

# **Engineering Financial Strategies, Part III**

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## Congratulations!!

Welcome to *Engineering Financial Strategies, Part III*, your do-it-yourself guide to understanding Financial Terms and Equations that works for your engineering firm.

Once you've been through this guide, you'll know precisely what it takes to write effective Engineering Financial Reports and supporting documentation. More importantly, you'll have a sample of three powerful Financial Reports to get you started.

This is the next step in your business story. From this point on, you won't have to stab in the dark – you'll have clear direction. You'll start to see some real results for your efforts.

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## How to Use this Guide

Each section covers an important aspect of your Financial Reports – these are terms and formulas used to create these reports. Understanding these reports will allow you to better understand the financial performance of your business.

You will be surprised how much this guide will reveal about your business financial efforts. It will get you to think about important issues that may have never crossed your mind in the past. It may also uncover new issues. But it is never a better time to put together or update your Engineering Financial Strategies than now.

While reading please go ahead and jot down some notes in the spaces provided. It will help to improve your Engineering Financial Plan.

Later sections will go into greater depth describing how to develop a Increasing Profitability, Decreasing Expenses, the three main Financial Reports, and Financial Indicators.

Now, it's time to get started.

Financial reports use a number of financial terms that may be unfamiliar to many engineers. Let's take a look at some of the more common terms.

## Financial Terms

**Beginning Cash Balance** – The available cash at the beginning of the period.

### Cash Received

**Cash from Operations** – (a.k.a. Operating Cash Flow) is basically the revenues minus operating expenses

**Cash Sales** – In general engineering companies provide a service. They produce products, like reports and drawings, but these items are included in the services they provide. Most cash sales for engineering companies are through retainers on service contracts.

**Cash from Receivables** – Most if not all payments made to engineering companies except Retainers are on Receivables, which are payment on invoices.

### Additional Cash Received

**Sales Tax, VAT, HST/GST Received** – These are taxes on sells. Sales tax is usually based a percentage of the sale for a product not a service. VAT is a Value Added Tax and is mostly utilized in the European Union, although United States Congress is considering the same tax. VAT is on a product and not services. HST and GST is the Canadian Harmonized Sales Tax and Goods and Services Tax. Again the United States Congress is considering adding these taxes to the tax code.

**New Current Borrowing** – This cash the company has received by borrowing from a lending institution and will pay back within a fiscal year.

**New Other Liabilities (interest free)** – These are other loans without interest. The typical interest free loans are from founders, family members, or friends.

**New Long Term Liabilities** – These are loans that will be paid back to the lender over a period longer than one year.

**Sales of Other Current Assets** – As the company grows older equipment, furniture, and other assets will be replaced with newer items. These assets were of small individual value and the costs were not depreciated over a period of several years. The sell of these assets fit this category.

**Sales of Long-term Assets** – These assets were high ticket amount that were depreciated over a period of several years.

**New Investments Received** – This is money received from investors, company owners. The money is invested in hopes that it will the company to grow, but the money is at risk.

**Cost of Goods Sold (COGS)** - COGS is the direct expense a company incurs in making a product or supplying a service such as raw materials and labor. Yes, its true engineering companies do produce products, such as technical reports and development plans. COGS are also referred to as the Cost of Sales. The COGS do not include indirect expenses such as administrative or selling expense. If a company keeps an inventory or product or raw materials, the cost of goods sold needs to account for changes to beginning and ending inventories. The cost of goods sold is calculated:

$$\text{Goods Available for Sale} = \text{Starting Inventory} + \text{Additions}$$

$$\text{Cost of Goods Sold} = \text{Goods Available} - \text{Ending Inventory}$$

**Current Liabilities** – This is a liability in the immediate future. This includes wages, taxes, and accounts payable.

**Equity** – On the company's balance sheet, the amount of the funds contributed by the owners (the stockholders) plus the retained earnings (or losses). The term is referred to as "shareholders' equity".

## **Expenditures**

**Expenditures from Operations** – These are expenses incurred for creating the product or service. This may include raw materials, labor cost, leasing equipment, and sub-consultants.

**Cash Spending** – This includes all expenses not done on credit which are shown as Accounts Payable.

## **Additional Cash Spent**

**Sales Tax, VAT, HST/GST Paid Out** – These are taxes on sells. Sales tax is usually based a percentage of the sale for a product not a service. VAT is a Value Added Tax and is mostly utilized in the European Union, although United States Congress is considering the same tax. VAT is on a product and not services. HST and GST is the Canadian Harmonized Sales Tax and Goods and

Services Tax. Again the United States Congress is considering adding these taxes to the tax code

**Principal Repayment of Current Borrowing** – This expense does not include the interest or fees on the loan. The loan period is less than one year.

