-Formulation-Implementation (AFI) framework outlines how firms create and manage their strategy to gain and sustain competitive advantages. It is the broadest conceptualization of how strategic management functions: executives analyze (A) their options, the environment, and their own organization; they formulate (F) a business and a corporate strategy; and they implement (I) by making decisions aligned with their strategies.

Rothaermel's Exhibit 1.4



Planning in Capstone

While much of the strategy in Capstone may feel to students as purely the Implementation phase, they will need to focus on the first four phases in order to succeed. Initially, students can complete the analysis phases prior to any work. The formulation phase should be revisited each round of the simulation – specifically the business strategy section. However, it is worth noting that the internal analysis may evolve over the simulation based on investments of the team and the external analysis may evolve over the simulation based on the strategic choices of the other teams in the simulation.

Student Discussion

Consider leading a conversation about this in a live class. Alternatively, these discussion questions could be prompts for an online discussion board.

- 1. For each of the five "boxes" on the outside of the AFI circle, explain the concrete steps you take as a top management team to accomplish those between rounds (e.g., assess previous round goals, discuss how to better differentiate each product, etc.)
 - a. Initial Analysis
 - i. Assessing the competitive challenge

- 1. In this case, several other competitors with EXACTLY the same position, so it is a challenge to conceive a way to create separation from those other teams
- Round to round, this could also involve an assessment of how the team did with respect to other teams and their own internal expectations
- 3. Creating a guiding policy
- 4. Agreement about team goals
- 5. Agreement about team norms, communications, decision making processes, conflict resolutions, etc.
- 6. Agreement about what sort of firm the company is (or wants to become)

ii. Coherent actions

- 1. What decisions from last round helped us achieve our strategy through good implementation and better future positioning?
- 2. What decisions from last round were inconsistent with our goals and deterred us from realizing our strategy?

b. External and Internal Analysis

i. External

- 1. Assessing the competitors' likely strategies
- 2. Assessing competitors' resource positions, strengths, and weaknesses
- 3. Gaining understanding of the "rules of the game", and what types of environmental shocks the game may throw at the teams (recessions, labor negotiations, etc.)

Note: In the Five Forces Model, only two are relevant in Capstone, and this is OK, as the FFM is primarily a tool for choosing which industries to enter and exit, options not relevant in the Capstone simulation.

Irrelevant forces include:

Supplier power (no interaction with suppliers)

Substitutes (do not play a role in the simulation)

Threat of entrants (no new companies enter)

Relevant forces:

Competitive rivalry – some industries are more competitive than others!

- -More or fewer teams
- -Strength of competing teams
- -Number of strong competitors
- -Strategic groups within the simulation
- -Intensity of competition (e.g. how price wars escalate)

Customer power – no switching costs and no loyalty for customers make them a powerful group. This power is felt equally by all groups, and it makes for more dynamic changes in sales year-to-year.

How would the simulation change if customers were more loyal to particular companies' products?

ii. Internal

- 1. What resource strengths/weaknesses does the firm have *this round*?
 - a. Cash
 - b. Debt position
 - c. Stock price
 - d. Customer awareness (for each product)
 - e. Product accessibility
 - f. Positioning of products
 - g. Size (relative to expectations)
 - h. Performance (relative to expectations)
 - i. Reliability (relative to expectations)
 - i. Capacity
 - k. Credit rating
- 2. What capability strengths/weaknesses does the firm have *this round*?
 - a. Particular executive team strengths/weaknesses
 - b. Knowledge of the industry/operations of the simulation
 - c. Complementarity of skills among team members is there expertise in each of the major functional areas?
 - d. Ability to communicate and decide as a team
 - e. Forecasting ability
 - f. Integrative decision-making team functioning
 - g. Decision quality control (i.e. how well do teams ensure that their decisions are not bad ones)
 - h. Ability to learn from previous rounds' mistakes
 - i. R&D availability and speed
 - j. Employee productivity
 - k. Automation
 - 1. Efficiency with production (e.g., rejection rates)
 - m. Satisfying stakeholder demands
- c. Business Strategy Formulation
 - i. These map with the generic strategies well.

