

Excellence in Financial Management

Discussion Board Articles through December 2002

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Cash Flow Management

Basic Cash Flow Management

Managing cash must take an equal stature with Net Income. In financial management, "cash is king" is a frequent motto. Your first step in managing cash is to elevate the importance of cash. The basic process for managing cash is straightforward. Try to maintain an adequate level of cash to meet current obligations and invest idle cash into earning assets. Earning assets must have high liquidity; i.e. you must be able to convert investments back into cash quickly. Additionally, you want to protect your cash balance by paying obligations only as they come due.

Managing cash also involves aggressive conversion of current assets into cash. Inventory levels must be converted into accounts receivables and accounts receivables must be converted into cash. Ratios should be used to monitor the conversion of cash, such as number of days in inventory and number of days in receivables. Cash balances are the result from a combination of cycles: inventory, purchasing, receivables, payables, etc. The key is to properly manage these cycles for conversion into cash.

Once conversion cycles are identified, cash forecasts can be prepared for managing cash. Weekly cash reports are used to monitor balances. Since everything ultimately passes through your cash account, a strong internal control system is required. This involves the separation of duties in handling cash, reconciling cash accounts, adequate support for cash disbursements, and other control procedures. The overall objective is to protect cash just like any other asset through a system of internal controls.

Quick Tips for Improving Cash Flow

The first step for improving your cash flow is to understand the history of your cash flow. This requires scheduling cash inflows and outflows. Once you understand the history, you can take steps to cut cash outflows and increase collections.

One of the biggest cash outflows is payroll. Payroll should be managed with flexibility in mind. You need a workforce that works when needed as opposed to 5 days a week, 8 hours a day. Consider diversifying your work force into a mix of temporary workers, part-time workers, and outsourcing of non-value added activities. Also, don't forget you can extend your payroll float by distributing payroll checks after 2:00 o'clock on Fridays.

Your purchasing practices should also consider a mixed approach. For example, why do you have to buy everything new? Purchasing used items or renting can save a lot of cash flow. You may want to purchase in minimum quantities, especially if your cash flow is tight. And do not hold inventory that isn't moving - get rid of it!

Other cash traps include insurance. Do not use insurance to cover all risks. Make sure you retain some risks, especially if the risk is not materially significant and not likely to occur very often. One of the fastest rising insurance outflows is health care costs. Make sure you have a preventive program for your employees. This can include things like annual cholesterol screenings, reimbursement for quit smoking programs, and company participation in outdoor activities. Finally, aggressively monitor your outstanding receivables and begin to take action at the first sign of trouble. If you have doubts about a customer's ability to pay, require an advance deposit.

Cash Support for Sales Growth

As sales grow, cash needs will grow. Planning for future sales must include planning for additional requirements for cash. A basic formula can be used to help determine the amount of additional cash needed for new sales. The formula is calculated as follows:

Additional Cash = ((New Sales - Gross Profit) + Additional Overhead) / (Sales Growth Duration in Days x Average number of days to collect Receivables + Safety Factor)

Example: We expect \$ 10,000 of additional sales during the year (365 days) with a corresponding increase of \$ 3,000 in overhead. All payables are paid on time, we do not expect any changes in our collection periods, and we expect a continued gross profit margin of 25%. The average period to collect receivables is 40 days and we will add in a safety factor of 20% into our estimate.

$(\$ 10,000 - \$ 2,500) + \$ 3,000 / 365 = \$ 28.77 \times (40 \times 1.20) = \$ 1,381$ of additional cash is needed to support the \$ 10,000 of additional sales.

The above formula is a quick and rough estimate for estimating how much cash is needed to carry additional sales. Changes in collections and payment cycles need to be considered when using this formula.

Basic Accounts Receivable Management

This article will outline some of the basic components for managing accounts receivable, ranging from policies and measurement to outsourcing options.

The foundation behind account receivables is your policies and procedures for sales. For example, do you have a credit policy? When and how do you evaluate a customer for credit? If you look at past payment histories, you should be able to ascertain who should get credit and who shouldn't. Additionally, you need to establish sales terms. For example, is it beneficial to offer discounts to speed-up cash collections? What is the industry standard for sales terms? There are several questions that have to be answered in building the foundation for managing accounts receivables.

A system must be in place to track accounts receivables. This will include balance forwards, listing of all open invoices, and generation of monthly statements to customers. An aging of receivables will be used to collect overdue accounts. You must act quickly to collect overdue accounts. Start by making phone calls followed by letters to upper-level managers for the Customer. Try to negotiate settlement payments, such as installments or asset donations. If your collection efforts fail, you may want to use a collection agency.

Also remember that the collection process is the art of knowing the customer. A psychological understanding of the customer gives you insights into what buttons to push in collecting the account. One of the biggest mistakes made in the collection process is a "sticks only" approach. For some customers, using a carrot can work wonders in collecting the overdue account. For example, in one case the company mailed a set of football tickets to a customer with a friendly note and within weeks, they received full payment of the outstanding account.

Measurement is another component within account receivable management. Traditional ratios, such as turnover will measure how many times you were able to convert receivables over into cash.

Example: Monthly sales were \$ 50,000, the beginning monthly balance for receivables was \$ 70,000 and the ending monthly balance was \$ 90,000. The turnover ratio is:
 $.625 (\$ 50,000 / ((\$70,000 + \$ 90,000)/2))$. Annual turnover is $.625 \times 360 / 30$ or 7.5 times. If you divide 360 (bankers year) by 7.5, you get 48 days on average to collect your account receivables. You can also measure your investment in receivables. This calculation is based on the number of days it takes you to collect receivables and the amount of credit sales.

Example: Annual credit sales are \$ 100,000. Your invoice terms are net 30 days. On average, most accounts are 13 days past due. Your investment in accounts receivable is:

$(30 + 13) / 365 \times \$ 100,000$ or \$ 11,781.

Example: Average monthly sales are \$ 10,000. On average, accounts receivable are paid 60 days after the sales date. The product costs are 50% of sales and inventory-carrying costs are 10% of sales. Your investment in accounts receivable is:

$2 \text{ months} \times \$ 10,000 = \$ 20,000 \text{ of sales} \times .60 = \$ 18,000.$

Measurements may need to be modified to account for wide fluctuations within the sales cycle. The use of weights can help ensure comparable measurements.

Example: Weighted Average Days to Pay = $\text{Sum of } ((\text{Date Paid} - \text{Due Date}) \times \text{Amount Paid}) / \text{Total Payments}$

Example: Best Possible Days Outstanding = $(\text{Current A/R} \times \# \text{ of Days in Period}) / \text{Credit Sales for Period}$

Receivable Management also involves the use of specialist. After-all, you need to spend most of your time trying to lower your losses and not trying to collect overdue accounts. A wide range of specialist can help:

- Credit Bureau services to review and approve new customers.
- Deduction and collection agencies
- Complete management of billings and collections

Examples of specialist include www.clect.net , www.ecredit.com , and www.iab-inc.com . Finally, don't overlook software programs for managing receivables, such as www.getpaid.com .

Financing

What are Effective Interest Rates?

The effective interest rates you pay are a function of how much money you have available and how much money you give up for the use of these funds. In the simplest form of borrowing, a one-year loan of \$ 10,000 at 12% interest will cost \$ 1,200. The effective interest rate is $\$ 1,200 / \$ 10,000$ or 12%. As we change the costs and/or amount of funds available, the effective interest rate will change.

Example: You borrow \$ 10,000 at 12% which is discounted by the Bank at 10%, thereby reducing the amount of funds you have available. The effective interest rate is:

$\$ 1,200 / \$ 9,000$ or 13.3%.

Compensating balances also decrease the proceeds of the loan. As proceeds decline, the effective interest rate rises.

Example: You borrow \$ 30,000 at 12%. The Bank requires that you maintain a 10% compensating balance. The effective interest rate is:

$\$ 3,600 / (\$ 30,000 - \$ 3,000) = 13.3\%$.

The Cost of Financing Inventories

Inventory financing can be used where inventories are highly marketable and no threat of obsolescence exists. The inventory serves as collateral within the financing arrangement. Financing can occur up to 70% of inventory values provided that inventory prices are relatively stable. The costs of financing inventory can be very high; such as 6% over the prime lending rate.

Three types of financing arrangements for inventory are available. They are floating liens, warehouse receipts, and trust receipts. Floating liens place a lien on the overall inventory stock. Warehouse receipts give the lender an interest in your inventory. And trust receipts represent a loan which is released as you sell your inventory. The costs of financing inventory is illustrated in the following example:

You would like to finance \$ 100,000 of your inventory. You need the funds for 3 months. You will use a warehouse receipt arrangement. This arrangement requires that you setup a separate area for the lender's inventory. You estimate an additional \$ 2,000 in costs for storing and maintaining the inventory. The lender will advance you 80% at 16%. The costs of financing inventory is \$ 5,200 as calculated below:
 $.16 \times .80 \times \$ 100,000 \times 3/12 = \$ 3,200 + \$ 2,000$ or \$ 5,200.

What is Operating Leverage?

The use of fixed assets in generating earnings is referred to as operating leverage. Operating Leverage is measured by comparing the change in profits to the change in sales. Higher levels of operating leverage tend to result in wider variations in profits given a change in sales. This variation is called operating risks. Therefore, higher levels of fixed costs are often associated with high levels of operating risks which in turn leads to fluctuations of earnings given a change in sales.

Breakeven analysis is often used in conjunction with operating leverage. As we increase sales beyond the breakeven point, the effects of operating leverage diminish since the sales base we are using has increased. We can use breakeven analysis to calculate operating leverage.

Degree of Operating Leverage (DOL) = % Change in EBIT / % Change in Sales

EXAMPLE: Price of Product = \$ 10.00, Variable Cost per unit = \$ 6.00, Fixed Costs = \$ 12,000 and 5,000 units are sold.

$$DOL = ((\$ 10.00 - \$ 6.00) \times 5,000) / (((\$ 10.00 - \$ 6.00) \times 5,000) - \$ 12,000) = 2.5$$

What we can conclude from our calculation is that when sales increase by say 10%, we can expect a 25% increase in earnings since we have operating leverage of 2.5. Thus, operating leverage gives us some measure of variations in earnings from changes to sales.

Budgeting & Forecasting

Financial Forecasting Using % of Sales

Financial forecasting often begins with a forecast of future sales. The Sales Forecast serves as the basis for estimating future expenses, assets, and liabilities. Many of these accounts vary with changes in sales. Therefore, using a percent (%) of sales can be very useful for forecasting a Balance Sheet.

The following steps can be used to prepare a forecasted (pro-forma) Balance Sheet based on the % of Sales Method:

1. Determine which Balance Sheet accounts vary with Sales (such as accounts receivable). Calculate the % of sales for each account that varies with sales.
2. For accounts that do not vary with sales (such as long-term debt and equity), simply list the current balances from the last Balance Sheet.
3. Calculate the future Retained Earnings balance by adding projected net income and subtracting any future dividends from the Beginning Balance for Retained Earnings. Don't forget to calculate a % of sales for Net Income and Dividends.
4. Add up your assets to determine total projected assets. Now add up your liabilities and equity to determine the financing of assets. If total assets is greater than total liabilities and equity, then you will need to raise additional capital.

Please note that the % of Sales Method is based on the assumption that you are operating at full capacity. Also, you will need to prepare a Cash Budget for a more accurate estimate of financing requirements.

Improving the Budgeting Process

One of the most non-value-added activities within financial management is budgeting. Budgets are prepared to allocate and control how resources will be used in the future. Unfortunately, the future is hard to predict and upper-level management doesn't always communicate with people who prepare budgets. Because of poor communication, budgeting becomes an exercise in futility. Some of the main problems associated with budgeting are:

- Poor communication from decision-makers.
- Too many people involved in the process.
- Budgets don't help manage our business.
- Budgets are outdated by external events.
- Budgets are difficult to revise.

Since upper-level management often circumvents the budgeting process, the first thing to do in budgeting is to find out *what does management expect from the budgeting process?* Next, make sure management decision making is linked to the budgets. You can accomplish this by creating budgets within the strategic planning process. Don't forget to include external factors when preparing budgets. Outside events and issues can impact your budget estimates.

Budgets should be easy to revise. When new planning data pops up, your budgeting process should adopt and accept this new data. Hold your cost centers responsible for meeting their budgets. This can force feedback from end-users for improvements in the budgeting process. If you find yourself always revising a budget, consider preparing several budgets or setup a contingency budget if you expect changes. Prepare the basic outline or summary of a budget and get approval before you spend lots of time preparing detail budgets. Or better yet, try to reduce the detail in your budgets to streamline the entire process.

Budgeting should be a dynamic process within strategic planning. The more your budgets can react to change, the closer budgeting will be to a value-added activity. If your budgets don't add value to decision making, then it's time to improve the process.

Don't Forget to Use Expected Values in Your Forecasting!

There are many turns and twists when it comes to forecasting cash flows and other amounts. The last thing you need in your analysis is statistical errors that distort your estimates. The problem is what amount do I use? Do I use the average amount? Do I use the most likely amount? Or do I use the expected value?

In order to come up with a realistic estimate of what amount will occur in the future, you should use expected value. Expected value is not the same as average value or most likely value. Expected value is derived by looking at all possibilities and taking into account the probability of occurrence. Using expected value has statistical merit over other approaches since you are forced to give consideration to all possible outcomes. And the difference you get in estimates can be extremely significant.

Let's say you need to estimate the cash inflows for next month. You have three customers who have outstanding receivable balances. Based on past histories, you can assign probabilities to receiving payment next month.

Customer A owes \$ 10,000, there is a 60% probability of receiving payment next month. Customer B owes \$ 20,000, there is a 30% probability of receiving payment next month.

Customer C owes \$ 30,000, there is a 10% probability of receiving payment next month.

Total Expected Value next month = $(\$10,000 \times .60) + (\$20,000 \times .30) + (\$30,000 \times .10) = \$ 15,000$. Total Average Value = $(\$10,000 + \$20,000 + \$30,000) / 3 = \$ 20,000$.

Total Most Likely Value = $\$ 10,000 + \$0 + \$0 = \$10,000$.

As you can see, it makes a difference in which approach you take in coming up with your estimate. We can use an expected value of \$ 15,000, an average value of \$ 20,000, or a most likely value of \$ 10,000. Therefore, it is very to go through a decision based approach to estimation. You accomplish this by calculating expected values.

Considerations for Budgeting Software

Budgets are often prepared with the use of spreadsheets. As an organization grows and becomes more complex, the use of spreadsheets must give way to formal budgeting applications. A database of spreadsheets with increased functionality can significantly improve the budgeting process. Here are some features to look for in formal budgeting software:

1. Database Functionality: Each budget dimension (cost center, general ledger account, business segment, etc.) should stand separately so that data can be mapped against each dimension. This allows the user to view budgets by whatever x and y dimension he or she chooses.
2. Bi-Directional Calculations: It should be easy to make random changes to budgets within any level of the organization. Changes should be made from the top and the bottom at the same time. For example, a 5% cut to all departments is made and at the same time, the Marketing Department Budget increases its line item for research.
3. Multi User Sharing: The budget system should not be restricted to any single user. By allowing users to share access to the same database, duplicative procedures are eliminated. Obviously, the budgeting system should include line item security controls for each dimension within the system.
4. Easy to Learn & Use: The budgeting system should be simple and data entry should be self-explanatory. A spreadsheet like feel can help reduce learning time since most professionals are very familiar with spreadsheet programs.
5. Customizable: The actual calculation logic should be subject to modification by the user since one size does not fit all. Users need the ability to customize how budgets are prepared to meet the needs within the organization.
6. Audit Trails: It should be easy to tell who made a revision to the budget. The amount and variance associated with the revision should be easy to identify within the budgeting system.
7. External Importing of Data: The budgeting system should be able to import data from external systems. This can streamline the process and make budgeting more of a value-added activity.

Good budgeting programs should include features like "what if" analysis and customization options at each budget control point. The real power of automating the budgeting process can be found in consolidating large volumes of data and integrating all budget control points into a single, unified budgeting system.

One alternative to budgeting software is the use of Application Service Providers (ASP's) for the overall budgeting process. This so-called e-planning alternative offers some big advantages over formal installation of enterprise software:

- Rapid deployment throughout the entire organization.
- Bypasses the costly life cycle of designing and implementing formal programs.
- Ensures consistent integration throughout the entire organization
- Instantly transforms budgeting into a dynamic, real time process where on-line templates are used to update budget information.

Whichever option you choose, budgeting software or ASP's, you will need to have a process that is flexible and responsive to constant change. The single biggest problem in budgeting often boils down to failure to integrate the process. This should be a key concern in whichever option you choose.

Project Evaluations

Basic Economics for Capital Budgeting Analysis

Planning for capital assets involves a process of calculating the Net Present Value of the investment. Net Present Value is calculated by discounting the future changes in cash inflows and cash outflows using the weighted average cost of capital. The resulting present value of cash flows is compared to the Net Investment for the Capital Asset. The result is called Net Present Value. It should be noted that Net Investment includes all costs to place the capital asset into service plus any working capital requirements. If the capital asset has above average risks, then we would increase the weighted average cost of capital.

If the Net Present Value is positive, this indicates that value is added by making the investment. If the Net Present Value is negative, this indicates value destroyed. The objective is to have a total asset portfolio where the total Net Present Values are above zero. Besides Net Present Value, we can use Internal Rate of Return and Discounted Payback Period to evaluate capital projects.

Internal Rate of Return is the rate of return that the project earns. It is calculated by finding the discount rate whereby the total present value of cash inflows equals the total present value of cash outflows. Modified Internal Rate of Return can be used to remove the assumption that funds are reinvested each year at the Internal Rate of Return. We can also calculate the number of years it takes to recoup our Net Investment. Simply calculate a running total of the discounted cash inflows to determine the Discounted Payback Period.

Net Present Value, Internal Rate of Return, and Discounted Payback Period are three popular economic criteria for evaluating whether or not to invest in a capital asset. All three concepts give consideration to the time value of money. Estimating incremental cash flows is one of the most difficult steps in the overall evaluation process.

What is Internal Rate of Return?

The actual rate of return earned on a project is called Internal Rate of Return (IRR). The Internal Rate of Return is the discount rate where the total present value of cash outflows equals the total present value of cash inflows. For projects with equal cash flows, a payback calculation can be used to find the IRR. If projects have varying cash flows over the life of the project, a trial and error approach must be used. However, most spreadsheet programs include an IRR formula which makes the calculation very simple.

Example: We have a project with an initial cash outlay of \$ 40,000 and cash inflows each year are \$ 10,000 over the next five years.

$\$ 40,000 / \$ 10,000 = 4.0$ factor, look up the 4.0 factor under Present Value of Annuity Table, across for periods = 5, we find 3.993 under 8%. The Internal Rate of Return is approximately 8%.

Using Microsoft Excel Spreadsheet: Enter all cash outflows and inflows into cells A1 to A7: - 40000, +10000, +10000, +10000, +10000, +10000. Make sure you enter your amounts in the correct order. From the menu bar, click Insert / Function / Financial / IRR into a separate cell. The formula should appear as =IRR(A1:A7).

It should be noted that IRR is probably the most popular economic criteria for evaluating capital projects. IRR is best used in conjunction with other economic criteria, such as Net Present Value and Discounted Payback.

Using Discounted Payback

Perhaps one of the most popular economic criteria for evaluating capital projects is the payback period. Payback period is the time required for cumulative cash inflows to recover the cash outflows of the project. For example, a \$ 30,000 cash outlay for a project with annual cash inflows of \$ 6,000 would have a payback of 5 years ($\$ 30,000 / \$ 6,000$).

The problem with the Payback Period is that it ignores the time value of money. In order to correct this, we can use discounted cash flows in calculating the payback period. Referring back to our example, if we discount the cash inflows at 15% required rate of return we have:

Year 1 - \$ 6,000 x .870 = \$ 5,220	Year 6 - \$ 6,000 x .432 = \$ 2,592
Year 2 - \$ 6,000 x .765 = \$ 4,536	Year 7 - \$ 6,000 x .376 = \$ 2,256
Year 3 - \$ 6,000 x .658 = \$ 3,948	Year 8 - \$ 6,000 x .327 = \$ 1,962
Year 4 - \$ 6,000 x .572 = \$ 3,432	Year 9 - \$ 6,000 x .284 = \$ 1,704
Year 5 - \$ 6,000 x .497 = \$ 2,982	Year 10 - \$ 6,000 x .247 = \$ 1,482

The cumulative total of discounted cash flows after ten years is \$ 30,114. Therefore, our discounted payback is approximately 10 years as opposed to 5 years under simple payback. As the required rate of return increases, the distortion between simple payback and discounted payback grows. Discounted Payback is more appropriate way of measuring the payback period since it considers the time value of money.

Using Decision Trees

Too often Financial Managers rush into a capital project by simply analyzing the cash flows. Since high levels of uncertainty are associated with most capital projects, the first place to start is with an analysis of the decision itself. Decision Trees are extremely useful for mapping-out a decision so that all alternatives are considered in relation to probabilities. Decision trees walk you through the different stages and events within the project. Expected values are calculated and a logical outcome is presented for making the right selection.

Several computer programs are available to automate the decision making process. Two popular programs are InfoHarvest (www.infoharvest.com) and Expert Choice (www.expertchoice.com). These programs allow you to build a tree through each period of your capital project. This process can be particularly useful when certain events are conditional on other events. Finally, decision tree programs can be used for all types of applications, such as make or buy decisions, marketing decisions, technology decisions, etc. If you are interested in a structured approach to decisions with high levels of uncertainty, decision trees can be invaluable.