**Other Liabilities Principal Repayment** – Any payments on the principal of any liabilities.

**Long-term Liabilities Principal Repayment** – Payments made on the principal of any long-term loans. Long-term loans are debts with terms longer than one year.

**Purchase Other Current Assets** – Any purchase of equipment, furniture, appliances, or other tangible items that will not be depreciated over a period of several years.

**Purchase Other Long-term Assets** – Any purchase of real estate, equipment, furniture, appliances, or tangible items that will be depreciated over a period of several years.

**Dividends Payment of Accounts Payable** – Payment of a part of a company's profits to its shareholders.

**Gross Profit Margin** – Gross profits margin are your profits for the period before operating expenses, fixed expenses, taxes, or interest. This is calculated as your sales minus your Cost of Goods Sold (COGS).

**Inventory** – Total inventory which includes normal inventory, safety stock, and work in progress. This is usually zero for engineering companies, since there are no real on the shelf products to be sold.

**Long-Term Assets** – This includes buildings and equipment (less depreciation), real estate, and other assets that are not readily turned into income or cash.

**Long-Term Liabilities** – This includes mortgage, deferred taxes, notes payable, and other long term liabilities.

**Net Cash Flow** – Amount of cash remaining after a transaction and deductions and expenses have been subtracted.

$$\text{Net Cashflow} = \text{Cash Inflows} - \text{Cash Outflows}$$

**Net Worth** – This value is known as shareholders' (or owners') equity and is determined by subtracting liabilities on the balance sheet from assets.

**Other Current Assets (Income)** – Any other income your company receives that was not through its operations. This includes the sale of appreciated property and securities.

**Pretax Margin (\$)** - Pretax margin is a ratio of the company's pretax profits divided by operating revenues.

**Pre-tax Return on Assets** - Indicates profit as a percentage of Total Assets before taxes. It is calculated by dividing a company's annual Pretax Earnings by its Total Assets. Measures a company's ability to manage and allocate resources. An indicator of how profitable a company is relative to its total assets.

**Pre-tax Return on Net Worth** - Indicates shareholders' earnings before taxes for each dollar invested. This ratio is not applicable if the subject company's Net Worth for the period being analyzed has a negative value. It is calculated by dividing a company's annual Pretax Earnings by its Total Assets. An indicator of how profitable a company is relative to its total assets.

**Sales Growth (%)** – This value indicates how fast the company is growing, and is normally indicated as a percentage growth from the prior years sales.

**Total Current Assets** – This is any cash or assets that can be quickly turned into cash. This includes prepaid expenses, accounts receivable, most securities and your inventory.

**Total Liabilities** – All liabilities including the Current Liabilities, Long-Term Debt, and any other miscellaneous liabilities the company may have.

**Working Capital (Net Working Capital)** - This ratio is calculated by subtracting Current Liabilities from Current Assets. This is another measure of cash position. Positive means the company is able to pay off short-term liabilities. Negative means the company is unable to meet its short-term liabilities.

## ***Financial Indicators***

Financial ratios are used as indicators that allow you to determine the health of your business. If used correctly you can zero in on areas of the business that may need attention. These areas may include solvency, liquidity, operational efficiency, and profitability.

### *Profitability Metrics*

Most of the Profit Ratios are based on the Income Statement. They are separated into three categories; Margin Ratios, Return Ratios, and Shareholder Earnings Ratios.

Margin Ratios

Net Profit Margin (%) – This ratio is calculated dividing Sells into Net Profit. For large engineering companies this figure maybe 10 to 12%. The profit margin indicates how much profit a company makes for every \$1 it generates in revenue. Smaller engineering companies with very little over-head cost this figure maybe 30 to 40% or even higher.

$$\frac{\text{Net Income}}{\text{Net Sales}}$$

Gross Profit Margin (%) – This figure let's us know the percentage of a company's operating revenue to sales. Operating revenue is the company's sales revenue minus the cost of good sold.

$$\frac{\text{Gross Profit}}{\text{Net Sales}}$$

Operating (Net) Profit Margin (%) – This figure let's us know what percentage of sale amounts are left after removing the Cost of Goods Sold and the Operating Costs. The net profit margin is the ratio of net profits to sales. This is the best indicator of the company's efficiency in that net profit takes into consideration all expenses of the company. You want the net profit margin to be as high as possible.

