Round 2: Overview

Please look at all aspects of your team's results in the context of your industry. Try and assign all possible causalities for the results you achieved in each functional area. All the information you need is available in the Capstone Courier. That is the best learning (and preparation for subsequent rounds). Please use Excel to help you organize and analyse the wealth of competitor and industry information and to run scenarios.

In addition to other areas, please deliberate on your proclivity to excessive caution or excessive greed -**please navigate a sound course between excessive greed and excessive caution**. Both are equally deleterious to you company's health. Please take well considered logical and realistic decisions in the business environment you operate (for which all information is given in the Capstone Courier).

Some points common to most teams

1. **Your Sales (your top-line) are paramount**. If you are selling well and are maintaining/increasing market share (i.e. have $131M or more in sales in Round 2) you are doing okay. If your sales are poor you (your company) are in trouble. Analyse the causes for poor sales. Essentially, you are not giving the customers what they want (the customer buying criteria) and/or the competition is doing it better. Hence, look the buying criteria for the concerned segment and make changes accordingly:

- Positioning of sensors (i.e. performance and size) – go for the ideal spots or as close to them as possible.
- Age of sensor
- MTBF
- Price
- Awareness (promotion) and accessibility (sales budgets)
- Remember the 4Ps that you learnt in marketing. You have to address all the Ps for making better sales.

2. If the **asset turnover** (The amount of sales generated for every dollar's worth of assets.) is low, take note. Your sales are too low to justify the assets you hold. Dig deeper to analyse the causes. You could be holding very large plant and equipment. Or, maybe your fixed assets are small enough/ adequate, but your current assets (inventory, AR, cash are very high). Examine, analyse, remedy....

3. **Hold your margins** – if your contribution margin for a product is less than ~ 30%, you'll find it difficult to make money on that product. A look at the Courier front page will make this immediately evident. Remember you've got SGA and other period costs to cover. It's good to run scenarios in Capstone. For example,

- For a given price, at what volume do I break even (remember break even analysis!)? And, does my product justify such a volume given its 4Ps. If not, work needs to be done in that area(s).

- For a give volume of sales, what should I price the product to **break even**? What should I price the product so as to attain __% profit, etc. And more importantly, will my product actually sell the volumes given above with its associated marketing mix?
- Enter you figures on Capstone.xls for the scenarios you want to run – see the effect on your proforma income statement and your proforma ratios**. Tinker with as many variables as you like and see the effect.** Capstone provides you a great opportunity to build and analyse scenarios. Build you competence in identifying which levers effect which metric and how they are inter-related. This provides very strong learning indeed and will pay you rich dividends personally and professionally (not to mention you'd do better on Capstone). This is a great ERP at your fingertips.

4. **Emergency Loans**: You know the common causes-

- Over optimistic sales forecast: You thought you'd sell, but wound up with too much inventory in you warehouse. Cash is king. The unsold inventory is hurting you. Your suppliers, creditors, employees, etc want to be paid – you can't tell them "We'll pay you when we sell and get the cash". Too much unexpected inventory could outstrip your inflows, exhaust your starting cash and force you to beg for money to keep your company afloat.
- You didn't fund Plant Capacity Purchases/ Automation CapEx adequately. If you spend on plant make sure you fund it through debt/equity.
- Remember: while forecasting, do a best and worst case scenario. Have enough cash to just cover your worst case scenario (i.e when sales are the lowest possible). Check the bottom most row in the finance screen on Capstone for "Cash position on 31 Dec" of the present year. Make sure it is healthy.

5. **Plant Automation**: Very few of you have invested here. Higher automation means lower labour costs and improved margins. But remember – it cost money and delays your R&D projects. Therefore, plants for *which* products are more amenable for automation than others?

6. **Plant Size**: Some of you are holding plant capacity that would be able to produce more than what you would need three to four years from now! The avoidable depreciation and interest expense is hurting your bottom line and pulling down your ROA and ROE.

7. **New Product Development**: Very few of you have introduced new products. It is an *investment*. In later years, more products, translate into greater market share and better overall margins (remember, they share the same accessibility network). Would Maruti have the same market share if it had only one/two cars in the small car segment, instead of the seven or eight that it has?

8. **Dividends**: I would think, it is too early to be paying dividends; however, it's your company. Your shareholders may be happy, but will ask the question: "Do they not need the money to grow in these early years and give us greater returns in future? Have they run out of growth options?"
Make big profits. The share price will take care of itself. Giving even a dollar a share as dividend now is not only difficult to fund in the initial years, it also deprives you of investments in growth options which would easily allow you to pay $7 a share in later years. Which will improve stock price more?

9. You're running a for profit company. Remember core economics? Extract the consumer surplus. Why drop prices where customers are prepared to pay more?

Round 2: Industry and Team Specific Points

C130943

Andrews missed this round.

General: The gap widens faster than one anticipates. **All teams** made losses this year. Low sales for **Andrews.** The reasons for your low sales are given below in the sales paragraph. The top-line for **Ferris** has shown good growth in the last financial year. Emergency loans were seen for **all teams**. Please read the paragraph on emergency loans below.

In the initial years you will be making some hard decisions to set right the company you have just taken over. **You will be making growth investments. Profits are likely to suffer in the initial years. That's perfectly understandable.**

Always remember, **sell more, sell profitably and keep a check on cash**. More or less everything will fall in place.

Stock Price and Market Cap: **All teams** stock price remained constant at $1/share caused by losses and emergency loans.

Sales: **Chester, Erie and Ferris** had a rise in market share of 0.1%, 1.1% and 4.6% respectively. **Andrews, Baldwin and Digby had a fall** in market share of 2.7%, 1.9% and 1.3% respectively.

Each 1% market share in this round was worth almost $10M. In the real world, heads would roll when there are large losses of market share. Your sales should have been in the region of $131 M if you were retaining market share.

Low sales for Andrews. This was caused by:

- Poor product specifications (performance and size) for Able, Adam, Aft and Agape; look at the ideal spot on the perceptual map. Look at your product specifications. If you do not offer the customers the specifications they desire, sales will suffer.
- High price /pricing outside the price range for Adam.
- Low customers awareness levels due to low promo budgets for Adam, Aft and Agape.
- Poor distribution reach and accessibility caused by low sales budget for Able, Acre, Adam, Aft and Agape.

Please pay more attention to the 4P's of marketing: improve your sales.

Except **Erie**, none of the teams have **introduced new products in the market**. Each team can launch up to three new products. More products help you capture more market share.

Profits: **All teams had bottom line in red**. The reasons for your lower profits are easy to isolate

- High unnecessary depreciation of plant and machinery due to low plant usage for Baldwin, Chester, Digby and Erie. Why keep a plant that only gathers dust.
- High Unsold Inventory and the attendant carrying cost.
- Low Margins

- High interest expense for all team except Chester

Profits are important: Let's not forget why we are running the company.

Return on Sales: Return on Sales (Profit/Sales) answers the question, "How much of every sales dollar did we keep as profit?"

Between 0% and 4%, while the company is at least making a profit, it is not bringing in sufficient new equity to fund growth. The industry is growing at about 15% per year. The industry consumes about 15% more capacity each year, which arrives in the form of plant expansions and new products. Therefore, as the simulation begins, an average company would add about $12 million in new plant each year. If half that or $6 million was funded with bonds, an average company would need about $6 million in new equity. Therefore, if the company does not have the profits, it must either issue $6 million in new stock, or $12 million in bonds, or not grow to keep up with demand. Worse, if it has no profits, its stock price falls, making it difficult to raise equity through stock issues.

This ignores investments in automation, which also require a funding mix of equity and debt.

In the opening round of Capstone® companies have an excess of idle assets, and that can convert idle assets into productive ones. Therefore, do not worry too much if the company's profits are low. But after year 3, expect that idle asset cushion to be gone. Profits become critical because those companies with profits can grow, and those without cannot.

What if profits are negative? The company is destroying equity. Its stock price has plummeted, making it more difficult to raise equity. All of the problems described above are now accelerated. In short, trouble.

How can companies improve ROS? Here are a few questions to pose:

1. Can you raise prices?

2. Can you reduce your labor costs? Your material costs?

3. Can you forecast sales better and thereby reduce your inventory carrying expenses?

4. Have you pushed your promotion or sales budgets into diminishing returns?

5. Can you sell idle plant to reduce depreciation? Alternatively, can you convert idle plant into some other productive asset, like automation or new products?

6. Is your leverage too high, resulting in high interest expenses.

Contribution Margin: All teams need to improve their contribution margin. Aim for contribution margins above 30%. Remember you've got fixed and period costs to cover. To jog you memory:

Contribution margin is defined as:

$$\frac{\text{Sales - (Direct Labor + Direct Materials + Inventory Carry)}}{\text{Sales}}$$

It is reported on Page 1 of the Capstone Courier as an aggregate average of each team's product portfolio. A good benchmark for contribution margin is 30%. A product-by-product margin computation is available on the Income Statement portion of your company's annual reports.