Capital Management

What is Your Cost of Capital?

There is a cost of doing business that must serve as your benchmark for how you invest in long-term assets. This cost is called *Cost of Capital*. Cost of Capital is the rate you pay to those who lend or invest money into your business. You can think of Cost of Capital as the rate of return investors require for incurring risk whenever they give you money. Cost of Capital applies to long-term funding of assets as opposed to short-term funding of working capital.

Why is Cost of Capital so important? Well, you have to earn an overall rate of return on your assets that is higher than your cost of capital. If not, you end-up destroying value. So how do you calculate Cost of Capital? The most popular approach is called the Capital Asset Pricing Model or CAPM. CAPM estimates your cost of equity by taking a risk free rate and adjusting it by risks that are unique to your company or industry. Long-term government bonds are often used to estimate risk free rates while overall market premiums run around 6%.

CAPM is not perfect since it has many unrealistic assumptions and variations in estimates. For example, sources (Bloomberg, S & P, etc.) for reporting market risks of specific companies provide very different estimates. Additionally you might find simple estimates are just as accurate as CAPM. For example, simply adding 3% to your cost of debt may provide a reasonably accurate estimate of your cost of capital. You can also look at companies that are very similar to your company. In any event, you need to calculate your cost of capital since it is an extremely important component in financial management decision-making.

Calculating Weighted Average Cost of Capital

Weighted Average Cost of Capital (WACC) is the overall costs of capital. WACC is based on your current capital structure. Market values are used to assign weights to different components of capital. It should be noted that market weights are preferred over book value weights since market values more closely reflect how you raise your capital. Market weights are calculated by simply dividing the market value for each component by the sum of market values for all components. The following example illustrates how you calculate weighted average cost of capital.

Current Capital Structure consists three components: Long-term Debt (10 year A Bonds) with a book value of \$ 400,000 and a cost of capital of 6.0%. Common Stock with a book value of \$ 200,000 and a cost of capital of 18.0%. Retained Earnings with a book value of \$ 50,000 and a cost of capital of 16.0%.

1. Determine Market Values for Capital Components. 10-Year grade A bonds are selling for \$ 1,150 per bond and the common stock is selling for \$ 40.00 per share. Assume we have 500 bonds outstanding and 15,000 shares of stock outstanding. Market Value for Debt is \$ 575,000 ($\$ 1,150 \times 500$) and Market Value for Stock is \$ 600,000 ($\$ 40.00 \times 15,000$).
2. Allocate the Equity Market Value between Common Stock and Retained Earnings based on book values. Common Stock = \$ 480,000 ($\$ 200,000 / \$ 250,000 \times \$ 600,000$). Retained Earnings = \$ 120,000 ($\$ 50,000 / \$ 250,000 \times \$ 600,000$).
3. Calculate the WACC using market weights:

The Debt (Bonds) has a market weight of .49 ($\$ 575,000 / \$ 1,175,000$) x .06 cost of capital = .029. Stock has a market weight of .41 ($\$ 480,000 / \$ 1,175,000$) x .18 cost of capital = .074. Finally, Retained Earnings has a market weight of .10 ($\$ 120,000 / \$ 1,175,000$) x .16 cost of capital = .016. This gives us a Weighted Average Cost of Capital of .119 or 11.9% (.029 + .074 + .016).

Capital Structure Theory

The theory behind capital structure is to find the right mix of long-term funds that minimizes the costs of capital and maximizes the value of the organization. This ideal mix is called the optimal capital structure. It can be argued that an optimal capital structure really doesn't exist since changing the mix of capital will not change values.

However, four approaches can be used to find the optimal capital structure. They are Net Operating Income (NOI), Net Income (NI), Traditional, and Modigliani-Miller. It should be noted that all of these approaches assumes no income taxes exists, all residual earnings are distributed as dividends, and operating risks remain consistent.

The NOI approach holds that costs of capital is relatively the same regardless of the degree of leverage. The NI approach takes the opposite view; costs of capital and market values of companies are affected by the use of leverage. The Traditional Approach is a mix of both the NOI approach and the NI approach. Finally, the Modigliani-Miller view is that costs of capital and market values are independent of your capital structure. In practice, there are many factors that influence capital structure. They include growth in sales, asset composition, risk attitudes within the organization, etc. The best approach seems to be to focus on a range of capital structures in managing the organization.

Capital Structure Analysis Using EBIT-EPS

One way of determining the right mix of capital is to measure the impacts of different financing plans on Earnings Per Share (EPS). The objective is to find the level of EBIT (Earnings Before Interest Taxes) where EPS does not change; i.e. the EBIT Breakeven. At the EBIT Breakeven, EPS will be the same under each financing plan we have under consideration. As a general rule, using financial leverage will generate more EPS where EBIT is greater than the EBIT Breakeven. Using less leverage will generate more EPS where EBIT is less than EBIT Breakeven.

EBIT Breakeven is calculated by finding the point where alternative financing plans are equal according to the following formula:

$(EBIT - I) \times (1.0 - TR) / \text{Equity number of shares after implementing financing plan.}$
I: Interest Expense TR: Tax Rate Formula assumes no preferred stock.

The formula is calculated for each financing plan. For example, you may be considering issuing more stock under Plan A and incurring more debt under Plan B. Each of these plans will have different impacts on EPS. You want to find the right plan that helps maximize EPS, but still manage risks within an acceptable range. EBIT-EPS Analysis can help find the right capital mix for high returns and low costs of capital.

What is Intellectual Capital?

For publicly traded companies, capital is raised by issuing debt or equity which in turn is invested into assets. Hopefully these capital investments will earn a rate of return higher than your cost of capital. Capital assets are reported on the Balance Sheet. As the World becomes more and more competitive, the returns generated by assets **not** reported on the Balance Sheet becomes much more important. And for some organizations, this may represent the single biggest source of value-creation!

One of these *hidden* assets for creating value is so-called **Intellectual Capital**. Intellectual Capital (IC) is the intangible stuff that provides your organization with knowledge, strategy, customer service, etc. Internal sources of IC include your people who possess the knowledge and expertise to make your organization work. Internal IC also includes your management information systems, brand names, and copyrights. External IC would represent your loyal customers and suppliers.

IC received widespread attention when Thomas Stewart published his book: Intellectual Capital: The New Wealth of Organizations. As a result, many companies now recognize that value-creation goes outside traditional capital. This intense interest in IC has prompted some companies to create Managers of Intellectual Capital.

Finally, how do you measure IC? Well it's not easy since IC is such a new concept. Measurement of IC can include things like employee qualifications, customer retention rates, and registered copyrights. For now, most companies are focused on measuring the traditional sources of capital. However, in the future Intellectual Capital may become one of the most important components of value-creation.

Recognizing Intellectual Capital

Financial professionals are increasingly apprehensive over the traditional accounting model. Financial statements, the main product of the traditional accounting model, are extremely inadequate for reporting the valuations behind a business. Real values, not book values, are the focus of attention within financial management. According to New York University, a typical set of financial statements will only disclose about 15% of the market value of a business. In order to bridge the gap between market values and book values, we need to recognize something called intellectual capital.

By using a set of intellectual capital accounts, an organization better understands and communicates the sources of value. Unlike financial accounts, intellectual capital accounts have a long-term perspective. They stress the importance of spending time and resources on the intangibles within the business. Therefore, intellectual capital accounts support growth, development, and innovation. These are the real sources of value within a business.

In a world where knowledge is critical, intellectual capital accounts will capture and report knowledge as one of the principal assets within the business. We no longer look at our business within the confines of the Balance Sheet, focusing only on fixed tangible assets. The intangible assets (such as knowledge, people, customers, systems, etc.) represent the stimulus for growth and value creation. The use of intellectual capital accounts can provide several benefits, including:

- Stresses the importance of developing knowledge, people, technology, and other components of intellectual capital.
- Supports organizational development in those areas that have the biggest impact.
- Provides a better indication of long-term growth.
- Assists in strategic decision making since we now have a better understanding of where our growth comes from.
- Supports how financial capital is deployed and managed, improving returns and financial performance.

Setting up a set of intellectual capital accounts can be very creative. Most organizations seem to focus on at least four resource categories:

1. Human Resources - Knowledge, education, qualifications, abilities, strategic thinkers, etc.
2. Customers - Loyalty, retention, brands, agreements, etc.
3. Technology - Networks, data warehousing, executive information systems, etc.
4. Processes - Value added activities, efficiencies, cost, etc.

Intellectual capital accounts will need to capture the values associated with intangible resources within the four categories defined above. In order to accomplish this, we will need to establish a structure or definition for each intellectual capital account. Intellectual capital accounts are often defined within three measurement layers:

1. Define what needs to be measured, such as level of professional development of personnel.
2. Define the metric to be used, such as number of continuing professional development hours completed.
3. Define the desired outcome, such as 80 hours average within the organization.

In conclusion, resource categories are the foundation for building the content of intellectual capital accounts. The objective is to capture through measurement your position, compare the results through reporting, and take action to improve how intellectual capital is being managed. This in turn leads to better implementation of the corporate strategy and vision. And this will lead to higher market valuations.

Ratio Analysis

Cash Flow Ratios

Although not widely used, cash flow ratios can be useful in determining the adequacy of cash and cash equivalents. Cash flow ratios are used depending upon the critical needs of cash. For example, if cash is critical to servicing long-term debt, then Cash Flow to Long-Term Debt would be a good ratio. If liquid assets are critical to meeting current liabilities, then Cash + Marketable Securities to Current Liabilities would be useful. Some of the variations for cash flow ratios include:

Cash Flow / Total Debt, Cash Flow / Long-Term Debt, Cash + Marketable Securities / Working Capital, Cash + Marketable Securities / Current Liabilities.

Another good cash flow ratio is Operating Cash Flow to Net Income. This ratio shows the extent to which Net Income is supported by operating cash flows. Cash flow from operations is calculated by adjusting Net Income for non-cash items, such as depreciation. Cash flow is reported on the Statement of Cash Flows and cash flow ratios can be calculated from a complete set of financial statements.

Accounts Receivable Ratio Analysis

Ratio analysis can be used to tell how well you are managing your accounts receivable. The two most common ratios for accounts receivable are turnover and number of days in receivables. These ratios are calculated as follows:

Accounts Receivable Turnover = Credit Sales / Average Receivable Balance.

Example: Annual credit sales were \$ 400,000, beginning balance for accounts receivable was \$ 55,000 and the yearend balance was \$ 45,000. The turnover rate is 8, calculated as follows: Average receivable balance is \$ 50,000 ($\$ 55,000 + \$ 45,000$) / 2. The turnover ratio is $\$ 400,000 / \$ 50,000$. This indicates that receivables were converted over into cash 8 times during the year.

Number of Days in Receivables = $365 \text{ Days in the Year} / \text{Turnover Ratio}$. Using the same information from the previous example gives us 46 days on average to collect our accounts receivable for the year.

Two other ratios that can be used are Receivables to Sales and Receivables to Assets. Referring back to our first example, we would have a Receivable to Sales Ratio of 12.5% ($\$ 50,000 / \$ 400,000$). Remember ratios are only effective when used in comparison to other benchmarks, trends or industry standards. A turnover ratio well below the industry average would indicate much slower conversion of receivables than other companies. A much lower Receivables to Sales Ratio than the industry average might indicate much better policies in getting sales converted into cash.

Asset Ratio Analysis

The ability to generate revenues and earn profits on assets can be measured through ratio analysis. Several types of ratios can be calculated regarding the utilization of assets.

Example: Asset Turnover gives an indication of how often assets are converted into sales. The Asset Turnover Ratio is calculated as follows: $\text{Sales} / \text{Average Assets}$. If annual sales were \$ 200,000 and the average asset balance for the year was \$ 160,000, the asset turnover rate would be 1.25. A higher turnover rate implies effective use of assets to generate sales.

Receivable and Inventory ratios are part of asset ratio analysis. Inventory Turnover gives an indication of how much inventory is held during the reporting period. Example: Cost of Goods Sold for the Year was \$ 270,000 and the average inventory balance during the year was \$ 90,000. This results in an inventory turnover rate of 3 ($\$ 270,000 / \$ 90,000$). The average number of days inventory is held is calculated as follows: $365 \text{ days in the reporting period} / \text{inventory turnover rate}$. In our example, this would be 122 days.

Finally, you can look at the use of capital for generating revenues. Two common ratios are Total Capital Turnover and Investment Rate. Total Capital Turnover is calculated as: $\text{Sales} / \text{Average Total Capital}$. Average Total Capital consists of both debt and equity. The Investment Rate is the rate of change in capital. The Investment Rate is calculated by simply dividing the amount of change in capital / total beginning capital. A high investment rate would imply an aggressive program for generating future sales.

Accounts Payable Ratio Analysis

Ratio analysis can be used to determine the time required to pay accounts payable invoices. This ratio is calculated as follows: $\text{Accounts Payables} / \text{Purchases per Day}$. For example, assume we have total accounts payables of \$ 20,000 and our annual purchases on account total \$ 400,000. Our purchases per day are $\$ 400,000 / 365 \text{ days in the annual reporting period}$ or \$ 1,096. The average number of days to pay accounts payable is $\$ 20,000 / \$ 1,096$ or 18 days. The result of this ratio should be compared to the average terms available from creditors.

If the average number of days is close to the average credit terms, this may indicate aggressive working capital management; i.e. using spontaneous sources of financing. However, if the number of days is well beyond the average credit terms, this could indicate difficulty in making payments to creditors.

Another ratio that can be used in managing accounts payable is Sales to Accounts Payable. This ratio gives an indication of a company's ability to obtain interest free funds. For example, if we had sales of \$ 600,000 and accounts payables of \$ 20,000, this gives us a ratio of 30. As this ratio increases, it becomes more difficult to obtain trade credit.

Managing Return on Equity

For publicly traded companies, one of the most watched financial measurements is return on equity. Return on Equity is calculated by dividing Net Income over Average Shareholder's Equity. Financial Managers break this ratio down into three components for managing the organization. The three components of Return on Equity are: Return on Sales, Asset Turnover, and Financial Leverage. Therefore, we can breakdown Return on Equity as: $(\text{Net Income} / \text{Sales}) \times (\text{Sales} / \text{Assets}) \times (\text{Assets} / \text{Equity})$.

Example: Net Income is \$ 100,000, Equity is \$ 400,000, Sales were \$ 500,000 and Assets are \$ 600,000. $\text{Return on Equity} = (\$ 100,000 / \$ 500,000) \times (\$ 500,000 / \$ 600,000) \times (\$ 600,000 / \$ 400,000) = .20 \times .8333 \times 1.50 = .25$ or 25%.

The trick is to manage these three components in such a way that you maximize Return on Equity. Remember if you increase one ratio, it will decrease a corresponding component. For example, if you were to increase assets, this would increase your leverage (assets / equity), but would decrease your turnover (sales / assets). Additionally, you can further breakdown the three component ratios into more detail ratios. For example, the first component ratio is Return on Sales. This can be broken down into Operating Margin on Sales. The point is to start at the top - Return on Equity and move to the middle layer (3 component ratios) and then move to the bottom layer (detail ratios).

Profitability Ratios

Profitability Ratios are used to evaluate management's ability to create earnings from revenue-generating bases within the organization. Profitability Ratios measure the earnings by dividing the earnings by a base, such as assets, sales or equity. Four common profitability ratios are:

Profit Margin on Sales = $\text{Net Income} / \text{Sales}$

Operating Margin on Sales = $\text{Earnings Before Interest \& Taxes} / \text{Sales}$

Return on Assets = $\text{Net Income} / \text{Average Assets}$

Return on Equity = $\text{Net Income} / \text{Average Common Equity}$

Example: Net Sales (Gross Sales less Allowances) are \$ 500,000.

Earnings Before Interest and Taxes are \$ 50,000 and Net Income is \$ 25,000. Asset Balances are: Beginning \$ 190,000 and Ending \$ 210,000
Common Stock Balances: Beginning \$ 325,000 and Ending \$ 325,000
Retained Earnings Balances: Beginning \$ 100,000 and Ending \$ 150,000.

Profit Margin = $\$ 25,000 / \$ 500,000 = .05$ or 5%

Operating Margin = $\$ 50,000 / \$ 500,000 = .10$ or 10%

Return on Assets = $\$ 25,000 / (\$ 190,000 + \$ 210,000) / 2 = .125$ or 12.5%

Return on Equity = $\$ 25,000 / (\$ 425,000 + \$ 475,000) / 2 = .055$ or 5.5%

Profitability ratios are widely used by creditors, investors, and others who are interested in finding out how management generates its earnings.

Operating Cost Ratios

Ratios can be used to help measure the effectiveness over cost control. Operating costs can be monitored with the use of direct and indirect operating ratios. Examples of Direct Operating Ratios are:

Direct Labor to Sales = Direct Labor Costs / Sales

Direct Materials to Sales = Direct Materials / Sales

Factory Overhead to Sales = Factory Overhead / Sales

Indirect Operating Ratios can be computed for almost any itemized expense. Two examples are:

Computer Expenses to Sales = Computer Expenses / Sales

Travel Expenses to Sales = Travel Expenses / Sales

Example: Direct Labor Costs are \$ 100,000 Factory Overhead is \$ 200,000, Computer Expenses are \$ 15,000 and Sales were \$ 500,000.

Direct Labor to Sales = $\$ 100,000 / \$ 500,000 = .20$ or 20%

Factory Overhead to Sales = $\$ 200,000 / \$ 500,000 = .40$ or 40%

Computer Expenses to Sales = $\$ 15,000 / \$ 500,000 = .03$ or 3%

Operating cost ratios are often used by production managers to monitor trends and identify problems. If a significant change occurs, the problem must be identified as either internal (such as operations) or external (such as economic conditions). Since investors and other outsiders don't have access to operating information, operating ratios are rarely used outside the organization.

Measuring Sustainable Growth

Is there such a thing as too much growth? In financial management, we try to balance the management of growth with our asset base. For example, if sales were to grow too fast, than we would deplete our financial assets resulting in extreme risks to the organization. If sales grow too slow, than we run the risk of destroying value by holding assets that earn a rate below the cost of capital. The objective in financial management is to manage a sustainable rate of growth that creates value year after year.

The growth rate in sales is limited by the growth we can obtain from the equity side of the Balance Sheet. Therefore, sustainability is a function of equity growth rates, not sales growth rates. The formula for calculating a sustainable growth rate (G) is:

$G = \text{Margin} \times \text{Turnover} \times \text{Leverage} \times \text{Retention}$
Margin = Net Income / Sales
Turnover = Sales / Assets
Leverage = Assets / Equity
Retention = % of Earnings Retained

Consequently, if we want to maintain a consistent level in profit margins, asset turnover, leverage, and retained earnings, than we should grow our sales by G (sustainable growth rate). Changing the sustainable growth rate is a function of the four components of sustainable growth. For example, eliminating marginal products can increase the Margin component or paying out less dividends will increase the Retention component. The trick is to manage the four components so that sales growth follows the sustainable growth rate.

Using the Z Score to Assess Bankruptcies

Financial insolvency or bankruptcy can be forecasted using the Z Score. The Z Score combines several ratios with a statistical application called MDA - Multiple Discriminate Analysis. The Z Score is highly accurate in predicting bankruptcies. The Z Score is about 90% accurate in forecasting business failures the first year and about 80% accurate the second year.

The Z Score is calculated by adding five ratios with applicable MDA weights:

$$Z = 1.2 (A) + 1.4 (B) + 3.3 (C) + .6 (D) + .999 (E)$$

A: working capital / total assets
B: retained earnings / total assets
C: earnings before interest taxes / total assets
D: market value of equities / book value of debt
E: sales / total assets

The following guideline is used to score an organization:

If the Z Score is 1.8 or less, very high probability of bankruptcy.

If the Z Score is 1.81 to 2.99, not sure about bankruptcy.

If the Z Score is 3.0 or higher, bankruptcy is unlikely.

Example: Total Assets = \$ 1,000, Retained Earnings = \$ 400, Earnings Before Interest Taxes = \$ 50, Sales = \$ 1,500, Market Value of Stock = \$ 600, Book Value of Debt = \$ 700, Working Capital = \$ 100.

$$1.2 \times (\$ 100 / \$ 1,000) = .120$$

$$1.4 \times (\$ 400 / \$ 1,000) = .560$$

$$3.3 \times (\$ 50 / \$ 1,000) = .165$$

$$.6 \times (\$ 600 / \$ 700) = .514$$

$$.999 \times (\$ 1,500 / \$ 1,000) = 1.499$$

$$\text{Total Z Score} = 2.86 \text{ Not Sure}$$

Valuations

Valuations of Mergers & Acquisitions

The basic principle for valuing a business combination is similar to capital budgeting of projects. If the present value of incremental cash flows from the merger exceeds the present value of the amounts paid, then the investment should add value. This concept is referred to as Net Present Value. In order to calculate Net Present Value (NPV), you must:

- Determine the expected cash flows of the target company.
- Determine the effect the merger will have on the combined cost of capital of the new entity.
- Determine the amount that will be paid for the target company. A higher price should only be paid if there is definite synergy values.

Estimates of cash flows can be seriously distorted if management has plans to change the future operations of the combined entity. Make sure you have a good understanding of future strategic plans. Your estimate of cash flows should include any additional cash outflows that will be incurred from the issuance of new debt. Cash flow estimates need to be based on sensitivity analysis of how NPV changes when a critical variable is changed. Using a decision tree model will help determine the expected value from a range of possible values.