Capstone Strategy	Textbook Strategy
Broad Cost Leader	Cost Leadership
Niche Cost Leader (Low Technology)	Focused Cost Leadership
Cost Leader with Product Lifecycle Focus	Cost Leadership
Broad Differentiator	Differentiation
Niche Differentiator (High Technology)	Focused Differentiation
Differentiator with Product Lifecycle Focus	Differentiation

- ii. Could discuss why Product Lifecycle is another strategy in this game, and what industry characteristics make such a strategy viable. Lifecycle strategies are possible with high velocity industries characterized by frequent new product introductions and a diverse set of customer segments.
- d. Corporate Strategy Formulation
 - i. Largely not applicable
 - 1. Could discuss the trade-offs between having few products vs. many products, which mirrors having many vs. few industries under the corporation.
- e. Implementation
 - i. Enormously important in Capstone, particularly in early rounds
 - ii. Good decisions that align with strategy are key
 - iii. Not making bad decisions (blind spots, operational mistakes, or misaligned decisions) is critical for success. Bad decisions can lead to poor performance across many rounds.
 - iv. Competitive advantage early! Teams who study Capstone early have advantages.
 - 1. Other resources are the same as the simulation starts.
 - 2. Path dependence good decisions in early rounds set up success in later rounds.
 - v. Understanding the connections within the game is critical.
 - 1. How decisions are interconnected across functions
 - 2. How decisions are interconnected from round to round
 - 3. How to diagnose decision quality and learn
- 2. What is the relative importance of each step to performing well in Capstone, in your view?
 - a. Initial Analysis: Important early, less so as the game progresses
 - b. External and Internal Analysis: Understanding competitors and your own teams' position vs. those competitors is an important aspect for formulating and adjusting strategy and tactics
 - c. Business Strategy Formulation: How many other teams in your industry have your strategy? The fewer that do, the better the firm's performance! Capstone designs it to be business strategy neutral, so should not be advantages of one over the other, all else equal.
 - d. Corporate Strategy Formulation: Not applicable.
 - e. Implementation: Most of the variance lies here for less advanced industries (e.g. undergraduates)
- 3. In your Capstone decision making, how do you (or how can you better) combat common cognitive biases? Answer for 3 of following:
 - Illusion of control
 - Escalation of Commitment
 - Confirmation bias
 - Reason by analogy

- Representativeness
- Groupthink

a. Illusion of control

- i. Recall that other teams' decisions impact your team's performance, as can other external factors (e.g. recession)
- ii. Allow for "bad rounds" to be partially a function of bad luck and/or unfortunate guessing
- iii. Focus on what can be controlled internally, and believe that luck will "even out" in the long run (e.g. regression to the mean)

b. Escalation of Commitment

- i. Discuss and be willing to change course and abandon sunk cost decisions.
- ii. Focus on future rounds and what the right decision is *this round* with respect to future rounds

c. Confirmation bias

- i. Stay open to alternative explanations for outcomes
- ii. Recall that, in Capstone, outcomes rarely are a function of just one cause, decision, or competitor's action

d. Reason by analogy

- i. Remind teammates that Capstone (and real organizational) outcomes are rarely a function of one cause
- ii. Analogies can be helpful to understanding phenomena, but often do not capture the complexity in Capstone and in real organizational outcomes

e. Representativeness

- i. Consider multiple data points
- ii. Do not extrapolate results of one round to all others
- iii. Competitors will likely change their behavior, and not make the same mistakes as they did in previous rounds. Teams that anticipate what their competitors will do next have the advantage in Capstone.

f. Groupthink

- i. Have an active "devil's advocate" culture among the executive team; or
- ii. Assign a naysayer that will question decisions and offer alternatives
- iii. Having general acceptance of diverse perspectives encourage others to offer opinions and directions that are different than yours

Chapter 3: External Analysis

Porter's 5 Forces

Porter's 5 Forces describe the various threats that shape an industry. Understanding each of these forces helps predict the average industry profitability. These industry level effects will be the same for all firms within an industry, but firms' responses will vary. These differing responses help determine the profitability of an individual firm within that industry. This simulation helps students understand that despite identical industry-level effects, firms will vary in their overall performance. Additionally, Porter's 5 Forces can help students understand which areas of an industry may require more attention than others.