Always watch your margins. It's difficult to maintain long-term success with contribution margins below 30%. There is downward pressure on price across all market segments (50 cents per year). Investments in cost reduction strategies (automation/capacity expansion) should be considered, as should price increases. Also check your MTBF against the Customer Buying Criteria on segment analysis pages of the simulation reports. You may be offering customers more reliability than they care about.

Emergency Loans: All teams have emergency loans. Your company will get no respect from Wall Street if you cannot manage your cash. The reasons are –

Andrews - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of over $219M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $26M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $84M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Baldwin - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of over $56M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $6.7M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $96M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)

- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Chester - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of over $41M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $4.9M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $84M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Digby - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of over $45M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $5.4M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $84M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Erie - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of over $46M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $5.5M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $84M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Ferris - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of over $164M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $19.7M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $80M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

This emergency loan is current debt. It will automatically get plugged into "current debt due this year". Borrow maximum from long and short term debt and raise funds through stock issues and sale of surplus plant to **ensure your 31 Dec closing cash (bottom left row on Finance sheet of Capstone) balance is a healthy figure (attempt 1-2 months of sales).**

Please remember: emergency loan is current debt: you have to repay it in the next year. Please err on the side of caution when it comes to managing cash. Get rid of your emergency loan ASAP. A team with an emergency loan gets no respect: period. Naturally, it impacts your stock prices. Plus it hinders your operational flexibility and business options.

Plant Size and Utilization: Baldwin, Chester, Digby and Erie need improvement in plant utilization. Remember, you can produce up to twice your first shift capacity. For example, **Chester** could have produced the same quantity of goods with 10% of the current first shift capacity of their plant. This would have reduced their depreciation by 90%. Idle plants only bleed you.

Asset Turnover: Andrews, Baldwin and Ferris need to work their assets harder. They have an asset turnover of less than one. **A high asset turnover indicates that sales per unit of asset is high. Remember, the purpose of your assets was to generate sales (and hopefully profitable sales).**

Forecasting and Inventory: All teams have high unsold inventory levels. Please make sales forecasts more deliberately and produce only the quantity you are certain can sell. In the next round you would have the present unsold inventory to sell also. Hence, set production such that you cater to this unsold inventory. Do not overproduce. **Producing more does not mean you will sell more!**

Segment Wise Product Analysis: How are your products faring?

- **Traditional Segment:** Fast leads the industry. Able and Baker have low market share in this segment. Able and Baker have inappropriate age (too high) for the segment (age has an importance of 47% in this segment). All products need improvement in their position (performance and size) in the segment. All products need improvement in accessibility.
- **Low End Segment:** Feat leads the industry. Daze and Able have low market share in this segment. Able is overpriced (outside the price range, Price has an importance of 53% in this segment). Dell, Bead, Cedar, Daze and Able have inappropriate age (too low) for the segment (Age has an importance of 24% in this segment). All products need improvement in accessibility.
- **High End Segment:** Echo leads the industry. Adam has low market share in this segment. All products need improvement in their position (performance and size) in the segment (Ideal position has an importance of 43% in the segment). Adam has inappropriate age (too high) for the segment (Age has an importance of 29% in this segment). Fist, Duck and Adam are overpriced (outside the price range). Cid, Fist, Duck and Adam need increased levels of awareness. Except Echo, all products need improvement in accessibility.
- **Performance Segment:** Edge leads the industry. Aft has low market share in this segment. Dot, Bold, Foam and Aft have low MTBF (MTBF has an importance of 43% in the segment). All products need improvement in its position (performance and size) in the segment (Ideal Position has an importance of 29% in the segment). Aft has inappropriate age (too high) for the segment. Coat, Dot, Foam and Aft need increased levels of awareness. All products need improvement in accessibility.
- **Size Segment:** Cure leads the industry. Buddy and Agape have low market share in this segment. All products need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 43% in the segment). Buddy and Agape have inappropriate age (too high) for the segment (Age has an importance of 29% in the segment). Cure, Dune, Fume and Agape need increased levels of awareness. All products need improvement in accessibility.

Financial Management: Except Chester, all teams need to rework their D/E ratio. The ideal leverage in Capstone is between 1.8 and 2.8.

HR Module: Except Baldwin, teams do not seem to want to improve the productivity of their employees. The productivity and labor costs carry an inverse relation. If the productivity of the employees is 1.1 the labor cost would reduce to 90.9%. To improve on the productivity teams need to invest in training and recruitment of the employees. Please carry out a cost benefit analysis and invest accordingly.

C130944

General: Good round. Variance between teams has grown in the very second year of business. Run your businesses carefully; losing customers and profits weakens you and strengthens your competitors. The gap widens faster than one anticipates. Once your competitors have strengthened, the going gets tougher for you.

Ferris made losses this year. Low sales for **Ferris.** The reasons for your low sales are given below in the sales paragraph. The top-line for **Baldwin** has shown good growth in the last financial year. Emergency loan was seen for **Erie**. Please read the paragraph on emergency loans below.

In the initial years you will be making some hard decisions to set right the company you have just taken over. **You will be making growth investments. Profits are likely to suffer in the initial years. That's perfectly understandable.**

Always remember, **sell more, sell profitably and keep a check on cash**. More or less everything will fall in place.

Stock Price and Market Cap: Andrews, Baldwin, Chester and Digby had a rise in stock price of $4/share, $10/share, $9/share and $4/share respectively. Ferris's stock price remained constant at $1/share. **Erie** had a fall in stock price of $5/share. **Andrews** is the most valuable company with a market capitalization of **$115M**.

Sales: Andrews, Baldwin and Digby had a rise in market share of 0.9%, 8.6% and 0.2% respectively. **Chester, Erie and Ferris had a fall** in market share of 0.5%, 1.8% and 7.5% respectively.

Each 1% market share in this round was worth almost $10M. In the real world, heads would roll when there are large losses of market share. Your sales should have been in the region of $131 M if you were retaining market share.

Low sales for Ferris. This was caused by:

- Poor product specifications (performance and size) for Fast; look at the ideal spot on the perceptual map. Look at your product specifications. If you do not offer the customers the specifications they desire, sales will suffer.
- Poor distribution reach and accessibility caused by low sales budget for Fast and Feat.
- You have exited three segments simultaneously. Make sure you take up a position of equal or greater opportunity in another segment.

Please pay more attention to the 4P's of marketing: improve your sales.

Except **Andrews and Digby**, none of the teams have **introduced new products in the market**. Each team can launch up to three new products. More products help you capture more market share.

Profits: Ferris had bottom line in red. The reasons for your lower profits are easy to isolate

- High Unsold Inventory and the attendant carrying cost.
- Low Margins
- High Interest Expense
- Low Sales

Profits are important: Let's not forget why we are running the company.

Return on Sales: Return on Sales (Profit/Sales) answers the question, "How much of every sales dollar did we keep as profit?"

Between 0% and 4%, while the company is at least making a profit, it is not bringing in sufficient new equity to fund growth. The industry is growing at about 15% per year. The industry consumes about 15% more capacity each year, which arrives in the form of plant expansions and new products. Therefore, as the simulation begins, an average company would add about $12 million in new plant each year. If half that or $6 million was funded with bonds, an average company would need about $6 million in new equity. Therefore, if the company does not have the profits, it must either issue $6 million in new stock, or $12 million in bonds, or not grow to keep up with demand. Worse, if it has no profits, its stock price falls, making it difficult to raise equity through stock issues.

This ignores investments in automation, which also require a funding mix of equity and debt.

In the opening round of Capstone® companies have an excess of idle assets, and that can convert idle assets into productive ones. Therefore, do not worry too much if the company's profits are low. But after year 3, expect that idle asset cushion to be gone. Profits become critical because those companies with profits can grow, and those without cannot.

What if profits are negative? The company is destroying equity. Its stock price has plummeted, making it more difficult to raise equity. All of the problems described above are now accelerated. In short, trouble.

How can companies improve ROS? Here are a few questions to pose:

1. Can you raise prices?

2. Can you reduce your labor costs? Your material costs?

3. Can you forecast sales better and thereby reduce your inventory carrying expenses?

4. Have you pushed your promotion or sales budgets into diminishing returns?

5. Can you sell idle plant to reduce depreciation? Alternatively, can you convert idle plant into some other productive asset, like automation or new products?

