

## **CAPSTONE® BROAD COST LEADER**

This practice exercise will help you understand the relationships between business strategy, tactics, functional alignment, and the Capstone® simulation. We will use the Chester Company for this example. (During the practice rounds, each company is assigned a different strategy.)

You will execute your plan by inputting the decisions described below. At the same time, your competitors will execute their assigned plans. The practice exercise will take three rounds. As each round is processed, you will evaluate the results and then input the next round's assigned decisions.

Upon completion of the practice rounds, the simulation will be reset to the beginning. You can then create and implement your own strategic plan for the actual competition.

### **Executive Summary**

We will adopt a Broad Cost Leader strategy, maintaining a presence in every segment. We will gain a competitive advantage by keeping R&D costs, production costs, and raw material costs to a minimum, enabling us to compete on the basis of price. Our Cost Leader orientation will allow us to gain a competitive advantage based upon low prices. Our products will keep pace with the market, offering improved size and performance. We will price below average. We will increase automation levels to improve our margins and to make it acceptable to run a second shift.

### **Vision Statement**

Low priced products for the industry: Chester brands offer solid value. Our primary stakeholders are bondholders, customers, stockholders and management.

### **Research And Development (R & D)**

We will keep our existing product line, maintain a presence in every segment, and work to keep our products up to date in each segment despite high automation levels.

### **Marketing**

We will maintain awareness and accessibility. After we establish our cost leadership position we will revisit our situation to decide whether sales and promotion budgets should be reduced or if we should keep pace with our competitors. Our prices will be lower than average.

### **Production**

We will significantly increase automation levels on all products. However, because automation sets limits upon our ability to reposition products with R&D, we will automate more in the slower moving Traditional and Low End segments than in the fast moving High End, Performance, and Size segments. We will prefer a second shift to capacity expansions.

### **Finance**

We will finance our investments primarily through long-term bond issues, supplementing with stock offerings on an as needed basis. When our cash position allows, we will establish a dividend policy and begin to retire stock. We are not adverse to leverage, and expect to keep debt/equity between 2.0 and 3.0.

### **PRACTICE ROUND 1**

Follow the decisions below. After the practice rounds are complete and the competition rounds begin, you are free to choose a different strategy; you are not obligated to continue as a Broad Cost Leader.

#### **R & D Round 1**

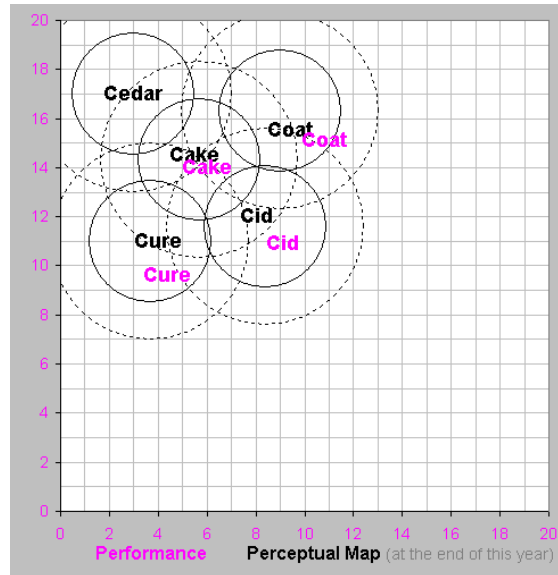
Cake – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material cost. Example: Increase Cake's performance by 0.5, reduce size by 0.5 and reduce MTBF by 1000 hours.

Cedar – Leave positioning alone, allowing the product to age further. Reduce reliability (MTBF) to reduce material cost. Example: reduce Cedar's MTBF by 1000 hours.

Cid – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material cost. Example: Increase Cid’s performance by 1.1, reduce size by 1.1 and reduce MTBF by 1000 hours.

Coat – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material costs. Example: Increase Coat’s performance by 1.4, reduce size by 0.4, and reduce MTBF by 1000 hours.

Cure – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material costs. Example: Increase Cure’s performance by 0.4, reduce size by 1.4, and reduce MTBF by 1000 hours.



Perceptual Map from the Research & Development Spreadsheet: Product names in black indicate the product’s current location, names in magenta indicate the product’s revised position (with slight revisions, the names will overlap). Names of newly invented products appear in magenta.