Simulation Limitations

Any simulation will need to control a variety of factors. In the Capstone simulation, the following forces do not apply based on the assumptions built into the simulation:

- The Threat from Entry No firms may enter (or exit) the industry
- The Power of Suppliers Prices are dictated by the simulation essentially treating all suppliers as commodities
- The Threat of Substitutes The market size is set by the simulation so buyers are not able to pursue even fictitious substitutes

Given these simplifying, but necessary, assumptions, students ought to focus their attention on Rivals and Buyers. Rivalry among existing competitors is the main thrust of the simulation, but the power of Buyers should not be overlooked. While the buyers' preferences shift from period to period in predictable ways, they nonetheless exert influence over the market.

Student Discussion

Consider leading a conversation about this in a live class. Alternatively, these discussion questions could be prompts for an online discussion board.

- 1. Which of Porter's 5 Forces apply in Capstone and which are less relevant due to the nature of the simulation?
 - a. Threat from New Entrants does NOT apply the simulation represents a closed market whereby new entrants cannot enter so this threat does not apply.
 - b. Threat from Suppliers does NOT apply there are no negotiations available with suppliers or no alternative options for suppliers so this threat does not apply.
 - c. Threat from Substitutes does NOT apply in the simulation, alternative products are not considered. Some discussion may suggest that alternative market segments act as substitutes. That is, the traditional market segment may be considered a substitute for the low-end market. While students may make this claim, it is worthwhile to draw attention to the need to define an industry and that variation within firms inside an industry would be considered rivals rather than substitutes.
 - d. Threat from Rivals does apply clearly the rivals in this simulation impact the industry. If the setup is a tournament, then rivals are other teams in the tournament. In a footrace, the rivals are designed by Capsim. These rivals shape the industry within Capstone.
 - e. Threat from Buyers does apply the nature of buyers in the industry applies within Capstone. These buyers are well-defined and their preferences shift

according to predetermined path, but they nonetheless shape the industry within Capstone.

- 2. For each of the forces that do apply, what is the nature of those forces?
 - a. Threat from Buyers The buyers in this industry face no switching costs and products are somewhat standardized, creating substantial power for buyers. At the outset, product offerings are identical, but over time differentiation may arise. Typically, firms cluster around ideal performance/size positions within market segments, but there may still be variation in the firms in terms of other factors (price, MTBF, accessibility, or awareness) that creates some differentiation. Greater differentiation in product offerings will lead to increased profitability across the industry. It may be worth discussing how the well-defined evolution and segmentation of buyers shifts some power from the buyers back to the industry. Namely, differentiation and specialization can often be an uncertain proposition, but in Capstone that uncertainty is removed.
 - b. Threat from Rivals The nature of rivalry in this industry is intense due to the similar size of firms and their identical product offerings. Moreover, firms in this industry are unable to exit making rivalry that much more intense. The growth within the industry mitigates some of the threat from rivals, and, over time, firms can diversify into different segments making rivalry less intense. The greater degree of diversification in the firms over time, the more we would expect to see profitability across the industry rise.
- 3. What are the strategic implications for your firm based on the industry forces that do apply in Capstone?
 - a. Buyers have power but are predictable so we simply need to pay attention to the evolution of the buyers within the industry over time.
 - b. Rivals will determine much of the profitability in this industry. Choosing how and where to compete will be important for your firm's decisions, but it is also important to pay attention to what other firms are doing.
 - i. Additional context: Paying attention to your rivals is important. Understand how each of your competitors are competing in each segment. Since that is the greatest source of variability it should be our main focus. Think of industries where the competitors play well together. Coke and Pepsi seem like fierce rivals but they refrain from price competition and instead compete on branding and new product lines. Meanwhile, airlines compete mostly on price which hurts everyone involved. In the same way, you can think of how you compete within Capstone. The variation in pricing in each segment will give you clues about how each firm is trying to compete within that segment.

Chapter 4: Internal Analysis

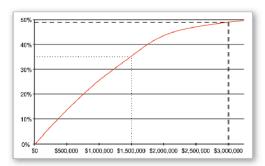
<u>Underlying assumptions of the RBV</u>

Standard assumptions in economics state that all firms are identical and offer identical products, much like the beginning of this simulation. However, we know that in real life, firms are different and offer different products. This is at the heart of the assumption of resource heterogeneity in the RBV. This simulation helps students realize how heterogenous resources can arise in firms based on strategic decisions, even in the extreme situation where all firms start off identical.

