JET2 Financial Analysis

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JET2 Task 1

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JET2 Task 1

A. Financial Statement Analysis

Financial analysis refers to the assessment of the stability, solvency, liquidity, viability and profitability of a business or project. The common method for financial analysis is to compare financial ratios. The financial ratios will take past performance, future performance and comparative performance to create an overall evaluation of the company's strengths and weaknesses. We will be analyzing Competition Bikes to show the strengths and weakness by using Horizontal, Vertical, Trend and Ratio Analysis. The spreadsheet attached provides the horizontal analysis for the years 6,7 and 8 for the balance sheet and income statement for Competition Bikes and Two Wheel Racing.

A1a) Horizontal Analysis Results

Horizontal Analysis is a procedure that compares the ratios or line items in a company's financial statements over a certain period of time. This analysis will give us the dollar amount as well as the percentage of change year over year. Horizontal analysis is part one of the two ways to analyze financial statements of a business.

Income Sheet Analysis for Year 7:

Revenue

The Years 6 to 7 showed a positive result with an increase in revenue result for Competition Bikes. The Net Sales had increased by \$1,495,000 or 33%. There was a 33.3% increase in Net Sales while the Cost of Goods Sold increased to 1,048,000 (31.8% increase). This is a positive result because the net sales had increased more than the cost of goods. Since Cost of Goods typically move in tandem with the Net Sales, this positive result shows Competition Bikes found a way sell more bikes at a lower cost. This explains the increase of Gross Profit of 37.5%.

Selling Expenses

The Selling Expenses had increased by 33% for the years of 6 and 7. This is to be expected because they are variable expenses. The variables expenses are expenses due to increases in cost of production and sales. When sales and production increases so do the cost of expenses. The cost of expenses increase in sales commissions, distribution network support and transportation. Since Net Sales had increased by 33%, this shows that the 33% in variable expenses was totally to be expected. The Advertising expense had increased to 37.5% which was more than the percentage of net sales, but it appears to drop to -16% from year 7 to year 8 that means that there was a Marketing/Advertising campaign push for the years 6 to 7. Since the Website Creation and Maintenance costs have stayed the same, this has helped out the balancing of the total selling expenses with the net sales increase.

General and Admin Expenses

The General and Admin Expenses from year 6 to year 7 for Total General and Admin Expenses had increased to 20.4%. The General Admin Expenses include Administrative Salaries, Executive Compensation, Employment Taxes, Utilities, Payroll Services – Non Manufacturing, Research and Development, Depreciation, and Other General and Admin expenses. Almost all of these are considered Fixed Expenses. Fixed Expenses are relatively stable month after month, year after year and are not directly related to sales and production. With expenses only increasing by 20.4%, the gross profit of 37% is a positive result. The most notable in the General and Admin Expenses was the increased in Research and Development to 37.5%. This must be to overcome the lack of not having a chain driven product like Two Wheel Racing. The other only minor increase was the Utilities of 3.8%.

Operating Income

The Operating Income showed a positive increase in operating income. Since Gross Profit had an increase of \$447,000 from year 6 to year 7, the Total Operating Expenses had an increase to \$156,440 as expected. This shows an increase of \$191,820 or 154.6% in the Operating Income which is a significant difference between year 6 and year 7.

Interest Income (Expense)

Interest Income (Expense) Interest Income saw a 38.1% increase. This created a \$5000 drop in the Interest Expense. With the decrease of the Interest Expense and the increase of the Interest Income, it caused a decrease of 10.9% in the Net Interest.

Net Earnings

Net Earnings with the consideration of Provision For Income Taxes had a net increase of \$128,973 or 313.4%. This represents a very positive result for Competition Bikes.