The discount rate you should use in discounting the cash flows should be the Cost of Equity of the combined company or the target company; depending upon which cash flow stream you are measuring. Remember you are buying the equity or ownership of the target company. You may need to adjust the discount rate for additional risks incurred from the use of funds. If you are using the Capital Asset Pricing Model, you will need to determine a new Beta coefficient. Finally, don't forget to include an estimate for terminal values beyond your forecasted cash flows.

Obviously this overview touches on the very basics in acquiring the equity of another company. A good book on valuing companies is Valuation: Measuring and Managing the Value of Companies by three consultants with McKinsey & Co.

The Underlying Sources of Value-Creation: Innovation and Speed

If someone were to ask me what is the greatest strategic advantage any organization can have in the global marketplace? My response would be INNOVATION.

Innovation is one of the greatest generators of value. Innovation can lead to new markets, new customers, new products; all of which generates a lot of value. Unfortunately, innovation is very difficult to achieve. One of the best places to find innovation is in France. The French are great at innovation, everything from eye surgery to flat free tires. Because of this incredible level of innovation, the French economy has the largest trade surplus of any nation.

So how do the French generate so much innovation? Well think about how the French approach business. They are very visual in how they solve problems; i.e. use gauges and pictures to explain and solve problems (Balanced Scorecard). The French allocate lots of time to creative thought, not to creative work. In fact the French tend to minimize work; they almost have a disdain for work. Because of this freedom, the French can react quickly to market conditions without having "work" get in the way. And remember what Tom Peters and others keep preaching: *It's the fast over the slow that will survive in the future, not the big over the small.*

The ability to react quickly to events, customers, markets, new technologies, and other issues can make or break companies in the future. For example, years ago Bill Gates, founder of Microsoft, dismissed the Internet as inconsequential. Year's later Mr. Gates changed his views on the future of internet. What's so amazing is that Microsoft (a very large company) was able to change directions so quickly. The ability to move fast is paramount to survival in the future.

Finally, you have got to create an environment that is conducive to creativity. This requires that you break down barriers and free people up so they can be creative. For example, one company discarded most of its personnel policy and replaced it with a single sentence on one page: "Use Your Best Judgement." Other companies are evolving into virtual organizations by having the customer run the company, not the CEO. Also recognize the importance of failure. Failure is normal and it usually comes before success. Remember innovation comes from some unusual places. You have to break away from old ideas, old values, and the status quo. Don't be afraid to challenge what is going on.

Lease Valuations

A lease is an agreement whereby the lessor (owner of property) allows the lessee use of the property in exchange for lease payments. Operating leases give the lessee the use of property without ownership. Operating leases are sometimes used to initiate off-balance-sheet financing of assets. Capital or Financing leases transfer ownership from lessor to lessee. Under capital leases, the lessee will record the asset at the present value of lease payments not to exceed the fair market value of the asset. The following examples will illustrate certain basic calculations in valuing leases. You will need to refer to present value tables to understand the source of present value factors.

Example 1: What is the value of the leased asset?

Annual lease rental payments are \$ 10,000 under a 5 year lease. The financing rate for this lease is 12% and payments are made at the beginning of the year. Since payments are made at the beginning of the year, we will use a present value factor for an annuity due. Remember that many present value tables are based on year-end payments.

Step 1: Determine the present value factor to use, 4 years (n-1) and 12% gives us $3.0373 + 1.0000 = 4.0373$ present value for annuity due at 12% for 5 years.

Step 2: Calculate the present value of cash flows associated with the lease.
 $\$ 10,000 \times 4.0373 = \$ 40,373$ Value of Leased Asset.

Example 2: What is the annual payment for a lease?

We will lease an asset that has a value of \$ 50,000 over 10 years. Payments will be made at year-end with an interest rate of 14%.

Step 1: Determine the present value factor to use, 10 years and 14% gives us 5.2161

Step 2: Calculate the annual lease payments, $\$ 50,000 / 5.2161 = \$ 9,586$

Lease calculations are important when making a decision to buy or lease assets. Leases can help preserve cash flows, but leases carry higher costs over the long-run than outright purchasing of assets.

Focus on Free Cash Flow, not EBITDA!

When analyzing and determining values, there is a tendency to use shortcuts or recommended calculations. For example, Cash Flow Return on Investment is advocated by some while others like to measure value by calculating EBITDA - Earnings Before Interest Taxes Depreciation Amortization. The problem with these approaches is that they tend to bypass "free" cash flows. And free cash flows are the source of valuations.

Think of free cash flow as the amount of cash you can draw out of your organization after you've paid everything off. This is the amount you want to use for determining value. If you were to use EBITDA, you would falsely assume that the asset base will be systematically capitalized over time with no future additional reinvestments into assets. How long can your organization generate future revenues with a declining asset base? Consequently, you need to be careful about fashionable ways in arriving at valuations. Get back to Cash Flows. If you want to rely on the Income Statement, then add back non-cash items such as depreciation and subtract out future working capital requirements and future capital investments. Don't shortcut your analysis; go back to how you arrive at cash flows.

Valuation of Customers – Part 1

Most businesses recognize the importance of customers. However, few businesses will recognize customers like any other asset, assigning value to customers and categorizing this asset as the main asset for running the business. When you treat customers like an asset, you begin to manage differently. For example, some customers add value to the business while others remove value from the business. For those that add value, more resources are allocated to these types of customers. The net losers are transferred to the competition. Retaining the highest value-creating customers is the primary objective behind assigning values to customers.

The value assigned to customers is based on the future net profits generated by a customer, discounted back at the cost of service rate to a net present value. In some cases, it is necessary to account for additional values contributed by customers. For example, suppose you have a customer that refers new customers to your business or suppose you have a customer that is providing you with valuable feedback for improving your services. These types of customer attributes generate higher values.

When calculating net present values for customers, you will need to estimate the full costs of servicing the customer. This requires a cost allocation system, such as Activity Based Costing with an object layer that captures net profits by customer. Since most cost models will be hard pressed to capture all customer-related costs, you will probably have to apply some probabilities to certain cost

categories. Keep in mind that we are trying to calculate a comparison of values between customers so that we can distinguish between customers adding value and customers destroying value. Ranking customers according to value requires an understanding of how customers impact the bottom line. Once we have a ranking by value, we can allocate more marketing and customer service resources to the highest value generators.

Retaining "value-adding" customers is a major challenge for every business. The range of customer values will guide you on how to allocate your limited resources. Some businesses may have a very narrow range of values; i.e. every customer adds more or less the same relative amount of value. For example, a bookstore makes more or less the same amount on each and every customer. Other businesses may find a major divergence between customer groups. For example, airlines tend to make much more money from business travelers that fly first class as opposed to vacation travelers flying coach.

The valuation process is now an integral component of managing customers. And customers are the critical assets behind every business. When we recognize that customers are different, we start to move towards customization. The process of customization is the next phase in properly managing the customer. Part 2 of this article will explore how we leverage customization as a major strategy for retaining and building customer loyalty.

Valuation of Customers – Part 2

In Part 1 of this article, we learned that valuation of assets should be applied to customers. Once we assign values to customers, we can better allocate our limited resources towards retaining the highest value-creating customers. We will now expand on what we can do to retain and build the customer asset base.

One beginning question to ask is: What customers do we want to keep? The range of values we have calculated for customers will help us answer this question. Some businesses (like a foodstore) will have narrow valuations since almost all sales are marginal. Other businesses with wide variations in profit margins will have a much more diverse spread of valuations. Wide variations in valuations will give us a customer base with a high skew curve. Businesses with wide variations and high skew curves will tend to emphasize frequent marketing programs, special sales, and other strategies directed at the high-end of the skew curve. Businesses with low skew curves have a flat customer base and thus, they will allocate their marketing efforts more uniformly throughout the entire customer mix. For businesses with low skew curves, one way to segment out customers is by their needs. For example, a clothing retailer provides numerous needs - children's shoes, men's neck ties, etc. The greater the differentiation in needs amongst your customers, the greater the need to learn from the customer.

Therefore, retaining customers is a function of gaining new knowledge about the customer. This requires that you establish a relationship with the customer. Once you begin to interact with the customer, you start to identify unique needs of the customer. This is important since customers are not interested in making choices. Customers are best satisfied when you deliver products and/or services that are customized to their specific needs. Customer retention comes from treating each and every customer differently. The most loyal customers are those who expect you to remember what their specific needs are. The more specific a customer is with your business, the more you will be able to learn from the customer. And the less likely the customer will defect and move over to the competition.

As the organization learns from the customer, it will be necessary to deliver customized products and services. The organization will have to become increasingly flexible with marketing and production. Additionally, a needs specific program should be directed at high value customers. The high value customers are the ones that you must retain. In the book *Enterprise One to One*, the authors Don Peppers and Martha Rogers note that a learning relationship between the business and the customer can only take place if:

- The business has the capabilities to deliver customized products and services in a cost-effective manner.
- The business has intelligence about the customer and this intelligence allows the business to anticipate customer needs.
- The business is very flexible and there is a strong interface between production, marketing, and other components of customer service.
- The customer is required to tell the business what specifications are required. Customers direct production, marketing, and other parts of customer service.

Finally, the emphasis is not on trying to bring in new customers. The emphasis is on providing more and more unique products and services. This wider product mix brings in the new customers. Consequently, the organization must be customized to meet the needs of the customer. This may require changing the organizational structure.

We no longer live in a world where one common product or service can be spread amongst the customer mix. We are quickly moving into a world where products and services are customized to meet individual customer needs. Customization based on learning from the customer is critical to value creation in the future.

Economic Value Added

What is Economic Value Added (EVA)?

Have you noticed that the stock prices of many companies (especially internet stocks) seem to rise rapidly despite large reported losses on their Income Statements. How can values go up, up, and up with such low earnings on the Income Statement? This question has raised serious concerns that Net Income has little to do with the values of companies. So why the disconnect? Well, net income is derived from past events on a short-term basis while values of companies are derived from future events over the long-term. Consequently, managers are looking for better measures of financial performance. In recent years, such a measurement has emerged. It's called **Economic Value Added** or EVA.

The basis of EVA resides in something called Economic Income. Economic Income is a better measure of value-creation since it takes a much longer view of what's going on. Unfortunately, calculating Economic Income isn't easy. For example, suppose you spend \$ 10,000 on research and development. This should provide a long-term benefit to your organization. In determining Economic Income we will capitalize Research and Development while under traditional accounting, we deduct the full amount as an expense in arriving at Net Income.

In a much simpler form, EVA is calculated by taking Net Operating Profits After Taxes (NOPAT) and reducing NOPAT by your **total** cost of capital. Remember that your cost of capital includes both debt and equity. Cost of Capital is the cash flows that you spend to compensate your investors for the risks they incur when they lend you money or buy stock in your company. The resulting amount, NOPAT - Cost of Capital, is called EVA. If it's positive, this indicates that you created x amount of value for the owners of your company. A negative EVA would imply that you destroyed x amount of value for the owners.

Numerous companies, such as Coke Cola, have made EVA their key management program to drive value-creation. So does EVA really work? Well, that depends upon your business. It appears EVA is a good improvement to traditional financial measurement when a company's capital structure is heavily invested in real assets with relatively low debt loads (such as utilities). However, if your business is based on intangibles such as intellectual capital in a fast growth environment (such as technology companies), then EVA will be less useful.

My recommendation is to give EVA serious consideration due to the major distortions within traditional accounting. However, since cash flows are the real source of value-creation, you need to take EVA with a grain of salt. And don't forget that value-creation comes from lots of things that have little to do with financial measurement.

Four Steps to Calculating EVA

EVA or Economic Value Added is a financial measurement of how much value was created or destroyed for the reporting period. The following example illustrates a four step approach to calculating EVA:

Step 1: Calculate NOPAT (Net Operating Profits After Taxes)

Gross Profits (Sales - Cost of Goods Sold) of \$ 100,000 less Depreciation & Amortization of \$85,000 = \$15,000 less income taxes @ 30% = NOPAT of \$ 10,500.

Step 2: Determine Amount of Capital Deployed

Net Working Capital of \$ 20,000 + Net Fixed Assets of \$ 60,000 = Total Capital Deployed of \$ 80,000.

Step 3: Calculate Your Weighted Average Cost of Capital

We will assume that the Capital Asset Pricing Model was used for calculating an equity cost of capital of 14% and that market weights show 65% debt and 35% equity. Cost of Equity x Market Weights or $.14 \times .35 = .049$. Cost of Debt x Market Weights or $.09 \times .65 = .0585$. This gives us Weighted Average Cost of Capital of $.1075$ or 10.75% ($.049 + .0585$).

Step 4: Calculate Capital Charge to NOPAT & EVA

Total Capital Deployed (Step 2) was \$ 80,000 x Weighted Average Cost of Capital (Step 3) of $.1075 =$ Total Charge for Cost of Capital \$ 8,600. Now take NOPAT (Step 1) which was \$ 10,500 Less Charge for Cost of Capital of \$ 8,600 = Economic Value Added or EVA of \$ 1,900.

Making Economic Value Added (EVA) Work

One of the biggest problems with measuring the creation of value is that it's all over the place. Value comes from so many things: Customer service, efficient operations, great products, intellectual capital, etc. And if you expect to drive value from these sources, then you have to go way beyond financial measurements like EVA. That is why professionals like myself are big advocates of *balanced scorecards* and *competitive intelligence*. Since EVA is a "financial" type measurement and since value-creation has so many sources, EVA can't possibly be the sole driver behind value-creation.

Another problem with EVA is cost of capital is already recognized for highly leveraged companies. When debt is high, your cost of capital shows up on your Income Statement; i.e. outstanding debt requires interest payments. These payments show up on your Income Statement as interest expense. Also, your returns on assets are not easily measured. Suppose your organization is a knowledge based service company, than measuring the true returns on all assets becomes difficult. The

"intellectual assets" within your organization are not measured and reported anywhere, but they can be the single most important asset you have for creating value.

Despite its limitations, EVA warrants serious consideration by many organizations; especially if your organization is relying on traditional financial measurements, such as ratio analysis. EVA reports the real economic profits of your organization. This is accomplished by forcing your organization to consider the entire cost of capital.

In order for EVA to work, you will need to consider the following:

1. Build an EVA Model that fits your organization. For example, what adjustments are needed to capital? What business units are included in the calculations? What adjustments do you make to NOPAT (Net Operating Profits After Taxes)?
2. Determine how you will apply EVA. What business units will you measure? What levels of management will be subject to EVA?
3. Determine how you will implement EVA. How will EVA be reported? How do you get the organization to "buy in" on the idea of EVA? Who should receive training in EVA?
4. Determine how EVA will impact your company. Who is the most responsible for generating EVA? Should you link compensation of key officers to EVA?

How EVA is introduced and implemented will be critical to its success. Remember EVA can create some uneasiness among your managers. Having top management as the champions of EVA will go a long way in making EVA work. The bottom line is simple: Management must increase shareholder wealth and EVA can represent a good metric to add to your existing financial measurements (Return on Gross Investment, Return on Equity, etc.). Everyone involved in Financial Management should be conversant with EVA.

Risk Management

Step 1 in Risk Management: Take a Risk Profile

All organizations are faced with risks, ranging from destruction of assets by fire to lawsuits from customers. So how do you manage all of these risks? Well the first step in managing risks is to complete a *Risk Profile* of your organization. A risk profile assesses your risk by asking numerous questions. For example, does your business operate overseas? If yes, you may be exposed to exchange rate risks. Does your company execute contracts on a regular basis? If yes, do the contracts limit your liabilities? Are sales within your company largely dependent upon a single customer? If yes, you may be exposed to high levels of business risk.

Besides asking lots of questions, a risk profile is also developed by looking at past insurance claims and lawsuits within your industry. Physical inspection of facilities can uncover possible problems such as theft and employee injury. Interviewing employees can help identify several types of risks. Once you complete the Risk Profile, you will have a good understanding of different risks that apply to your organization. Your next step is to categorize risks so that you can properly manage them.

Step 2 in Risk Management: Categorize Your Risks

After you have completed a Risk Profile of your organization, the next step in risk management is to categorize your risks. Risks are categorized into four areas according to significance and probability:

Significance to Organization	Probability that Risk will occur	Basic Approach to Managing this Type Risk
HIGH	HIGH	Try to avoid these types of risk
LOW	HIGH	Implement procedures and policies to reduce
HIGH	LOW	Use insurance to spread the risks
LOW	LOW	Accept these types of risks

Now that you have categorized your risks, you can implement a formal risk management program. If you have risks that will materially impact your organization and there is a high probability of occurrence, than you want to take steps to avoid these types of risks. For example, some Japanese manufacturers have incurred significant losses from foreign currency exchanges with the United States. In order to avoid these risks, manufacturing operations have been transferred over to the United States.

Some risks are likely to occur, but have little impact on your overall operations. For example, employee injuries are common, but rarely do they result in significant losses. A worker safety program can reduce this type of risk. You can use insurance for risks that are significant, but rare in occurrence. Finally, if you have risks that are not material and infrequent, you will implement a risk retention program; i.e. you will accept these types of risks. Most companies calculate an assigned value to this last category to determine their overall exposure. One final point: Since risks will change over time, you will need to go through this process on a regular basis.

Using Insurance to Manage Risk

One of the most common ways of managing risks is to use insurance. Once you have categorized your risks, you need to seek insurance on those risks that can be significant in your operations, but have relatively low probabilities of occurrence. Insurance is used to share losses associated with property, income, and liability. You can either purchase separate policies for each type of loss or you can use a commercial package to cover a range of losses. Commercial packages are usually cheaper than a collection of separate policies.

So what kinds of insurance are available? Well first you will use property insurance to protect your assets against damages and losses from various events (floods, fire, etc.). Property insurance with "all risk" is usually preferred since it's sometimes hard to predict what kinds of events will occur. Crime insurance is sometimes added if you have assets located in areas subject to theft and vandalism. General Liability insurance is used to protect your organization against claims from injured parties. Product Liability insurance is used to protect against faulty workmanship. Professional Liability insurance is used to protect engineers, CPA's, and other professionals against liability due to errors and omissions in their work.

If your business is subject to major interruptions from floods, hurricanes, and other natural events, than you may want to consider Business Interruption insurance. Business Interruption insurance provides your organization with a base level of cash until you can get up and running again. If you have key personnel that are important to your organization, than you should consider life insurance on these employees. Finally, if you have concerns that your separate insurance policies may not cover all of your exposures, than you can execute an Umbrella Policy to catch the unique items not covered by other policies.

Managing Foreign Exchange Rate Risks

When you conduct business overseas, you will have to convert currencies involved at some prevailing exchange rate. The price of one country's currency in terms of another country is called the exchange rate. When the currency of one country depreciates (drops in value), there will be a corresponding appreciation of value in another country's currency. Depreciation occurs when it takes more currency to purchase the currency of another country. Appreciation is just the opposite; the currency is able to purchase more units of the other country's currency. Since most currencies are valued according to the marketplace, there are constant changes to exchange rates. This gives rise to exchange rate risk.

There are several ways to reduce exchange rate risk. Two popular approaches are hedging and netting. Hedging is where you buy or sell a forward exchange contract to cover liabilities or receivables that are denominated in a foreign currency. Forward exchange contracts offset the gains or losses associated with foreign receivables or payables.

A very popular form of hedging is the Interest Rate Swap. Interest rate swaps are arrangements whereby two companies located in different countries agree to exchange or swap debt-servicing obligations. This swap helps each company avoid the risks of changes in the foreign currency exchange rates. Due to the popularity of interest rate swaps, most major international banks offer interest rate swaps for organizations concerned about foreign exchange rate risks when making interest payments. The costs charged by banks for interest rate swaps is relatively low.

Another solution to foreign exchange rate risk is the use of netting. Netting is the practice of maintaining an equal level of foreign receivables against foreign payables. The net position is zero and thus exchange rate risk is avoided. If you expect the currency to depreciate in value, then you should hold a net liability position since it will take fewer units of currency to pay the foreign currency debt. If you expect the currency to appreciate in value, then you would want to have a net receivable position to take advantage of the increased purchasing power of the foreign currency.

There are other vehicles for dealing with exchange rate risk, such as option hedges and other types of derivatives. However, the costs and risks associated with these types of arrangements can be much higher than a simple approach such as the interest rate swap.

If you have exchange rate exposure, then take a look at simple hedges and netting as ways of avoiding foreign exchange rate risk.

Controlling Costs

A Better Approach to Cost Control: ABC

When it comes to controlling costs, most organizations control costs by general ledger account; i.e. they look to their Income Statement. So when you have to cut costs, you look at your expenses and say to yourself: "Payroll is \$ 100,000 and utilities is \$ 5,000; we can't cut off our utilities, but we can sure cut payroll."

This short-sided approach to cost control often leads to the destruction of value within the so-called value chain. When you cut people, the activities they perform may still be there, but no one's around to perform the activity. So you end-up creating black holes in the organization that destroys employee value. Once you've destroyed employee value, this leads to poor customer service and hence, the destruction of customer value. Now that you've lost your customers, this translates into the destruction of shareholder value. So you end-up destroying value within the entire value-chain: Employee, Customer, and Shareholder.

A better approach is to control your costs by activity. Under this approach, you now look at your expenses by activity; such as costs to process customer orders, costs to run payroll, costs to recruit new employees, etc. The key is to reduce costs that fail to serve internal or external customers. You can easily do this by simply focusing on RE-type activities. For example, Retype the letter, Re-inspect the pipe, Re-enter the accounting entries, etc. Try to eliminate RE-type activities and you will improve your process immensely and cut costs at the same time.