Resource Stocks and Flows

The bathtub metaphor can be easily applied to the Capstone simulation across a variety of metrics. For example, consider the promotion budget as an inflow into the resource stock of awareness and each year an outflow occurs. Specifically, in Capstone, each year 33% of

awareness depletes as an *outflow*. Investments in promotion represent resource *inflows*. Those inflows translate, according the graph at the right, which is available from Capsim. A \$3,000,000 inflow would result in an increase of just under 50% in awareness. In Capstone, these numbers are programmed in, whereas in real life the level of inflows and outflows are much more difficult to calculate directly. This lack of numerical certainty does not eliminate the value of understanding the idea of resource inflows and outflows for an organization.



In Capstone, awareness and sales budgets follow this logic in a straightforward manner. Other areas follow similar patterns, but many are only inflows and lack outflows. For example, investments in TQM have inflows each period, but those investments do not degrade over time so they simply accumulate. As the tool tips in Capstone point out, the most value that can be gained from TQM or the highest level of resource stocks is reached at \$4 million invested over three rounds in the form of \$1.5 million, \$1.5 million, and then \$1 million. These inflows completely fill the 'bathtub' of TQM-based resources.

Student Discussion

Consider leading a discussion about these questions in a live class. Students can answer these questions within their teams then share with the class. Alternatively, assign these questions as an individual or team-based preparation for a strategic planning session.

- 1. What resources are valuable and rare at the beginning of the simulation?
 - a. Valuable PPE, Current Designs, Brand, Distribution, Human Capital, Financial Capital, etc.
 - b. Rare None (every firm in the industry possesses all the same resources); creative students could argue that the management team is rare justifying their own unique skill sets alone or in combination

- 2. What resources or capabilities could be valuable and rare at the end of the simulation?
 - Capabilities manufacturing efficiencies from investing in automation; quality practices from investing in TQM; human resource capabilities from investing in HR
 - b. Resources brand awareness from investing in marketing; variety of products or product lines at certain size/quality combinations; market share allowing for economies of scale
- 3. Could any be inimitable? What would make them inimitable?
 - a. Likely not, although temporary advantages may arise from early investments into the specific resources. If viewed within the timeline of the simulation an argument could be made that an advantage becomes sustainable once a certain gap between firms has been created from consistent investment in something like human resources.
- 4. How might you organize around each of those resources?
 - a. Heavily investing in automation to decrease unit labor costs would work best in pursuing low-cost strategies where greater volume is pushed
 - b. Alternatively, investing in R&D capabilities would help with a strategy more geared at releasing and developing more cutting-edge products

Chapter 5: Competitive Advantages, Firm Performance, and Business Models

Measuring Performance

There are many ways to measure firm performance. Chapter 5 identifies five distinct approaches: Accounting profitability, shareholder value, economic value, balanced scorecard, and the triple bottom line. Each of these have their own pros and cons, and Capstone helps students generate these from their own unique data. These "real life" calculations help students see the utility of each measure.

Student Discussion

- 1. Which of these are present in Capsim?
 - a. Accounting profitability yes. Given the homogeneity in the industry, these metrics are particularly useful in comparing performance between companies and understanding relative position. These can give tremendous insights on why some firms are performing better than others.
 - b. Shareholder value yes. This is reflected in the stock price. Interesting to note that Capsim allows issuance of new shares and share buy-backs, which can influence the share prices (and returns) substantially.
 - c. Economic value partially. It is impossible to know what the consumer value is for each sensor sold. However, profit margins are transparent for every company, and potential sales per segment which may give some indication of consumer value are available in the Capsim Courier.
 - d. Balanced scorecard yes. It is available for each team in Reports, though not available for competitors.
 - e. Triple bottom line no. While financial (profit) outcomes are available, no data on environmental (planet) or larger societal (people) outcomes are created in Capsim.
- 2. Study Exhibits 5.4 and 5.5 in the book. What business strategy is Firm B pursuing that gives it a competitive advantage over Firm A? What business strategy is Firm C pursuing that gives it a competitive advantage over Firm D?
 - a. Firm B is executing a differentiation strategy better than Firm A.
 - b. Firm C is executing a cost-leadership strategy better than Firm D.
- 3. Using the logic of economic value in Exhibits 5.4 and 5.5, assess each of the five segments in your Capsim industry. Which products have competitive edges in each of the five segments? How sustainable are those advantages for each of those products?
 - a. Each answer will be unique, but in the low and traditional segments, products with the lowest cost structures tend to have advantages. In the size, performance, and high-end segments, products that are closest to ideal criteria for that round have the advantage (because they can charge more and still sell high volumes).
 - b. Cost advantages are potentially sustainable for several rounds through:
 - -Automation
 - -TQM investments
 - -HR investments