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Balance Sheet Analysis for Year 7:

Assets

The Balance Sheet for Competition Bikes Assets shows how a net increase sales affects the balance sheet. The Net Increase of 33.3% in sales created a 31.5% in total current assets. It shows how increased sales have affected the Cash and Cash Equivalents. This caused a decrease of 64.6% in Cash and Cash Equivalents. This decrease was because of the increase in the Cost of Goods Sold. This increase of Cost of goods Sold and increase of sales created an increase of 164.3% in the Accounts Receivables. This is a positive for the Competition Bikes. Work in progress noticed an increase of 31,440 31.8%. Even though companies try to keep the WIP low as possible to free up capital, it is an asset that is valued more than raw materials and lower than the finished product. The decrease in Raw Materials Inventory of 15% shows that a demand for those raw materials into the WIP inventory which is a positive for Competition Bikes.

Liabilities

The Balance Sheet shows a very small increase of 1.2% for the Total Liabilities. The reason for this small increase is due to the \$128,820 192% to the Accounts and Notes Payable. This increase of Total Liabilities was tied with the drastic increase in volume of sales for this year.

Stockholders' Equity

The Total Stockholders' Equity increased by \$70,121 or 3.2%. The Retained Earnings of 170,121 or 17.4% is a large difference from the 3.2% Total Shareholders' Equity. The large difference is because the other \$100,000 went to the buyback of the 25000 shares @ 4\$ of the company's stock. This buyback reflects the decrease of the 64.6% in the Cash and Cash Equivalents section of the Balance sheet.

In General, Year 7 had a very positive outcome for Competition Bikes. The performance for the company showed marked improvement in many areas.

Income Sheet Analysis for Year 8:

Unlike the previous year, Year 8 was not as successful as year 7. A closer look at the Income Sheet and Balance Sheet will reveal the following issues.

Revenue

The Years 7 to 8 showed a negative result with a decrease in Net sales of 15%. This decrease caused a decrease in Gross Profit. Seeing how the Cost of Goods Sold only decreased by 14.5%, this could have been caused by the following things. The Storyline mentions the current economic condition (cutbacks for sponsored funded for riders and forecasts for a decline for the next 3 years). The company needs to focus on how to decrease the costs of goods sold even further. This would require cost cutting measures and evaluate their current vendors. *Selling Expenses*

The Total Selling Expenses decreased about the same amount as the Net Sales. These results are to be expected. Almost all of the Selling Expenses are variable expenses like the Net

Sales. So when the Net Sales decrease, the Selling Expenses should also decrease by the same amount. It should be noted that Advertising expenses had dropped by 16.3%. This shows that the company does not spend money and even cuts \$5,332 on advertising when there is a loss in sales.

General and Admin Expenses

The General and Admin Expenses were roughly the same previous year with only a slight decrease of 1.2%. These numbers could have been a higher even though most of these items are fixed expenses. After reviewing these General and Admin Expenses, I began to notice a negative trend. The most important is that Net Sales had dropped by 15% while the company only decreased their expenses by 1.2%. Another concern was the 16.3% \$15996 cut in Research and Development. The company should have looked at other places to cut costs instead of risking the future developments of new products. This company needs to concentrate on the Other General and Admin Expenses that had increased by \$12000 or 7.6% from the previous year. The same focus could also be applied to the reviewing the Utilities spike of 11.1% or \$15000 from the previous year to.

Operating Income/Net Earnings

The decrease in net sales has affected this section negatively. The company honestly tried to expenses under control, but this was not enough. Operating income dropped from \$315,925 to \$97,533 for a 69.1% loss. This lead to the Net Earnings to take a huge loss of 81.6% of \$138,835 from the previous year down to \$41,148. This had an extremely negative result.

Balance Sheet Analysis for Year 8:

Assets

The Total Assets between year 7 and year 8 had decreased by 0.2%. This number also matches the Total Liabilities and Equity. This Balance sheet shows a \$321,661 or 348% increase in Cash and Cash Equivalents. This increase in Cash and Cash Equivalents could be contributed to the decrease in Account Receivables by 15%. The Competition Bikes seem to have been successful in collecting their Account Receivables and this was expected due to the decrease of 15% in the net sales for the year. Accumulated Depreciation only decreased by 50% which only decreased the Net Property and Equipment by 7.8%.