**Important:** Make certain that the projects complete during this year before December 31st. Under the rules, a new project can only begin on January 1st. If these projects do not complete before the end of this year, you cannot begin follow-up projects next year.

### Marketing Round 1

Cake – Make a moderate cut in price, maintain promotion and sales budgets. Forecast sales as a moderate reduction from last year, because our product will not be revised until late this year. Example: Price \$27.00, promotion budget \$1000, sales budget \$1000, and sales forecast 950.

Cedar – Make a moderate cut in price. Make moderate increases in promotion and sales budgets. Forecast unit sales near last year’s level. Example: Price \$19.50, promotion budget \$1000, sales budget \$1000, and sales forecast 1900.

Cid – Make a moderate cut in price. Make moderate increases in promotion and sales budgets. Forecast decreased unit sales. Example: Price \$37.00, promotion budget \$1000, sales budget \$1000, sales forecast 400.

Coat – Make a moderate cut in price. Make moderate increases in promotion and sales budgets. Forecast unit sales near last year’s level. Example: Price \$34.00, promotion budget \$800, sales budget \$800, sales forecast 400.

Cure – Make a moderate cut in price. Make moderate increases in promotion and sales budgets. Forecast unit sales near last year’s level. Example: Price \$34.50, promotion budget \$800, sales budget \$800, sales forecast 350.

## Production Round 1

Production schedules will plan for eight weeks of inventory. That is, have enough inventory on hand to meet demand eight weeks beyond the sales forecast. This requires a 15% inventory cushion ( $8/52 = 0.15$ ). For example, suppose Marketing forecasts demand at 1000, and you have 100 units in inventory. You want  $1000 \times 115\% = 1150$  available for sale. Since you have 100 on hand, you would schedule 1050 for production.

If you cannot meet demand, sales go to competitors. Therefore, you want to plan for the upside as well as the downside. Your proforma balance sheet will forecast about eight weeks of inventory. You hope that your actual sales will fall between your sales forecast and the number of units available for sale.

For each product, schedule production using the formula:

(Unit Sales Forecast X 1.15) - Inventory On Hand.

Cake – Increase automation level by 1.0 or 2.0 points. Sell 500,000 units of capacity by entering -500 in the Buy Sell Capacity cell.

Cedar – Increase automation level by 1.0 or 2.0 points.

Cid – Increase automation level by 0.5 to 1.0 points.

Coat – Increase automation level by 0.5 to 1.0 points.

Cure – Increase automation level by 0.5 to 1.0 points.

**Important:** There is a one year lag between purchase and use of new capacity and automation for both new and existing products.

## Finance Round 1

Your fiscal policies should maintain adequate working capital reserves to avoid a liquidity crisis. Working capital can be thought of as the money that you need to operate day-to-day. In Capstone® working capital is current assets (cash + accounts receivable + inventory) - current liabilities (accounts payable + current debt). If you run out of cash because your sales are unexpectedly weak, an Emergency Loan will be issued.

Here are some guidelines to help you avoid an Emergency Loan. Your proforma balance sheet predicts your financial condition at the end of this year. Make conservative sales forecasts. Do not rely on the computer prediction. Override it with a forecast of your own. If you are conservative, it is unlikely that your worst expectations will be exceeded. Next, build additional inventory beyond your conservative expectations. This forces your proforma balance sheet to predict a future where your sales forecast comes true and you are left with inventory. (If you sell the inventory, that's wonderful.) On the Finance spreadsheet, issue stock, bonds or current debt until the December 31 Cash Position for the upcoming year equals at least five percent of your assets, as displayed on the proforma balance sheet. This creates an additional reserve for those times when your worst expectations are exceeded and disaster strikes.

As you gain experience with managing your working capital, you will observe that the guidelines above make you somewhat "liquid," and you may wish to tighten your policy by reducing cash and inventory projections. That is fine. The better your marketing forecasts, the less working capital you will require.

Match your plant investment with a long-term bond. If you do not have sufficient new bond debt capacity, issue stock to cover the shortfall.

Pay a dividend between \$0.50 and \$1.00.

Do not issue current debt.

Save decisions (select "directly to the website").