- c. Differentiation advantages are typically less sustainable in the game, though perhaps harder to execute because they are more challenging to achieve. These advantages can be built with
 - -TQM investments in R&D cycle time
 - -R&D management that positions products well in more timely fashion
- 5. Stock prices in Capsim are formulaic. They are generated via current round financial metrics and growth over several rounds. What other forces drive real world company's stock prices to fluctuate?
 - a. Real companies' stock prices are subject to:
 - i. Market fluctuations
 - ii. Assessment of intangible assets (like strength of executive team)
 - iii. Strength of competitors
 - iv. Industry effects
 - v. Company news
 - vi. Investors' opinions about the company
 - vii. Projections of future growth given all the above
 - b. One of the primary jobs of CEOs and their teams is to actively manage their analysts and investors through calculated and frequent communication of what is happening in their company. This is one of many different ways Capsim is simpler than actually running a publicly traded company.

Chapter 6: Business Strategy

Generic Business Strategies

As businesses evaluate their place within an industry given their unique resources, they must make strategic trade-offs. Typically, these tradeoffs align in one of two directions: cost-leadership or differentiation. This simulation helps students see how generic strategies play out across the decisions of the firm. Pursuing a cost-leadership strategy requires students to think through the positioning of their product and pricing, but it also forces them to consider how this strategy affects R&D, marketing, HR, and TQM. As in real life, many, but not all decisions invert for a differentiation strategy as compared with cost leadership.

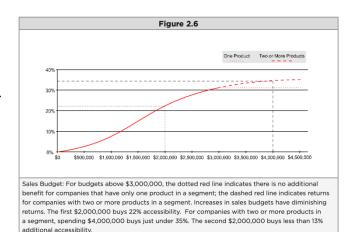
Capstone provides simple descriptions for six different strategies. They are mapped below to the strategies in the text:

Capstone Strategy	Textbook Strategy
Broad Cost Leader	Cost Leadership
Niche Cost Leader (Low Technology)	Focused Cost Leadership
Cost Leader with Product Lifecycle Focus	Cost Leadership
Broad Differentiator	Differentiation
Niche Differentiator (High Technology)	Focused Differentiation
Differentiator with Product Lifecycle Focus	Differentiation

Value and Cost Drivers

Value drivers around *product features* are straightforward whereas *customer service* is more indirect and *complements* are unaddressed in the simulation. Product features such as positioning may seem obvious, but a deeper examination of the underlying driving of that positioning would lead students to consider TQM and HR measures that affect R&D costs and timing. Customer service is addressed, albeit indirectly, in the accessibility of the product. While not a perfect mapping, this thought process enables students to see alternative means of creating value in the mind of the customer.

Cost drivers are available in Capstone, as students can manipulate the *cost of input factors* and *economies of scale* relatively directly. The positioning of a product affects the cost of materials, and automation can alter the labor expenses associated with a product. Economies of scale can come in a number of areas including expenses in promotion and sales. Having multiple products in a given segment can lead to greater gains in accessibility as detailed in the User Guide on Figure 2.6 here.



Student Discussion

The first set of questions below can be used to prompt team discussions in planning or during the simulation. The second set of questions can be used to guide an in-class or online discussion about each of the strategies.

Team Questions

- 1. Which strategy do we want to pursue?
- 2. What decisions are especially important for this type of strategy? (**Note**: answers to this question are laid out in the Capstone User Guide)
- 3. What impact will a broad vs. niche strategy have on our balanced scorecard?