$$\frac{\text{Operating Profit}}{\text{Net Sales}}$$

Relative R&D (Research and Development) – This figure let's us know what percentage of sales the company is spending on creating new products and services for the market.

$$\frac{\text{R \& D Expense}}{\text{Net Sales}}$$

Return Ratios

Return on Assets – This figure let's us know well our Investment in Assets is performing in producing income for the company.

$$\frac{\text{Net Income}}{\text{Total Assets}}$$

Asset Turnover (Sales to Fixed Assets) – This ratio let's us know the capital-intensity of a business and how efficient the company is in producing sells with its resources. Companies that require a large infrastructure in order to produce or deliver their product, such as utility companies, require a large asset base to generate sales.

$$\frac{\text{Sales}}{\text{Fixed Assets}}$$

Return on Investment – This is the ratio that most investors will ask about. The figure yields a percentage which indicates how well the company performs at generating profit from investments.

$$\frac{\text{Net Income}}{\text{Long-Term Debt} + \text{Equity}}$$

Return on Equity – This figure shows the profits generated from the company's holdings which include stocks and retained earnings. This ratio is calculated by dividing Net Profit by Net Worth, expressed as a percentage.

$$\frac{\text{Net Profit}}{\text{Equity}}$$

### Shareholder Ratios

Earnings per Share – This figure simply show profitability per share of stock.

$$\frac{\text{Earnings Available to Common Stockholders}}{\text{Average Number of Common Shares Outstanding}}$$

Price/Earnings Ratio – The figure results in the multiplier that you may have heard a financial news program. You may hear a multiplier of 35, which means the purchaser of the stock paid 35 times the earnings per share of stock.

$$\frac{\text{Market Price per Share of Common Stock}}{\text{Earnings per Share}}$$

### *Liquidity Metrics and Working Capital*

First what is Working Capital? It simply is the difference between the company's Assets and Liabilities.

$$\text{Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

Since the company's Assets are Cash, Accounts Receivables and Inventory and the Liabilities are the Accounts Payable, the equation can be rewritten as:

$$\text{Working Capital} = \text{Cash} + \text{Accounts Receivable} + \text{Inventory} - \text{Accounts Payable}$$

Working Capital to Sales – This figure shows how the Working Capital is generating Sales. The number should as low as possible.

$$\frac{\textit{Working Capital}}{\textit{Total Sales}}$$

Working Capital Turnover – This figure is a show of efficiency; how well Working Capital is used. Since this is the same as Working Capital to Sales only flipped the higher the number the better.

$$\frac{\textit{Total Sales}}{\textit{Working Capital}}$$

Sales/Net Worth - This ratio is calculated by dividing Total Sales by Net Worth.

$$\frac{\textit{Total Sales}}{\textit{Net Worth}}$$

Current Ratio – This ratio is a measure of the company's ability to meet financial obligations and is expressed as the number of times current assets exceed current liabilities. It is determined by dividing the current assets by current liabilities based on the most recent quarter. The current ratio is used to provide guidance on a company's immediate financial health and its ability to meet current obligations. A high ratio indicates that a company can pay its creditors. A number less than one indicate potential cash flow problems.

$$\frac{\textit{Current Assets}}{\textit{Current Liabilities}}$$

Quick Ratio (Acid Test) – The equation is similar to the Current Ratio except it removes the Inventory from the Current Assets. Since the inventory generally moves much slower than Cash and Accounts Payable, the equation gets its name as quick. This ratio measures a company's ability to meet its current obligations using its most liquid assets. It is determined as the sum of cash and receivables divided by the total current liabilities. The quick ratio is another measure of a company's immediate financial condition.

$$\frac{\textit{Current Assets} - \textit{Inventory}}{\textit{Current Liabilities}}$$

Note sometimes the ratio also removes Accounts Receivables from the Current Assets. In this case the equation looks like this:

$$\frac{\text{Cash} + \text{Accounts Receivables} + \text{Short Term Investments}}{\text{Current Liabilities}}$$

Note: Most engineering companies do not have much in their inventory. They do not have a stack of designs ready to go for the next client. So usually the inventory cost is extremely low.