## PRACTICE ROUND 2

### R & D Round 2

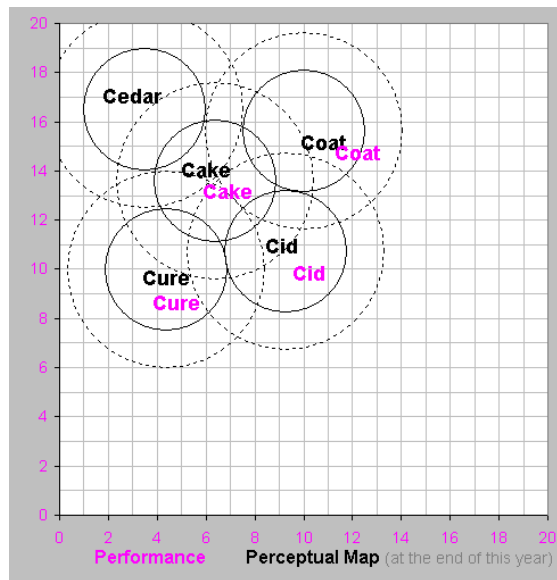
Cake – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material cost. Example: Increase Cake’s performance by 0.9, reduce size by 0.9, and reduce MTBF by 1000 hours.

Cedar – Leave positioning alone, allowing the product to age further. Reduce reliability (MTBF) to reduce material cost. Example: Reduce Cedar’s MTBF by 1000 hours.

Cid – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material cost. Example: Increase Cid’s performance by 1.1, reduce size by 1.1 and reduce MTBF by 1000 hours.

Coat – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material costs. Example: Increase Coat’s performance by 1.4, reduce size by 0.4 and reduce MTBF by 1000 hours.

Cure – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material costs. Example: Increase Cure’s performance by 0.4, reduce size by 1.4 and reduce MTBF by 1000 hours.



### Marketing Round 2

Cake – Offer a price cut, hold promotion and sales budgets near current levels. Forecast improved unit sales. Example: Price \$25.00, promotion budget \$1000, sales budget \$1000, and sales forecast 1400.

Cedar – Offer a price cut, hold promotion and sales budgets near current levels. Forecast improved unit sales. Example: Price \$18.50, promotion budget \$1000, sales budget \$1000, and sales forecast 2100.

Cid – Make moderate cuts in price, hold promotion and sales budgets steady. Forecast improved unit sales. Example: Price \$36.00, promotion budget \$1000, sales budget \$1000, sales forecast 480.

Coat – Make moderate cuts in price, hold promo and sales budgets. Forecast improved unit sales. Example: Price \$32.00, promotion budget \$800, sales budget \$800, sales forecast 520.

Cure – Make moderate cuts in price, hold promo and sales budgets. Forecast improved unit sales. Example: Price \$32.00, promotion budget \$800, sales budget \$800, sales forecast 450.

### Production Round 2

For each product, schedule production using the formula:

$(\text{Unit Sales Forecast} \times 1.15) - \text{Inventory On Hand}$

Cake – Increase automation level by 1.0 or 2.0 points, not to exceed 8.0.

Cedar – Increase automation level by 1.0 or 2.0 points.

Cid – Increase automation level by 0.5 to 1.5 points, not to exceed an automation level of 6.0.

Coat – Increase automation level by 0.5 to 1.5 points, not to exceed an automation level of 6.5.

Cure – Increase automation level by 0.5 to 1.5 points, not to exceed an automation level of 6.5.

## **Finance Round 2**

Match your plant investment with a long-term bond. If you do not have sufficient new bond debt capacity, issue stock to cover the shortfall.

Look at the proforma balance sheet, and add together your cash and inventory accounts. Apply the following rule of thumb. Keep between 15% and 20% of your balance sheet assets in cash plus inventory. You do not care about the mix, but you do want to have adequate reserves to cover unexpected swings in inventory.

Adjust your cash position to meet the guideline from Round 1. If you are cash poor, issue stock. If you are cash rich, pay dividends and buy back stock.

Do not issue current debt.

Save decisions (select “directly to the website”).