Liabilities

The Total Liabilities decreased by 1.9% for this year. The Total Current Liabilities had increased by 28.5% or \$66,500. The cause of this increase was because of the Accounts, and Notes Payable had increased by 33.3% or \$65,300. This increase suggests that the company was having a hard time paying their suppliers. However, there was a decrease in the Long-term Liabilities of 5.9% which helped offset the increase in the notes and accounts payable.

Stockholders' Equity

After reviewing the Stockholders' Equity, the appears to be little change from the previous year. The only subtle change was the small increase in the Total Stockholders' Equity for \$31,286 or 1.4%. There were no buybacks like in year 6 and 7, and there was not a purchase of treasury stock during this year. When comparing the years 6 and 7 to years 7 and 8,

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Competition Bikes was not successful.

A1b) Vertical Analysis Results

Vertical Analysis also called "Common-Size" Statement Analysis is the other method used to analyze the company's financial statements. The Vertical Analysis contrasts the Horizontal Analysis by using one year's worth of entries as the baseline while every other year represents the difference in terms of changes to that baseline. Vertical Analysis shows every items as a % of a base amount. For the Balance Sheet, this is shown as a percentage of Total Assets, and for the Income Statement, this is shown as a percentage of Net Sales. Vertical Analysis gives us the ability to compare companies of different sizes. In this task, we will be identifying the strengths and weaknesses for Competition Bikes from year to year.

Income Statement Vertical Analysis for Years 6,7 and 8

Revenue

From the years 6 and 7, the Net Sales had an increase by \$1,495,000. Unfortunately for years 7 and 8, the Net Sales had decreased by \$897,000. The Cost of Goods Sold basically kept

in tandem with the decrease of Net Sales. The Cost of Goods Sold for year 6 was 73.4%, year 7 was 72.6%, and year 8 was 73%. These numbers clearly show how the Cost of Goods Sold stayed consistent the volume of sales. This proves that the Cost of Goods Sold is a variable expense and that Gross Profit should stay consistent with variable expenses. This consistency can be seen with Gross Profit being 26.6% in year 6, 27.4% in year 7 and 27% for year 8.

Selling Expenses

Selling Expenses were consistent at 6.7% for all of the years 6, 7 and 8. This shows that the Selling Expenses are a variable expense and are closely related to the Net Sales and the Sales Volume.

General and Administrative Expenses

For the General and Administrative Expenses, the expenses should be viewed as fixed expenses and will not change when the net sales changes. However, these expenses do need to be reviewed over the years for noticeable changes. When assessing the overall company's performance, these expenses are extremely important.

The most obvious expense was the Executive Compensation. In the year 6, the executive compensation was 3.8% of the Net Sales. While Net Sales increased in the year 7, so they increased their pay to the 3.75 of the Net Sales. However, for the Year 8 the amount of executive compensation stayed the same but because of the decrease in Net Sales their

percentage increased to 4.3%. This was because they did not adjust for the decrease in the Net Sales.

Total Operating Expense

The Total Operating Expenses showed a \$1,066,895 for the year 6, \$1,322,075 for year 7 and \$1,273,867 for year 8. When comparing these numbers to the net sales, it will explain why net operating incomes increased by 2.8% for year 6, increased by 5.3% for year 7 and slightly increase by 1.9% for year 8.

Net Earnings

After the Provisions For Income taxes in net earnings for the year 6, it had only increased by 0.9% for a total of S41,148. Year 7 had a net earnings increase by 2.8% or \$170,121. However, the numbers did fall significantly during year 8. The Net Earnings for year 8 decreased to 0.6% at \$31,286. Again, Year 8 did not have a successful year.

