What is Business Anyway?

Ponder the MBA Diagram of Business shown below (Figure 1).

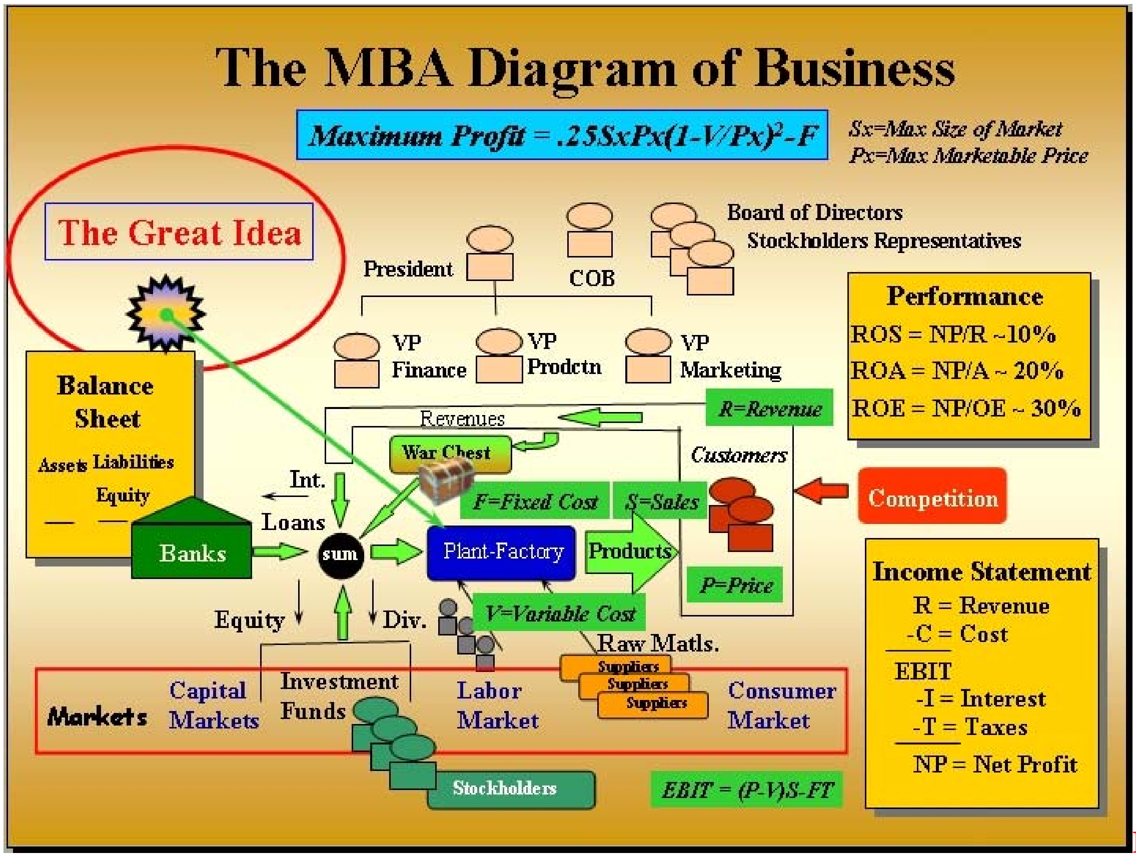

Figure 1

This map was developed from an advanced management program at the Harvard School of Business. What is useful about this information is that it contains the structural elements of business in a single diagram, showing their location and their relationship with one to another. This diagram is rich in dimension. Following the concepts of Dr. Edward Tufte, author of *The Visual Display of Technical Information*, it is self-explanatory and requires little in the way of amplification to gain the following nine common sense insights about business:

1. Business begins with the infusion of capital from the capital markets.

2. The capital is transformed into value products and services of high value by (A) production equipment and other assets purchased with collateralized loans (B) labor from the labor markets and (C) raw materials from the suppliers.

3. The "Great Idea" is the patented invention, or copy written product or trade secret that adds substantial value to the raw materials. Example: Mass production in the auto production business is a great idea. Given 2500 lbs. of metal, 200 lbs. of glass, 300 lbs. of polymer foam, and all the

essentials needed to build a car, an individual cannot make a car with engine, radio, etc. by himself, for $14,000, and do it in a day. The concept of production line learning, economies of scale, technology insertion, and quality management, are all great ideas that underlie the production of cars and trucks that an individual cannot do alone.

