A Note on Market Share

Generically, you **want high overall market share for three reasons:**

1. You began with a sizeable fixed asset base. You want to utilize your plant and equipment to pay for depreciation and service the long-term debt. Idle plant costs money. As it gathers dust, it also hands you a bill for depreciation, interest, and eventually the principal on the funds used to buy the equipment. Therefore, so long as you at least break even, you would prefer to utilize all of your capacity. That implies high sales volume.
2. You began with a large company doing business in every segment. An investor would argue that any strategy you develop, including niche strategies, should produce at least average sales. For example, a focused strategy should produce higher share in the target segments, enough to compensate for sacrificing positions in abandoned segments.
3. If you make a sale, a competitor did not. This weakens competition over the long haul.

A Note on Margins

Analyse your margins across three metrics:

1. Contribution Margin Percentage
2. Net Margin
3. ROS or Return On Sales

Why do margins matter? And why focus upon Contribution Margin, Net Margin, and Return On Sales? To simplify things, let's consider an example where you have only one product.

REVENUE ($000)	**Awsum**
Sales	$30,000
VARIABLE COSTS	
Direct Labor	$7,000
Direct Material	$11,500
Inventory Carry	$500
Total Variable Costs	$19,000

Product	**Awsum**
Price	$30.00
Labor	$7.00
Material	$11.50
Inventory Carry	$0.50
Unit Margin	$11.00
Units Sold	1,000,000

Contribution margin	$11,000	36.7%
PERIOD COSTS		
Depreciation	$2,000	
SG&A: R&D	$500	
Promotion	$1,300	
Sales	$1,100	
Admin	$300	
Total Period Costs	$5,200	
Net Margin	$5,800	19.3%
Other (fees, write-offs)	$100	
EBIT	$5,700	
Interest	$2,500	
Taxes	$1,120	
Profit Sharing	$50	
Net Profit	$2,030	6.8%

EXAMPLE

Contribution Margin is defined as Sales less Variable Costs. Variable Costs are the expenses that are tied to the sale of each unit. They are recognized when a unit is sold. Because the number of units you sell varies with demand, they are called Variable Costs. In the example above you sold 1 million units. If you had sold 2 million, your Variable Costs would have been $38 million, but if you sold 500 thousand, they would be only $9.5 million.

In short, you do not know your Variable Costs until the sales numbers arrive.

Period Costs, on the other hand, are not tied to sales. In the example above, you spent $5.2 million on Period Costs whether you sold anything or not. While you could not say what your Variable Costs were until December 31st, the Period Costs were known on January 1st.

Net Margin is defined as Contribution Margin less Period Costs. Put simply, it is what the product contributes towards profits.

From the combined Net Margin (normally across all products) you pay the expenses that cannot be allocated to a product. First comes "Other" (expenses like brokerage fees), then Interest, Taxes, and Profit Sharing until you are left with a Net Profit.

What is critical here?

Have another look at the example. Notice that all the expenses from the PERIOD COSTS label down are either fixed or a percentage of profits. The moment you submit your decisions, everything but Profit Sharing and Taxes is known, and they only occur if you produce a profit. Those known expenses total ($5,200 + $100 + $2,500 = $7,800) or $7.8 million. If your Contribution Margin cannot cover $7.8 million, you are destroying wealth instead of creating it.

In the big picture, you cannot have a decent ROS unless your Net Margin Percentage is good, and you cannot have a good Net Margin Percentage unless your Contribution Margin Percentage is healthy. In Capstone®'s industry, this translates to a 10% ROS, 20% Net Margin, and 30% Contribution Margin.

Finally, consider your detailed Income Statement in your Annual Report. Typically, some of your products are producing healthy margins, while others are slim to negative. Your task is to improve the margins on the poor performers. Are Period Costs too high? Are Sales, and therefore the Contribution Margin, too low?

A note on Profits

Because the industry is growing, profit expectations from your company grow too. Here is a broad guide for profit expectations from Wall Street for your firm:

Year 1	$6 million
Year 2	$8 million
Year 3	$10 million
Year 4	$12 million
Year 5	$16 million
Year 6	$21 million
Year 7	$27 million
Year 8	$35 million

You want your profits to be as high as possible. If your profits are not where you'd like to see them, please begin by analysing your margins:

1. If your ROS is above 5%, chances are the problem is rooted in below average Sales.

2. If your ROS is below 5%, but your Net Margin Percentage is above 20%, you either experienced some extraordinary "Other" expense like a write-off on plant you sold, or you are paying too much Interest (If TQM is enabled, you may also have spent heavily on TQM initiatives).

3. If your Net Margin Percentage is below 20%, but Contribution Margin is above 30%, the problem is heavy expenditures on Depreciation (perhaps you have idle plant) or on SGA (perhaps you are pushing into diminishing returns on your Promo and Sales Budgets).