Inventory to Working Capital – This figure let's us know how much of the Working Capital is tied up in Inventory. A negative value for Working Capital does not give an answer. This is why it is probably better to compare this number with the value for Inventory to Current Assets.

$$\frac{\text{Inventory}}{\text{Working Capital}}$$

Days' Supply of Inventory – The figure measures how many days inventory is stored. Again for engineering companies' Inventory should be very low, and the number of days stored should be few.

$$\frac{\text{Inventory}}{\text{Cost of Goods Sold} / 365}$$

Inventory Turnover – This number gives the number of times the inventory moves in a period of time; monthly or yearly. This ratio is calculated by dividing the Cost of Sales by the average Inventory balance. The resulting Inventory Turnover ratio indicates how fast the company's products are moving on the marketplace. For the inventory ratio, a higher number is better.

$$\frac{\text{Cost of Goods Sold}}{\text{Inventory}}$$

Accounts Receivable to Working Capital - This figure let's us know what portion of the Working Capital is tied up in Accounts Receivable. The problem is that Working Capital can be negative. So this value is not very reliable.

$$\frac{\text{Accounts Receivable}}{\text{Working Capital}}$$

Days' Supply of Inventory – The figure lets us know how long to collect payments from our clients.

$$\frac{\text{Accounts Receivables}}{\text{Net Sales} / 365}$$

Accounts Receivables Turnover – This number determines how many times payments occur over a given accounting period. So if the number of turns is 4 in a year, the company is receiving payments every three months (90 days); not very good.

$$\frac{\text{Net Credit Sales}}{\text{Accounts Receivables}}$$

Bad Debt Percentage – This figure shows the expected number of accounts that will not be paid at the end of the period. For an engineering company this number should be low. If a client is not expected to pay then either drop the client or make sure they pay before they receive the deliverables. For some engineering firms this is a big problem.

$$\frac{\text{Allowance for Doubtful Accounts}}{\text{Gross Accounts Receivables}}$$

Accounts Payable to Working Capital - This figure lets us know what portion of the Working Capital is consists of Accounts Payable. The problem is that Working Capital can be negative. So this value is not very reliable.

$$\frac{\text{Accounts Payable}}{\text{Working Capital}}$$

Days' Payables Outstanding – This figure shows how long it takes us to pay our vendors; the longer the better. A number between 30 to 60 days is about right. Much longer and vendors may not want to extend credit to your firm.

$$\frac{\text{Accounts Payable}}{\text{Average Purchases per Day} / 365} = \frac{\text{Sales}}{365}$$

Payment Days - This ratio is calculated by multiplying average Accounts Payable by 365, which is then divided by new Accounts Payable.

$$\frac{\text{Average Accounts Payable}}{\text{New Accounts Payable}} \times 365 \text{ days}$$

Accounts Payable Turnover - This ratio is a measure of how quickly the business pays its bills. It divides the total new Accounts Payable for the year by the average Accounts Payable balance.

$$\frac{\text{Total New Accounts Payable}}{\text{Average Accounts Payable}}$$

Accounts Receivable Turnover - This ratio is calculated by dividing Sales on Credit by Accounts Receivable. This is a measure of how well your business collects its debts.

$$\frac{\text{Net Credit Sales}}{\text{Accounts Receivables}}$$

Collection Days - This ratio is calculated by multiplying Accounts Receivable by 360, which is then divided by annual Sales on Credit. Generally, 30 days is exceptionally good, 60 days is bothersome, and 90 days or more is a real problem.

$$\frac{\text{Accounts Receivables} \times 360}{\text{Net Credit Sales}}$$

Accounts Receivables to Accounts Payable – This number shows that the company has the necessary future revenues to pay the company’s future expenses. If you are maximizing your Working Capital the Accounts Payable will be much larger than the Accounts Receivables.

$$\frac{\text{Account Receivable}}{\text{Accounts Payable} + \text{Accrued Expenses}}$$

### Cash Ratios

The Cash Ratios are based on the Cash Flow Statement. The ratios are separated into three categories; operating cash flow, investing cash flow and financing cash flows.