4. The products are transformed into revenue for the business by sales to the consuming markets.
5. The revenues are fed back to the business for continued operations and future growth of the business.
6. The business is managed by the company president, three vice presidents (Finance, Production/Operations, Marketing), and the stockholders, as represented by the Board of Directors.
7. The revenue must be sufficient to pay the interest and dividends demanded of the capital markets, the wages demanded of the labor market, the raw materials provided by the supplier markets, and the cost of producing and selling the products/services and the profit.
8. When the revenues exceed the total cost of producing and marketing the product, all or part of that profit is invested in the continued growth of the company. Some or all of this reinvestment is directed to Research & Development.
9. There are three fundamental economic markets in business: the capital market, the labor market, and the consumer market. The *supply* in the consumer market is provided by business and the *demand* is provided by the household. The price is the independent variable. The *supply* in the labor market is the household while the *demand* is business. The wage is the independent variable. Finally, the *supply* in the capital markets are the banks and investors and the *demand* is business. The interest and/or dividends are the independent variables.

When JMSA begins consulting with a firm, the first thing we do is to draw the map for their business. It is recommended that you do the same. A well crafted visual model of the business avoids wasted time and labor over misunderstandings about the business. Visualizing the business has many advantages over memos about parts of the business. The diagram forces the business managers to understand the business in an integrated, systems engineered way.

Let us continue now with the Business Diagram. We need to reinforce certain concepts before proceeding. We see that business is a system. The system map is as shown in the MBA Diagram of Business. Virtually all businesses have such a top-level diagram that maps out the flow of money, materials, and people among its structural components. See Figure 2.

- THE CAPITAL MARKETS: The capital markets are markets of banking institutions and private investors. The simplest *supply* of funds for business loans, are the banks. The simplest *demand* elements in the capital market are the businesses. The supply and demand come into equilibrium when the interest on the banks loaned money is found acceptable to the business demanding business loans. If the interest is too high, the business demand declines. If the interest is too low the number of banks willing to make the loans declines. On the average over many businesses, only one value for the interest allows the supply and demand to come into equilibrium.

- THE LABOR MARKETS: The labor markets consist of the businesses that need labor and the workers in the workforce agree to a wage where the supply meets the demand. We say the labor market is in equilibrium when that condition occurs.

- THE CONSUMER MARKETS: The business and the consumer share this market. The business supplies the products that go to market and the consumer has demands for the products. Pricing is the stabilizing agent. When the price is right, the consumer's demand is met by the businesses that supply the product. We say the *consumer's* market is in equilibrium when the price is right for the business to profit and the consumer is happy to pay the price for the product.

It's right here at the consumer market interface that the pricing concepts and the pricing spreadsheet come into play. For the business to sustain itself, profit must be directly related to price. The product must be priced in the high profit zone near the peak of the