Balance Sheet Vertical Analysis for Years 6, 7 and 8

Assets

After reviewing the Balance Sheet, it became apparent that there is a very high percentage in the fixed assets "tangible assets" to the total assets. Also, another significant change was in Cash and Cash Equivalents and Accounts Receivable. In year 6, Cash and Cash Equivalents were at 6.2% or 261,000. This drastically decreased in year 7 to 2.2% at \$92,376. This finally increased in year 8 to 9.7%. Meanwhile, Accounts Receivable had some considerable changes. Accounts Receivable in year 6 was at 6.5% but increased in year 7 to

16.7%. This shows that the company was very successful at collecting accounts receivable for year 7. This success is also reflected in the increase of Cash and Cash Equivalents for year 8. However, accounts receivable did drop slightly from year 7 to year 8 to 14.2% which means they were not as collecting their money as in year 7. By the company being more aggressive with the accounts receivable, they definitely had a favorable impact on this balance sheet.

Liabilities

The most drastic changes that should be noted are in the Total Current Liabilities section of the Balance Sheet. This section gravitated towards the Accounts and Notes Payable. In Year 6, the accounts and notes payable was only at 1.6%. Then this increased to 4.6% in Year 7. By Year 8, it had hit 6.1%. This shows that the company was more concerned about collecting account receivables than paying their suppliers. This negative impact could have caused a decrease in net sales. However, Total Liabilities were still consistent because of the Mortgage Payable. The Mortgage Payable had decreased every year which appears to have help offset the increase of the Accounts and Notes Payable.

Stockholders' Equity

The Total Stockholders' Equity has had a steady increase over the years. Year 6 showed Total Stockholders' Equity at 52.5%. This increased to 53% in Year 7 and finally to 53.8% in Year 8. This definitely appears to be a positive for the Stockholders' Equity. A contributor to this success was the buybacks for Year 7 and Year 8. Another contributor was payments made on Total Long-Term Liabilities which include the Mortgage Payable. The increase in the Stockholders' Equity was attributed because of the items mentioned above more than the impact

of the company's financial health.

A1c) Trend Analysis

Trend Analysis is another way to do an analysis for Competition Bikes. Trend Analysis takes a financial item and compares it to the same item for all of the previous years. The first year is the base year for the analysis. To calculate the percentage for each item of each year, you take the current selected same item and divide it into the same base year item. This will give the percentage for that selected year. The trend that we will be looking at is the Net Sales for Competition Bikes from past performance to the future growth projection of the company. With Trend Analysis, Competition Bikes can estimate for future items "forecast" based upon past performance. This forecast will include year's 9, 10 and 11. For this analysis, they are using Year 8 as the base amount.

For Competition Bikes, it shows an increase for Year 7 and then a decrease for Year 8 in Net Sales. Year 7 had showed a strong increase of 133.3% when it was compared to Year 6. For Year 8, the amount had decreased to 113%. This was a negative trend for Competition Bikes trend analysis.

The forecasted trend analysis was also included by using the Year 8 as the base year. It shows that Competition Bikes will have an increase in net sales every year compared to Year 8. However, when viewing Year 11's forecasted Net Sales of 5,681,000, this is already considered a decrease in Net Sales compared to the Net Sales for Year 7 of 5,980,000. This forecast is a negative trend with a decrease of \$299,000 in Net Sales.

Here are some of the Strengths that should be noted from the Trend Analysis.

Competition Bikes has a very successful product in their bikes. With sixty percent of race winners using a Competition Bike's bike, this shows that they have a quality product that is reputable among the racing marketing segment. This company has demonstrated that they can prosper when their sales are increasing. Competition Bikes had a strong positive increase in Year 7 compared to Year 6. This shows that the company can be successful. Even with the decrease in Net Sales for 8 year, the company still did better than Year 6. With the exception of Year 8 slight decrease because of economic conditions, it shows that Competition Bikes is a stable company with a loyal client base with promotes their quality product.