6. Is your leverage too high, resulting in high interest expenses.

Contribution Margin: Baldwin and Ferris need to improve their contribution margin. Aim for contribution margins above 30%. Remember you've got fixed and period costs to cover. To jog you memory:

Contribution margin is defined as:

$$\frac{\text{Sales - (Direct Labor + Direct Materials + Inventory Carry)}}{\text{Sales}}$$

It is reported on Page 1 of the Capstone Courier as an aggregate average of each team's product portfolio. A good benchmark for contribution margin is 30%. A product-by-product margin computation is available on the Income Statement portion of your company's annual reports.

Always watch your margins. It's difficult to maintain long-term success with contribution margins below 30%. There is downward pressure on price across all market segments (50 cents per year). Investments in cost reduction strategies (automation/capacity expansion) should be considered, as should price increases. Also check your MTBF against the Customer Buying Criteria on segment analysis pages of the simulation reports. You may be offering customers more reliability than they care about.

Emergency Loans: Erie have emergency loans. Your company will get no respect from Wall Street if you cannot manage your cash. The reasons are –

Erie – For a cash outflow of $26.3M (plant improvements + dividends), you raised $5M through equity. Remember assets = liabilities plus equity. You increased assets (larger plant) but did not fund it adequately with debt and equity. Where will the cash come from? You also have high unsold inventory worth $25.2M which is blocking cash. In the next year, please make realistic forecasts and do not overproduce inventory. In the next round, remember to raise funds from long term and current debt to repay this emergency loan. See note in red below:

This emergency loan is current debt. It will automatically get plugged into "current debt due this year". Borrow maximum from long and short term debt and raise funds through stock issues and sale of surplus plant to **ensure your 31 Dec closing cash (bottom left row on Finance sheet of Capstone) balance is a healthy figure (attempt 1-2 months of sales).**

Please remember: emergency loan is current debt: you have to repay it in the next year. Please err on the side of caution when it comes to managing cash. Get rid of your emergency loan ASAP. A team with an emergency loan gets no respect: period. Naturally, it impacts your stock prices. Plus it hinders your operational flexibility and business options.

Plant Size and Utilization: Chester, Digby and Erie need improvement in plant utilization. Remember, you can produce up to twice your first shift capacity. Idle plants only bleed you.

Asset Turnover: Erie and Ferris need to work their assets harder. They have an asset turnover of less than one. **A high asset turnover indicates that sales per unit of asset is high. Remember, the purpose of your assets was to generate sales (and hopefully profitable sales).**

Forecasting and Inventory: Erie and Ferris have high unsold inventory levels. Please make sales forecasts more deliberately and produce only the quantity you are certain can sell. In the next round you would have the present unsold inventory to sell also. Hence, set production such that you cater to this unsold inventory. Do not overproduce. **Producing more does not mean you will sell more!**

Segment Wise Product Analysis: How are your products faring?

- **Traditional Segment:** Able leads the industry. Eat has low market share in this segment. Eat has inappropriate age (too high) for the segment (age has an importance of 47% in this segment). Fast and Eat need improvement in their position (performance and size) in the segment. Cake, Daze, Fast, And Eat need improvement in accessibility.
- **Low End Segment:** Bead leads the industry. Ebb has low market share in this segment. Feat and Acre have inappropriate age (too low) for the segment (Age has an importance of 24% in this segment). All products need improvement in accessibility.
- **High End Segment:** Bid leads the industry. Baker has low market share in this segment. All products need improvement in their position (performance and size) in the segment (Ideal position has an importance of 43% in the segment). Echo has inappropriate age (too high) for the segment (Age has an importance of 29% in this segment). Baker has poor MTBF. Duck, Adam and Cid are overpriced (outside the price range). Echo needs increased levels of awareness. All products need improvement in accessibility.
- **Performance Segment:** Aft leads the industry. Edge has low MTBF (MTBF has an importance of 43% in the segment). Except Dot, all products need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 29% in the segment). Except Dot, all products have inappropriate age (too high) for the segment. Except Edge, all products need increased levels of awareness. All products need improvement in accessibility. This has become a seller’s market. Teams should strategize accordingly.
- **Size Segment:** Buddy leads the industry. Baker and Daze have low market share in this segment. All products need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 43% in the segment). Cure and Egg have inappropriate age (too high) for the segment (Age has an importance of 29% in the segment). Dune is overpriced (outside the price range). Buddy, Cure, Dune and Agape need increased levels of awareness. All products need improvement in accessibility.

Financial Management: Except Ferris, all teams are low on leverage. ROA times the leverage is ROE.

HR Module: Baldwin, Chester, Erie and Ferris do not seem to want to improve the productivity of their employees. The productivity and labor costs carry an inverse relation. If the productivity of the employees is 1.1 the labor cost would reduce to 90.9%. To improve on the productivity teams need to invest in training and recruitment of the employees. Please carry out a cost benefit analysis and invest accordingly.

C130945

Digby missed this round.

General: Well played round. Variance between teams has grown in the very second year of business. Run your businesses carefully; losing customers and profits weakens you and strengthens your competitors. The gap widens faster than one anticipates. Once your competitors have strengthened, the going gets tougher for you.

Andrews, Digby and Erie made losses this year. Low sales for **Andrews and Digby.** The reasons for your low sales are given below in the sales paragraph. The top-line for **Baldwin** has shown good growth in the last financial year.

In the initial years you will be making some hard decisions to set right the company you have just taken over. **You will be making growth investments. Profits are likely to suffer in the initial years. That's perfectly understandable.**

Always remember, **sell more, sell profitably and keep a check on cash**. More or less everything will fall in place.

Stock Price and Market Cap: **Baldwin and Chester** had a rise in stock price of $12/share and $9/share respectively. **Andrews, Digby, Erie and Ferris** had a fall in stock price of $17/share, $10/share, $16/share and $1/share respectively. **Chester** is the most valuable company with a market capitalization of **$149M**.

Sales: **Baldwin and Chester** had a rise in market share of 14.6% and 5.4% respectively. **Andrews, Digby, Erie and Ferris had a fall** in market share of 8.6%, 7.9%, 2.5% and 1% respectively.

Each 1% market share in this round was worth almost $10M. In the real world, heads would roll when there are large losses of market share. Your sales should have been in the region of $131 M if you were retaining market share.

Low sales for Andrews and Digby. This was caused by:

- Poor product specifications (performance and size) for Able, Adam, Aft, Agape, Daze, Dell, Duck, Dot and Dune; look at the ideal spot on the perceptual map. Look at your product specifications. If you do not offer the customers the specifications they desire, sales will suffer.
- Low customers awareness levels due to low promo budgets for Adam, Aft, Agape, Duck, Dot and Dune.
- Poor distribution reach and accessibility caused by low sales budget for Able, Acre, Adam, Aft, Agape, Daze, Dell, Duck, Dot and Dune.

Please pay more attention to the 4P's of marketing: improve your sales.

Except **Chester**, none of the teams have **introduced new products in the market**. Each team can launch up to three new products. More products help you capture more market share.

Profits: **Andrews, Digby and Erie had bottom line in red**. The reasons for your lower profits are easy to isolate

- High unnecessary depreciation of plant and machinery due to low plant usage. Why keep a plant that only gathers dust.
- High Unsold Inventory and the attendant carrying cost for Andrews and Digby.
- Low Margins for Andrews and Erie

Profits are important: Let's not forget why we are running the company.

Return on Sales: Return on Sales (Profit/Sales) answers the question, "How much of every sales dollar did we keep as profit?"

Between 0% and 4%, while the company is at least making a profit, it is not bringing in sufficient new equity to fund growth. The industry is growing at about 15% per year. The industry consumes about 15% more capacity each year, which arrives in the form of plant expansions and new products. Therefore, as the simulation begins, an average company would add about $12 million in new plant each year. If half that or $6 million was funded with bonds, an average company would need about $6 million in new equity. Therefore, if the company does not have the profits, it must either issue $6 million in new stock, or $12 million in bonds, or not grow to keep up with demand. Worse, if it has no profits, its stock price falls, making it difficult to raise equity through stock issues.

This ignores investments in automation, which also require a funding mix of equity and debt.

In the opening round of Capstone® companies have an excess of idle assets, and that can convert idle assets into productive ones. Therefore, do not worry too much if the company's profits are low. But after year 3, expect that idle asset cushion to be gone. Profits become critical because those companies with profits can grow, and those without cannot.

What if profits are negative? The company is destroying equity. Its stock price has plummeted, making it more difficult to raise equity. All of the problems described above are now accelerated. In short, trouble.

How can companies improve ROS? Here are a few questions to pose:

1. Can you raise prices?

2. Can you reduce your labor costs? Your material costs?

3. Can you forecast sales better and thereby reduce your inventory carrying expenses?

4. Have you pushed your promotion or sales budgets into diminishing returns?

5. Can you sell idle plant to reduce depreciation? Alternatively, can you convert idle plant into some other productive asset, like automation or new products?