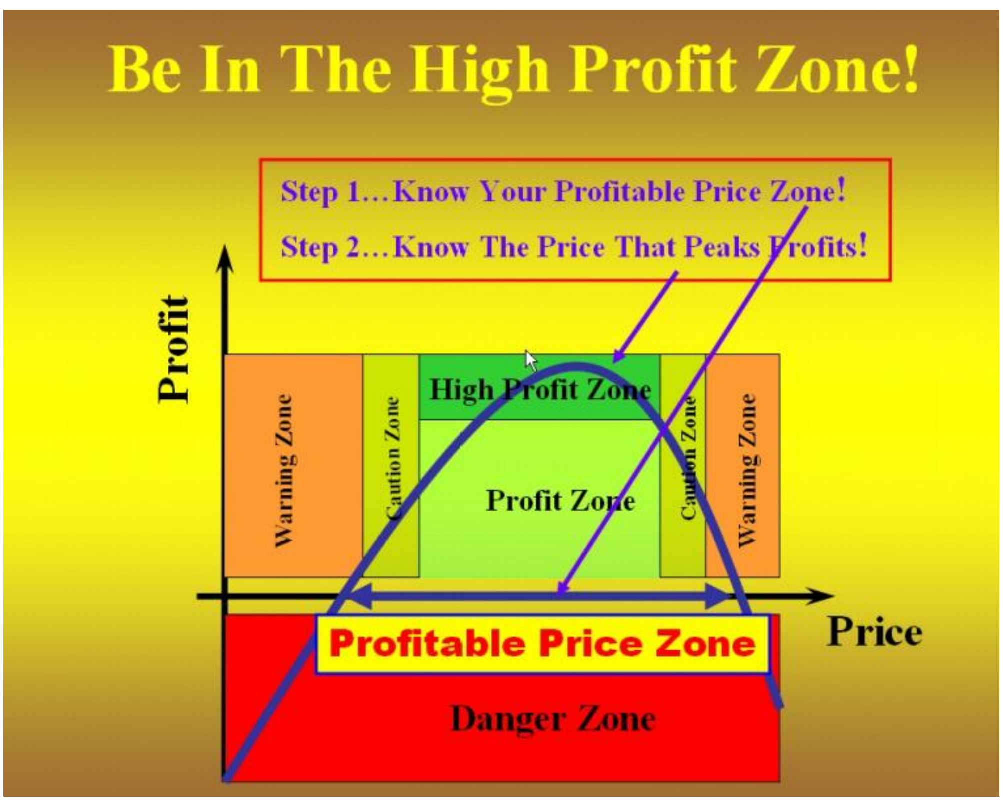

Figure 2

profit curve (See Figure 2).

All the other factors such as the cost of the product, the size of the market, the maximum marketable price, and the market elasticity are factors but they cannot distract the business management from its focus on profit. The spreadsheet on pricing is intended to put these background factors into the profit model at exactly the right the right way so that profit calculations can be reliable (see the profit-price spreadsheet). Most important are the concepts of the ***profitable pricing zone*** and the ***price that peaks the profits.*** These are the critical insights that the business person needs to know. In business you have to know the profitable price zone for your products and the prices that peak profits.

Once you know what you are looking for, it's an easy matter to get that information from the Peak Profit Pricing spreadsheet (See Figure 3).

