A staff's Understanding of Finance Can Enhance the Bottom Line for Any Company

If you work in a manufacturing plant, you almost certainly associate the word "training" with courses centering on technical skills, supervisory skills or safety. While these are all important topics for training, my guess is that few ever envision manufacturing plants as classrooms for acquiring financial acumen.

Why? Could it be that senior management believes that plant personnel already possess a keen understanding of financial inputs used to support decision making and that financial training isn't needed? Maybe there isn't sufficient room in the budget for all important topics for training, my guess is that few ever envision manufacturing plants

that financial training isn't needed? Maybe there isn't sufficient room in the budget for this type of training? Or, maybe is it because most companies have a decision-making chain of command that requires review and approval from treasury, accounting or finance, assuring that adequate financial expertise will be applied to the decision making process.

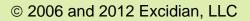
Whatever the reasons, I believe that:

- Plant personnel, even those with years of experience, cannot perform to their maximum without applying financial analysis to decision making.
- Any company can develop a long-term competitive advantage by spreading financial knowledge through its ranks.
- Based on recent research, investment in human capital management (HCM), of which training is an important component, will deliver value to shareholders.
- At some manufacturing plants, the dollar outlay for O&M and capital improvement is so larger that a small decision-making error can translate into a sizeable and adverse impact on financial performance.

There are thousands of accounting and finance courses available to people in the workforce. If you type the phrase "Finance for Non-Financial Managers" into Google, you get over 4,600,000 responses. That's a lot of courses. Why so many? My guess would be because the demand is high.

# Basic Education Lacking

Why the high demand? The reason could well be the absence of financial, accounting and economics content in our nation's elementary, middle and high school curricula. Schools don't require accounting, finance and economics and, in many cases, they aren't available to pre-college students. It's not until a student enters college that they take accounting or finance courses. In many cases students take these courses because they are required for majoring in business or management, not because they want to master the subject. As these students enter the workforce, they are often assigned tasks that don't require them to use financial acumen.



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Consequently, the academic understanding of their accounting or finance courses fades rapidly from lack of use. These events set the stage for the academic "after market" to supply financial training courses for those already in the workforce and in need of upgrading their financial knowledge.

Most people who graduate from high school are financially literate to the degree that they can add, subtract, divide, multiply and perform basic algebraic calculations. However, if they work for a publicly-traded company, most would be unable to read the company's annual report and comment on the company's relative financial performance as compared to its competitors. This inability, in and of itself, doesn't necessarily mean that a company's management skill is seriously flawed. However, if hundreds – or perhaps thousands – of managers lack a base-level knowledge of finance and the ability to apply it to decision-making, then a company has a problem.

It should also be noted that even employees with advanced degrees requiring accounting or economic courses also need a higher level of financial acumen. What do I mean by "higher?" As a manager at a moderate sized electric utility for 14 years, I gave assignments to employees that required the use of basic financial analysis tools. Much to my dismay, these employees, all of whom had engineering degrees and/or MBAs, were unable to create solutions supported by sound financial reasoning. As a result of this experience, Excidian developed a two-day financial acumen course titled "Business Finance for Non-Financial Professionals." It has become one of our company's most popular courses.

Business finance courses customized for an industry are popular for several reasons. Many businesses have employees in technical and engineering intensive functions. The academic backgrounds of these types of employees require them to master the use of mathematics, formulas, logic and spreadsheet software. These are the same skills needed to master accounting and finance.

Furthermore, most personnel above a certain level find themselves either on the periphery of, or deeply involved in, decision-making that results in expenditures of hundreds of thousands or even millions of dollars. Many of these managers have had to defend their budget requests before finance committees. Many managers who attended my industry-specific classes admit that their financial knowledge and ability to present a clear, concise and financially correct business case supporting their requests were lacking. Some admit to being intimidated by financially detailed questions coming from committee members, many of whom are from treasury, accounting or finance departments.



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#### Case in Point

Since 2001, American Electric Power (AEP), has been aggressively deploying financial acumen training in its power plants. Plant management personnel and various engineering groups at AEP progress through a two-day basic course and then a two-day advanced course. Working with Excidian to design the advanced course in 2004, AEP specified distinct ways it expected the business finance training to be useful to its plant managers, middle managers and supervisors.

AEP wanted these managers and supervisors to be able to make better operating decisions on a consistent basis. Typical decisions that require financial skill include the ability to determine if the plant should replace a piece of equipment – thereby increasing the capital budget – or maintain the old piece of equipment – thus increasing the O&M budget. Should the plant use internal or external construction resources? Should a piece of equipment be replaced this year, in three years or in five years? Power plant-specific, financial training allows plant personnel to better understand the financial pressures coming from Wall Street which then filters down through the organization from the company's CEO and CFO. These pressures ultimately impact the decisions being made at the plant level and must be understood by plant management to avoid frustration.