6. Is your leverage too high, resulting in high interest expenses.

Contribution Margin: Andrews, Baldwin and Erie need to improve their contribution margin. Aim for contribution margins above 30%. Remember you've got fixed and period costs to cover. To jog you memory:

Contribution margin is defined as:

$$\frac{\text{Sales - (Direct Labor + Direct Materials + Inventory Carry)}}{\text{Sales}}$$

It is reported on Page 1 of the Capstone Courier as an aggregate average of each team's product portfolio. A good benchmark for contribution margin is 30%. A product-by-product margin computation is available on the Income Statement portion of your company's annual reports.

Always watch your margins. It's difficult to maintain long-term success with contribution margins below 30%. There is downward pressure on price across all market segments (50 cents per year). Investments in cost reduction strategies (automation/capacity expansion) should be considered, as should price increases. Also check your MTBF against the Customer Buying Criteria on segment analysis pages of the simulation reports. You may be offering customers more reliability than they care about.

Emergency Loans: Emergency loan is current debt. It will automatically get plugged into "current debt due this year". Borrow maximum from long and short term debt and raise funds through stock issues and sale of surplus plant to **ensure your 31 Dec closing cash (bottom left row on Finance sheet of Capstone) balance is a healthy figure (attempt 1-2 months of sales).**

Please remember: emergency loan is current debt: you have to repay it in the next year. Please err on the side of caution when it comes to managing cash. Get rid of your emergency loan ASAP. A team with an emergency loan gets no respect: period. Naturally, it impacts your stock prices. Plus it hinders your operational flexibility and business options.

Plant Size and Utilization: Andrews, Digby, Erie and Ferris need improvement in plant utilization. Remember, you can produce up to twice your first shift capacity. For example, **Digby** could have produced the same quantity of goods with 35% of the current first shift capacity of their plant. This would have reduced their depreciation by 65%. Idle plants only bleed you.

Asset Turnover: Andrews, Digby and Ferris need to work their assets harder. They have an asset turnover of less than one. **A high asset turnover indicates that sales per unit of asset is high. Remember, the purpose of your assets was to generate sales (and hopefully profitable sales).**

Forecasting and Inventory: Andrews and Digby have high unsold inventory levels. Please make sales forecasts more deliberately and produce only the quantity you are certain can sell. In the next round you would have the present unsold inventory to sell also. Hence, set production such that you cater to this unsold inventory. Do not overproduce. **Producing more does not mean you will sell more!**

Segment Wise Product Analysis: How are your products faring?

- **Traditional Segment:** Baker leads the industry. Crème, Able and Feat have low market share in this segment. Fast, Daze, Able and Fest have inappropriate age (too high) for the segment (age has an importance of 47% in this segment). Daze, Crème, Able and Fest need improvement in their position (performance and size) in the segment. Crème needs increased levels of awareness. (It has awareness of only 64% and hence 36% of the market does not know about your product). Fast, Daze, Able and Feat need improvement in accessibility.

- **Low End Segment:** Cedar leads the industry. Crème and Feat have low market share in this segment. Dell and Feat have inappropriate age (too low) for the segment (Age has an importance of 24% in this segment). Dell needs improvement in its position (performance and size) in the segment. Crème needs increased levels of awareness. Acre, Dell and Feat need improvement in accessibility.
- **High End Segment:** Bid leads the industry. Adam and Foam have low market share in this segment. All products need improvement in their position (performance and size) in the segment (Ideal position has an importance of 43% in the segment). Duck and Adam have inappropriate age (too high) for the segment (Age has an importance of 29% in this segment). Duck, Adam and Foam need increased levels of awareness. Cid, Fist, Duck, Adam and Foam need improvement in accessibility.
- **Performance Segment:** Coat leads the industry. Dot has low market share in this segment. Edge, Foam, Aft and Dot have low MTBF (MTBF has an importance of 43% in the segment). Except Coat, all products need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 29% in the segment). Bold, Edge, Aft and Dot have inappropriate age (too high) for the segment. Foam, Aft and Dot need increased levels of awareness. Except Bold, all products need improvement in accessibility.
- **Size Segment:** Coat leads the industry. Dune and Agape have low market share in this segment. Buddy, Egg, Dune and Agape need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 43% in the segment). Egg, Dune and Agape have inappropriate age (too high) for the segment (Age has an importance of 29% in the segment). Fume, Dune and Agape need increased levels of awareness. Except Buddy, all products need improvement in accessibility.

Financial Management: **Except Baldwin, all teams** are low on leverage. ROA times the leverage is ROE.

HR Module: **Except Andrews, teams** do not seem to want to improve the productivity of their employees. The productivity and labor costs carry an inverse relation. If the productivity of the employees is 1.1 the labor cost would reduce to 90.9%. To improve on the productivity teams need to invest in training and recruitment of the employees. Please carry out a cost benefit analysis and invest accordingly.

C130946

General: Interesting round. Variance between teams has grown in the very second year of business. Run your businesses carefully; losing customers and profits weakens you and strengthens your competitors. The gap widens faster than one anticipates. Once your competitors have strengthened, the going gets tougher for you.

Andrews, Digby, Erie and Ferris made losses this year. Low sales for **Ferris.** The reasons for your low sales are given below in the sales paragraph. The top-line for **Chester** has shown good growth in the last financial year. Emergency loans were seen for **Andrews, Digby, Erie and Ferris**. Please read the paragraph on emergency loans below.

In the initial years you will be making some hard decisions to set right the company you have just taken over. **You will be making growth investments. Profits are likely to suffer in the initial years. That's perfectly understandable.**

Always remember, **sell more, sell profitably and keep a check on cash**. More or less everything will fall in place.

Stock Price and Market Cap: **Chester** had a rise in stock price of $5/share. **Ferris's** stock price remained constant at $1/share. **Andrews, Baldwin, Digby and Erie** had a fall in stock price of $12/share, $8/share, $13/share and $8/share respectively. **Chester** is the most valuable company with a market capitalization of **$87M**.

Sales: **Baldwin, Chester and Ferris** had a rise in market share of 0.7%, 11.7% and 0.3% respectively. **Andrews, Digby and Erie had a fall** in market share of 4.5%, 4.3% and 3.9% respectively.

Each 1% market share in this round was worth almost $10M. In the real world, heads would roll when there are large losses of market share. Your sales should have been in the region of $131 M if you were retaining market share.

Low sales for Ferris. This was caused by:

- Poor product specifications (performance and size) for Fist, Foam and Fume; look at the ideal spot on the perceptual map. Look at your product specifications. If you do not offer the customers the specifications they desire, sales will suffer.
- Low customers awareness levels due to low promo budgets for Fist and Foam.
- Poor distribution reach and accessibility caused by low sales budget for all Ferris's products.

Please pay more attention to the 4P's of marketing: improve your sales.

None of the teams have **introduced new products in the market**. Each team can launch up to three new products. More products help you capture more market share.

Profits: **Andrews, Digby, Erie and Ferris had bottom line in red**. The reasons for your lower profits are easy to isolate

- High unnecessary depreciation of plant and machinery due to low plant usage for Ferris. Why keep a plant that only gathers dust.

- High Unsold Inventory and the attendant carrying cost.
- Low Margins
- High Interest Expense

Profits are important: Let's not forget why we are running the company.

Return on Sales: Return on Sales (Profit/Sales) answers the question, "How much of every sales dollar did we keep as profit?"

Between 0% and 4%, while the company is at least making a profit, it is not bringing in sufficient new equity to fund growth. The industry is growing at about 15% per year. The industry consumes about 15% more capacity each year, which arrives in the form of plant expansions and new products. Therefore, as the simulation begins, an average company would add about $12 million in new plant each year. If half that or $6 million was funded with bonds, an average company would need about $6 million in new equity. Therefore, if the company does not have the profits, it must either issue $6 million in new stock, or $12 million in bonds, or not grow to keep up with demand. Worse, if it has no profits, its stock price falls, making it difficult to raise equity through stock issues.

This ignores investments in automation, which also require a funding mix of equity and debt.

In the opening round of Capstone® companies have an excess of idle assets, and that can convert idle assets into productive ones. Therefore, do not worry too much if the company's profits are low. But after year 3, expect that idle asset cushion to be gone. Profits become critical because those companies with profits can grow, and those without cannot.

What if profits are negative? The company is destroying equity. Its stock price has plummeted, making it more difficult to raise equity. All of the problems described above are now accelerated. In short, trouble.

How can companies improve ROS? Here are a few questions to pose:

1. Can you raise prices?

2. Can you reduce your labor costs? Your material costs?

3. Can you forecast sales better and thereby reduce your inventory carrying expenses?

4. Have you pushed your promotion or sales budgets into diminishing returns?

5. Can you sell idle plant to reduce depreciation? Alternatively, can you convert idle plant into some other productive asset, like automation or new products?