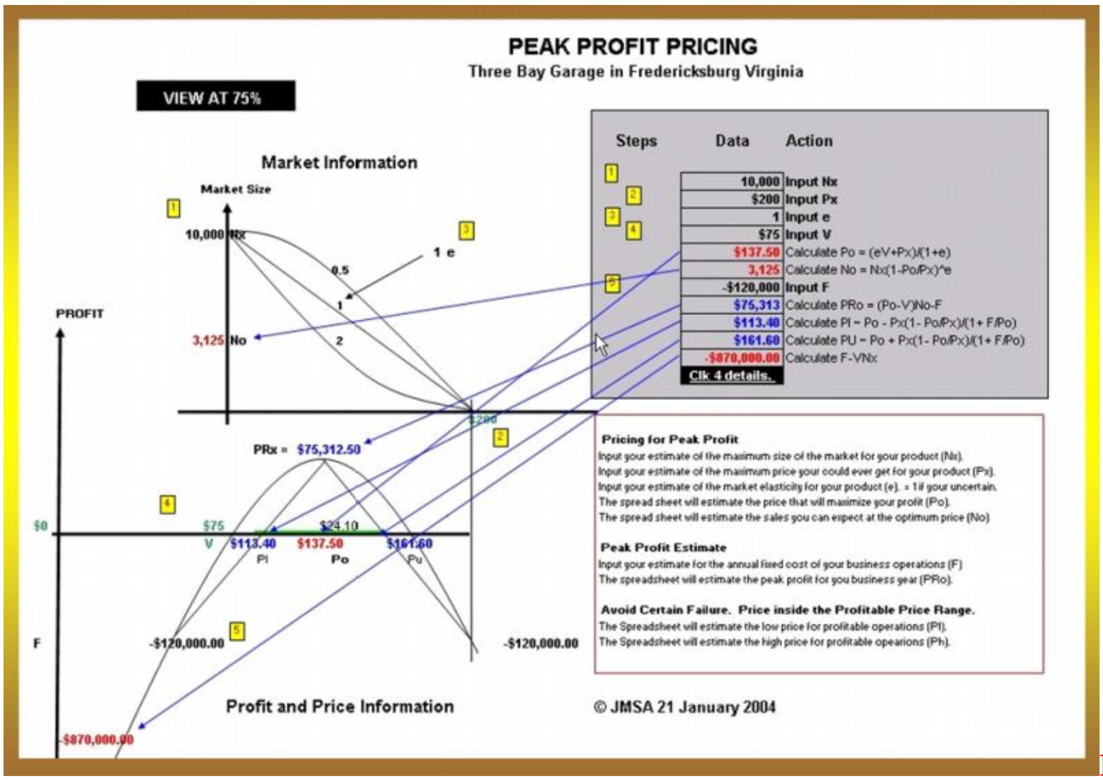

Figure 3

This spreadsheet accompanies the business map. If you don't have the spreadsheet then go to [JMSA Download Site] and download it now.

The challenge for the Proprietor, President or CEO is to bring all three of these markets into equilibrium, simultaneously. This is not a simple task for either big or small businesses. What the MBA Business Map does is guide business persons in understanding their business and the competition's business, in such a way that they can compete effectively.

You can see in the MBA Diagram of Business that the Consumer, Labor and Capital markets are all part of what makes up the economy of a business. Take the time to ponder this diagram. Make notes on how your business is structured. Put names of people and firms that support your business on the sketch so that you can think strategically about the strengths and weaknesses in your organization.

Having a great idea is not enough. It takes tough-minded management to convert a great idea into a highly profitable business. Shown here are the executives that it takes to manage the business: On the left, VP for Finance, in the middle, VP for Production & Operations, and on the right, VP for Marketing and Sales. Leading all is the President of the company, the steward, who instills the values and insures the integrity of the business.

Also shown are the members of the Board of Directors and its chairman. This body of businesspersons represents the stockholder (owners) of the business. It takes these experienced executives to guide the business as it grows from an idea to a trusted investment for members of the capital markets.

College courses include Accounting & Finance, Production, Marketing and Strategic Management with the overriding courses entitled, Quantitative Methods in Business and Economics. The "Quant" course covers analytical methods like those that we use in First Warning, a business caution and warning program. The economics courses include considerations of the three markets.

Businesses are the engines in our economy. About 60% of our gross domestic product (GDP) is the consumption of the products and services from business. We know that community businesses (less than 20 employees) comprise approximately 80% of the firms and establishments in the United States and employ approximately 20% of the labor market, (see Quick Facts about American Business).