Here are some of the Weaknesses that should be noted from the Trend Analysis. The first obvious weakness is in the Net Sales from Year 7 to Year 8. Even though Net Sales from Year 6 to Year had increased there is still the huge drop from Year 7 to Year 8. The Income Statement shows no changes for the fixed costs area. This is a real concern because the Fixed Costs did not decrease, so other areas had been decreased to offset the decrease in sales. Unfortunately, the expense that decreased was Research and Development. Another Weakness is that the Trend Analysis is showing an increase in Net Sales for every year going forward. Without the facts or data to support the reason for these increases this could be a negative because this is not assured or guaranteed. Competition Bikes only had net earnings of 31,286 for Year 8 while the Fixed Costs had increased every year since Year 6. This is a negative trend especially when sales might decrease. Unfortunately, Competition Bikes has not shown a way to reduce the Other General and Admin Expenses. At this pace, Other General and Admin Expenses will have a huge impact on the future Net Earnings for this company. This company will eventually end up operating at a loss if Competition Bikes does not reduce Other General

and Admin Expenses even if their Net Sales stay at the same level. Even though the Forecasted Trend Analysis is projected for increased Net Sales if the issue of not reducing fixed costs is not addressed this trend analysis is very negative.

A1d) Ratio Analysis

Current Ratio

The current ratio is one of the most widely used ratios in financial analysis. This ratio is calculated by taking current assets divided by current liabilities. The ratio shows how well a company can pay their current liabilities with their current assets (Horngren, 2008). Competition Bikes in Year 7 had a ratio of 5.79 and a decrease to 5.25 in Year 8. In comparison to Two Wheel Racing "Benchmark" ratio of 4.20 for Year 8, Competition Bikes showed a positive ratio. Even with the lower ratio of 5.25 in Year 8, this shows that Competition Bikes current assets are 5 times more than their liabilities. When the ratio is low, this is a signal that the company might not be in good financial health and has difficulty paying their current liabilities. Since Competition Bikes has a 5.79 for Year 7 and 5.25 for Year 8 this clearly shows that this company is very stable.

Acid-Test Ratio

Another name for the acid-test ratio is quick ratio. This ratio will tell you whether the company could pay all its current liabilities if they became due immediately. The acid-test ratio is calculated by adding cash, short-term investments, and net current receivables. You then take

this number and divide it current liabilities (Horngren, 2008). Competition Bikes had a ratio 4.41 in Year 7 and 4.41 in Year 8. Since Two Wheel Racing only had a ratio of 3.40, this looks very favorable for Competition Bikes. This positively shows that Competition Bikes could pay all of their current liabilities if they were to all of sudden become due.

Average Collection Period

The approximate amount of time that it takes for a business to receive payments owed, in terms of receivables, from its customers and clients (investopedia, n.d.). This is calculated by taking the Accounts Receivable and dividing it by the Net Sales. From that amount, then divide that number by 365. Competition Bikes had 43.8 for both Year 7 and Year8. Two Wheel Racing was 32.5 for Year 8. This shows that Two Wheel Racing was more successful at receiving payments from their customers and clients. However, this does not mean that 43.8 is not a good result for this industry.

Debt Ratio

The Debt Ratio is a ratio that indicates the proportion of debt a company has in relation to its assets. This determines the amount of the debt-load and the amount of leverage and potential risks the business faces. The Debt Ratio is calculated by taking Total Liabilities and then dividing it by Total Assets. The Competition Bikes had a Debt Ratio of 47% for Year 7 and 46.2 for Year 8. If the Debt Ratio is greater than 1, it means the company has more debt than assets. Meanwhile, if the Debt Ratio is less than 1 indicates that the company has more assets than debt. Since Competition Bikes with a ratio of 47% in Year 7 and 46.2% in Year 8 is very good. This

means Competition Bikes has more assets than debt. In comparison to Two Wheel racing which has 38%, Competition Bikes ratio is still very positive.