Class Discussion

- 1. What are the tradeoffs involved in each strategy?
 - a. In general, the cost leader strategies will both focus on increasing automation to decrease labor costs and reducing R&D expenditures to support below average price points. To that end, the niche cost leader strategy would focus on areas where price is a more important factor the traditional and low-end markets. In general, the differentiator strategies will both focus on spending money on R&D to regularly hit the optimal positioning within each segment. These extra expenses will warrant higher prices. To that end, the niche differentiator strategy will focus on the size, performance, and high-end segments.
- 2. What are the markers of successfully implementing each strategy?
 - a. Cost leadership strategies would likely see very high levels of automation in conjunction with lower price points. Additionally, these strategies, whether niche or broad, would look for greater market share in the traditional and low-end segments.
 - Differentiator strategies would likely see investments in TQM that reduce R&D costs and timing in particular increases in Concurrent Engineering and Quality Function Deployment Effort. Additionally, you would expect to see higher contribution margins and greater market share in the size, performance, and highend segments.
- 3. Are the Product Lifecycle Focus strategies (either Cost Leader or Differentiator) examples of Blue Ocean Strategies from the text?
 - a. No, as they don't represent Value Innovation where customer value is increased from an activity that also reduces costs. These strategies are, as they sound, either cost leadership strategies or differentiation strategies. The product lifecycle focus simply describes a different means of managing products with regard to R&D. Some students may argue that by decreasing R&D spend (or rather focusing it on the introduction of new products) they are lowering costs while pursuing a differentiation strategy. All firms seek to lower costs, but merely reducing costs does not equate with a cost leadership strategy.

Chapter 12: Governance and Ethics

Shared Value Creation

Porter proposes focusing on:

- 1. Expanding the customer base to bring in non-consumers
- 2. Expanding traditional internal firm value chains to include more nontraditional partners
- 3. Focusing on creating new regional clusters

[More of stakeholder theory is in Chapter 1, which is referenced in Chapter 12]

Relevant Stakeholders within Capstone

Four stakeholder groups are present within Capstone: shareholders, employees, customers, and the natural environment. Serving shareholders is straightforward in the simulation, as it would be in real life. Maximizing the stock price and providing dividends increases their returns. Employees can be served through actions that decrease turnover. This comes from both HR and TQM activities. The assumption here is that happier employees will stay longer, so lower turnover means that employees are better taken care of. Customers are best served through products that meet their needs. The natural environment is the least obvious, but can be seen as the benefactor of an efficient operation – where inputs are minimized (less stress on raw materials and upstream manufacturing), processes are optimized (less waste via rejections, more efficient processing requires fewer resources), and product outputs are a maximized for consumer demand (buying from more efficient companies reduces the need to support less efficient competitors).

Boards of Directors

Capstone does not have formal governance mechanisms, though AI Analysts provide guidance and feedback to executive teams. While Capstone has no real market for corporate control and students cannot be fired as the executive team, it is worth considering what a \$1 stock price in Capstone actually means for teams.

Student Discussion

The first set of questions below can be used to prompt team discussions in planning or during the simulation. The second set of questions can be used to guide an in-class or online discussion about each of the strategies.

Team Questions

- 1. If you had a Board of Directors that oversaw your Capstone company, who would they be? What would their role be in making sure your company ran smoothly?
 - a. BoDs have two distinct roles: monitoring and consulting
 - i. Monitoring BoDs may have included making sure each team member contributed as much as they could over the course of the simulation. It could have also recommended dismissal of team members who shirked responsibilities, or a change in the leader (e.g. CEO) of the team.
 - ii. Consulting BoD members could have helped interpret reports, made recommendations to strategy, and provided input on operational decisions.
- 2. Most of your company performance metrics were available for all to see AI Analysts, your professor, your competitors. How would the simulation have changed if the only

publicly available data was sales data as it typically is for an industry full of privately-owned firms?

a. Prediction and response to competitors would be much more difficult. Currently, teams can see the coming round's production and any introduction of new products that are pending. These announcements would be more surprising.

Class Discussion

- 1. Default Capstone weights for the balanced scorecard give 25% scoring to financial, operational, consumer, and workforce metrics. With a better understanding of stakeholder analysis, would you recommend altering any of these weights? How would you change them?
 - a. Emphasizing the consumer or workforce metrics might seem more important given the greater ability to impact these groups (customers and employees) within Capstone. It's worth probing, however, if de-emphasizing other categories would make it more difficult to serve customers or employees well. For example, can a team consistently deliver on the customer buying criteria which requires regular R&D expense, if they don't maintain profitability?
- 2. Should there have been a market for corporate control in this simulation, where high performing firms are able to acquire poor performing firms? Why or why not?
 - a. A market for corporate control could provide greater motivation especially for teams in the bottom of the simulation. Moreover, it would allow a way for top performing teams to have greater levels of differentiation. The question here would be what to do with teams that get bought out of their jobs. This conversation may help bring home the actual high stakes of running a company.