6. Is your leverage too high, resulting in high interest expenses.

Contribution Margin: All teams need to improve their contribution margin. Aim for contribution margins above 30%. Remember you've got fixed and period costs to cover. To jog you memory:

Contribution margin is defined as:

Sales - (Direct Labor + Direct Materials + Inventory Carry)

Sales

It is reported on Page 1 of the Capstone Courier as an aggregate average of each team's product portfolio. A good benchmark for contribution margin is 30%. A product-by-product margin computation is available on the Income Statement portion of your company's annual reports.

Always watch your margins. It's difficult to maintain long-term success with contribution margins below 30%. There is downward pressure on price across all market segments (50 cents per year). Investments in cost reduction strategies (automation/capacity expansion) should be considered, as should price increases. Also check your MTBF against the Customer Buying Criteria on segment analysis pages of the simulation reports. You may be offering customers more reliability than they care about.

Emergency Loans: Andrews, Digby, Erie and Ferris have emergency loans. Your company will get no respect from Wall Street if you cannot manage your cash. The reasons are –

Andrews - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of over $159M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $19M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $36M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Digby - The reasons for your emergency loan were large cash outflows arising from:

- You spent (wrote out cheques) for $18.8M for plant. Assets increased but you did not fund it adequately with debt and equity. Where will the cash come from?
- You have large unsold inventories of over $89M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $10.8M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $36M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:

Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Erie - The reasons for your emergency loan were large cash outflows arising from:

- You spent (wrote out cheques) for $11.3M for plant. Assets increased but you did not fund it adequately with debt and equity. Where will the cash come from?
- You have large unsold inventories of over $94M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $11.2M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $36M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Ferris - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of almost $140M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $16.8M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $163M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

This emergency loan is current debt. It will automatically get plugged into "current debt due this year". Borrow maximum from long and short term debt and raise funds through stock issues and sale of surplus plant to **ensure your 31 Dec closing cash (bottom left row on Finance sheet of Capstone) balance is a healthy figure (attempt 1-2 months of sales).**

Please remember: emergency loan is current debt: you have to repay it in the next year. Please err on the side of caution when it comes to managing cash. Get rid of your emergency loan ASAP. A team with an emergency loan gets no respect: period. Naturally, it impacts your stock prices. Plus it hinders your operational flexibility and business options.

Plant Size and Utilization: Ferris needs improvement in plant utilization. Remember, you can produce up to twice your first shift capacity. Idle plants only bleed you.

Asset Turnover: Andrews, Digby, Erie and Ferris need to work their assets harder. They have an asset turnover of less than one. **A high asset turnover indicates that sales per unit of asset is high. Remember, the purpose of your assets was to generate sales (and hopefully profitable sales).**

Forecasting and Inventory: Andrews, Digby, Erie and Ferris have high unsold inventory levels. Please make sales forecasts more deliberately and produce only the quantity you are certain can sell. In the next round you would have the present unsold inventory to sell also. Hence, set production such that you cater to this unsold inventory. Do not overproduce. **Producing more does not mean you will sell more!**

Segment Wise Product Analysis: How are your products faring?

- **Traditional Segment:** Cake leads the industry. Fast and Ebb have low market share in this segment. Baker, Able and Eat have inappropriate age (too high) for the segment (age has an importance of 47% in this segment). Able and Ebb need improvement in their position (performance and size) in the segment. Fast and Ebb have poor MTBF. Except Cake, all products need improvement in accessibility.
- **Low End Segment:** Cedar leads the industry. Ebb and Able have low market share in this segment. Able is overpriced (outside the price range, Price has an importance of 53% in this segment). Cedar, Dell, Ebb and Able have inappropriate age (too low) for the segment (Age has an importance of 24% in this segment). Except Cedar, all products need improvement in accessibility.
- **High End Segment:** Cid leads the industry. Fist has low market share in this segment. All products need improvement in their position (performance and size) in the segment (Ideal position has an importance of 43% in the segment). Echo has inappropriate age (too high) for the segment (Age has an importance of 29% in this segment). Fist has poor MTBF. Adam and Bid are overpriced (outside the price range). Adam and Fist needs increased levels of awareness. Except Cid, all products need improvement in accessibility.
- **Performance Segment:** Coat leads the industry. Foam has low market share in this segment. Dot, Aft, Edge and Foam have low MTBF (MTBF has an importance of 43% in the segment). Except Coat all products need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 29% in the segment). Bold is overpriced (outside the price range). Bold, Dot, Aft and Edge

have inappropriate age (too high) for the segment. Bold, Aft, Edge, and Foam need increased levels of awareness. All products need improvement in accessibility.

- **Size Segment:** Cure leads the industry. Fume has low market share in this segment. Except Cure, all products need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 43% in the segment). Egg and Dune have inappropriate age (too high) for the segment (Age has an importance of 29% in the segment). Fume has poor MTBF. Agape needs increased levels of awareness. Except Cure, all products need improvement in accessibility.

Financial Management: **Baldwin and Chester** are low on leverage. ROA times the leverage is ROE.

HR Module: **Teams** do not seem to want to improve the productivity of their employees. The productivity and labor costs carry an inverse relation. If the productivity of the employees is 1.1 the labor cost would reduce to 90.9%. To improve on the productivity teams need to invest in training and recruitment of the employees. Please carry out a cost benefit analysis and invest accordingly.

C130947

General: Interesting round. Variance between teams has grown in the very second year of business. Run your businesses carefully; losing customers and profits weakens you and strengthens your competitors. The gap widens faster than one anticipates. Once your competitors have strengthened, the going gets tougher for you.

Andrews, Chester, Digby and Erie made losses this year. Low sales for **Erie.** The reasons for your low sales are given below in the sales paragraph. The top-line for **Chester** has shown good growth in the last financial year. Emergency loans were seen for **Andrews, Baldwin, Digby and Erie**. Please read the paragraph on emergency loans below.

In the initial years you will be making some hard decisions to set right the company you have just taken over. **You will be making growth investments. Profits are likely to suffer in the initial years. That's perfectly understandable.**

Always remember, **sell more, sell profitably and keep a check on cash**. More or less everything will fall in place.

Stock Price and Market Cap: Chester and Ferris had a rise in stock price of $12/share and $9/share respectively. **Digby and Erie's** stock price remained constant at $1/share. **Andrews and Baldwin** had a fall in stock price of $4/share and $6/share respectively. **Ferris** is the most valuable company with a market capitalization of **$105M**.

Sales: Chester and Ferris had a rise in market share of 5.9% and 2.4% respectively. **Andrews, Baldwin, Digby and Erie had a fall** in market share of 2%, 0.9%, 0.7% and 4.7% respectively.

Each 1% market share in this round was worth almost $10M. In the real world, heads would roll when there are large losses of market share. Your sales should have been in the region of $131 M if you were retaining market share.

Low sales for Erie. This was caused by:

- Poor product specifications (performance and size) for Eat, Echo, Edge and Egg; look at the ideal spot on the perceptual map. Look at your product specifications. If you do not offer the customers the specifications they desire, sales will suffer.
- High price /pricing outside the price range for Echo.
- Low customers awareness levels due to low promo budgets for Ebb, Echo, Edge and Egg.
- Poor distribution reach and accessibility caused by low sales budget for Eat, Ebb, Echo, Edge and Egg.

Please pay more attention to the 4P's of marketing: improve your sales.

None of the teams have **introduced new products in the market**. Each team can launch up to three new products. More products help you capture more market share.

Profits: Andrews, Chester, Digby and Erie had bottom line in red. The reasons for your lower profits are easy to isolate

- High unnecessary depreciation of plant and machinery due to low plant usage for Chester, Digby and Erie. Why keep a plant that only gathers dust.
- High Unsold Inventory and the attendant carrying cost for Andrews, Digby and Erie.
- Low Margins for Andrews, Digby and Erie
- High interest expense for Andrews and Digby

Profits are important: Let's not forget why we are running the company.

Return on Sales: Return on Sales (Profit/Sales) answers the question, "How much of every sales dollar did we keep as profit?"

Between 0% and 4%, while the company is at least making a profit, it is not bringing in sufficient new equity to fund growth. The industry is growing at about 15% per year. The industry consumes about 15% more capacity each year, which arrives in the form of plant expansions and new products. Therefore, as the simulation begins, an average company would add about $12 million in new plant each year. If half that or $6 million was funded with bonds, an average company would need about $6 million in new equity. Therefore, if the company does not have the profits, it must either issue $6 million in new stock, or $12 million in bonds, or not grow to keep up with demand. Worse, if it has no profits, its stock price falls, making it difficult to raise equity through stock issues.

This ignores investments in automation, which also require a funding mix of equity and debt.