Operating Cash Index – The index compares the profits to income. This index is a very good indicator for an engineering company. If this number is substantially different from 1 it means that the company is have time collecting on its invoices.

$$\frac{\text{Cash from Operations}}{\text{Net Income}}$$

Cash Ratio – This number shows that the company has the ability to its debts.

$$\frac{\text{Cash Equivalents} + \text{Martable Securities}}{\text{Current Liabilities}}$$

Cash to Working Capital – The intent of this number is to show the amount of Working Capital that is cash, but if the Working Capital is very small or negative the ratio is irrelevant. A better indicator is Cash to Current Assets.

$$\frac{\text{Cash}}{\text{Working Capital}}$$

Cash Turnover Ratio – This number shows the company how many times cash was realized in sales. The bigger the number becomes the better. Everyone wants their money working hard for them.

$$\frac{\text{Sales}}{\text{Cash} + \text{Marketable Securities}}$$

Cash Flow Ratio – This number shows whether the company is making enough cash from its sells to cover its expenses. Obviously a number greater than 1 is preferred.

$$\frac{\text{Cash Flow from Operations}}{\text{Current Liabilities}}$$

Cash to Cash Dividends – This number shows whether the company has enough Cash to cover the dividends obligations.

$$\frac{\text{Operating Cash Flow} - \text{Preferred Dividends}}{\text{Common Stock Cash Dividends}}$$

Cash Flow Adequacy Ratio – This ratio is used to answer a lot of questions about how much debt the company can take on with the Cash it is receiving form its Operations. Using the Ratio the may discern that it does not have the necessary Cash to increase its Inventory or other new debts.

$$\frac{\text{Cash from Operations}}{\text{Capital Investments} + \text{Inventory Additions} + \text{Dividends} + \text{Debt Uses}}$$

Mandatory Cash Flow Index – This number shows the company that either it has the ability to take care of its mandatory debt or not. Notice that Dividends are removed from the Cash Flow, because Dividends are not mandatory.

$$\frac{\text{Cash Used in Operations} + (\text{Cash Used for Financing Activities} - \text{Dividends})}{\text{Total Sources of Cash}}$$

Defensive Interval – This number shows the company how many days the company can continue to operate on its Current Assets. The Inventory value is removed you may not be able to sell the in a couple of days. Engineering companies usually do not have any much in inventory (Inventory = 0)

$$\frac{\text{Current Assets} - \text{Inventory}}{\text{Daily Cash Operating Expenses}}$$

Dividend Payout of Cash from Operations – This number shows whether the company can pay its Dividends from its generated Cash. You want the number to be far less than 100%

$$\frac{\text{Dividends}}{\text{Cash from Operations}}$$

Depreciation Impact Ratio – This number shows what percentage of the company's Cash from operation is actually depreciation.

$$\frac{\text{Depreciation}}{\text{Cash from Operations}}$$

Depreciation to Total Fixed Assets – This number indicates the age of fixed assets.

$$\frac{\text{Accumulated Depreciation}}{\text{Total Fixed Assets}}$$

### *Financing Ratios*

Debt to Equity – This ratio is a comparison of the right side of the Balance Sheet. Where is the company's money coming from: debt, stock, or retained earnings? If the number is larger than 1, the company maybe overburden with debit.

$$\frac{\text{Total Debit}}{\text{Total Equity}}$$

Debt Ratio – This number is another way to determine if the company is overburden with debt. This is indicated if the value is greater than 1. So you will want the Net Assets to be much larger than Total Liabilities.

$$\frac{\text{Total Liabilities}}{\text{Net Assets}}$$

Cash to Long-Term Debit – This number also determines the company's ability to pay its debts. But has some really larger debts that are to be paid off over a period of many years, the value may be much lower than 1.

$$\frac{\text{Cash and Cash Equivalents}}{\text{Long - Term Debt}}$$

Long-Term Debt Payment Ratio – The information for this formula is from the Cash Flow Statement. The number shows for the current year how much money the company received by issuing debt versus how much the company paid in obligation on the debt.

$$\frac{\text{Cash Applied to Long - Term Debt}}{\text{Cash Supplied by Long - Term Debt}}$$

Percent of Cash Sources Required for Long-Term Debt – This number shows what portion of the generated Cash is dedicated to paying the company's debt.

$$\frac{\text{Cash Applied to Long - Term Debt}}{\text{Total Sources of Cash}}$$

Short-Term Debt to All Debt Ratio – This number shows what portion of the company's Total Debt is Short-Term Debt.

$$\frac{\text{Short - Term Debt}}{\text{Short - Term Debt} + \text{Long - Term Debt}}$$

Long-Term Debt to All Debt Ratio – This number shows what portion of the company's Total Debt is Long-Term Debt.

$$\frac{\text{Long - Term Debt}}{\text{Short - Term Debt} + \text{Long - Term Debt}}$$

Cash to Current Maturities of Long-Term Debt – This number shows how much the company is obligated to pay on its Long-Term Debt right now versus how Cash it has available. The ratio determines if the company is capable of paying its Long-Term Debt.