4. If your Contribution Margin is below 30%, the problem can be traced to some combination of Marketing (customers hate your products), Production (your labor and material costs are too high), or Pricing (you cut the price too much).

A note on Emergency Loans

In the real world emergency loans do not exist. When you run out of cash, you have "a liquidity crisis", "Chapter 11", or simply "Bankruptcy" on your hands. Capstone® gives you every benefit of a doubt, and every opportunity to come up with the money to pay your bills, but if you are out of cash on December 31st, "Big Al" arrives to give you just enough cash to bail you out and bring the Cash account to zero.

Emergency loans are closely linked to your working capital policy and forecasting abilities. Most loans are rooted in two mistakes:

1. An unexpected and dramatic expansion in inventory;

2. Funding plant expansion with "excess" working capital. Or worse, forgetting to fund the plant improvements at all.

One can argue that the Emergency Loan category should offer nothing for small emergency loans. After all, if your heart stops beating, blood stops flowing, and you are dead. If Cash no longer flows through your company, it is dead, too.

Emergency loans are listed on Page 1 of the Capstone Courier. The simulation gives you every benefit of a doubt, but if you are out of cash at the end of the year, "Big Al" arrives to give you just enough cash to bail you out -- at a 7.5 percentage point premium, of course. **In the real world we often refer to emergency loans as "a liquidity crisis",**

"Chapter 11", or simply "Bankruptcy." If your company has an excessive emergency loan, check to see which of the following problems you have:

1. When you saved your decisions, did your Proforma Balance Sheet project negative cash? If so, your emergency loan was unnecessary. In Capstone you can always raise adequate cash via stock issues, new bonds, or short term debt. Of course, this is not true in the real world, but it is a necessary aspect of our simulated environment. Your task is to learn how to dig your way out of this hole. Here are some guidelines:

a. Raise all the money via stock issues that the spreadsheet will allow. Note that the spreadsheet presents a ceiling called "Max Issue". Do not exceed the number in "Max Issue". (You can enter a bigger number and the spreadsheet will accept it, but when your decisions are processed on the website you will actually receive the value in "Max Issue.")

b. Raise all the money via bond issues that the spreadsheet will allow, or enough to make your Performa Cash balance positive. Do not exceed the number labeled "Maximum Issue This Year". (Like the stock "Max Issue," you can enter a bigger number, and the spreadsheet will accept it, but when your decisions are processed you will get "Maximum Issue This Year.")

c. If your Performa Cash balance is still negative, borrow sufficient Current Debt to bring Cash into the black. Current Debt is your last choice because it is your most expensive money, but even it is less expensive than an emergency loan. Note that the Current Debt principal is due at the start of every year, but you have the option of reborrowing or "rolling" the debt.

d. If you have large quantities of inventory on any product, identify which segment it falls within on the Perceptual Map. Find the price guidelines for that segment. Price to sell within those guidelines. You need to convert that inventory back into cash. Cut back on production as appropriate.

e. Take a critical look at your plant capacity. If your product lines are running at less than 100% utilization, sell the excess capacity.

f. If you are planning to retire a product line, now is the time. Sell the capacity. If you have inventory, however, and think you can sell it, keep one unit of capacity. This makes it possible to sell the inventory instead of liquidating it at 50% of its value.

g. In the Help files in your software or on the website, find the item "How do we develop a unit sales forecast?" Follow the guidelines to prepare a realistic sales forecast and enter it on the Marketing spreadsheet.

h. Examine your Performa Income Statement. If any product shows a negative "Net Margin", you must address the problem. If necessary, do not make or sell the product. Do not sell a product at a loss.

2. If your Performa Balance sheet showed a positive cash balance when you saved your decisions, check the following:

a. Was there a very large increase in inventory? Check your Annual Report's Cash Flow statement. Did inventory increase dramatically? If so, turn to the Production Analysis (page 4). Was it one product, or are you carrying moderately large inventories on several products? If it is a single product, you have a serious but short term problem. The solution is to cut back on production until the inventory is sold. This may take several years depending upon the cause of the problem. On the other hand, if you are carrying moderately large inventories on several product, the root problem is overly optimistic forecasting. In the Help files in your software or on the website, find the item "How do we develop a unit sales forecast?". Follow the guidelines to prepare a realistic sales forecast and enter it on the Marketing spreadsheet.

b. Did you buy plant and equipment and forget to fund it? If so, fund it now by matching the investment with a combination of stock and bond issues. Your emergency loan has been classified as Current Debt and is due on January 1st. If you do not fund your investment, you could get another emergency loan to pay for the previous emergency loan.

To diagnose your emergency loan, examine your Cash Flow statement. It represents the net flow of money into and out of your checking account. A positive number indicates an inflow, a negative number an outflow. For example, find the "Inventory" line. If your inventory position increased compared to last year, you had to pay for the additional inventory, and that resulted in a cash outflow. On the other hand, if you sold all of your old inventory, that represented a cash inflow.