In the opening round of Capstone® companies have an excess of idle assets, and that can convert idle assets into productive ones. Therefore, do not worry too much if the company's profits are low. But after year 3, expect that idle asset cushion to be gone. Profits become critical because those companies with profits can grow, and those without cannot.

What if profits are negative? The company is destroying equity. Its stock price has plummeted, making it more difficult to raise equity. All of the problems described above are now accelerated. In short, trouble.

How can companies improve ROS? Here are a few questions to pose:

1. Can you raise prices?

2. Can you reduce your labor costs? Your material costs?

3. Can you forecast sales better and thereby reduce your inventory carrying expenses?

4. Have you pushed your promotion or sales budgets into diminishing returns?

5. Can you sell idle plant to reduce depreciation? Alternatively, can you convert idle plant into some other productive asset, like automation or new products?

6. Is your leverage too high, resulting in high interest expenses.

Contribution Margin: Andrews, Chester, Digby and Erie need to improve their contribution margin. Aim for contribution margins above 30%. Remember you've got fixed and period costs to cover. To jog you memory:

Contribution margin is defined as:

$$\frac{\text{Sales - (Direct Labor + Direct Materials + Inventory Carry)}}{\text{Sales}}$$

It is reported on Page 1 of the Capstone Courier as an aggregate average of each team's product portfolio. A good benchmark for contribution margin is 30%. A product-by-product margin computation is available on the Income Statement portion of your company's annual reports.

Always watch your margins. It's difficult to maintain long-term success with contribution margins below 30%. There is downward pressure on price across all market segments (50 cents per year). Investments in cost reduction strategies (automation/capacity expansion) should be considered, as should price increases. Also check your MTBF against the Customer Buying Criteria on segment analysis pages of the simulation reports. You may be offering customers more reliability than they care about.

Emergency Loans: Andrews, Baldwin, Digby and Erie have emergency loans. Your company will get no respect from Wall Street if you cannot manage your cash. The reasons are –

Andrews - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of over $106M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $12.7M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $36.2M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Baldwin – For a cash outflow of $9.6M (plant improvements), you raised $2M through debt and equity. Remember assets = liabilities plus equity. You increased assets (larger plant) but did not fund it adequately with debt and equity. Where will the cash come from? You also have high unsold inventory worth $22.9M which is blocking cash. In the next year, please make realistic forecasts and do not overproduce inventory. In the next round, remember to raise funds from long term and current debt to repay this emergency loan. See note in red below:

Digby - The reasons for your emergency loan were large cash outflows arising from:

- You spent (wrote out cheques) for $7.2M for plant. Assets increased but you did not fund it adequately with debt and equity. Where will the cash come from?
- You have large unsold inventories of over $69M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $8.3M as inventory carrying costs) and depressed profits
- Previous years' emergency loan/current debt of $58.2M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Erie - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of over $56M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $6.7M as inventory carrying costs) and depressed profits
- You bought back (retired) long term debt of $0.5M
- Previous years' emergency loan and current debt of $59.6M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

This emergency loan is current debt. It will automatically get plugged into "current debt due this year". Borrow maximum from long and short term debt and raise funds through stock issues and sale of surplus plant to **ensure your 31 Dec closing cash (bottom left row on Finance sheet of Capstone) balance is a healthy figure (attempt 1-2 months of sales).**

Please remember: emergency loan is current debt: you have to repay it in the next year. Please err on the side of caution when it comes to managing cash. Get rid of your emergency loan ASAP. A team with an emergency loan gets no respect: period. Naturally, it impacts your stock prices. Plus it hinders your operational flexibility and business options.

Plant Size and Utilization: Except Andrews, all the teams need improvement in plant utilization. Remember, you can produce up to twice your first shift capacity. For example, **Chester** could have produced the same quantity of goods with 25% of the current first shift capacity of their plant. This would have reduced their depreciation by 75%. Idle plants only bleed you.

Asset Turnover: Andrews, Digby, Erie and Ferris need to work their assets harder. They have an asset turnover of less than one. **A high asset turnover indicates that sales per unit of asset is high. Remember, the purpose of your assets was to generate sales (and hopefully profitable sales).**

Forecasting and Inventory: Andrews, Baldwin, Digby and Erie have high unsold inventory levels. Please make sales forecasts more deliberately and produce only the quantity you are certain can sell. In the next round you would have the present unsold inventory to sell also. Hence, set production such that you cater to this unsold inventory. Do not overproduce. **Producing more does not mean you will sell more!**

Segment Wise Product Analysis: How are your products faring?

- **Traditional Segment:** Able leads the industry. Cedar and Acre have low market share in this segment. Cake, Eat, Cedar and Acre have inappropriate age (too high) for the segment (age has an importance of 47% in this segment). Daze, Eat, Cedar and Acre need improvement in their position (performance and size) in the segment. All products need improvement in accessibility.
- **Low End Segment:** Feat leads the industry. Eat and Daze have low market share in this segment. Daze is overpriced (outside the price range, Price has an importance of 53% in this segment). Dell, Cedar, Bead and Acre have inappropriate age (too low) for the segment (Age has an importance of 24% in this segment). Dell needs improvement in its position (performance and size) in the segment. Ebb and Bead need increased levels of awareness. All products need improvement in accessibility.
- **High End Segment:** Bid leads the industry. Coat has low market share in this segment. All products need improvement in their position (performance and size) in the segment (Ideal position has an importance of 43% in the segment). Adam and Coat have inappropriate age (too high) for the segment (Age has an importance of 29% in this segment). Duck, Fist and Echo are overpriced (outside the price range). Duck, Echo and Adam need increased levels of awareness. Duck, Fist, Echo and Adam need improvement in accessibility.
- **Performance Segment:** Dot leads the industry. Aft and Coat have low market share in this segment. Bold, Edge, Aft and Coat have low MTBF (MTBF has an importance of 43% in the segment). Foam, Bold, Edge and Coat need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 29% in the segment). Bold is overpriced (outside the price range). Foam, Aft and Coat have inappropriate age (too high) for the segment. Dot, Foam, Edge and Aft need increased levels of awareness. All products need improvement in accessibility.
- **Size Segment:** Agape leads the industry. Egg and Cake have low market share in this segment. All products need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 43% in the segment). Egg and Cake have inappropriate age (too high) for the segment (Age has an importance of 29% in the segment). Fume and Buddy are overpriced (outside the price range).

Agape, Dune, Fume and Egg need increased levels of awareness. All products need improvement in accessibility.

Financial Management: **Baldwin** is low on leverage. ROA times the leverage is ROE.

HR Module: **Except Digby, teams** do not seem to want to improve the productivity of their employees. The productivity and labor costs carry an inverse relation. If the productivity of the employees is 1.1 the labor cost would reduce to 90.9%. To improve on the productivity teams need to invest in training and recruitment of the employees. Please carry out a cost benefit analysis and invest accordingly.

C130948

General: Decent round. Variance between teams has grown in the very second year of business. Run your businesses carefully; losing customers and profits weakens you and strengthens your competitors. The gap widens faster than one anticipates. Once your competitors have strengthened, the going gets tougher for you.

Andrews and Baldwin made losses this year. Low sales for **Chester.** The reasons for your low sales are given below in the sales paragraph. The top-line for **Erie** has shown good growth in the last financial year. Emergency loans were seen for **Baldwin and Chester**. Please read the paragraph on emergency loans below.

In the initial years you will be making some hard decisions to set right the company you have just taken over. **You will be making growth investments. Profits are likely to suffer in the initial years. That's perfectly understandable.**

Always remember, **sell more, sell profitably and keep a check on cash**. More or less everything will fall in place.

Stock Price and Market Cap: **Digby and Erie** had a rise in stock price of $10/share and $1/share respectively. **Baldwin's** stock price remained constant at $1/share. **Andrews and Chester** had a fall in stock price of $19/share and $2/share respectively. **Ferris** is the most valuable company with a market capitalization of **$113M**.

Sales: **Chester, Erie and Ferris** had a rise in market share of 1.7%, 1.8% and 1% respectively. **Andrews, Baldwin and Digby had a fall** in market share of 0.4%, 3.8% and 0.2% respectively.

Each 1% market share in this round was worth almost $10M. In the real world, heads would roll when there are large losses of market share. Your sales should have been in the region of $131 M if you were retaining market share.

Low sales for Chester. This was caused by:

- Poor product specifications (performance and size) for Cid and Cure; look at the ideal spot on the perceptual map. Look at your product specifications. If you do not offer the customers the specifications they desire, sales will suffer.
- Low customers awareness levels due to low promo budgets for Coat and Cure.
- Poor distribution reach and accessibility caused by low sales budget for Cake, Cedar, Cid, Coat and Cure.

Please pay more attention to the 4P's of marketing: improve your sales.

Baldwin, Erie and Ferris have **introduced new products in the market**. Each team can launch up to three new products. More products help you capture more market share.