The formal system for controlling costs by activity is referred to as **Activity Based Costing**. Activity Based Costing (ABC) is not easy to implement, but once working it can open your eyes to a whole new approach to cost control. You leverage ABC information by making management decisions - this is called Activity Based Management (ABM). And once you have ABM working, you can implement Activity Based Budgeting and ultimately build a model to look at both costs and revenue drivers. For now, I highly recommend that all organizations think in terms of activities, not in terms of general ledger account. Otherwise you run the risk of destroying value within the value chain.

Why Implement Activity Based Costing?

Whether you realize or not, your cost control system may be becoming more and more distorted. At the heart of this distortion is an enormous escalation in overhead costs. According to Robin Cooper, a well-known authority on cost control, many organizations are experiencing *super-variable costs* within fixed overhead. For example, support staff and programming are exploding for many companies with projects like Enterprise Resource Planning. These types of costs are often classified within traditional cost systems as administrative overhead. Traditional systems allocate these costs based on a single relationship to numerous cost centers. Some experts refer to this traditional approach to cost allocation as "peanut butter" accounting. The end result is an enormous distortion in cost allocation to various cost centers.

Activity Based Costing (ABC) looks at relationships in allocating and reporting costs. Consequently, many of the distortions occurring in traditional cost systems are eliminated due to an itemized allocation approach. Additionally, the ABC Model can be designed to provide profit information by customer, by product, etc. This in turn leads to better pricing of products and services. It also results in increased profits since resources (such as marketing staff) are redirected where the profits are the highest.

ABC can also fit with other re-engineering and information improvement projects. Software vendors, like ABC Technologies (www.abctech.com), now have integrated their software with ERP applications. Implementing ABC isn't easy since it requires extensive analysis of activities, building a three layer cost model, and maintenance after implementation. However, given the increased distortions in traditional systems and with so much emphasis on company improvement projects, ABC needs to be given serious consideration where process improvement is critical.

Performance Measurement

The Basic Foundation Behind a Performance Measurement System

A good performance measurement system can change your entire organization. However, your organization must be willing to accept change. If upper-level management supports long-term improvement and your company is receptive to change, than a performance measurement system needs to be considered. A performance measurement system is based on measuring areas that are critical to your future success.

A good performance measurement system strikes the right balance or mix of key performance indicators. This requires that you properly identify those things that need to be measured on an enterprise-wide basis. The mix of performance indicators should not be so extensive that your system will be overly complicated. Try to keep your indicators to four or five main areas; such as customer service, market share, innovation & development, and financial performance.

Once you have the right mix of performance indicators, than ask yourself two very important questions: Can we measure the indicator and can we report the indicator? You have to be able to measure the critical area to control it. And you must be able to report your measurement results if you expect to take action in the area being measured. If your system can't pass these two questions, than you run the risk of a system whose costs exceeds the benefits. If your system has passed these two critical questions, than it's time to start building a prototype for testing and refinement.

It is extremely important to get feedback from users in the design of your system. In order to ensure users are happy, it is sometimes better to work backwards; i.e. design the outputs for the users first and than work backwards designing the actual system. The best performance measurement systems distribute results on-line and facilitate user interaction (such as On-Line Analytical Processing). But even if you can't have an automated system, remember a basic performance measurement system in the form of reports is a lot better than no system at all.

Design Steps in Building a Performance Measurement System

If you have decided to implement a performance measurement system (PMS), here are six basic steps you will need to consider in designing the system:

1. Bring together all stakeholders; i.e. everyone who has an interest in the PMS. The purpose of this first step is to build consensus on what should be accomplished from the PMS. What are the needs of your organization? A cross-functional team needs to be formed for directing the design of the PMS.
2. Next, your cross-functional team will need to formulate a plan for analyzing activities, collecting data, communicating to users, etc. Your main objective is to identify areas that need to be measured. Start by looking at how your business is organized. For example, if your business is organized around assembly plants, than your PMS should follow this path.
3. Once you have an understanding of what needs to be measured, you have to collect the data that will be used for decision making. It's usually best to have one member of the cross-functional team for each area that will be measured. For example, if you are collecting operating data, you should have an operating person on your cross-functional team. The purpose of step 3 is to determine how you will manage the data within your PMS. How often will the data be needed? Can it be measured and reported within the PMS?
4. The cross-functional team must select a test site within your company. Here you will run pilot tests to determine the feasibility of a PMS. When you select a site, make sure you are dealing with activities that can be measured. You should select a site that has room for improvement and current employees are not happy with the current system. However, you need a test site that can generate reliable data. So the existing system must be reasonably sound.
5. At the test site, you will need to collect lots of data. Several questions must be addressed. How easy is it to collect the data? How big should the test area be? How many people should be involved? Once again, you need to determine the feasibility of a PMS, the costs versus the benefits. Make sure you have support from users at this stage of the process. If not, you may need to go back to the drawing board.
6. Once you have collected and analyzed the data at the test site, you need to present the results of your performance measurements to management. Make sure you present the outputs in a useable and easy-to-understand format. For example, operating people will want performance information presented differently than marketing people. You must tailor the information to fit the user.

Obviously a lot more planning and detail goes into designing a new system. This article has touched on the very basic steps within the process. Finally, keep in mind that many new projects will fail due to:

- Lack of support from upper-level management (single biggest reason for failure).
- Inability to form a good cross-functional team.
- The PMS doesn't fit the organization.
- The organization is not willing to change.

What are Critical Success Factors?

There are things that your organization must do right if you expect to survive in the future. These critical areas require constant care and attention on the part of management. According to John F. Rockart in the Harvard Business Review: "Critical success factors for any business are the limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization."

Therefore, critical success factors represent performance areas that must meet expectations if the organization is to flourish. Measurements are used to track performance in each critical success area. Critical success factors are both internal and external. For example, comparison of budgets to actual would be internal while percent of market share would be external.

One way to identify critical success factors is to go through a strategic planning process. A second or complimentary approach is to conduct competitive intelligence research. Look at the success factors of your competition. Collectively, you will need to develop a set of critical success factors which serves as the foundation for your performance measurement system. Consequently, critical success factors are an important link between strategic plans and performance measurement systems.

Examples of Key Performance Indicators

Key Performance Indicators (KPI) are used in performance measurement systems such as the Balanced Scorecard. Examples of KPI's for specific measurement areas include:

Measurement Area => Customer Service (Price, Delivery, Support, Satisfaction)

Examples of KPI's => Price comparisons to competition, number of on-time deliveries, response times, customer complaints, number of product returns, customer survey results, service awards, etc.)

Measurement Area => Internal Operations (Efficiency, Costs, Production, Inventories)

Examples of KPI's => Cycle times, inventory turnovers, defect rates, plant utilization, targets met, unit cost compared to competition, overhead trends, etc.

Measurement Area => Innovation (New Products, Technology, R & D)

Examples of KPI's => Number of new products, number of patents, new technologies adopted, system improvements implemented, etc.

Measurement Area => Financial (Profitability, Growth, Value)

Examples of KPI's => Return on Equity, growth rate compared to industry growth rate, EVA, levels of operating cash flow, etc.

The ultimate purpose of KPI's is to drive future performance. The Balanced Scorecard provides the framework for capturing and reporting this performance.

Matching Financial Metrics with Strategies and Cycles

Traditional financial performance measurements are often applied uniformly to all business operations without regard to variations in strategies and / or stages within the business cycle. For organizations with diverse operations and different units or divisions, there is a need for different performance measurements since each unit has a different strategy. Forcing a one size fits all approach to performance measurement results in erroneous comparisons. Start with strategy and build measurements to fit strategies, not the overall organization.

Additionally, financial performance measurements need to consider the life cycle of a business unit. For early stages in the cycle, there is high growth, large investments and little or no working capital. Performance measurements need to focus on sales and market growth as opposed to immediate profitability. As the business stabilizes, growth slows down and the focus shifts to maintaining market share and sustaining the organization. Traditional financial performance measurements will now be employed, such as return on equity, return on assets, etc. The next stage in the cycle is maturity. All major investments have been made. Most investments are short-

duration for maintaining the existing organization. The main emphasis is on cash flow; especially operating cash flows. Thus, performance measurements tend to emphasize cash flows for mature business units.

Performance measurements are not static. You have to review and revise measurements in relation to strategies and business cycles. The best managed companies seem to understand that some measurements are emphasized over others in relation to strategies and cycles within the life of an organization.

The Balanced Scorecard: Measuring Real Sources of Value

The dilemma facing most financial managers today is how do I drive value-creation within my organization? Many managers have decided to hang their hat on something called Economic Value Added. But can we really drive value by measuring only the financial parts of our organization? The answer is a resounding NO!

The real sources of value; i.e. those things that result in higher capacities for generating cash flow come from many things. They include great customer service, great products, extremely efficient operations and ultimately the greatest source of value resides in your ability to innovate. As Tom Peters has pointed out in his book [The Circle of Innovation](#), innovation is what separates the men from the boys when it comes to value-creation.

So now that you understand the sources of value, how do you go about doing all of these things (great customer service, great products, innovation, etc.). Well you have to measure it and the way you are going to measure it is on something called the **Balanced Scorecard**. The Balanced Scorecard is a "balanced" approach to measuring those things that are critical to your future success. Key Performance Indicators (KPI) are established for your critical success factors, such as customer service. KPI's are reported in a dashboard format that resembles the dashboard a car.

Because balanced scorecards provide simple visual output, they often receive wide acceptance throughout the organization. For example, most balanced scorecards report results on gauges or dials with red indicating problems, yellow indicating caution, and green indicating acceptable performance. A series of needles on the gauge will show trends in the KPI. Comments can be added by users to help explain results and indicate what actions will be taken to improve performance.

By the year 2005, over half the Fortune 1000 companies in the United States will have implemented a Balanced Scorecard. If you want to measure and drive value, a Balanced Scorecard is possibly the best measurement system you can implement.

The Power of the Scorecard

The Balanced Scorecard implies a performance measurement system. However, as Kaplan & Norton have pointed out, the Balanced Scorecard is a management system, not a performance measurement system. The reason is due to the fact that the Scorecard deals with strategies, the real source of increased values for an organization. The problem is that most organizations fail to successfully implement their strategies.

Most people within an organization are way too focused on tasks and activities with little or no focus on strategizing. Even upper level managers fail to spend sufficient time on strategizing. According to one study, executive managers spend less than 50% of their time on strategic planning type activities. When you poll workers within an organization, you will find that less than 10% have any understanding of the organization's strategies. Is it no wonder that most organizations fail to create value through strategizing.

Enter the Balanced Scorecard. The Balanced Scorecard transforms an organization into a knowledge driven organization. Strategies are now communicated throughout the entire organization in a very precise and specific metric format. This allows people to easily identify with the strategies of the organization. Everything is now linked together, working from the same plan as opposed to scattered pockets of knowledge working in all directions. When you embed everyone into one system, the organization can respond quickly to changes in the marketplace. And since strategy is everyone's business, you have a tool for communicating strategy in terms that people can relate to. Balanced Scorecards unlock and release many of the solutions that people have for meeting strategic goals and objectives. This is why Balanced Scorecards are so powerful in helping an organization create higher values.

A case in point often cited by Kaplan & Norton is that of Mobil Oil. In 1993, Mobil adopted the Balanced Scorecard as a tool for integrating and communicating its strategies. Mobil's performance was ranked dead last in 1993. Two years later, Mobil launched its strategies in conjunction with the Balanced Scorecard. By 1996, Mobil Oil had reached record performance. This performance was repeated in 1997 and once again in 1998. As long as organizations have the ability to develop good solid strategies, the Balanced Scorecard can be the tool for implementation. If you want to create higher values, you must engage in strategizing and once of the best ways to implement strategies is through the Balanced Scorecard.

Balanced Scorecards for Non Profits & NGO's

Since strategies are critical to the success of non profit organizations (NPO) and non governmental organizations (NGO), balanced scorecards represent the central management system for running the NPO / NGO. One of the biggest difficulties for NPO / NGO's is to restrict the scope of strategic objectives. NPO & NGO's will typically have an overall strategy that tries to do too many things with too few resources. Therefore, the first step for building an NPO / NGO Balanced Scorecard is to make strategic choices about what the NPO and NGO can realistically hope to accomplish. Remember, it is better to have a few successes than a lot of failures.

Additionally, existing legacy systems are often riddled with numerous measurements and reports, making the organization focus on the wrong things. Although some of these controls may be important, they should not be part of your balanced scorecard. The Balanced Scorecard should be based on the vital areas within the strategic plan. Once a realistic strategic plan has been developed, you can establish perspectives for the scorecard.

Perspectives for NPO / NGO's can differ significantly from private sector scorecards. For example, the Customer Perspective is usually the most important perspective for an NPO / NGO. Customers represent the essence of why an NPO / NGO exists. Additionally, many NPO / NGO's will have two customer perspectives; customers who contribute resources to the NPO / NGO and customers who receive the services and products of the NPO / NGO. In some cases, customers who receive services will not pay for the services. Payment is made from another source. Also, customers can under-score every perspective within the Balanced Scorecard. For example, the City of Charlotte, North Carolina has a balanced scorecard that includes Community Safety, Transportation, and Economic Development as perspectives. All of these perspectives have customers. Therefore, the customer perspective for NPO / NGO's is considerably different than commercial businesses.

Whereas the Financial Perspective tends to be important for commercial businesses, financials is not as critical for NPO / NGO's. For example, United Way's balanced scorecard places the customer perspective at the top. Internal processes, such as improving efficiency, increasing capacities of local United Way's, and delivering services, fall below the customer. The Financial Perspective is listed at the bottom since it does not represent a major strategic objective; financial activity is the lubricant or enabler for operations, but not a critical strategic objective.

Probably the biggest challenge for NPO / NGO's is to align existing resources with the strategic themes that have emerged from the strategic planning process. Alignment will usually flow in a similar fashion to commercial business scorecards. You start at the top where overall organizational management and strategies occur. Second, you move down to the operating units that will deliver the products and services in accordance with the strategic plan. Next, support services must design

their scorecards to meet the needs of the operating units. Finally, scorecards are developed at the individual level based on the three layers above.

Since NPO / NGO's are facing more and more demands with fewer resources, it has become increasingly important for NPO / NGO's to be very selective in their strategies; focusing on those areas that will have the biggest impact. Balanced Scorecards are only as good as the strategic themes of the NPO / NGO. And the Balanced Scorecard will tell the NPO / NGO how well it is doing with its strategic themes. If performance is poor, it may be necessary to re-strategize and decide which initiatives should be continued and which should be discontinued. Balanced Scorecards represent a system of communication, providing feedback in relation to the strategic map of the NPO / NGO. The better the strategic map, the better the results you will get from the Balanced Scorecard.

The Basics of Benchmarking

The use of benchmarking can provide an objective way of measuring performance against the competition. Benchmarking is based on finding a comparable activity and determining how well you are doing. Comparisons can be both internal and external; i.e. you can compare performance between similar departments or divisions as well as compare internal to external benchmarks.

Benchmarking provides several benefits, including better understanding of the competition, better performance, and objective evaluations of performance based on real examples. One way to leverage benchmarking is to develop cost data and cost the process or activity that is being benchmarked. This provides a "perfect world" view of the activity since all costs not related to the activity are removed; especially any abnormal or unusual costs. This view of costs is becoming increasingly important since management must understand costs under a perfect scenario if the company expects to compete in the global marketplace. Additionally, management and investors are starting to push for perfection because of programs like Six Sigma.

The basic process for setting up benchmarks will usually consist of:

1. Identify and understand the function or process that needs to be benchmarked. Determine end-user requirements for benchmarking.
2. Organize a benchmarking team for design and implementation of benchmarking.
3. Understand the process and related activities. You need to make sure have comparability; otherwise you may end up comparing apples to oranges. The goal is to find relevant benchmarks for improving performance.
4. Research and gather "best in class" performance data. This may require interviews, research, analysis and other tasks. For small companies on a tight

budget, outside services may have to supply the benchmark data. Larger companies will develop their own in-house benchmark data.

5. Analyze the data and determine performance gaps between your company and "best in class" benchmarks. Identify the causes for the gaps and establish future attainable performance.
6. Obtain senior management support for benchmarking. Finalize the benchmark standards and assess their impacts.
7. Apply the benchmarks and continuously update the benchmark data.

The best types of benchmarks focus on critical functions or processes in the business, such as production efficiency or customer service. A solid understanding of the function or process is critical to finding the right benchmark. You are trying to pull out the right performance data for external benchmarking. External benchmarking is considerably more difficult than internal benchmarking.

Finding financial related benchmark data is not too difficult. Financial benchmarks are widely available from service bureaus, market reports, financial reports, and published surveys. Financial benchmarking can help you determine the costs of a process or activity based on perfect cost conditions. The key to benchmarking is to make sure you have a good comparison. Once you have this out of the way, you should find the appropriate benchmark and allow the benchmark to help guide your performance. Always remember to benchmark against "best in class" and not averages. You are not interested in average performance; you want to move towards best in class.

Integrated Performance Measurement

A fully integrated approach is now considered a standard approach to performance measurement; especially with the advent of the Balanced Scorecard. An integrated approach recognizes that measurement should be process oriented and cut across functional areas. It also recognizes that a balanced set of measures, both financial and non-financial, is needed for a complete picture of what is going on.

The best types of measurements provide more than score keeping; they help you understand what changes are needed to improve the score. Good measurements usually start with the core competencies of the organization. By focusing on core competencies, you are measuring the strategic areas that give the organization a competitive foothold in the marketplace.

Typically a set of performance measurements will rely on Key Performance Indicators (KPI's). The best KPI's tend to be simple. Here is an example of KPI's at General Electric:

<u>Performance Area</u>	<u>Key Performance Indicator</u>
Profitability	Residual Income
Productivity	Output
Human Resources	Number of Promotable Employees
Market Position	Market Share

As you can see from this example, the primary drivers behind performance are very visible within the performance measurement system. Areas that are selected for measurement are critical to the business. Therefore, the best place to start in the design of an Integrated Performance Measurement System (IPMS) is by simply understanding how the organization works. Based on this understanding, strategic themes emerge to help you identify what areas of the business should be measured. The objective behind the design phase of the IPMS is to come up with a set of KPI's that are both measurable and reportable.

The design phase of the IPMS should be both top-down and bottom-up. The top view is needed to help ensure that design is based on major strategic issues confronting the organization. The bottom-up view is needed since you need to identify barriers and issues that must be resolved for implementation of the IPMS. The preliminary design of the IPMS will often consist of eight steps:

1. Executive Management buy-in and support for the IPMS.
2. Forming the Design and Implementation Team(s).
3. Developing a clear and concise set of strategies.
4. Drafting a prototype model for testing and refinement of the IPMS.
5. Defining the Critical Success Factors or Areas that need to be measured.
6. Defining the Key Performance Indicators that will serve as the measurements.
7. Finalize the Prototype Model.
8. Develop a plan for full implementation.

The biggest reason behind failure of a performance measurement system is lack of senior management support. In order to gain management support, an "ABO" approach is sometimes useful:

1. Awareness: Management shows an interest in the project, learns more, and becomes passively involved.
2. Buy-In: Management now seeks more information, they commit time and money to the project, and they openly support the idea behind performance measurement.
3. Ownership: Management assumes responsibility for success of the project, they recruit people to participate, and they sell others on the idea of performance measurement.

Once you have ABO from upper-level management, you can proceed to Step 2, forming a design and implementation team. Since the IPMS cuts across the entire organization, the team should have representation from areas that will be measured.

For example, a beverage company has identified marketing and production as critical areas that need to be measured. The design team consists of five key people: Marketing Manager, Sales Manager, Operations Manager, Quality Control Manager, and Chief Financial Officer.

This article has touched on the very basics of trying to get a comprehensive performance measurement system started. A very important aspect with any project like performance measurement is to spend sufficient time with planning and design. One of the biggest mistakes with most projects is to move too quickly into implementation. A good IPMS should evolve through a process of planning and design. And don't forget to prototype test each and every idea within the IPMS. This will save a lot of grief down the road when it comes time to implement.

Balancing the Balanced Scorecard

Too many measurements, too much emphasis on financials, too few leading indicators, disregard for human resource capital, etc., etc., etc. All of these attributes represent fundamental reasons why so many Balanced Scorecards are "out-of-balance." One of the biggest problems to emerge with many balanced scorecards is excessive measurement. As Mark Graham Brown points out in his book *Keeping Score*, it can be worse to have too many measurements than to have no measurements at all. Brown recommends that the overall organization have no more than 20 measurements. Brown also suggests the following:

- Measurements should be based on the needs of stakeholder groups - shareholders, customers, employees, etc.
- Measurements should provide a mix of past, present and future.
- Measurements should flow from the top down to all levels of the organization to ensure linkage. Kaplan and Norton reiterate this point in their four-layer approach to deployment of scorecards (Organization > Operations > Shared Services > Individual).

One way of reducing the number of measurements is to combine several related measurements into one single index. Weights are assigned to individual measurements based on importance with a weighted average index serving as the metric within the Balanced Scorecard. One problem with the use of an index is the fact that individual measurements can get buried within the index. Therefore, the best approach is to have a few solid key indicators as opposed to an index that combines numerous indicators. However, if your scorecard is overloaded with measurements, indexing can help streamline the Balanced Scorecard.