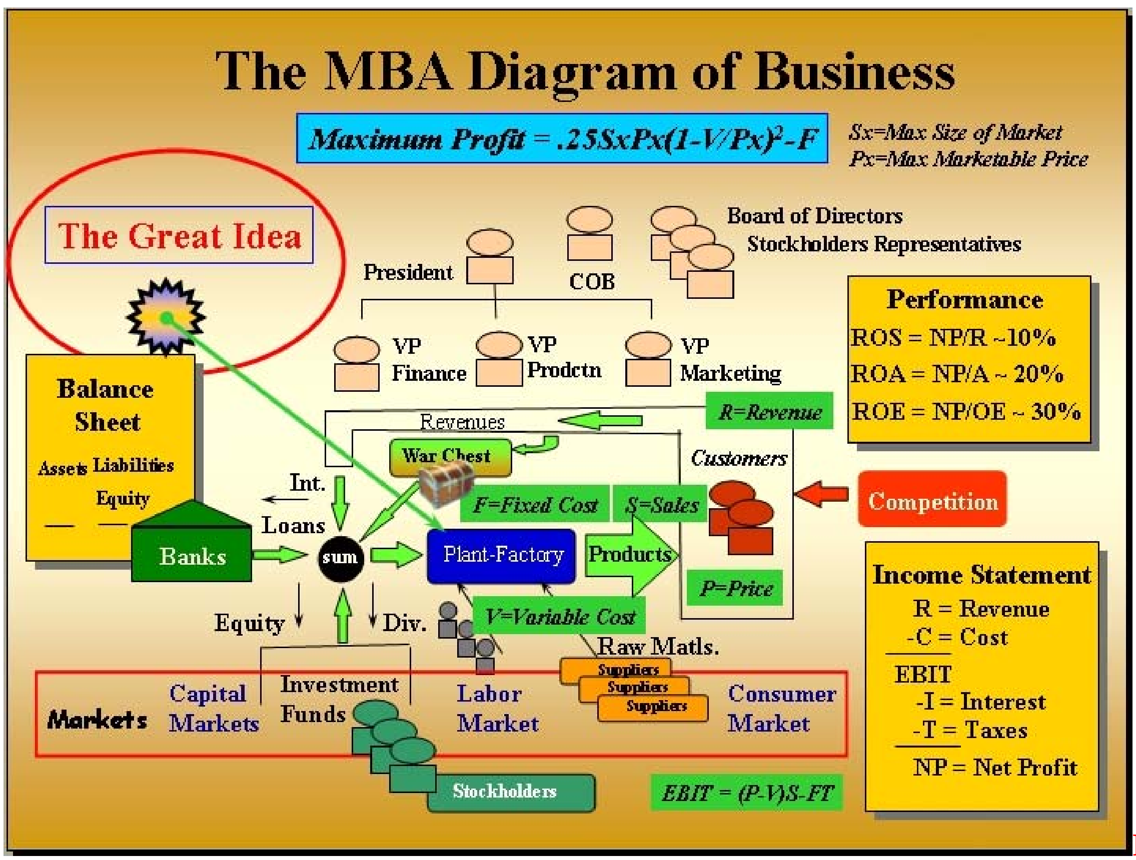

Figure 4

Referring to the MBA Business Map again (Figure 4), there are many financial documents to monitor the performance of the business. Three are shown here. **The Income Statement** is located near the marketing element of the business. The Income Statement starts with the

Revenue. The Revenue is the responsibility of the VP for Marketing. Also shown on the income statement is the cost of doing business, the biggest share of which is generally (not always) the responsibility of the VP for Production and Operations. The difference is the earnings before interest and taxes. Of course, the interest and taxes are generally the responsibility of the VP for Finance. Well, what about the president of the firm? What is the role of the president? Yes, you have it… to formulate the competitive strategy and produce profit for the firm.

Notice where the **Balance Sheet** is located: it's next to the Bank and the Stockholders. Unlike the periodic nature of the income statement, the balance sheet is a lifelong measure of the Assets, Liabilities and Ownership of the firm. If the assets are not maintained, upgraded, and replaced, the assets decline in value. The job of the VP for Finance is to retain access to the capital markets, continue the ongoing productivity of the business, and to support its growth and development.

Now notice the block of information titled **Performance**. Of particular interest to the banks, is the return on the assets (**ROA**) that you procure with their loans. Thus, the banks monitor the ROA closely. The stockholders are interested, of course, in the return on the equity (**ROE**) they have in the firm: They and their investment councilors closely monitor the ROE.

Notice that this block of information is located near the Board of Directors. Since the Board establishes the compensation for the executives in the firm, they are interested in the overall return on sales, as well as the other financial relations that measure the performance. Return on sales (**ROS**) is a measure of how effectively the business is converting its revenues directly into bottom line profit. ROS is one of the key measures of the business that takes into account all structural elements from Capital to Competition. The truly effective business executive can improve a company's profitability while simultaneously improving its *measures* of profitability so as to attract capital to the business. If the overall performance of the business is poor, it WILL NOT attract capital, the life blood of the business.

A Very Controversial Question: Is the purpose of business to generate profit? Some would argue the answer is yes, as money is the name of the game: no profit, no business. Others would argue that the answer is no. To say that a business is for profit is like saying your body is for its blood. The body is for doing wonderful things for self and society….business is for doing wonderful things for its employees and its customers. So, what is your answer to this interesting question? It is in the answer to this question that the business manager sets the psychological sail of the business. It is the answer to this question that is at the core of the survival of a company.

The second thing we do is to develop the analytical model of the business. The approach is to write the profit equation for each product or services offered, and then sum the profits to analytically understand the total business. This is the math model of the whole business. One learns a great deal by following this simple procedure as it is "business" in its simplest terms. The tools for doing this are simply to write the profit equation for one of the top profit producing products in Excel or another spreadsheet program. Then duplicate the equation using the "Copy Down" features of the spreadsheet, for the many other products, ten for example. Then, each of the equations must be modified by changing the parameters in the equation to be correct for the product it represents.