Profits: **Andrews and Baldwin had bottom line in red**. The reasons for your lower profits are easy to isolate

- High unnecessary depreciation of plant and machinery due to low plant usage for Baldwin. Why keep a plant that only gathers dust.

- High Unsold Inventory and the attendant carrying cost.
- Low Margins
- High Interest Expense for Baldwin

Profits are important: Let's not forget why we are running the company.

Return on Sales: Return on Sales (Profit/Sales) answers the question, "How much of every sales dollar did we keep as profit?"

Between 0% and 4%, while the company is at least making a profit, it is not bringing in sufficient new equity to fund growth. The industry is growing at about 15% per year. The industry consumes about 15% more capacity each year, which arrives in the form of plant expansions and new products. Therefore, as the simulation begins, an average company would add about $12 million in new plant each year. If half that or $6 million was funded with bonds, an average company would need about $6 million in new equity. Therefore, if the company does not have the profits, it must either issue $6 million in new stock, or $12 million in bonds, or not grow to keep up with demand. Worse, if it has no profits, its stock price falls, making it difficult to raise equity through stock issues.

This ignores investments in automation, which also require a funding mix of equity and debt.

In the opening round of Capstone® companies have an excess of idle assets, and that can convert idle assets into productive ones. Therefore, do not worry too much if the company's profits are low. But after year 3, expect that idle asset cushion to be gone. Profits become critical because those companies with profits can grow, and those without cannot.

What if profits are negative? The company is destroying equity. Its stock price has plummeted, making it more difficult to raise equity. All of the problems described above are now accelerated. In short, trouble.

How can companies improve ROS? Here are a few questions to pose:

1. Can you raise prices?

2. Can you reduce your labor costs? Your material costs?

3. Can you forecast sales better and thereby reduce your inventory carrying expenses?

4. Have you pushed your promotion or sales budgets into diminishing returns?

5. Can you sell idle plant to reduce depreciation? Alternatively, can you convert idle plant into some other productive asset, like automation or new products?

6. Is your leverage too high, resulting in high interest expenses.

Contribution Margin: Andrews, Baldwin, Chester and Erie need to improve their contribution margin. Aim for contribution margins above 30%. Remember you've got fixed and period costs to cover. To jog you memory:

Contribution margin is defined as:

Sales - (Direct Labor + Direct Materials + Inventory Carry)

Sales

It is reported on Page 1 of the Capstone Courier as an aggregate average of each team's product portfolio. A good benchmark for contribution margin is 30%. A product-by-product margin computation is available on the Income Statement portion of your company's annual reports.

Always watch your margins. It's difficult to maintain long-term success with contribution margins below 30%. There is downward pressure on price across all market segments (50 cents per year). Investments in cost reduction strategies (automation/capacity expansion) should be considered, as should price increases. Also check your MTBF against the Customer Buying Criteria on segment analysis pages of the simulation reports. You may be offering customers more reliability than they care about.

Emergency Loans: Baldwin and Chester have emergency loans. Your company will get no respect from Wall Street if you cannot manage your cash. The reasons are –

Baldwin - The reasons for your emergency loan were large cash outflows arising from:

- You spent (wrote out cheques) for $6.1M for plant.
- You have large unsold inventories of over $59M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $7.1M as inventory carrying costs) and depressed profits
- Previous years' emergency loan and current debt of $80.8M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Chester – For a cash outflow of $28.5M (plant improvements + dividends), you raised $2.5M through debt. Remember assets = liabilities plus equity. You increased assets (larger plant) but did not fund it adequately with debt and equity. Where will the cash come from? In the next round, remember to raise funds from long term and current debt to repay this emergency loan. See note in red below:

This emergency loan is current debt. It will automatically get plugged into "current debt due this year". Borrow maximum from long and short term debt and raise funds through stock issues and sale of surplus plant to **ensure your 31 Dec closing cash (bottom left row on Finance sheet of Capstone) balance is a healthy figure (attempt 1-2 months of sales).**

Please remember: emergency loan is current debt: you have to repay it in the next year. Please err on the side of caution when it comes to managing cash. Get rid of your emergency loan ASAP. A team with an emergency loan gets no respect: period. Naturally, it impacts your stock prices. Plus it hinders your operational flexibility and business options.

Plant Size and Utilization: Baldwin, Chester, Digby and Erie need improvement in plant utilization. Remember, you can produce up to twice your first shift capacity. For example, **Baldwin** could have produced the same quantity of goods with 38% of the current first shift capacity of their plant. This would have reduced their depreciation by 62%. Idle plants only bleed you.

Asset Turnover: Baldwin needs to work their assets harder. They have an asset turnover of less than one. **A high asset turnover indicates that sales per unit of asset is high. Remember, the purpose of your assets was to generate sales (and hopefully profitable sales).**

Forecasting and Inventory: Andrews and Baldwin have high unsold inventory levels. Please make sales forecasts more deliberately and produce only the quantity you are certain can sell. In the next round you would have the present unsold inventory to sell also. Hence, set production such that you cater to this unsold inventory. Do not overproduce. **Producing more does not mean you will sell more!**

Segment Wise Product Analysis: How are your products faring?

- **Traditional Segment:** Able leads the industry. Cedar has low market share in this segment. Cedar has inappropriate age (too high) for the segment (age has an importance of 47% in this segment). Able and Baker are overpriced (outside the price range thereby diminishing demand). Remember, price has an importance of 23% in this segment). Cedar needs improvement in its position (performance and size) in the segment. Except Able, all products need improvement in accessibility.
- **Low End Segment:** Dell leads the industry. Daze has low market share in this segment. Bead and Daze are overpriced (outside the price range, Price has an importance of 53% in this segment). Dell, Ebb, Daze, Bead and Cedar have inappropriate age (too low) for the segment (Age has an importance of 24% in this segment). Except Acre, all products need improvement in accessibility.
- **High End Segment:** Fist leads the industry. Edge has low market share in this segment. All human team products need improvement in their position (performance and size) in the segment (Ideal position has an importance of 43% in the segment). Cid, Adam and Bid have inappropriate age (too high) for the segment (Age has an importance of 29% in this segment). Duck is overpriced (outside the price range). Echo, Duck and Edge need increased levels of awareness. Except Adam, all products need improvement in accessibility.
- **Performance Segment:** Foam leads the industry. Edge has low market share in this segment. Coat, Aft, Dot and Edge have low MTBF (MTBF has an importance of 43% in the segment). Dot, Bold, Edge and Aft need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 29% in the segment). Bold is overpriced (outside the price range). Aft has inappropriate age

(too high) for the segment. Bold, Coat, Dot and Edge need increased levels of awareness. All products need improvement in accessibility.

- **Size Segment:** Fume leads the industry. Buddy has low market share in this segment. All human team products need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 43% in the segment). Cure, Agape and Buddy have inappropriate age (too high) for the segment (Age has an importance of 29% in the segment). Buddy is overpriced (outside the price range). Cure, Egg, Dune and Buddy need increased levels of awareness. Except Agape, all products need improvement in accessibility.

Financial Management: **Digby and Erie** are low on leverage. ROA times the leverage is ROE.

HR Module: **Except Erie, teams** do not seem to want to improve the productivity of their employees. The productivity and labor costs carry an inverse relation. If the productivity of the employees is 1.1 the labor cost would reduce to 90.9%. To improve on the productivity teams need to invest in training and recruitment of the employees. Please carry out a cost benefit analysis and invest accordingly.

C130949

General: Andrews, Baldwin and Chester made losses this year. Low sales for **Andrews and Baldwin.** The reasons for your low sales are given below in the sales paragraph. The top-line for **Digby** has shown good growth in the last financial year. Emergency loans were seen for **Andrews, Baldwin and Chester**. Please read the paragraph on emergency loans below.

In the initial years you will be making some hard decisions to set right the company you have just taken over. **You will be making growth investments. Profits are likely to suffer in the initial years. That's perfectly understandable.**

Always remember, **sell more, sell profitably and keep a check on cash**. More or less everything will fall in place.

Stock Price and Market Cap: Andrews, Baldwin and Chester had a fall in stock price of $32/share, $26/share and $29/share caused by losses and emergency loans. **Digby** is the most valuable company with a market capitalization of **$139M**.

Sales: Chester, Digby and Ferris had a rise in market share of 2%, 7.4% and 3.4% respectively. **Andrews, Baldwin and Erie had a fall** in market share of 7.7%, 4.5% and 0.6% respectively.

Each 1% market share in this round was worth almost $10M. In the real world, heads would roll when there are large losses of market share. Your sales should have been in the region of $131 M if you were retaining market share.