Financial measurements will often dominate a Balanced Scorecard since many executives are addicted to earnings as a value-driver. One of the problems with financial measurement is that it tends to be a lagging indicator; i.e. it looks back at past performance. Financial metrics within a balanced scorecard should cover three perspectives:

Historical - How did we do last period?
Current - How are we doing right now?
Future - How will we do next period?

For example, the number of customer contracts executed is an indication of future revenues and thus, this would be a leading indicator as opposed to revenues for the quarter (lagging indicator). Measurements should also look at things from a long-term perspective. Long-term strategic thinking should flow into the Balanced Scorecard. Examples of long-term measurements are customer service, human resource development, and product innovation.

Another challenge within the Balanced Scorecard is Detail vs. Summary. How much detail to include depends upon what is required for decision making. Balanced Scorecards should provide sufficient information so that people can act on unacceptable performance. The ability to drill down and see what is going on is important for problem solving.

Balanced Scorecards should reflect a balance between generic types of measurements and measurements that are unique to the organization. Most organizations have similar generic measurements, such as financial and customer service. However, each organization is unique and therefore, balanced scorecards should include measurements that are specific to the organization based on what drives value. Measurements should relate to critical areas for future success, such as maintaining your competitive edge. For example, if your competitive edge resides in innovative products, then you will need to have some measurements focused on product innovation.

No one metric should dominate the scorecard; after-all it needs to be balanced in many areas (operations, customers, financial, etc.). You also need to change your measurements with changes in strategy. Strategies should be changing all the time due to marketplace changes, technological changes, etc. Finally, see if you can answer yes to the following questions about your Balanced Scorecard:

1. Do our measurements reflect the critical strategies of the organization so that we will grow and remain competitive in the future?
2. Everyone within the entire organization, from employee on up to CEO, is not evaluating more than 20 measurements each period within their balanced scorecard?
3. Measurements throughout the organization flow together and no set of measurements is floating alone, separate from the remainder of balanced scorecards in the organization?
4. We have a set of measurements that is balanced - Mix of past, present, and future; mix of unique and generic; balance within categories (operations, customer, human resources, financial, etc.); and balance between detail vs. summary.

Once a strategic map has been developed, balancing the Balanced Scorecard is perhaps the most challenging goal in building the scorecard. Indexing, time dimension, integration from top to bottom, and an emphasis on stakeholder groups can all help ensure that your balanced scorecard is balanced.

The E2K Metric

One of the most significant challenges facing finance is to provide information faster and faster to end-users. By acting on information as it is produced, decisions are more effective and the costs associated with the information declines. To help drive this mandate for finance, the Event to Knowledge Metric or E2K Metric is applied.

E2K measures the time between when an event occurs and when the knowledge can be acted upon. The objective is to reduce the E2K time so that decisions are made as close to the event as possible. For example, it may take 5 days before all allocation entries are posted to a series of accounts, providing income information by cost center. By integrating all centers into a new automated system, this time is now reduced to 3 hours. Operating managers can now act on sales targets the same day the information is produced.

One place to look in reducing E2K time is internal reporting. Most companies are preoccupied with cranking out report after report with no regard with how the information is used. Transforming information into knowledge and reducing the inordinate amount of time on reporting are two fundamentals steps to cutting down on E2K times. Another obvious way of reducing E2K is electronic distribution of information to end-users. In some cases, quick flash reports can serve as preliminary sources of information before final reports are prepared and released.

In his article titled Event-to-Knowledge¹, Frank Potter describes four basic strategies for reducing E2K time:

1. Increase the material threshold for accrual and other adjusting entries.
2. Pre-calculate your monthly adjustments ahead of time, such as monthly depreciation.
3. Post more frequently to sub-ledgers and make correcting entries before month end closings.
4. Review the allocation and distribution process; making sure it is streamlined and efficient.

For labor-intensive businesses, getting your accounting cycles in sink with your payroll cycles can yield big results. No more payroll estimates, accruals, and reversing entries. And labor costs are now reported in the financials every two weeks or weekly.

¹ Event to Knowledge by Frank Potter, Strategic Finance Magazine, July 2001

However, the biggest step towards cutting E2K times is gained through “just in time accounting.” Just in time accounting provides accounting and financial information on a daily basis. At the heart of just in time accounting is the Virtual Close. Under the virtual close, the accounting records are closed by 2:00 p.m. the following day as opposed to the traditional close, which takes place once a month:

<u>Event</u>	<u>Traditional Close</u>	<u>Virtual Close</u>
30-day monthly period	30 days	1 day
Month end closing process	5 days	1½ day
Generate / Distribute Financials	4 days	½ day
End User acts on information	2 days	½ day
Total E2K	41 days	2 ½ days

The Virtual Close was popularized by Cisco Systems, which integrated all of its systems and technologies over an eight-year period. Web based applications are often deployed for virtual closings since they provide the infrastructure for instantaneous sharing of information. According to Cisco CFO Larry Carter, “We can literally close our books in hours. More important, the decision makers who need to achieve sales targets, manage expenses, and make daily tactical operating decisions now have real-time access to detailed operating data.”²

According to Mark Kruger of AnswerThink, all of our clients are moving toward the virtual close, cutting between a third to one half of their closing cycles.³ Kruger suggests many larger companies can simply cut their E2K’s by consolidating all of their companies – “Every legal entity costs around \$ 250,000 to \$ 500,000 to maintain because people spend money to account and consolidate those transactions.”⁴

Getting to the virtual close can be a monumental task because of the diversities that exist within a business. Everyone needs to get the right information to the right location on time with minimal errors. Once you have the system in place, you begin to reap the benefits. According to KPMG Consulting, the real benefits of a virtual close are not generating consolidated financials within hours or days, but giving decision makers instant access to critical information so they can be more pro-active.

One final point about E2K and the Virtual Close concerns the balance for accuracy. In light of the Enron collapse, the rush to “optimize” the financial function must be balanced with the goal of producing accurate financials. Therefore, as you move towards optimization, don’t forget to balance optimization with controls that ensure high levels of accuracy in financial reporting.

² Cisco’s Virtual Close, Harvard Business Review, April 2001

³ A Virtual Close: as Easy as One, Two, Three? CFO Magazine, March 2001

⁴ A Virtual Close: as Easy as One, Two, Three? CFO Magazine, March 2001

Competitive Intelligence

The Importance of Competitive Intelligence

One of the obvious trends in business today is increased competition. One reason for so much competition is because the World is now one single marketplace. Additionally, distribution channels like the internet now make it possible for anyone to enter the global marketplace. As a result of increased competition, the rate of change taking place in business is increasing exponentially. For example, internet usage now doubles every 100 days. If you expect to keep-up and survive in this fast paced competitive environment, you must know what the competition is doing. So how do you monitor the competition in this age of information overload? The answer is with **Competitive Intelligence**.

Competitive Intelligence (CI) is a process whereby you collect, analyze, and transform information into intelligence so you can manage the future. Examples of CI include everything from collecting the Annual Reports of your competition to setting up automated search routines. The overall objective of CI is to identify events, trends, and other issues that will impact your organization.

The best way to implement CI is to focus on critical questions confronting your organization. For example, how will this regulation change our business or how will the introduction of a competing product impact our business? You must continually monitor critical issues if you expect to compete. If you fail to implement CI, then you run the risk of operating in a reactive mode. And nothing changes a company more than having to survive.

Collecting Competitive Intelligence the Easy Way

Don't make competitive intelligence difficult. You will be surprised at how easy it is to collect certain types of intelligence. The most reliable forms of intelligence are primary sources. Primary sources of intelligence include:

1. Speeches by executive management that provides intelligence about future strategies of the Company. This would involve all types of communication mediums: TV, Radio, Business Magazines, etc.
2. Annual Reports and SEC Filings of companies.
3. Product Spec Sheets and other company literature distributed at trade shows, conferences, and other events.
4. Physical observation of operations, facilities, and other activities. For example, if you wanted to estimate the volume of gasoline from a distribution point, you can count tanker trucks over a representative sample period.

Secondary sources of intelligence are easier to collect, but are not as reliable as primary since they come from secondary sources. Secondary sources of intelligence include:

1. Articles, news stories, and other features created by someone outside the company about the Company.
2. Books about the industry and/or companies in the industry.
3. Special studies, research papers, and analyst reports about an industry and/or company.

Although secondary sources are not always as reliable as primary sources, they can provide a much broader view of industry trends and strategies. Finally, don't forget to do an intelligence audit within your company. You will be surprised at the many sources of intelligence residing within your company. Journals, publications, and employees are potential sources of intelligence.

Collecting intelligence is like an Easter egg hunt. Eggs are hidden everywhere. Your challenge is to go out and collect the intelligence wherever you can find it. And once you collect it, analyze it and translate it into strategies for managing the future.

Competitive Intelligence: An International Perspective

Unlike the United States, many countries place a much higher value on competitive intelligence. For example, the Japanese look at competitive intelligence as a basic competency within the organization. Nissan Motors has a library consisting of over 100,000 books, accessible to all employees. The Japanese culture lends itself to competitive intelligence. Reading and studying information from all over the World is a common activity for many Japanese. Public sources of information fuel the Japanese thirst for information and knowledge.

The Chinese are similar to the Japanese. The Chinese are very curious about the outside world. As you might expect, the Chinese Government sponsors several competitive intelligence programs. The real problem for the Chinese is a lack of infrastructure to support competitive intelligence.

France is perhaps one of the best countries for competitive intelligence. The French are very aggressive in learning what the competition is doing. The French Government works hand-in-hand with French companies to collect and gather intelligence. Since the French take competitive intelligence so seriously, it has become a major strategic advantage for the French in the global marketplace.

England is similar to the United States. Competitive intelligence is not taken seriously. Most large businesses have not developed competitive intelligence as a core competency within the organization. However, this is starting to change as more executives recognize the importance that competitive intelligence plays in strategic planning.

Organizing the Competitive Intelligence Effort

The development of strategies to compete is essential for the future survival of every organization. Competition is increasing from everywhere. Understanding this external, global environment is now part of how you must strategize. Competitive Intelligence (CI) is the process by which you collect and analyze information to better understand the external environment. The product of Competitive Intelligence is knowledge that facilitates decision making, both strategic and operational. Therefore, CI is both a process and a product.

Finding sources for competitive intelligence is not a problem. However, sources can vary widely. Some examples include press releases from the competition, trade journals, customers, suppliers, employees, banks, investors, government reports, market surveys, etc. The challenge is organizing and making competitive intelligence a core competency within the organization.

One good place to start is to do a competitive intelligence audit; i.e. take an inventory of what you already have. Pull together all of the pockets of information scattered throughout your organization. Over half of all competitive intelligence information is accessible through your own organization. Once you have completed the CI Audit, define your competitive intelligence objectives and outline a plan that will make competitive intelligence a major decision support service within the organization.

Some critical questions that should be asked are the following:

- How much information do we already have?
- What additional information do we need?
- How will we use this information?
- How will we transform this data into intelligence? What formats will we use?
- How much time and effort is required for CI?

Also try to place emphasis on the following:

- Design competitive intelligence so that it anticipates future events, such as changes to the competition through mergers.
- Competitive intelligence should tell you what areas to avoid as well as possible opportunities.
- Competitive intelligence will fill gaps or areas that otherwise would go unnoticed by the organization.
- Make sure competitive intelligence is a continuous process since the competitive landscape is always changing.

One of the main outputs of competitive intelligence is identification of the competition. A customer driven approach is a good starting place for identifying your competition. Identify those companies that compete against your company at the product or service level. What other companies offer similar products and services? Once you have identified the competing companies, you need to isolate the differences between your company and the competition. Since an

analysis of differences can be difficult, focus your attention on strategic differences. For example, many of these differences will relate to competitive advantages and disadvantages. What areas are we better and worse at in relation to our competition? Try to pick up on trends and patterns that are going forward. For example, what are the relationships between your company and the competition regarding price, cost, distribution, quality, innovative products, etc. If price represents a basis for competition, then your CI effort needs to identify the cost structure going forward. If quality is important to competing, then CI will need to obtain information about customer satisfaction. Keep in mind that your competition is seeking to match or exceed your competitive advantages. Therefore, protecting your competitive advantages is one of the key benefits behind competitive intelligence.

Organizing a competitive intelligence effort is paramount to protecting your values within the marketplace. Competitive intelligence will allow you to manage and react very quickly to changes in the external environment. Competitive intelligence will not only help you identify and monitor the competition, but you can expand competitive intelligence to monitor issues that profoundly impact your organization (such as deregulation, technology, social changes, etc.). Finally, the process of competitive intelligence will require substantial support from senior management since it must become an integral function within the organization. Without some form of competitive intelligence in place, strategic decision-making will run the risk of being too inward thinking. In today's global, competitive marketplace, you must give consideration to the external environment. Competitive intelligence will make you see things externally.

Leveraging Competitive Intelligence

This article will discuss some specific tactics that should be considered for leveraging an existing competitive intelligence function. One of the major challenges you will face is how to balance competitive intelligence within the organization.

For example, a highly centralized competitive intelligence function will facilitate focus and strong strategic decision-making. On the other hand, a very decentralized competitive intelligence function will promote better operational decision-making. In any event, there is a need to establish some structure for competitive intelligence to work.

Competitive intelligence is often structured around the ability to analyze and transform data into intelligence. In order for this process to work, you need to place competitive data into a structure that accounts for relevant relationships. Competitive intelligence is the process of taking small chunks of information and building a "big picture" scenario for directing strategic and operating decisions. This requires focus on critical areas, such as customer research, monitoring the strategies of the competition, benchmarking performance against the competition, etc.

Competitive intelligence is also leveraged by making sure you understand the competition. One way to better understand the competition is to categorize the competition based on some unique attribute. This will make it much easier for everyone to clearly understand how the competition functions. For example, one competing company may be growth oriented while another competing company is financially oriented in its thinking. Another way to categorize the competition is to identify their core competencies. Most companies are very aggressive about defending their core competencies. Other companies may need to be categorized based on vertical integration.

Another way to better understand the competition is to understand what measurements they use. This will give you insights into how adept the company is at managing value-creation. Try to determine what value drivers are most important to your competition. The objective is to distinguish the competition by some attribute that allows everyone to understand what makes the competition tick.

Competitive intelligence not only identifies the competition, but it also looks into emerging competition that enters the marketplace given a change in regulations, technology, etc. For example, deregulation can trigger a new wave of competition. All of sudden your competitive advantages are under extreme assault. Competitive intelligence needs to go beyond an understanding of the competition. It needs to help you understand the external environment that you are operating in.

Competitive intelligence is often viewed as a tool for maintaining marketplace share. However, competitive intelligence should be leveraged by directing the organization out of the marketplace; providing guidance on an appropriate exit strategy. As barriers to competition erode away, more and more companies will enter the marketplace. Your organization should not restrict competitive intelligence to maintaining market share. You may reach a point where you need to consider an exit strategy as values decline. Competitive intelligence will ascertain some of the problems associated with staying in the competitive marketplace. For example, a strategy to compete based on price may not work in the long run.

Another challenge facing competitive intelligence is how to balance timely information with reliability. Unfortunately, each and every source varies in relation to timeliness and reliability. Here are some examples:

- Secondary Research (fast, easy, reasonably reliable)
- Interviews with Industry Experts (fast, not very reliable)
- Market Surveys (time consuming, very reliable)
- Focus Groups (in-depth, somewhat unreliable)
- Employees (good source, but not very reliable)
- Customers (excellent source, but requires careful thought)

A final point on leveraging competitive intelligence concerns building a competitive intelligence database or more specifically, a data warehouse. The Data Warehouse will allow you to leverage all of the data residing in your operating systems. The objective is to consolidate the relevant data into one system for better decision-making. Several gaps will need to be filled in order to make competitive intelligence complete. And don't forget to measure the impact of competitive intelligence on your organization. Evaluating the competitive intelligence effort will help ensure that it is a value-added type of activity.

Process Improvement

Improve Accounts Payable Processing with P-Cards

One of the newest ways to re-engineer Accounts Payables is through the use of procurement credit cards or P-Cards (Purchase Cards). Accounts Payable is often a very non-value added type of activity. It involves a lot of time and expense with marginal benefits. For example, accounts payable may involve processing purchase orders, preparing checks, stuffing and mailing-out payments, posting entries from all kinds of source documents, etc. Suppose you could reduce this activity by simply using procurement credit cards to consolidate much of the process. That's what P-Cards are all about!

Here's how they work. Instead of purchasing with requisitions, purchase orders, invoices, and checks, you now streamline this entire process by issuing purchase cards to certain people in your organization. Processing costs are reduced and you receive special reports that itemize your purchases on one single statement. Purchase Card Programs require a "buy-in" by all participants: Management must OK the P-Card Program, employees must accept using them, vendors must honor them, and the bank has to offer a quality P-Card Program. If you can get all four of these lined-up, then it's well worth investigating.

Make sure you look at your current payables workload before selling the idea of a P-Card Program. For example, how many invoices will you eliminate with P-Cards? If P-Cards will cover only about 1% of your spending, then it probably isn't worth implementing. However, most researchers have indicated that the typical payable function has 80% of its purchase transactions accounting for less than 20% of total purchase dollars. Therefore, considerable time and effort can be saved through a P-Card Program.

You can also setup unique controls within a P-Card Program. For example, purchase credit cards can be programmed for purchase limits by transaction, by day, by month, etc. Special reports can be used to reconcile purchase transactions directly with general ledger accounts. The reconciliation process can be streamlined by having users submit on-line monthly reconciliation's to the Payables Department.

The bad news is that most banks still don't offer P-Card Programs. Three banks that do are: Bank of America (1-800-305-7735), PNC Bank (1-888-762-6011), and Norwest Bank (1-800-524-8189). If you are seeking to streamline your accounting functions, you owe it to yourself to take a serious look at purchase credit cards for consolidation of payable transactions.

Reaching for the Six Sigma

One of the hottest approaches to process improvement in the last few years has been Six Sigma. Six Sigma has been embraced as a statistical methodology for increasing quality, lowering production costs, and improving profitability. In the words of Jack Welch, CEO of General Electric: "Six Sigma GE Quality 2000 will be the biggest, the most personally rewarding and, in the end, the most profitable undertaking in our history." According to Richard Wallman, CFO for Allied Signal, we will save \$ 175 million in our first year of Six Sigma and this number will double in the second year.

Six Sigma was started by Motorola as a way of reducing defects in the manufacturing process. Six Sigma represents a statistical measurement of variation from a specific attribute or characteristic desired by the end-user. Six Sigma is expressed over six exponential layers:

One Sigma = 690,000 defects per million

Two Sigma = 308,000 defects per million

Three Sigma = 66,800 defects per million

Four Sigma = 6,210 defects per million (relatively efficient)

Five Sigma = 230 defects per million (world class efficiency)

Six Sigma = 3.4 defects per million (perfection)

Six Sigma provides a universal measurement standard for all processes throughout the organization. Sigma layers give an indication of how much failure is occurring within a process. It is estimated that a company operating between the third and fourth sigma can expect about a 10% loss in revenues from inefficiency. Moving from one sigma to the next is a major undertaking. A 30-fold improvement in quality is required to get from Four Sigma to Five Sigma.

Six Sigma is a very rigorous approach to improving quality within your products and services. Processes that are critical to products and services must be analyzed in detail. Techniques like process mapping and pareto charts are often used to understand the details within a process. Generally, Six Sigma will follow a four phase approach:

1. Measure - Determine the error or defect rate
2. Analyze - Understand the Process
3. Improve - Reach for a higher Sigma
4. Control - Monitor through measurement

Few companies have made it to the Six Sigma (3.4 errors per one million). However, where defect rates are extremely costly, reaching for the Sixth Sigma is now a given expectation. It is worth noting that Six Sigma requires formal training in the statistical methods that are used. Leaders of Six Sigma are called "black belts" while participants in Six Sigma are called "green belts." Once trained, the trick is to move the black belts around to critical areas for improvement.

One reason Six Sigma has become so popular is because companies want to eliminate non-value added activities as quickly as possible. Other approaches to process improvement, such as Activity Based Management, can take considerable time with marginal improvements. According to Mikel Harry, author and founder of Six Sigma, the defects and errors within a process are a key indicator of non-value added activities. For example, when a coding error occurs in payables processing, you have to put procedures in place for detecting the error, tracking the error, and correcting the error. All of this takes time and resources. When you eliminate the errors, you immediately reduce or eliminate the non-value added activities.

It is quite clear that many large corporations have made Six Sigma an integral part of their strategies. Operating people have long accepted Six Sigma as a way of improving quality. The challenge now is for financial management to adopt Six Sigma as a way of creating higher values and increased profitability.

A final word of caution - don't forget to look at the cost/benefit of reaching for the Six Sigma. An extremely low defect rate at a \$ 5 billion Motorola facility is not the same as a low defect rate at a \$ 1 million shoe manufacturing facility. The costs of going to a higher sigma may not be beneficial. As a result, some in financial management are using Activity Based Management as their guide to the deployment of Six Sigma.

Value through the Supply Chain

Maintaining a competitive advantage is a balance between providing great value for customers and doing it in such a way that your costs remain competitive. If you cut costs too much, you destroy your ability to service the customer. And service is the key ingredient behind customer retention. If your costs are too high, then your competition may gain an advantage in properly balancing costs with customer value. It should be noted that the value-chain encompasses all activities from design of products and services all the way through to the support of customers after they buy the product.

The buzzword for this whole process is called Supply Chain Management (SCM). The objective of SCM is to have all links in the chain working together, delivering products and services to customers when, where, and how they want it. At the same time, SCM must focus on minimizing costs and resources so that value is enhanced. Most value chains will consist of three links:

Distribution: Delivering products and services to customers.