It proceeds as follows for the first product:

- Profit = Revenue - Cost
- Revenue = R = Price times the number of items sold = PS
- Cost = C = Direct cost of production/operations related to direct hands-on work on the product + the sum of the fixed monthly cost of doing business (over and above the cost of production and marketing) times the number of months (T) the business is in operations = $VS + FT$.

Thus,

- Profit = $PS - VS - FT = (P-V)S-FT$.

It is a law of microeconomics that as the price increases the sales decrease from a maximum value S*x* to zero at a maximum price of *Px*. Again, in simplest terms this behavioral law can be written

- $S = Sx(1-P/Px)$^E, thus the "**Profit Law**" becomes
- $Pr = (P-V)(1-P/Px)Sx - FT$, here E (market elasticity) = 1 for simplicity. Also, in another form
- $Pr = (P-V)(Px-P)Sx/Px - FT$

From the profit definition and the two forms of the quadratic profit laws we see that for business to make a positive profit three conditions must be satisfied simultaneously

- $P > V$,
- $P < Px$,
- $S > FT/(P-V)$.

These relationships are remarkable! One might call these relationships **the laws of business.** If you break these laws, the business will fail: Said slightly differently; "A way to succeed in business is to avoid failure." **One can test a small or home business before it is even started by determining if the assumptions in the business satisfy the "laws of business".**

For your convenience, click on the following business names to see the spreadsheets for each of these small businesses; Medical Doctors Business, Production Business, Executive Tutor Business, Service Business, Publication Business, Retail Business.

Let us proceed a bit further to find a number of amazing new insights:

(1) We see that when $P = V$ the profit is $-FT$. The same it true for $P = Px$. So between $P=V$ and $P=Px$, the profit must reach a maximum (PEAK) and that price is (we shall see) $P = (Px+V)/2$. Then we see that on substituting this price in the profit law, we find that that maximum profitability of the business is

- $Prx = ¼SxPx(1-V/Px)^2-FT$.

We see here that we can estimate the maximum profitability of the business before spending a dime getting into business. The question then becomes one of "Is it enough to make a living and grow the business?"

(2) The profit *definition* shows us that at the bottom line, there are only four terms to manage in business: *P*,*V*, *F*, and *N*. Said slightly differently, all of the millions of considerations that a business manager is involved in really boils down to managing these four variables. The implications of this insight are that they focus management by asking the right cause-effect management questions whose answers can be quantified.

(3) When the price is double the variable cost *(P=2V)* of the product (keystoned, a typical business pricing scheme) the maximum profit, *Prx*, becomes a quadratic in *V*, and is maximized when *the variable cost is on the order of V ~ Px/3*.

(4) The **"Profit Law"** shows that the markets are characterized by only a few key terms, S*x, Px, P, V, F and T*.

These relationships are the professional executive's "rules of thumb" to understanding and managing a business. While these relationships are simplified here, they are the **basics of business**. This simple mathematical model is VALUABLE and important because it is focused on the ESSENCE of business, scraping away the millions of details that it takes to run a business and it shines a very bright light on the essential elements that make up the laws of business.

NOT TAUGHT AT HARVARD BUT VITAL INFORMATION: There is one vital lesson I have learned from my consulting business that is NOT taught at Harvard. The lesson is simply to pay your business taxes on time and be exactly right. The reason is that the penalties **compound** quickly to levels that can shut down a small or home business. I have witnessed small businesses that were thriving, die overnight due to underpaid taxes with the consequent penalty and compounded fees growing rapidly to levels beyond the reach of the business. I have seen tax burdens being as much as $50,000 in penalties and fees. **PAY YOUR TAXES!** Neither the IRS, nor the state, nor the county, nor the city, are merciful.

In closing this page, let me share with you what I believe to be the compelling argument for learning the Laws of Business. Many would agree that intuition is a powerful tool for guiding business success. Still others would say that analysis is a powerful tool for avoiding business failure. It is my view that the two together are better than either one alone.

Now, take the time to ponder the MBA Diagram of Business. Make notes on how your business is structured. Put names of people and firms that support your business on the sketch so that you can think strategically about the strengths and weaknesses in your organization and those of your competitors. Enjoy the challenge of management as you cope with the survival of your firm.

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