## **PRACTICE ROUND 3**

### **R & D Round 3**

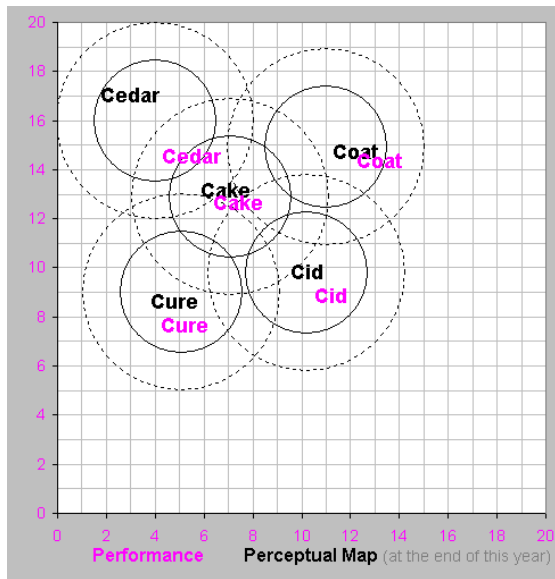
Cake – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material cost. Example: Increase Cake’s performance by 0.9, reduce size by 0.9, and reduce MTBF by 1000 hours. MTBF must not fall below the 14000 lower reliability (MTBF) limit for Traditional customers.

Cedar – Reposition Cedar to the current leading edge of the Low End segment. This will take 1.5 to 2.0 years, and it will sacrifice both positioning and age. It is necessary, however, to keep Cedar within the Low End segment in the long run. Example: Increase Cedar’s performance by 2.0 and reduce size by 2.0.

Cid – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material cost. Example: Increase Cid’s performance by 1.1, reduce size by 1.1 and reduce MTBF by 1000 hours. MTBF must not fall below the 20000 lower reliability (MTBF) limit for High End customers.

Coat – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material costs. Example: Increase Coat’s performance by 1.4, reduce size by 0.4 and reduce MTBF by 1000 hours. MTBF must not fall below the 22000 lower reliability (MTBF) limit for Performance customers.

Cure – Improve positioning and reduce age. Reduce reliability (MTBF) to reduce material costs. Example: Increase Cure’s performance by 0.4, reduce size by 1.4 and reduce MTBF by 1000 hours. MTBF must not fall below the 16000 lower reliability (MTBF) limit for Size customers.



### Marketing Round 3

**Cake** – Offer a price cut. Hold promotion and sales budgets near current levels. Forecast sales near average. Example: Price \$24.50, promotion budget \$1000, sales budget \$1000. Because Cake will have a Revision Date in September, it will lose appeal as its age approaches 3 years just prior to revision. Set the sales forecast of 1000.

**Cedar** – Offer a price cut, hold promotion and sales budgets near current levels. Forecast unit sales near last year's level. Example: Price \$18.00, promotion budget \$1000, sales budget \$1000, and sales forecast 2000.

**Cid** – Hold price, hold promotion and sales budgets steady. Forecast unit sales near last year's level. Example: Price \$36.00, promotion budget \$1000, sales budget \$1000, sales forecast 480.

**Coat** – Hold price, hold promo and sales budgets. Forecast an increase in unit sales. Example: Price \$32.00, promotion budget \$800, sales budget \$800, sales forecast 600.

**Cure** – Hold price, hold promo and sales budgets. Forecast an increase in unit sales. Example: Price \$32.00, promotion budget \$800, sales budget \$800, sales forecast 550.

### Production Round 3

For each product, schedule production using the formula:

(Unit Sales Forecast X 1.15) - Inventory On Hand

**Cake** – Increase automation level by 1.0 or 2.0 points, not to exceed 8.0.

**Cedar** – Increase automation level by 1.0 or 2.0 points, not to exceed the 10.0 upper limit.

**Cid** – Increase automation level by 0.5 to 1.5 points, not to exceed an automation level of 6.0.

**Coat** – Increase automation level by 0.5 to 1.5 points, not to exceed an automation level of 6.5.

**Cure** – Increase automation level by 0.5 to 1.5 points, not to exceed an automation level of 6.5.

### Finance Round 3

Match your plant investment with a long term bond. If you do not have sufficient new bond debt capacity, issue stock to cover the shortfall.

Adjust your cash position to meet the guideline from Round 1. If you are cash poor, issue stock. If you are cash rich, pay dividends and buy back stock.

Do not issue current debt.

Save decisions (select “directly to the website”).

### **SUMMARY CONSIDERATIONS**

Your instructor might want you to play another practice round. If so, continue the Broad Cost Leader vision.

Having executed the plan for two or three rounds, you are now in a position to analyze it. Consider the following questions:

What are this plan’s strengths? Weaknesses?

How will competitors respond to your actions?

How can you influence competitors to avoid competing with you directly?

Which performance measures support this plan?

What is the long range potential of this plan? Its future sales volume? Its future profitability?

How can you best coordinate this plan as a team?