Production: Converting resources into finished products and services according to the demands of the customer.

Resources: Acquiring the materials, people, and other resources to produce the required product or service.

Since this entire process is customer driven and since Distribution is closest to the customer, we start by looking at the Distribution link. Traditionally, distribution had

several links, manufacturer to agent, agent to distributor, distributor to retailer, and retailer to customer. In today's global e-commerce world, it is quite common to see only two visible links: Manufacturer selling directly to the customer. By removing links, we cut down on lead times and reduce costs within the supply chain.

One useful tool for streamlining distribution links is the customer product map. A customer product grid or map will differentiate customers. For example, some customers prefer to buy direct while others prefer traditional distribution outlets. Customer maps also identify product mixes, geographic markets, seasonal patterns, and other relationships important to customer demand. Collecting information about customer demand is extremely important. The objective is to get the customer involved in driving Supply Chain Management (SCM).

Once distribution has been re-designed around the customer, the next step is to integrate production into distribution. You need a production process that is fast, flexible, and centered around the customer order. Gone are the days of producing standard products within standard cost accounting systems. The process is now customer driven with throughput accounting, no longer relying on production forecasts.

After production and distribution have been engineered to fit the marketplace, you can move to the Resource Area with SCM. Resources must be managed on a Just In Time basis, delivering materials and other resources only as they are needed. This will require that you educate suppliers as to your marketplace needs. Establishing strong relationships with everyone involved is critical. In some cases, you may need to phase-out certain suppliers in favor of the more networked, leading-edge suppliers you can fit with e-procurement applications. Additionally, it may be necessary to share costs with suppliers in order to retain relationships.

A good example of reinventing the supply-chain is IKEA, a retail furniture store. The first part in the value-chain is product design: IKEA uses simple designs and parts. Secondly, IKEA keeps costs down by having the customer transport the product to the home and assembly the product. This eliminates non-value added links in the value-chain. Third, IKEA sells products of extremely high quality. IKEA also leverages technology and its Scandinavian image to create a competitive advantage through inventory management and marketing. The leveraging of core competencies is critical to squeezing value out of the supply-chain.

The entire supply-chain should be evaluated, from suppliers to end-users of the product. Supply-chains must be externally focused in a highly competitive environment. This requires that you work very closely with suppliers, customers, and everyone involved in the supply-chain. Finally, costs are controlled by looking at what drives the costs. The objective is to manage your activities better than the competition. Letting the customer guide the process (SCM) is how you can meet this objective.

Human Resource Capital

Metrics for Human Resource Management

Human Resource Metrics has become important for Balanced Scorecards and other performance measurement systems. The reason is due to the need for effective management over human resource capital; i.e. the intellectual capital that drives value. And to make matters more urgent, senior management often fails to comprehend the value of human resources within the organization. It is quite common to see little emphasis on human resource management within a balanced scorecard. Consequently, it has become very important to demonstrate the value of human resource capital to executive management. In one simple application, one CFO decided to apply the P/E (Price to Earnings) Ratio to each new employee. If the employee costs the company \$ 50,000 per year and the P/E Ratio is 5, then the employee should generate \$ 250,000 in value. However, a much better approach to human resource (HR) metrics is to delegate the design to HR people; i.e. let the HR people demonstrate the value of human capital to the Non-HR people and not vice versa.

The first step is for HR people to make the transition from "liking people" to "liking value." The sad fact is that many HR people simply don't understand or grasp concepts within value-based management (such as EVA, economic profits, etc.). Once HR people understand value-based and financial metrics, then you can move into developing a set of metrics that recognizes the relationship between human resources and finance. The primary focus is on people and how are we going to develop our human capital.

A good place to start is with a set of efficiency ratios to see how well you are managing human capital. The Society of Human Resource Management has identified ten key human capital measurements:

1. Revenue Factor = Revenue / Total Full Time Employees
2. Voluntary Separation Rate = Voluntary Separations / Headcount
3. Human Capital Value Added = (Revenue - Operating Expense - Compensation & Benefit Cost) / Total Full Time Employees
4. Human Capital Return on Investment = (Revenue - Operating Expenses - Compensation & Benefit Cost) / Compensation & Benefit Cost
5. Total Compensation Revenue Ratio = Compensation & Benefit Cost / Revenue
6. Labor Cost Revenue Ratio = (Compensation & Benefit Cost + Other Personnel Cost) / Revenue
7. Training Investment Factor = Total Training Cost / Headcount
8. Cost per Hire = (Advertising + Agency Fees + Recruiter's Salary/Benefits + Relocation + Other Expenses) / Operating Expenses

9. Health Care Costs per Employee = Total Health Care Costs / Total Employees
10. Turnover Costs = Termination Costs + Hiring Costs + Training Costs + Other Costs

It is also important to benchmark your HR metrics against past performance and other companies. For example, if you report turnover costs of \$ 50,000, the CEO may think this is too high, but when you benchmark it, you are in the top 20% for lowest turnover costs. One of the best sources for HR benchmarks is the Saratoga Institute in Santa Clara, California.

HR Metrics, like other measurements within the Balanced Scorecard, should have strong connections to the strategies of the company. This will help ensure that the evaluation of HR really matters to the organization and we are working to make things happen. Listed below are some critical questions that GTE used in their award winning HR Balanced Scorecard:

Strategic Perspective

- Do we have the talent we need to be successful in the future?
- Are we investing in growing our HR capabilities?

Customer Perspective

- Are we viewed as a great place to work?
- Are we creating an environment that engages our people?

Operational Perspective

- Are our HR management processes and transactions efficient and effective?
- Are we using technology to improve HR efficiency?

Financial Perspective

- Is our return on investment in people competitive?
- Are we managing our cost of turnover?

A final point that needs to be emphasized is the correlation between human capital and the creation of value. Watson Wyatt, a major consulting firm, recently released the results of a one-year study on human resource management practices for 405 publicly traded companies. The study concluded that there is a correlation between how human resources are managed and the amount of shareholder value. According to Bruce Phau, head of Watson Wyatt's measurement division, if you can improve your human resource management in certain key areas, you can experience a 30% increase in shareholder value. The message is clear - measuring and managing human capital is a major part of creating value and it must be a key component of the Balanced Scorecard.

Cross Functional Teams

Financial management, like most disciplines is becoming driven by projects as opposed to routine day-to-day work. Projects help facilitate needed change and represent the real value-creation activities of the organization. At the heart of projects is the Cross Functional Team (CFT). The CFT is a small group of people, committed to reaching project goals, which in turn brings about improvement within the organization. Understanding what makes a good CFT is important to successful project management and ultimately to the creation of value.

What makes a good CFT? Here are some key elements:

- Everyone within the CFT must be dedicated to improving the company's performance.
- CFT's should measure their own performance and set deadlines for getting things done.
- CFT's should have the ability to move around the organization and cross through organizational hierarchies.
- CFT's should have strong support and resources from senior management, including training, staffing, funding, autonomy, and time.

Choosing the right projects and the right people for the CFT is extremely important. The closer the "fit" a project has with the use of CFT's, the more likely the project will be successful. Projects that lend themselves to CFT's include:

1. Project requires the involvement of several departments.
2. Project impacts or influences outside customers or end-users.
3. Project deals with a major strategic issue.
4. Project requires considerable time and resources.
5. Project deals with a complex area where errors and mistakes are common.

As a general rule, CFT's should be considered when you have a project that:

- Represents a major challenge
- There is a sense of urgency
- Project has major implications within the organization.
- Project has high risk and mistakes are likely to occur.

When choosing members for the CFT, three important factors to consider are:

1. Technical Expertise - Education, knowledge, experience, etc.
2. Problem Solving Abilities - The ability to identify problems and develop solutions.
3. Interpersonal Skills - The ability to communicate, temperament, personal skills, etc.

If possible, it is best to let team members join on a voluntary basis. Additionally, allow team members to choose their own assignments and name the project. This can help ensure high productivity. And don't forget to include diversity and balance within the CFT. You need to cover a broad range of skills and talents within the CFT.

The scope and size of the project will determine the size of the CFT. In cases where the project is highly complex, the CFT may form sub-teams or task forces consisting of five to eight members. If the CFT is too large, interaction and consensus is difficult. If the CFT is too small, there is a lack of creativity with a very narrow focus.

Several roles are required for making CFT's work. These roles include:

1. **Sponsor or Champion:** A person should serve as a bridge between senior management and the CFT so as to obtain and maintain upper-level support. Sponsors or champions are not full-time members of the CFT, they act as a liaison for getting the resources the CFT needs.
2. **Team Leader:** The overall manager of the CFT is the Team Leader. Team Leaders coordinate activities, encourage participation, maintain cohesiveness, and direct the CFT.
3. **Team Facilitator(s):** Team Facilitators act like coaches within the CFT, helping prepare for CFT activities, meetings, and keeping everyone focused on project objectives. Team Facilitators have good communication and teaching skills.
4. **Team Secretary:** Someone will need to summarize the decisions and actions of the CFT. The Secretary keeps minutes of meetings and distributes minutes to all team members. This helps reinforce what needs to be done.
5. **Team Members:** Members must carry out the activities and tasks as indicated by the Team Leader. Team members should take their assignments seriously. Team members tend to be high achievers and they should be expected to serve for the entire life of the project.

CFT's have a much better chance of success when the goals of the project are clear and concise. The expected outcomes of the project should be specific and measurable; such as a 15% improvement in production output. Make sure upper-level management communicates the following to the CFT:

- What are the deliverables from this project?
- Why was this project chosen?
- What type of support will upper-level management provide?
- What restrictions, limitations or other special issues will affect the project?

A final point concerns how the CFT works through the project. In his book, Project 50, Tom Peters points out that the biggest mistake within a project is to move too quickly to implementation. Failure to plan and design the project will result in failed implementation. So once you have the right CFT in place, make sure you spend time planning, testing, and designing the project.

What is Matrix Management?

As Tom Peters has pointed out, the essence of most organizations is centered around projects. The traditional organization, organized around departments, is fast giving way to work by project. As project work replaces department work, more and more organizations are adopting a matrix formation to their structures.

Matrix management is the interface of an organization both vertically and horizontally. Traditional organizations consist of horizontal layers with a distinct line of command. Under matrix management, people may report to more than one person. Therefore, you could have a Salesmen report to the Finance Manager or a Production Supervisor report to the Chief Technology Officer. The balancing of horizontal and vertical structures creates a matrix or grid whereby people move according to project. Thus, the organizational chart looks like a series of vertical department columns crossed over by a series of horizontal project rows. By moving people around according to projects, skills are improved and human resource capital is enhanced. Matrix management can provide several benefits:

- Reduces the number of organizational layers down to project by project.
- Better utilizes the human resources of the organization.
- Eliminates unnecessary work and improves value-added type activities.
- Emphasizes the need to change and work around projects as opposed to department.

Matrix management does have some drawbacks:

- It can create much more conflict since people are forced to interact with others outside their traditional areas.
- Traditional career paths no longer exist.
- Top managers (especially Project Managers) can gain increased power over traditional department managers.

One of the biggest challenges to matrix management is getting "buy-in" from those affected. If employees have difficulty getting along and they are suspicious of management, then employees will view matrix management as another popular fad of the month. Additionally, matrix management emphasizes core competencies and as a result, in-house personnel may find themselves outsourced. Thus, matrix management is appropriate for organizations that have wide fluctuations in their workloads. Companies involved in major project work, such as Research & Development, function well under matrix management.

Additionally, matrix management works best when an organization has clearly defined goals and there is strong fit between organizational goals and the goals of horizontal components and vertical components within the matrix. This binds the grid together and facilitates accountability through measurement (such as a Balanced Scorecard).

The evidence is quite clear. More and more companies are emphasizing projects. More and more jobs are requiring project management skills. The demand for Project Managers has never been stronger. And to solidify this trend, matrix management is becoming a standard for rebuilding organizational structures.

Measuring Returns on Human Resource Capital

One of the most under measured parts of a business is the human resource capital and it represents one of the biggest challenges facing business; namely finding the best and brightest people. It is these human resources or people who ultimately create value for the organization. People generate value through their application of skills, talents, and abilities. The key is to invest in people so that human resources are productive, knowledgeable, effective, and efficient. This is what separates the average company from the exceptional. Getting a return on this investment or ROI is extremely important.

People who create lots of value often have certain characteristics:

- They openly share their knowledge and expertise with others
- They transform data into intelligence for better decision-making.
- They pay attention to details, collecting and gathering information to reach informed conclusions.
- They communicate clearly and concisely.

We can extend this concept to all aspects of intellectual capital; i.e. people interact with processes, knowledge, systems, customers and other intangibles within the business. Once you understand this interaction, you can measure these relationships to ascertain returns on human resource capital. A critical question to ask is: What impact does a person have on these intangibles? For example, one employee may interact with complaining customers in order to gain knowledge and improve the business. Another employee may view complaining customers as a nuisance to be avoided.

Each process can have its own unique set of metrics. These metrics can be applied within a formal measurement system designed specifically for human resource capital. In his book *The ROI of Human Capital*, Dr. Jac Fitz-enz describes how all performance measurement systems can be placed into a matrix. The following matrix was developed for measuring Human Resource Capital (HRC):

	Acquire HRC	Maintain HRC	Develop HRC	Retain HRC
Cost =>				
Time =>				
Quantity =>				
Error =>				
Reaction =>				

In the above matrix, we would have costs associated with acquiring personnel; such as advertising, agency fees, and relocation costs. These costs would fall under Acquire HRC. The next level down is time; i.e. how long did it take us to recruit a new employee. Quantity would be the number of applications processed; often viewed as the "driver" within the process. Error refers to any event that does not meet our expectations; such as incorrect processing of new applications. Finally, the Reaction level looks at how people respond to various events within the process. This can be somewhat subjective. In any event, we can transform our matrix into a Balanced Scorecard:

Perspective => Metrics

Acquisition => Cost per Hire, Time Required to Fill Position

Maintain => Average Pay per Employee, Labor Cost % to Operating Cost

Retention => Cost of Turnover, Retention Rate, % of Voluntary Separations

Development => Training Hours per Employee, % Promoteable People

Financial professionals are often too focused on applying metrics to a process as opposed to the underlying foundation behind the process; namely people. The emphasis should be on people since people are the glue that pulls together the elements of intellectual capital – processes, systems, knowledge, etc. Measuring and managing this “glue” is critical to squeezing value from all elements of intellectual capital.

The 360-Degree Evaluation Process

Managing human resource capital is now mission critical. One of the most effective tools for managing human resources is the 360-degree evaluation process. Traditionally, an employee is evaluated from a sole source (1 degree), namely the immediate supervisor or manager. However, employees interact with numerous sources: Co-workers, customers, Managers outside the employees department, vendors, contractors, and others. The 360- degree evaluation process relies on these multiple sources, providing a more balanced and objective approach to measuring employee performance. This leads to higher productivity, better customer service, and enhanced organizational performance.

“Every published report recommends multiple as opposed to single raters for performance appraisal.” – John Bernardin, Author & Expert on Performance Appraisal

When you tap into an employee's circle of influence, you will have a major impact on changing employee behavior. Additionally, employees often respect the feedback of co-workers more than their respective supervisor. A survey of Coca-Cola Foundation employees indicates that over 90% of employees prefer evaluations that include both co-worker and supervisor. Only 4% of employees chose to have their performance evaluations performed by the supervisor only.

Surveys are often used for collecting the feedback used to evaluate the employee. It is very important to keep surveys short and to the point. A few open comment questions can be included. However, you need an objective way of scoring the surveys. It is also important to maintain anonymity; i.e. receivers of the surveys should not know who provided the information. Likewise, the information received must be controlled so that confidentiality is maintained.

Example of Survey Questions for Evaluating Employee Performance:

Assign a score of 1 to 10 for each of the following questions. 1 is the lowest score (strongly disagree) and 10 is the highest score (strongly agree). N for Don't Know

	Score
1. Performs day to day activities in a timely and accurate manner.	_____
2. Communicates effectively, both orally and in writing	_____
3. Demonstrates initiative for solving problems	_____
4. Directs and leads others in a positive way	_____
5. Coordinates and manages time, people and other resources well	_____

As with any new approach to managing people, the 360-degree approach requires careful planning. For example, training is a must since employees will be apprehensive about how this new evaluation approach will work. Training should address fundamental questions, such as what is the 360 approach, why is the organization adopting it, who will be doing the evaluations, how will the information be collected, etc.

The design of a 360-feedback process should actively enlist the employee. In fact, the employee should select their own evaluation team, consisting of no more than six targets (co-worker, supervisor, customer, etc.). Design of the surveys for feedback is also important since traditional approaches will not fit:

<u>Traditional Survey</u>	<u>360 Feedback Survey</u>
Single Target Audience	Numerous Targets (all employees)
Numerous Responses	Few Responses (5 to 7) per target
Response Rates may be low	Need High Response Rate for Objectivity
Respondent may be known	Respondents must be anonymous
Survey may be long (minutes)	Survey must be short (less than 20 minutes)
Distributed through traditional ways	Electronic distribution is common
Control over surveys is low	Control must be high for confidentiality

Consistent rules must be adopted to make sure the process is fair for all employees. For example, you will need rules on when to throw out invalid survey responses. Some companies consider a survey as invalid when the individual response is more than 50% different than all other responses. Minimum levels are also needed for acceptance of surveys. For example, a required response rate of 75% is common where employee compensation is linked to 360 feedback results.

This article has touched on some of the basics behind the 360-feedback process. Multi-source systems, such as the 360 feedback, are more objective, accurate, creditable, and influential than traditional single source systems. By tapping into sources closest to the employee, we can better motivate and manage the employee. And since employees are at the center of organizational performance, we need fair and accurate methods for evaluating employee performance. The 360-degree feedback model is one of the best methods for driving employee performance and satisfaction.

Reintroducing the Human Factor

Out of necessity to compete and survive, the combination of innovation and technology are two focal points for management. The challenge for management is to make things happen through people, leadership, culture, and the organizational mindset. And this does not mean that everything must be done quicker, faster and at lower costs. The real benchmark to ask is: Does it add value to an existing process?

The driver behind this mandate (creating value through innovation and technology) is the management of people. With so much emphasis on profitability, things like people and innovation often get crushed in the mad rush to re-engineer the business. Re-engineering views the business in terms of excess, asking the question: What can we eliminate? Innovation on the other hand views the business in terms of re-thinking, asking the question: Can we do this a better way? Whereas re-engineering places little emphasis on people, innovation relies heavily on people.

If the organization fails to support its people, then creative thinking and innovation becomes elusive. A good way to understand this concept is to simply flip the organizational pyramid upside down. The CEO, who typically sits on top of the pyramid, is now at the bottom, providing upward support to the VP's (Vice Presidents). The VP's provide support to upper level management, upper level management provides support to middle level management, and so on. The lower levels of the organization are now front and center at the top of the organizational pyramid, supporting customers who in turn drive the business.

In his book, Leadership is an Art, Max De Pree describes leadership as "liberating people to do what is required of them." Employees are viewed as customers and the role of the Manager is to serve employees, attempting to optimize productivity. This point is also made in the book, Stewardship: Choosing Service over Self Interest by Peter Brock. Brock describes managers and supervisors as servants to employees, no longer controlling employees, but finding out specific issues confronting the employee and working through these issues to empower and unleash the human factor within the organization.

A network of employee-owned initiatives now re-energizes the organization into an entrepreneurial culture. Employees not only assume responsibility for valuing creating projects, but they share in the benefits and rewards; i.e. they have a piece of the action. Once employees are in control, they naturally find better ways of doing

things - this is the foundation behind innovation. Management can begin targeting innovation at critical business areas, such as customer service, production, and marketing. To further move the process along, technology can be deployed into the mix. It's worth noting that technology alone is **not** necessarily the answer. Once again, we can go back to our fundamental benchmark: Does it add value to what is currently taking place?

All of this requires considerable change on the part of management. In his book Managing by Measure, Mark T. Czarnecki offers the following observation:

"Actual change takes real participation, not just listening. It takes real emotion and understanding . . . We can ask people to change, but when we fail to redesign structures and systems around them, a lot of old behavior gets reinforced and new behaviors go unrewarded. Pay systems, leadership styles, job boundaries, technology, policies; if these aren't also changed, they merely serve to pull people back to where they were before the change process started."

Changing human behavior requires that managers put emphasis on people. And as author Mark T. Czarnecki has pointed out, a lot of things have to happen for this to occur - right leadership, right culture, right reward systems, etc. Therefore, the real test is how the organization itself changes in meeting the needs of the employee. For many organizations that have endured several re-engineering programs, reintroducing the human factor may offer the most effective and sustainable approach to continuous innovation.

Performance through People

Almost every organization says the same thing: People are our most valuable asset. However, when you see how people are actually managed, you have to conclude otherwise. Most organizations fail to manage their human assets for optimal performance.

"The performance challenge facing every organization is to develop management systems that make employees the organization's greatest assets."

- The Performance Challenge by Jerry W. Gilley, Nathaniel W. Boughton, and Ann Maycunich

The role of management is to find ways for getting people to perform. In the book Performance Improvement Methods, H. James Harrington and Kenneth C. Lomax outline ten barriers to performance:

1. Insufficient Time - Problems are not solved due to lack of time. However, the failure to solve a past problem creates a lack of time today.
2. Disowned - People fail to take ownership of a problem; i.e. it's not my job.