For example: senior managers tend to forget that not everyone is well-versed in accounting and finance. As a result, the operations staff often implements decisions without fully understanding why. This can lead to frustration. Suppose the decision has been made to not replace a series of heat exchangers at a power plant, but rather allow O&M expenses to increase as the costs to fix plus maintain the heat exchangers rise. Maybe the net present value (NPV) of replacement was not high enough. Or perhaps replacing them at this time would divert capital from a higher NPV capital project. When an employee is told to do something but does not understand why, he experiences frustration because he can't see how the action will benefit the company.

Managers and supervisors who receive financial training have more confidence. They understand and use the language of accounting and finance as they interact up the organization within the power generation division and across the organization outside of power generation. They are also better able to communicate the importance of finance to craft and hourly employees.

The manager for AEP's Gavin Plant in Ohio, provides a real life example of why plant employees need to understand the financial pressures coming from Wall Street. The manager wants all of his direct reports to understand why it is so important to keep O&M expenses as low as possible. He notes that meeting earnings per share (EPS) targets expected by Wall Street is not an abstract goal. "Wall Street punishes companies who consistently fail to meet earnings targets by various means including a change from 'buy' to 'hold' or even 'sell' for the company's stock," he says.

Another equally punishing action inflicted by Rating Agencies, such as

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Moody's, Fitch and S&P, is to downgrade a company's credit rating. "A downgraded credit rating can increase an electric utility's interest expense by hundreds of thousands of dollars per year. If interest expense increases without offsetting reductions in O&M costs, profits fall causing earnings projections to be missed again. This could generate another downward adjustment in the credit rating causing interest expense to increase even more. electric utility history."

Basic Skills even more. This cycle is referred to as a credit rating death spiral. More than a few electric utility companies and power generators experienced this phenomenon in recent

So what basic skills should a customized business finance course address? At the very least plant managers, middle mangers and supervisors should leave the course able to:

- read, understand and apply key information from the company's annual report and financial statements (income statement, balance sheet and cash flow statement);
- describe the benefit that depreciation of capital equipment has on a company's financial statements;
- analyze a company's financial health by describing the relationship between ROE, ROA, net income percent and financial leverage; and
- calculate the NPV, Internal Rate of Return (IRR) and Benefit / Cost Ratio of major capital investments in the plant.

After learning these skills, managers and supervisors begin to understand their company and its portfolio of plants. Using only a list of each plant's expenses and utilization, managers and supervisors will be able to get a general idea of the costs per unit produced and profitability of each plant. With this information, they will better understand the strategies driving the company's decisions to buy or sell various assets and they will know how their plant compares in cost per unit produced and profitability to other plants.

#### Nuts and Bolts Business Finance

Properly designed courses deliver financial knowledge to middle and upper managers in a way that prepares them to use that knowledge to make decisions. Such business finance training can be delivered in half of a day, one day, two days or three days by for-profit vendors, community colleges, university business schools and internal company training departments. Course content should cover income statements, balance sheets, cash flow statements, financial analysis and ratios, break-even analysis, and capital investment decision analysis.

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A good finance training course delivers its content in an application oriented manner, so that class participants can start using what they've learned when they walk out of the classroom. They can immediately apply the knowledge to their everyday jobs in a way that improves decision making.

This type of training is accomplished through the use of a variety of teaching techniques and media as well as large group discussions and small group exercises. Using the company's annual report and designing case studies with specific company data and realistic examples that apply sound financial reasoning also make a finance course.

realistic examples that apply sound financial reasoning also make a finance course more relevant, as does the completion of hands-on financial exercises. As with any training, good financial training also includes participant activities that maintain interest while serving as a means to review and reinforce the skills being built.

This type of training results in better decision making. That means decisions have a sound underpinning of financial reasoning so that the individual is capable of successfully defending a position if challenged. It also means that resources are directed to O&M and capital budgets to fund projects that are most appropriate for a particular plant.

Managers and supervisors who receive financial training are also able to make business decisions based on financial statement analysis, ratio analysis, break-even analysis and capital investment analysis. They may not be the person making the final decision. But they will know why decisions are made and be able to work the financial math to justify or question them. It is critical that this level of understanding be spread throughout the management of all plants to compete successfully.

# Measuring the Payback

Laurie Bassi, CEO of McBassi & Company, Inc. and former vice president of research at the American Society of Training and Development, has conducted research that identifies a link between organizational performance and investment in training. She notes that historically, there has been a real absence of information and a lack of understanding on the part of (stock) analysts about training and its impact on the marketplace. Based upon her research, Bassi has identified a firm's investment in employee training as "the single most powerful predictor of stock price we can find."

Manufacturing is a complex business, both operationally and financially, and understanding how operations impact finances and vice-versa is crucial to a plant's success. Providing financial training is something every company can do to enhance its competitive position. Every decision that involves spending money, capital or O&M, at plants must be a good decision from a financial standpoint. That happens when all employees have good business and financial acumen.