Low sales for Andrews and Baldwin. This was caused by:

- Poor product specifications (performance and size) for Able, Adam, Aft, Agape, Baker, Bid, Bold and Buddy; look at the ideal spot on the perceptual map. Look at your product specifications. If you do not offer the customers the specifications they desire, sales will suffer.
- High price /pricing outside the price range for Agape, Baker, Bid, Bold and Buddy.
- Low customers awareness levels due to low promo budgets for Acre, Adam, Aft, Agape, Bead, Bold and Buddy.
- Poor distribution reach and accessibility caused by low sales budget for Able, Acre, Adam, Aft, Agape, Baker, Bead, Bid, Bold and Buddy.

Please pay more attention to the 4P's of marketing: improve your sales.

Digby and Ferris have **introduced new products in the market**. Each team can launch up to three new products. More products help you capture more market share.

Profits: Andrews, Baldwin and Chester had bottom line in red. The reasons for your lower profits are easy to isolate

- High unnecessary depreciation of plant and machinery due to low plant usage for Andrews. Why keep a plant that only gathers dust.
- High Unsold Inventory and the attendant carrying cost.
- Low Margins

- High Interest expense for Baldwin and Chester

Profits are important: Let's not forget why we are running the company.

Return on Sales: Return on Sales (Profit/Sales) answers the question, "How much of every sales dollar did we keep as profit?"

Between 0% and 4%, while the company is at least making a profit, it is not bringing in sufficient new equity to fund growth. The industry is growing at about 15% per year. The industry consumes about 15% more capacity each year, which arrives in the form of plant expansions and new products. Therefore, as the simulation begins, an average company would add about $12 million in new plant each year. If half that or $6 million was funded with bonds, an average company would need about $6 million in new equity. Therefore, if the company does not have the profits, it must either issue $6 million in new stock, or $12 million in bonds, or not grow to keep up with demand. Worse, if it has no profits, its stock price falls, making it difficult to raise equity through stock issues.

This ignores investments in automation, which also require a funding mix of equity and debt.

In the opening round of Capstone® companies have an excess of idle assets, and that can convert idle assets into productive ones. Therefore, do not worry too much if the company's profits are low. But after year 3, expect that idle asset cushion to be gone. Profits become critical because those companies with profits can grow, and those without cannot.

What if profits are negative? The company is destroying equity. Its stock price has plummeted, making it more difficult to raise equity. All of the problems described above are now accelerated. In short, trouble.

How can companies improve ROS? Here are a few questions to pose:

1. Can you raise prices?

2. Can you reduce your labor costs? Your material costs?

3. Can you forecast sales better and thereby reduce your inventory carrying expenses?

4. Have you pushed your promotion or sales budgets into diminishing returns?

5. Can you sell idle plant to reduce depreciation? Alternatively, can you convert idle plant into some other productive asset, like automation or new products?

6. Is your leverage too high, resulting in high interest expenses.

Contribution Margin: **Andrews, Baldwin and Chester need to improve their contribution margin.** Aim for contribution margins above 30%. Remember you've got fixed and period costs to cover. To jog you memory:

Contribution margin is defined as:

$$\frac{\text{Sales - (Direct Labor + Direct Materials + Inventory Carry)}}{\text{Sales}}$$

It is reported on Page 1 of the Capstone Courier as an aggregate average of each team's product portfolio. A good benchmark for contribution margin is 30%. A product-by-product margin computation is available on the Income Statement portion of your company's annual reports.

Always watch your margins. It's difficult to maintain long-term success with contribution margins below 30%. There is downward pressure on price across all market segments (50 cents per year). Investments in cost reduction strategies (automation/capacity expansion) should be considered, as should price increases. Also check your MTBF against the Customer Buying Criteria on segment analysis pages of the simulation reports. You may be offering customers more reliability than they care about.

Emergency Loans: Andrews, Baldwin and Chester have emergency loans. Your company will get no respect from Wall Street if you cannot manage your cash. The reasons are –

Andrews - The reasons for your emergency loan were large cash outflows arising from:

- You spent (wrote out cheques) for $16.8M for plant. Assets increased but you did not fund it adequately with debt and equity. Where will the cash come from?
- You have large unsold inventories of over $39M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $4.8M as inventory carrying costs) and depressed profits
- Previous years' current debt of $0.7M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Baldwin - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of over $146M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $17.5M as inventory carrying costs) and depressed profits
- Previous years' emergency loan/current debt of $5.3M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.

- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

Chester - The reasons for your emergency loan were large cash outflows arising from:

- You have large unsold inventories of over $158M. That is causing a cash flow crisis by blocking cash. This also imposed 12% (almost $19M as inventory carrying costs) and depressed profits
- Previous years' current debt of $15M which was repaid in the current year.

All this caused a huge outflow (and blocking) of cash that you did not have:
Therefore, in the next round:

- Make realistic sales forecasts and do not overproduce inventory
- Reduce your production to cater to the large unsold inventory.
- Keep doing RnD on your products (remember the older inventory gets a free ride to the new specs)
- Sell surplus unused plant capacity
- Raise funds from long term and current debt to repay this emergency loan.

This emergency loan is current debt. It will automatically get plugged into "current debt due this year". Borrow maximum from long and short term debt and raise funds through stock issues and sale of surplus plant to **ensure your 31 Dec closing cash (bottom left row on Finance sheet of Capstone) balance is a healthy figure (attempt 1-2 months of sales).**

Please remember: emergency loan is current debt: you have to repay it in the next year. Please err on the side of caution when it comes to managing cash. Get rid of your emergency loan ASAP. A team with an emergency loan gets no respect: period. Naturally, it impacts your stock prices. Plus it hinders your operational flexibility and business options.

Plant Size and Utilization: Andrews needs improvement in plant utilization. Remember, you can produce up to twice your first shift capacity. For example, **Andrews** could have produced the same quantity of goods with 38% of the current first shift capacity of their plant. This would have reduced their depreciation by 62%. Idle plants only bleed you.

Asset Turnover: Andrews, Baldwin and Chester need to work their assets harder. They have an asset turnover of less than one. **A high asset turnover indicates that sales per unit of asset is high. Remember, the purpose of your assets was to generate sales (and hopefully profitable sales).**

Forecasting and Inventory: Andrews, Baldwin and Chester have high unsold inventory levels. Please make sales forecasts more deliberately and produce only the quantity you are certain can sell. In the next round you would have the present unsold inventory to sell also. Hence, set production such that you cater to this unsold inventory. Do not overproduce. **Producing more does not mean you will sell more!**

Segment Wise Product Analysis: How are your products faring?

- **Traditional Segment:** Cake leads the industry. Coat and Baker have low market share in this segment. Able and Baker have inappropriate age (too high) for the segment (age has an importance of 47% in this segment). Coat and Baker are overpriced (outside the price range thereby diminishing demand). Remember, price has an importance of 23% in this segment). Able, Coat and Baker need improvement in their position (performance and size) in the segment. Able and Baker need improvement in accessibility.
- **Low End Segment:** Ebb leads the industry. Acre has low market share in this segment. Bead is overpriced (outside the price range, Price has an importance of 53% in this segment). Acre has inappropriate age (too low) for the segment (Age has an importance of 24% in this segment). Bead and Acre need increased levels of awareness. All products need improvement in accessibility.
- **High End Segment:** Duck leads the industry. Daze and Buddy have low market share in this segment. Bid, Cid, Adam and Buddy need improvement in their position (performance and size) in the segment (Ideal position has an importance of 43% in the segment). Bid, Cid, Adam and Buddy have inappropriate age (too high) for the segment (Age has an importance of 29% in this segment). Buddy has poor MTBF. Bid and Cid are overpriced (outside the price range). Adam and Buddy need increased levels of awareness. Bid, Cid, Adam and Buddy need improvement in accessibility.
- **Performance Segment:** Dot leads the industry. Edge has low market share in this segment. Coat, Aft and Bold have low MTBF (MTBF has an importance of 43% in the segment). Coat, Aft and Bold need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 29% in the segment). Bold is overpriced (outside the price range). Coat, Aft and Bold have inappropriate age (too high) for the segment. Aft and Bold need increased levels of awareness. All products need improvement in accessibility.
- **Size Segment:** Fume leads the industry. Egg and Agape have low market share in this segment. Cure, Buddy and Agape need improvement in their position (performance and size) in the segment (Ideal Position has an importance of 43% in the segment). Buddy and Agape have inappropriate age (too high) for the segment (Age has an importance of 29% in the segment). Cure, Buddy and Agape are overpriced (outside the price range). Buddy and Agape need increased levels of awareness. All products need improvement in accessibility.

HR Module: **Teams** do not seem to want to improve the productivity of their employees. The productivity and labor costs carry an inverse relation. If the productivity of the employees is 1.1 the labor cost would reduce to 90.9%. To improve on the productivity teams need to invest in training and recruitment of the employees. Please carry out a cost benefit analysis and invest accordingly.