3. Not Recognized - People who deliberately go after problems are often not recognized. Instead, people are recognized for taking the path of least resistance.
4. Accepting Mistakes - The organizational culture may be too accepting of mistakes; i.e. everybody makes mistakes - this is normal. The mandate should be that when a mistake is made, we learn from the mistake so that the mistake is not repeated.
5. Ignorance - Lack of knowledge or awareness is not an excuse in today's competitive information age. Each problem requires some degree of attention or priority.
6. Impossible to Solve - People may conclude that the problem is impossible to solve. If this mindset grows, then more and more problems go unresolved.
7. Defensive - People will protect their turf, not assuming responsibility. People should respond by finding ways that they can contribute to resolving the problem.
8. Unrealistic Expectations - Management often imposes unrealistic requirements, usually in terms of time, quality or costs. Management must seek out realistic requirements by conferring with those who have to implement the decision.
9. Accepting Partial Solutions - People may accept a solution that partially solves the problem; i.e. it's good enough to get by. Instead, people should seek out the "best" solution and not the easiest.
10. Shifting Blame - People may target someone else as the source of the problem. The emphasis should be on trying to solve the problem and not pointing blame.

By removing these barriers, problems can be viewed as opportunities for value creation. Getting people into a problem-solving mode requires training and strong support from management. Additionally, the organization needs to be rich with performance improvement tools so that employees are empowered with the ability to solve problems. The list of performance improvement tools can be almost endless: Conflict Resolution Teams, Entrepreneurial Culture, Matrix Management, Strategic Benchmarking, 360 Feedback Systems, Risk Analysis, Competitive Research, Special Training Programs, Organizational Realignment, and so on and so on.

Improving performance is also a function of establishing standards and comparing actual results against these standards. This communicates "acceptable" levels of performance to employees. It can also push the organization towards "prevention" of problems. Programs like Six Sigma and Total Quality Management are often deployed for problem prevention.

Finally, one of the most potent tools for improving performance through people is to link performance to an employee's paycheck. Since people drive performance and the two are inseparably linked, you need to find some way of linking the two together (people and performance) through compensation. This leads to changing human behavior which is the ultimate goal of management.

"In the rush to change, many organizations have overlooked or mishandled what could be one of the most effective tools at hand - compensation."

- People, Performance, and Pay by Thomas P. Flannery, David A. Hofrichter, and Paul E. Platten, The Hay Group

The Smart Organization – Part 1

Building a "smart" organization is a function of what many HR (Human Resource) professionals call Emotional Intelligence or EI. Unfortunately, many traditional managers think that a smart organization is full of highly educated people with high IQ's. In his book, Emotional Intelligence: Why It Can Matter More Than IQ, Daniel Goleman describes how Emotional Intelligence is a much stronger indicator of organizational performance than IQ (Intelligence Quotient).

“For star performance in all jobs, in every field, emotional competence is twice as important as purely cognitive abilities. For success at the highest levels, in leadership positions, emotional competence accounts for virtually the entire advantage.”

- Working with Emotional Intelligence by Daniel Goleman

Emotional Intelligence is the combination of skills, capabilities, and competencies that allow a person to deal with the pressure and demands of work. Goleman notes that EI improves with age and experience. Therefore, a young startup company full of 20 to 30 year olds will lack strong EI's whereas a company full of seasoned veterans should possess higher EI's. For example, a person's ability to lead a team or cope with business failure is a good indicator of EI. The good news is that EI (Emotional Intelligence) can be learned in the five components that make up EI:

1. Self-Motivation - The ability to cope and remain highly motivated
2. Self-Awareness - Strong insights into how people work
3. Empathy - Sensing and feeling the emotions of others
4. Managing Emotions - Understanding your own emotional strengths and weaknesses
5. Social Skills - Interpersonal relationships with others

Since emotional intelligence is somewhat unconventional, many organizations may view EI as nice to have, but unnecessary. Therefore, the first step is to understand the link between EI and various business needs. Fortunately, there is a wealth of research to support the impact of EI on business. Here are a few examples from the Consortium for Research on Emotional Intelligence in Organizations:

1. Research by the Center for Creative Leadership has found that the primary causes of derailment in executives involve deficits in emotional competence. The three primary ones are difficulty in handling change, not being able to work well in a team, and poor interpersonal relations.
2. For 515 senior executives analyzed by the search firm Egon Zehnder International, those who were primarily strong in emotional intelligence were more likely to succeed than those who were strongest in either relevant previous experience or IQ. In other words, emotional intelligence was a better predictor of success than either relevant previous experience or high IQ.

3. An analysis of more than 300 top-level executives from fifteen global companies showed that six emotional competencies distinguished stars from the average: Influence, Team Leadership, Organizational Awareness, self-confidence, Achievement Drive, and Leadership (Spencer, L. M., Jr., 1997).
4. In a national insurance company, insurance sales agents who were weak in emotional competencies such as self-confidence, initiative, and empathy sold policies with an average premium of \$54,000. Those who were very strong in at least 5 of 8 key emotional competencies sold policies worth \$114,000 (Hay/McBer Research and Innovation Group, 1997).
5. In a large beverage firm, using standard methods to hire division presidents, 50% left within two years, mostly because of poor performance. When they started selecting based on emotional competencies such as initiative, self-confidence, and leadership, only 6% left in two years.
6. At a national furniture retailer, sales people hired based on emotional competence had half the dropout rate during their first year (Hay/McBer Research and Innovation Group, 1997).
7. One of the foundations of emotional competence -- accurate self-assessment -- was associated with superior performance among several hundred managers from 12 different organizations (Boyatzis, 1982).

So you might be asking, how can I apply EI in the workplace. Several companies, such as American Express and Met Life, are using simple techniques to actively identify high EI employees. For example, weeding out pessimist from optimist can help distinguish self-motivation from a lack of self-motivation. People who are highly confident regardless of their assignments or jobs usually possess high EI's. Also, people with broad experiences adapting to different environments have strong EI's. Many companies now use EI testing for new job applicants, looking for employees with well-rounded skills (good team player, adoptable to change, communicates clearly, etc.).

Many experts trace a lack of EI back to our early childhood education. In his book, EQ: Emotional Intelligence in Leadership and Organizations, Robert K. Cooper describes an educational system that is dominated by math, reading, history, and other intellectual pursuits. Little emphasis is placed on emotional development and those things that give a person an understanding of how to deal with people. It's only through long years of experience that someone learns the five EI skills. And since most of us never learned these skills to begin with, it's up to the organization to recognize and develop EI related skills.

Emotional Intelligence cuts to the heart of high performance teams, attracting the right people, effective communication, and other desirable characteristics for the organization. If an organization wants to be smart, Emotional Intelligence must be a high priority.

The Smart Organization – Part 2

Part 1 of this article set forth the argument that “emotional intelligence” (EI) is the key to creating a smart organization. Since EI enhances individual performance, it also leads to increased organizational performance. In Part 2 of this article, I will outline some specific actions that every organization can take for transforming the company through emotional intelligence.

“Emotional Intelligence (EI) is linked to abilities that involve skill in managing the emotions in oneself and others and are predictive of superior performance in work roles. Research during the last twenty-five years has consistently pointed to a set of competencies such as Self Confidence, Initiatives and Teamwork, for example – that make a significant difference to the performance of individuals and organizations.”

- The Emotionally Intelligent Workplace, Edited by Cary Cherniss and Daniel Goleman

In its simplest form, the fastest and easiest approach to building a smart organization is to hire people who possess strong emotional competencies; i.e. people who clearly demonstrate self initiative, self motivation, team leadership, self management, and other great people skills. Therefore, we can start by making sure the hiring practices of the organization take into account emotional characteristics of the job applicant. Second, an employee’s performance review should recognize those emotional attributes important to job success. Third, employees need to receive training in EI. Few, if any educational programs (including MBA programs) provide training in the field of emotional development.

Training should teach people how to become more adoptive, how to take initiative, how to resolve conflicts, and how to do your own self-assessments. For example, self assessments (which leads to self awareness) shows employees what their good at and what their not good at. Tests such as the Myers-Briggs Test are good tools for raising self-awareness. The 360 Degree Evaluation Process is also another good self-assessment process.

One misconception of EI is that some factors are more important than others. This is not true! People are different and jobs are different. Therefore, each person and each job will have its own unique set of emotional competencies:

Sales Staff

Self Confident
Self Control
Initiative
Social Empathy
Influence Others
Builds Relationships

General Management

Self Managed / Achiever
Builds Trust & Respect
Social Communication
Social Empathy
Awareness – Organization, People, Culture
Conflict Resolution

“Applications of emotional intelligence in the workplace are almost infinite. Emotional intelligence is instrumental in resolving a sticky problem with a co-worker, closing a deal with a difficult customer, criticizing your boss, staying on top of a task until it is completed, and in many other challenges affecting your success.” – Emotional Intelligence at Work by Hendrie Weisinger, PhD

Finally, in her book The Emotional Intelligence Activity Book, Adele B. Lynn outlines ten steps every organization can follow for improving emotional intelligence:

1. EI should be used in all interactions with employees.
2. Give employees the power of self-assessments.
3. Help employees identify their behaviors – which behaviors help them and which hurt them.
4. Show employees how to change by setting objectives for improving destructive beliefs and behavior.
5. Expose employees to alternative thinking for adoptability.
6. Challenge employees to create new belief systems that not only improve their own performance, but the performance of others.
7. Encourage and reinforce the use of acceptable behaviors on the job.
8. Give positive feedback to employees when they improve their EI.
9. Measure the results in performance evaluations and other HR practices. Also share the results with the employee.
10. Practice what you preach – management must set a good example for EI if you expect others to follow.

“Emotion is present in the workplace. Everyday. Everywhere. Emotion is energy. Learning to harness this energy and use it to impact the reasoning side of the business in a positive way is one of the great untapped resources yet to be conquered.”

- The Emotional Intelligence Activity Book by Adele B. Lynn

In conclusion, smart organizations are those organizations that hire, evaluate, and train their workforce around emotional intelligence. These smart organizations integrate EI into how people are managed. These organizations also leverage traditional IQ against EI, building real power behind business performance. There should be little doubt – emotional intelligence is fast becoming one of the most critical core competencies for every organization.

“We are in the beginning stages of what many authorities believe will be the next revolution in business. By design, no blood will be shed in this sweeping transformation from old to new, just a host of preconceived notions.”

- Executive EQ: Emotional Intelligence in Leadership and Organizations by Robert K. Cooper and Ayman Sawaf

Other Topics

Major Pitfalls in the Decision Making Process

The road of decision-making is filled with numerous pitfalls and traps. These pitfalls are hard to discern since they are part of our normal decision making process. They include misconceptions in the decisions we make, a bias in favor of one option, falling prey to the status quo, and continuance with sunk decisions. The more complex the decision, the more likely you'll run into these pitfalls.

One of my favorite types of pitfalls is the *anchor*. Anchors prejudice your decision by introducing an estimate or idea before you have time to analyze the decision. For example, suppose you and I need to negotiate billing rates for my services. If you reviewed my web site, you clearly saw what my billing rates were. This information will force or anchor you to seek rates that are close to what you already know. Anchors influence your decision by leaving an impression. They are hard to avoid. You can reduce the influence of anchors by not exposing yourself to information that influences your decision until you've had time to think on your own.

Sunk decisions are another common pitfall. Here you are trapped into a past decision because you don't want to admit that you were wrong. So you continue to throw more resources into the bad decision. Technology type projects often lend themselves to sunk cost decision making. To avoid sunk decisions, seek out advice from people who are not involved in the project and recognize that failure is a normal part of decision making.

Finally, there is the status quo where you make decisions that tend to not rock the boat. This bias approach to decision making is common in organizations where change is hard to accept. Additionally, if you break away from the status quo, you open yourself up to more responsibility and criticism. Remember that status quo is not your only alternative and status quo rarely remains the same over time. Ask yourself if the status quo weren't around would you still make the same decision in favor of the status quo?

Try to be aware of these pitfalls in making decisions. And remember, the more assumptions you make in your decisions, the more likely you'll be confronted with these pitfalls.

Key Elements to Effective Decision Making

Effective decision making is paramount to the creation of value. And as things get more and more complicated, it's harder and harder to make effective decisions. So what are the key elements to effective decision making? According to Peter Drucker, the decision making process should make a distinction between generic conditions and unique situations. For the most part, many decisions are made as generic; i.e. you are facing a situation which is similar to another decision and you can therefore apply a set of rules and principles to the decision. A unique decision is not generic and thus you have no real guidelines to solve the problem. The biggest problem according to Drucker is that most managers try to force their generic type conditions into a unique situation. Peter Drucker also advocates the importance of feedback to make sure your decisions achieve their anticipated results.

Too often organizations are making decisions with an aggressive attitude that implies that we have the resources to implement our decisions and we can overcome any and all adversity. In reality this may not be the case. For example, projects like Enterprise Resource Planning will sometimes trap companies into a deeper and deeper hole. An endless flow of cash is poured into these technology projects with no real regard for honest feedback from users. If you're inside a hole, you need to stop digging! A much better approach is to take a trial and error approach or *incremental decision-making*.

Making decisions in steps or increments is often the preferred approach since all decisions are based on some assumptions. And these assumptions are easily invalidated by the introduction of new information. With incremental decision-making, you make adjustments along the way and correct your assumptions. In capital budgeting, we call this contingent claims analysis - building options into our projects so we can get out if we have to. Incremental decision-making lends itself very well to Financial Management. So the next time you make a financial management decision, go in steps with corrections along the way.

What is Zero Working Capital?

Working capital is the comparison of current assets to current liabilities. For most organizations, current assets exceed current liabilities and working capital therefore represents the liquid reserves for meeting current obligations. Creditors prefer high levels of working capital since they are concerned about receiving payment. However, management prefers low levels of working capital since working capital earns an extremely low rate of return. Some companies are now driving working capital to record low levels, so-called Zero Working Capital. By keeping working capital at zero, funds are released for many other opportunities.

Zero Working Capital requires major changes in how an organization functions. One way to implement Zero Working Capital is to have a demand-based organization. Demand-based organizations do everything only as they are demanded: Fill

customer orders, receive supplies, manufacture products, and other functions are done only as needed. The production facilities run 24 hours a day non-stop according to the demands within the marketplace. There are no inventories; everything is supplied immediately as needed. The end result of this demand driven organization is that little, if any, working capital is necessary to run the business.

Companies like GE (General Electric) and Campbell Soup have made Zero Working Capital a major strategic objective for the organization. As more and more businesses find faster ways of servicing customers, the concept of Zero Working Capital will become more mainstream.

Turnarounds for Distressed Organizations

Let's hope your organization doesn't find itself in a distressed situation. However, the first step is to recognize the early warning signs of financial distress. They include:

- Escalating inventory levels.
- Cash balances are relatively low.
- Some payables are paid 15 days late.
- Sales margins have dropped.
- Production has become inefficient and requires improvement.
- The Bank has called and asked for recent financials and additional information.

If you fail to take corrective action, than serious symptoms will occur:

- Cash balances are dangerously low.
- Checks are overdrawn at the Bank.
- Vendor payments are extremely late.
- You can barely make payroll.
- Layoffs have started.
- Employee morale is falling.
- Some of the better people are beginning to resign.
- Creditors and banks are requesting meetings.

When you reach serious levels of distress, you will be forced to implement a Turnaround Plan. The single biggest source of financial distress is by far due to bad management. So a change in management is critical within a Turnaround Plan. Bring in new partners, outside consultants, or someone who can think differently; someone NEW has got to enter into the picture! A second component of a Turnaround Plan is restructuring your organization so it can survive for the next 90 to 120 days. This requires extreme cost cutting, immediate liquidation of assets, and negotiating new terms on outstanding debts.

Next you will need to determine if the organization has a "going concern value" in excess of its liquidation value. Can your organization reorganize and generate values

in excess of the values from selling off all of your assets? If yes, then you need to implement a long-term reorganization plan. If you are unable to reorganize and you can't meet your obligations, then you may have to consider Chapter 11 bankruptcy. However, voluntary reorganizations are preferred over Chapter 11. Finally, recognize the sources of organizational distress. They include bad management, inability to compete, too much debt, under capitalization, and lack of innovation.

What is a Data Warehouse?

One of the best ways to leverage intellectual capital is through a Data Warehouse. Intellectual Capital refers to the intangible stuff that creates value for a company, ranging from intuitive thinkers in the workplace to having great strategic partners within the value chain. Intellectual Capital is the main ingredient behind Market Value Added which is the additional value created over time above what was originally invested into the business. Therefore, it is imperative to find ways of expanding and leveraging intellectual capital. One way of doing this is to implement a Data Warehouse.

A Data Warehouse is a central location of data that combines all of the existing subsystems and legacy systems into one single structure. Applying this concept to the management of information is extremely important since most organizations have fragmented pockets or silos of information scattered all over the organization. When everything is located in one place, Manager's can capture all of the necessary information for decision making. Consequently, the main reason for building a data warehouse is to improve decision-making. The benefits of a data warehouse include better customer service, lower production costs, increased profitability, and quicker turnaround times for making decisions. One of the most powerful applications of a data warehouse is to engage in data mining. Take the following example on how to better understand the customer:

A clothing catalog company with over 2 million customers has decided to mine its databases and develop better customer groupings. Instead of coming up with the usual four or five segments, 5,000 different marketing cells were developed. For example, it was noticed that 850 customers had purchased a blue shirt and red neck tie. This data is important since these same customers are more likely to buy a navy blue jacket than the average customer. It may pay to send a special offer on navy blue jackets to these 850 customers. If the data is correct, the success rate could be as high as 10%.

One way a data warehouse can improve decision making is to improve the database itself. Business rules can be added to calculate valuable measurement information, such as inventory turnover rates or product margins. You can also eliminate dirty data during the course of building the Data Warehouse. For example, bad customer records, outdated names, and other bad data should be removed when building the Data Warehouse. Things can be done to make the data more user friendly. For

example, the customer type code "599" doesn't mean anything, but if you change it to "NPO" it means non profit organization.

There are several approaches to building a data warehouse, such as virtual or dimensional. The dimensional approach seems to work best since it represents a true separate warehouse that is easy to navigate. Some other things to consider when building a data warehouse include:

- Design the Data Warehouse around the strategic goals and objectives of the organization.
- Don't throw all data into the Data Warehouse, load only the useful data.
- Get the best people you can find since design and implementation of a data warehouse is extremely difficult.
- Make sure you allow for growth - the data warehouse will need increasing storage, memory, etc.

This article has touched on the very high points in data warehousing. There is a lot more to cover, but the main point is to start moving in this direction since data warehousing is a powerful tool for leveraging intellectual capital.

The IPO Process

For private companies in the United States, the first issue of securities to the public is referred to as an Initial Public Offering (IPO). IPO's are extremely speculative and rarely do they result in large gains for investors. However, since capital is often needed to grow a private company and values of companies are best determined in the marketplace, IPO's continue to be used as a way for growing private companies.

Currently, IPO's are one of the hottest topics in financial management. Behind the glamour and the glitz of Initial Public Offerings (IPO's) there is a tremendous amount of hard work and personal sacrifice. IPO's require a core group of highly skilled professionals who must literally work around-the-clock for one year. Therefore, one of the first steps to a successful IPO is the formation of a seasoned, experienced team of professionals who will make the IPO happen. You must recruit the best possible people you can find - there is no time to supervise inexperienced MBA's fresh out-of-school.

Once an IPO team (Investment Banker, Legal Council, SEC Expert, Outside Auditor, etc.) has been formed, you can establish a plan for the IPO Process. A basic timeline for an IPO will usually consist of:

Month 12: Recruit new management to run the public company - CEO, CFO, etc.
Start compiling the financial information.

Month 11: Start due diligence work - worthless assets are written off, inconsistencies with GAAP are resolved, etc.

Month 10: Start drafting the prospectus. Coordinate the collection of data to minimize duplicative efforts.

Month 9: Establish a board of directors for the newly formed public company.

Month 8: Draft three-year historical financial statements.

Month 7: Circulate draft prospectus for comments.

Month 6: Establish transition contracts for services and products that will now be provided to the newly formed public company. Some new contracts will be needed, such as independent audits of financial statements.

Month 5: Finalize historical financial statements. Start preparing interim (stub) financial statements for current period.

Month 4: Finalize pro forma and interim financial statements. Make revisions to draft prospectus.

Month 3: Convene new board of directors. Audit of interim financials should be complete.

Month 2: Outside auditors opinion is issued. Membership with stock exchange is complete.

Month 1: File prospectus with SEC (Securities Exchange Commission). Issue press release and sell the company to investors.

Before the IPO Process is complete, it is essential to implement all of the necessary controls, procedures, and systems that will now be required within "public life." Staff changes must be made, new financial systems tested, functions like human resources must be managed, etc. The entire IPO process is much more involved than most people realize. A great IPO team and proper planning are the key to a smooth IPO process.

Before considering an IPO, remember some of the key disadvantages. Once public, your company will be operating in a fish tank, much more visible to outsiders. This will require servicing investors, the SEC, and other interested parties. And don't forget you will have to pay at least \$ 500,000 per year in accounting and director liability insurance fees. Going public has got to fit with your strategic plan for growth if you expect the benefits to outweigh the costs. Don't overlook the single biggest source of money, investments made by other companies in emerging, high-growth companies. For many companies, the IPO process is a grueling and wrenching process that fails to meet expectations. Planning well in advance is the key to a successful IPO.

Strategic Planning: Your First Step in Building a Balanced Scorecard

The foundation for Balanced Scorecards resides in a complete understanding of what is important to the future success of your organization. Critical success factors are identified through strategic planning. Strategic planning is a formal process whereby you prepare your organization for the future. Building a strategic plan is like building a pyramid from the top down. You start at the top with your mission statement and work your way down to the bottom by completing an Operating Plan. The layers in between represent strategic objectives and goals.