$$\frac{\text{Cash} + \text{Cash Equivalents}}{\text{Current Maturities of Long - Term Debt}}$$

Fixed Charge Coverage – This number shows that the company has the ability to pay for its fixed charges. The Earnings should be much larger than the fixed charges. Your engineering company may need to modify the Earnings to better reflect your business.

$$\frac{\text{Earnings Before Interest, Taxes, and Lease Payments}}{\text{Interest Expense and Lease Payments}}$$

Receivables to Long-Term Debt – This number also show that the company has the ability to pay its long term debts. Once the Accounts Receivables have been collected, the company can pay the debt.

$$\frac{\text{Accounts Re ceivables}}{\text{Long – Term Debt}}$$

### Equities Ratio

Dividend Payout – This number compares how much the company has earned versus how much has been out to Dividends.

$$\frac{\text{Dividends per Common Share}}{\text{Earnings per Share}}$$

Percentage of Earnings Retained – This number also compares how much the company pays out to dividends versus the company's income.

$$\frac{\text{Net Income – All Dividends}}{\text{Net Income}}$$

External Financing Index – This number shows what percentage of the company generated Cash is from Operations versus Cash from financing and investing. The value shows whether the company is generating sufficient cash to operate on its own or if it needs external funding.

$$\frac{\text{Cash from Operations}}{\text{Total External Financing Sources}}$$

### Capital Investment Ratios

Reinvestment Ratio – This number shows whether the company is keeping its Capital Investments new. If you are hanging on to old equipment and not investing in new technology, this number will be low. If you are replacing old equipment with new technology, the number will be higher.

$$\frac{\text{Capital Investments}}{\text{Depreciation + Sale of Assets}}$$

Capital Investment per Dollar of Cash – This number indicates how much the company Cash is going towards Capital Assets. The company may want to pile-up Cash or it may want to increase its assets.

$$\frac{\textit{Capital Investments}}{\textit{Total Sources of Cash}}$$

Current Liability to Liability - This ratio is calculated by dividing Current Liabilities by Total Liabilities.

$$\frac{\textit{CurrentLiabilities}}{\textit{Total Liabilities}}$$

## About the Author

Joe Alvin Haun, PE, MSE

Joe Haun is a highly experienced Civil Engineer, author, public speaker, and business advisor who have worked in the engineering profession since 1983.

Mr. Haun's early career was in the United States Air Force as an Engineer Assistant. A Desert Storm veteran he has a unique perspective of the Middle East.

Mr. Haun graduated from the University of Las Vegas, Nevada in 1994 with a BS degree in Civil Engineering and in 1995 with a MSE in Civil and Environmental Engineering.

Mr. Haun worked with several engineering firms in the Las Vegas valley until February 2005 when open his own engineering company HAUNTEC, which has grown to a designing multi-million dollar projects in Nevada and Utah and in the countries of Iraq and Costa Rica. Review his growing company's website at [www.haunteceng.com](http://www.haunteceng.com) to see the firm's latest capabilities.

Mr. Haun has published articles in engineering magazines and has given speeches on water resources, and is currently working on several articles on permeable pavements.

In 2009, Mr. Haun started Engineering Business Seminars and Publications to. His first publication is the "Engineering Business Success." He has created many self-study engineering business seminars for Professional Development Hours credits. Visit the web-site [www.engineeringbusinesspubs.com](http://www.engineeringbusinesspubs.com) to review the latest seminars and publications.

## Recommended Reading List

Engineers are constantly learning about new techniques, products and design methods. Improving your skills as a business leader is no different. Reading books is one of the best ways to improve your skills. Below is a list of books we recommend.

- *Engineering Business Success* by Joe A Haun (book)
  - *Engineering Business Plan* by Joe A Haun (seminar)
  - *Engineering Marketing Strategies* by Joe A Haun (seminar)
  - *Engineering Operations Strategies* by Joe A Haun (seminar)
  - *Engineering Financial Strategies* by Joe A Haun (seminar)
  - *Engineering Proposal Strategies* by Joe A Haun (seminar)
  - *Engineering Joint Venture Strategies* by Joe A Haun (seminar)
  - *7 Habits of Highly Effective People* by Steven Covey
  - *First Things First* by Steven Covey
  - *Awaken the Giant Within* by Anthony Robbins
  - *Unlimited Power* by Anthony Robbins
  - *The E-Myth Revisited* by Michael E. Gerber
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  - *Dress for Success* by John T. Molloy
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