The overall process for building a strategic plan usually requires that you assess your current situation. A SWOT approach is quite common - Strengths, Weaknesses, Opportunities and Threats. Due to the enormous changes now taking place, I like to add a fifth area which I call Emerging Trends. Next you will isolate critical issues and categorize issues according to their probability of occurrence and significance to the organization. The following format can be used:

Place each critical issue within a grid according to Probability of Occurrence and Degree of Impact to Organization. Use three levels: High, Medium, and Low. Critical issues that are placed as High Probability of Occurrence and High Degree of Impact to the Organization must be addressed within the Strategic Plan.

You now have to reach agreement on how you will address these critical issues. This can involve scenario playing or simply establishing strategic goals. Some organizations will restructure the organization in order to meet critical issues. In any event, the end result is a draft strategic plan that clearly communicates direction and vision. Sometimes more critical issues will pop up when participants have a chance to read draft copies of the strategic plan. So make sure you encourage a flexible and open process. Strategic planning is very dynamic.

As a minimum, your organization should develop a strategic plan once a year. And you need to think strategically on a continuous basis. If you are new to strategic planning, a good place to start is with the [Strategic Planning Workbook for Nonprofit Organizations](#). This book includes forms to walk you through the entire process. I use this book for **all** types of organizations, not just non-profits. You can order the book by calling 1-800-274-6024 (1-612-659-6024 outside the U.S.A.) or visit www.wilder.org.

Lessons from the Entrepreneur

Lesson 1: Some Basic Concepts

One of the best ways to create higher values is to simply think like an entrepreneur. If we can think like an entrepreneur, we can find numerous ways of changing how we manage and create wealth within an organization. Over the next few months, I will summarize several concepts that I believe are paramount to creating higher values. All of these concepts come from thinking like an entrepreneur. Lesson 1 (which follows) will introduce some basic concepts. Lesson 2 will explore characteristics of the entrepreneur and Lesson 3 will outline the entrepreneurial culture.

One simple lesson we can all learn from the entrepreneur is how to manage risk. Entrepreneurs think in terms of stages or increments. They never commit large resources up-front, working within a single stage. The traditional manager, on the other hand, is given a budget to complete a project and he or she will force an outcome no matter what new facts may emerge during the life cycle of a project. Compare this approach to the entrepreneur who never takes such huge risks. Entrepreneurs manage risk by making decisions incrementally and they move forward very cautiously, moving to the next stage only if a specific event or action has occurred. This approach allows the entrepreneur to better control risk as opposed to the traditional manager who takes on major risk. By not wasting valuable resources, entrepreneurs not only manage risk better, but they preserve and protect value. They also have better control over the final outcome of projects.

Another key lesson from the entrepreneur is a never-ending search for new opportunities. Entrepreneurs enjoy experimenting with new ideas, seeking out new areas to exploit. Contrast this to the traditional manager who avoids experimentation, focusing on his or her career within the organization and not thinking outside the traditional box. Entrepreneurs live for new opportunities whereas traditional managers follow a sequential pattern of procedures that conforms to the corporate culture. A strong emphasis on learning is usually at the center of finding new opportunities. Entrepreneurs seem to listen and learn much better than anyone else and as a result, they can see an opportunity much easier than the rest of us. Therefore, a major commitment to learning is at the center of identifying new opportunities to exploit.

A third lesson we can learn from the entrepreneur is that execution is more important than the idea itself. Many organizations are searching for new ideas as a way of creating higher values. New ideas are hard to come by and they rarely result in the creation of value. Value comes from the ability to execute. Entrepreneurs seem to have an uncanny ability for executing an idea and turning something redundant into a great business. For example, something as simple as coffee all of a sudden becomes Starbucks, an international chain of coffee

shops. It's not the product or service that creates value, it is all of the intangibles associated with the product or service that seems to attract customers and creates value. Entrepreneurs understand this concept and they know how to execute an idea much better than the traditional manager. Keep in mind that over 70% of all new ventures come from existing ideas, not new ideas. Execution is how entrepreneurs create value.

In conclusion, we have learned three important concepts from the entrepreneur:

1. Thinking in stages or increments is a value-creating approach to risk management.
2. Allowing experimentation to take place is paramount to value creation. This requires a very strong commitment to continuous learning; otherwise you will have difficulty identifying new opportunities.
3. Existing ideas are much more important than new ideas when it comes to creating value. The challenge is to transform an existing idea into something that is new to the marketplace; i.e. execution.

In our next lesson, we will learn some of the basic characteristics behind the entrepreneur.

Lessons from the Entrepreneur

Lesson 2: Characteristics of the Entrepreneur

In our first lesson, we described a few basic concepts that entrepreneurs follow in managing a business. We will now expand on how entrepreneurs create value by looking at some characteristics of entrepreneurs. One common characteristic behind almost every entrepreneur is a strong commitment to a set of skills. Invariably you will find that entrepreneurs are extremely highly skilled in their chosen profession and as a result, they can attract customers based on this high level of expertise. Entrepreneurs are able to exploit this expertise and build a business around what they are good at. Entrepreneurs do not digress or move into areas where their skills are weak. If an entrepreneur requires other skills, the entrepreneur will seek out partners or build a management team. Keep in mind that almost every entrepreneurial business will require at least three skills: marketing, product, and finance. You have to be able to sell and reach the customer. You have to be able to create a product that creates value for the customer. Finally, you must be able to raise the money to execute your business. Entrepreneurs know how to cover all three of these skills.

Another common characteristic to most entrepreneurs is a love for what it is they do. Entrepreneurs have a passion for their work which helps them persevere through hard times. This strong commitment allows entrepreneurs to compete and overcome numerous obstacles. Failure is part of the process of building the entrepreneurial business. Most entrepreneurs will experience a lot more failures than successes. However, they persevere through failures by learning from failures and they build on

this new knowledge. Therefore, "intelligent" failing is an integral part of how entrepreneurs create value.

A third characteristic common to most entrepreneurs is a low resource need. Entrepreneurs are customer dependent and not resource dependent. Entrepreneurs seem to create value with minimal resources. This low support need is one of the reasons why so many entrepreneurial businesses create so much value. Contrast this to the big corporation where huge resources are plowed into projects, resulting in wasted resources and the destruction of value. Entrepreneurs create businesses with minimal capital investments. This in turn generates an extremely high return on invested capital and thus, high valuations for the business.

In summary, we can list several characteristics common to entrepreneurs:

- Extremely high skills resulting in benefits to customers.
- Strong commitment to building value with failure as a normal part of the process.
- Low support needs and thus, high valuations are possible.
- Focused on the needs of the customer. The customer is the ultimate solution within every business.
- Does not follow a pre-set path or structure; experiments through a meandering journey.
- Informal, open communication style that allows a conversation to take place and thus, entrepreneurs are always learning.
- Very sensitive to what works and what does not work. Entrepreneurs are very observant.

In our final lesson on entrepreneurship, we will look at how your organization can create an entrepreneurial culture.

Lessons from the Entrepreneur

Lesson 3: The Entrepreneurial Culture

It should go without saying that we now function in a world of intense competition. Additionally, those who invest in companies are becoming less and less confident in management's ability to create value. As a result, financial markets are becoming increasingly volatile. We also need to consider things like shorter product life cycles. Because of these factors and many more, it is absolutely imperative for every organization to build an entrepreneurial culture. This article will summarize some key components within the entrepreneurial culture.

As you may recall from Lesson 1, entrepreneurs never manage projects in a single stage. They think in terms of increments and they always learn from their mistakes. Traditional organizations destroy the project spirit by prohibiting people from going back to design or planning and thus, changes are not allowed. This in turn forces an outcome that never fits. Entrepreneurs have the freedom to

experiment. People can stretch and take risk, bringing new ideas into the organization. Traditional organizations restrict experimentation through an array of memo's, meetings, policies, politics, etc. Therefore, an entrepreneurial culture allows people to experiment in a "non-judgmental" environment. No idea is judged or ridiculed.

An informal management style is also important to the entrepreneurial culture. Informal and open organizations allow anyone to communicate with anyone else anytime, anywhere. This fosters innovation and change. An entrepreneurial culture will reinforce innovation through incentive programs, rewarding people for their new ideas. Entrepreneurs also create informal environments by making everyone equal. This is symbolized by not having lush offices, large bonuses, private parking, and other special perks. Everyone exists within the same environment. Contrast this to the traditional organization where numerous perks and other attributes segment the workforce. Only when you minimize all differences can you expect people to be viewed equally. Once everyone is equal, an entrepreneurial culture of open communication and new ideas will emerge. And don't forget to share the power and the rewards. Empowerment is part of equality.

In order to have creativity and innovation, we need to have an environment that is fun. For example, Southwest Airlines has a "fun" corporate culture thanks to its President, Herb Kelleher. As Kelleher has pointed out, intangibles like a "fun" culture are extremely difficult for the competition to replicate and as a result, this becomes the competitive advantage for a company like Southwest Airlines. Creating these intangibles is a major challenge in building the entrepreneurial culture.

One way many organizations create innovative cultures is to get into the habit of introducing new products and/or services. A continuous flow of new products or services seems to ensure that the organization is operating in a creative mode.

Finally, don't forget to communicate your strategies over and over again. It is absolutely critical that everyone has a clear understanding of the strategic objectives of the organization. According to Kaplan and Norton, less than 10% of the people in a typical organization will truly understand what the organization is about and where it is going.

In conclusion, all organizations can gain enormously by simply changing their cultures over to an entrepreneurial culture. In today's world of intense competition, an entrepreneurial culture is critical to staying ahead of the competition. Learning from the entrepreneur is one of the best approaches to creating long-term value for each and every organization.

eFinance Part 1: Basic Concepts

It seems that everything now has an "e" in front of it. Finance, like any other function, is subject to profound changes because of e-commerce. This article will outline some basic concepts for moving traditional finance into an e-commerce environment.

In the World of eFinance, complex decisions are made using sophisticated models that demonstrate what destroys value and what creates value. eFinance pulls together all stakeholders behind value-creation: Employees, customers, suppliers, etc. eFinance works 24 x 7 (24 hours a day, 7 days a week), providing instant knowledge to decision makers on an enterprise wide basis.

eFinance, like all e-business applications will consolidate and integrate business processes, sharing and distributing a process electronically for global collaboration. Additionally, financial data is transformed into business rules and intelligence, thereby enhancing the knowledge and intellectual capital of the organization. A database of knowledge, leveraged by mining tools is a major component of eFinance.

The technology for making eFinance happen usually consists of three layers:

1. Database servers that manage the data.
2. Application servers that distribute information to end-users.
3. Clients - Personal Computers, Laptops, Workstations, etc.

The term "client-server" is often used to describe the architecture of eFinance.

eFinance, like all e-commerce applications will involve unique risk:

- Integration of processes into one integrated system is extremely difficult.
- Critical applications may be down, resulting in major interruptions of business processes.
- Loss of personal interaction since everything is now electronic.
- Corrupted or compromised information.

However, the benefits of eFinance are enormous:

- Increased productivity.
- Faster and better decision making.
- Better collaboration through a consistent, standard process.

One obvious benefit of eFinance is lower transaction cost. For example, according to the International Technology Group, on-line transaction processing can result in the following savings per transaction:

Activity	Manual Cost	On-Line Cost
Process Order for Purchasing Equipment	\$ 65.00	\$ 6.85
Issue Retail Invoice to Customer	\$ 2.77	\$.88
Process Purchase Order	\$ 130.00	\$ 28.00
Customer Query	\$ 22.00	\$ 2.32

The goal of eFinance is to transform traditional financial functions into value-added services that creates and enhances value. eFinance delivers strategic financial information faster and sooner, not only about what happened in the past, but also giving you forecasts and insights into what will happen next quarter or next year. In today's competitive business world, eFinance has become a matter of survival. Next month, I will touch on some specific components of eFinance, such as e-procurement.

eFinance Part 2: Key Components

The basic premise for many financial systems will reside in a fully integrated, centralized system. This consolidated system is typically an Enterprise Resource Planning or ERP System. ERP Systems integrate all business processes together, covering a wide range of functions - finance, human resource management, customer relations management, supply chain management, etc. The challenge is to get all of these processes on-line in a real time, global environment. Web based applications are often deployed for meeting this challenge.

For example, e-procurement can be used to streamline the ordering of recurring purchases. No more purchase orders, no more phone messages and other administrative activities. People now spend more of their time finding the best quality supplies at the lowest cost. The best e-procurement applications will automate searching for prices, providing a list of suppliers and integrating the entire process into the ERP System.

Even simple task, such as distribution of financial reports should go on-line through web portals or private intranets. Centralized processing of payments should go on-line, such as paying travel and entertainment expenses to employees. This eliminates the costly manual process and integration takes place directly into the payroll system (part of ERP).

At the high end of ERP is Customer Relations Management or CRM. CRM is sometimes used in conjunction with Sales Force Automation or SFA. SFA will serve to acquire new customers by converting prospects into customers. The process is automated based on pre-defined criteria. CRM works to retain customers through direct personal service. One of the biggest challenges for CRM is to maintain a "personal touch" despite being an on-line service. Technologies such as telephony (voice over IP), real time chat rooms, and other interactive features can help provide the personal touch.

If all of this seems overwhelming, there are some options for rapid deployment at minimal cost. These options are covered by Application Service Providers (ASP's) and Business Service Providers (BSP's). For example, smaller companies may find that www.corio.com can accommodate complete financial accounting through corio's web site. Human resource functions can be outsourced to web sites such as

www.employeeservice.com and www.oneclickhr.com. Customer support can be outsourced to www.liveperson.com. Sites such as www.salesforce.com can serve as SFA. Simple on-line storefronts for e-tailing are available through sites such as www.freemerchant.com and www.openmarket.com can even integrate your e-tailing application into your ERP System.

Although eFinance is often seen as limited to things such as electronic payments and distribution of financials, financial professionals may find themselves serving as the driving force behind a host of e-commerce applications. This article has just scratched the surface. Things now change by the hour and financial professionals must play major strategic roles in making eFinance and ERP happen. And to make matters more complicated, the components of eFinance and ERP are extremely diverse. If core competencies are insufficient in meeting this enormous demand for eFinance, then partnering with ASP's and BSP's should be considered.

Intangibles over Tangibles

In today's information age, the emphasis is on intangibles. We no longer live in a world where physical assets are more valuable than intangible assets. High levels of business performance are more dependent upon intangible characteristics:

- Ability to innovate
- Ability to change
- Speed to Market
- Develop and Retain the Best People
- Create a One to One Customer Relationship

The marketplace also recognizes the value of intangibles. For example, companies like Microsoft have a market capitalization driven by intellectual and intangible attributes. And companies like Microsoft have market capitalization's well above companies operating with heavy loads of physical, tangible assets.

"Our primary assets, which are our software and our software development skills, do not show up on the Balance Sheet at all." – Bill Gates of Microsoft

When Financial Analyst were asked to rank the best non-financial measurements, they listed the following:

1. Execution of Strategy
2. Management Creditability
3. Quality of Corporate Strategy
4. Innovation
5. Ability to Attract and Retain Talented People
6. Market Share
7. Management Expertise

8. Alignment of Compensation with Shareholder Interest
9. Research Leadership
10. Quality of Major Business Processes

If you look at this list, most of it relates to the intangibles within the business; things like leadership, quality of management, people, ability to innovate, etc. This is what investors are looking for within a business. So how do you manage in this world of intangibles? In comparison, the World of Intangibles is considerably different than the traditional business world of physical, tangible assets.

Tangible Assets => Readily Visible, Easy to Quantify, Reported on the Balance Sheet, Easy to Duplicate, Depreciate over time, limited application, managed through control, accumulate and store.

Intangible Assets => Difficult to Recognize, Difficult to Quantify, Not Reported on the Balance Sheet, Difficult to duplicate, Appreciates over time if managed properly, Has multiple applications to the business, Managed by alignment, and tends to be very dynamic with a short life span.

For financial professionals, this presents numerous challenges. For example, much more emphasis must be placed on growing the intangibles within the business. Within finance, this can involve things like rethinking the budget models, allocating resources differently, shifting the cost structure, and moving towards virtual financial functions.

The trend towards intangibles is real and extremely profound for business. In fact, Tom Peters in his Project 50 series of books declares that those organizations that survive will have to adopt these types of intangible attributes. Peters refers to these surviving organizations as “Professional Service Firms.”

“These firms can be tiny or huge. But regardless of size, they perform purely intellectually based services, own damn little in the way of hard assets, and sometimes deposit billions of \$\$\$\$ on the bottom line. Those who survive – on or off a corporate payroll will jettison (almost) everything they’ve learned and adopt the attributes / attitudes of a PSF / Professional Service Firm“ - Reinventing Work: The Professional Service Firm 50 by Tom Peters

The Marketplace is clearly indicating a preference for intangibles over tangibles when it comes to running a business. Therefore, businesses will have to recognize new drivers of value, such as customer led business processes, increased specialization, and an emphasis on knowledge workers. Physical assets, which are easy to duplicate in the marketplace, will no longer provide a competitive advantage. This shift from tangible to intangible is one of the reasons we are experiencing so much change. If you expect to manage change, you will have to function in the World of Intangibles.

The XBRL Revolution

The Institute of Management Accountants calls it the most significant thing to hit the accounting and finance profession since the invention of the spreadsheet. The AICPA, SEC, and other regulatory bodies are racing to implement it as fast as they can. It's called XBRL or Extensible Business Reporting Language.

XBRL is rooted in XML – Extensible Markup Language. XML uses a set of tags to describe the specific data. Now that the data is tagged with a specific description, the user can pick and choose which data to download. All of the detail contained in a set of financial statements is coded, telling you exactly what it is. For example, the net accounts receivable balance is tagged so that users can extract only this bit of information off the financial statement. All users (investors, regulatory agencies, internal managers, analyst, etc.) will be able to pull off exactly what they want from one extensible coded financial statement. And all types of applications can read XBRL.

Some key points about XBRL:

- XBRL is a standard for preparing, publishing, and analyzing financial statements for both public and private companies.
- XBRL is freely licensed so that software companies and various operating platforms can adopt the XBRL format.
- XBRL does not change any existing regulatory reporting requirements.

The SEC has already setup an XBRL repository within EDGAR Online. Vendors like ekeeper.com have released tools for converting to XBRL. Software vendors are starting to incorporate XBRL into their financial reporting applications. The big ERP vendors, like PeopleSoft, have joined the XBRL Consortium.

Some of the major applications scheduled to roll out for XBRL include:

- Enabled consolidation engines to streamline the consolidation of financial statements.
- Conversion and Web Based Tools for pulling multiple financial sources into one single repository.
- Due Diligence Tools to streamline M & A Analysis.

XBRL will change how financial statements are prepared and analyzed. All users in the supply chain will expect XBRL financials. Therefore, financial professionals everywhere need to understand the coming XBRL revolution. For more information, visit www.xbrl.org.

The Importance of Knowledge Management

Most companies are focused on producing a product or service for customers. However, one of the most significant keys to value-creation comes from placing emphasis on producing knowledge. The production of knowledge needs to be a major part of the overall production strategy.

One of the biggest challenges behind knowledge management is the dissemination of knowledge. People with the highest knowledge have the potential for high levels of value creation. But this knowledge can only create value if it's placed in the hands of those who must execute on it. Knowledge is usually difficult to access – it leaves when the knowledge professional resigns.

“The only irreplaceable capital an organization possesses is the knowledge and ability of its people. The productivity of that capital depends on how effectively people share their competence with those who can use it.” – Andrew Carnegie

Therefore, knowledge management is often about managing relationships within the organization. Collaborative tools (intranets, balanced scorecards, data warehouses, customer relations management, expert systems, etc.) are often used to establish these relationships. Some companies have developed knowledge maps, identifying what must be shared, where can we find it, what information is needed to support an activity, etc. Knowledge maps codify information so that it becomes real knowledge; i.e. from data to intelligence.

For example, AT&T's knowledge management system provides instant access for customer service representatives, allowing them to solve a customer's problem in a matter of minutes. Monsanto uses a network of experts to spread the knowledge around. Employees can lookup a knowledge expert from the Yellow Page Directory of knowledge experts.

In the book Value Based Knowledge Management, the authors advocate that every organization should strive to have six capabilities working together:

1. Produce: Apply the right combination of knowledge and systems so that you produce a knowledge based environment.
2. Respond: Constantly monitor and respond to the marketplace through an empowered workforce within a decentralized structure.
3. Anticipate: Become pro-active by anticipating events and issues based on this new decentralized knowledge based system.
4. Attract: Attract people who have a thirst for knowledge, people who clearly demonstrate that they love to learn and share their knowledge opening with others. These so-called knowledge professionals are one of the most significant components of your intellectual capital.

5. Create: Provide a strong learning environment for the thirsty knowledge worker. Allow everyone to learn through experiences with customers, competition, etc.
6. Last: Secure long-term commitments from knowledge professionals. These people are key drivers behind your organization. If they leave, there goes the knowledge.

Knowledge professionals will become the dominant force behind the new economy, not unlike the farmer was once the key player behind the agricultural age. By the year 2010, one-third of the workforce in the United States will be comprised of knowledge professionals. It is incumbent upon all organizations to embrace this need for managing knowledge. Just take a look at those organizations that seem to create value against the competition. You will invariably find a strong emphasis on knowledge management.