Gross Profit Margin

A measure of how well a company controls its costs. It is calculated by dividing a company's profit by its revenues and expressing the result as a percentage. The higher the gross profit margin is, the better the company is thought to control costs (Harvey, 2012). Competition Bikes had gross profit margin of 27.4% for Year 7 and 27% for Year 8. The Gross Profit Margin of 27% is very good for Year 8. Even though the company had a decrease in sales, the company was able to prove they could maintain this ratio by keeping the cost of goods inline. Since Two Wheel Racing is at 32.1%, a possibility could be that Competition Bikes are producing a better quality bike.

Operating Profit Margin

Operating Profit Margin exhibits a company's efficiency in controlling costs by measuring the company's pricing strategy and operating efficiency. The proportion is the amount of money left over after deducting variable expenses to pay off fixed expenses. To calculate operating profit margin, the manager needs operating income and net sales or revenue. Operating income is operating revenues minus operating expenses (McBride, 2013). To create a healthy operating margin, the company must be able to pay its fixed cost. The Operating Profit Margin is calculated by using Operating Income divided by the Net Sales. Competition Bikes

Operating Profit Margin for Year 7 was 5.3% and 1.9% in Year 8. Year 7 was very favorable amount, but 1.9% for Year 8 is very bad. The company in Year 8 had lost 3.4% of sales for every dollar in sales. Two Wheel Racing had 5.2% which was good for them. This shows that Two Wheel Racing was successful in keeping Operating Income higher than Competition Bikes.

Net Profit Margin

A Net Profit Margin is used to measure the ratio of profitability. A ratio of profitability calculated as net income divided by revenues, or net profits divided by sales. It measures how much out of every dollar of sales a company actually keeps in earnings (Profit Margin, 2013). Net Profit Margin is very useful when comparing companies in similar industries. The Net Profit Margin for Competition Bikes in Year 7 was 2.8%. This was not nearly as good as the Two Wheel Racing standard of 5.1%. However, this could be acceptable if the rest of industry had a lower ratio. For Year 8, Competition Bikes dropped to only 0.6%. This amount in not acceptable and shows a huge decrease from the previous year. This appears to be caused by Competitions Bikes decrease in sales. The problem is also compounded by the company's lack of cutting expenses to compensate for the decrease in sales. If the expenses are not brought under control, this company will have a hard time staying competitive.

Earnings per Share

Earnings per Share is another ratio used to determine profitability. Earnings per share is generally considered to be the single most important variable in determining a share's price. It is also a major component used to calculate the price-to-earnings valuation ratio (Earnings Per

Share - EPS, 2013). This ratio will provide the portion of the company's profit allocated to each outstanding share of common stock. This cannot calculate the outstanding shares of treasury stock in the Earnings per Share. The Earnings per Share is calculated by taking the Net Earnings and dividing it by the Average Common Shares. Earnings per Share for Competition Bikes in Year 7 was .017 was a positive. This was very favorable compared to the Two Wheel Racing ratio of 0.08. However in Year 8, Competition Bikes Earnings per Share had decreased to the low amount of 0.03. This is not acceptable for this company.

Return on Total Assets

The Return of Total Assets ratio will measure a company's success by using assets to earn a profit. This ratio can be calculated by adding Net Income plus Interest Expense and dividing it by the Average Total Assets. Competition Bikes in Year 7 had a rate of 4.0%. This compares pretty well versus the Two Wheel Racing ratio of 4.8%. Unfortunately, Competition Bikes decreased to 0.7% in Year 8. This decrease was caused by the slight decrease of interest expense and reductions of sales for that year.

Return on Common Equity

Return on Common Equity is one of the most popular ratios used to measure profitability. This ratio will show the relationship between Net Income and the Common Stockholder's Equity. To calculate this ratio you will subtract preferred dividends from the net income to get net income available to the common stockholders. Then you will divide that amount by average common stockholders' equity (Horngren, 2008). In Year 7, Competition Bikes had a return on

the Return on Common Equity of 7.5%. This was not as high as Two Wheel Racing's percentage of 8.1%. The 7.5% that Competition Bikes had was still a positive. In contrast, Competition Bikes had drastic decrease to 1.4% for Year 8. This was definitely not a positive change for this company.

Price / Earnings Ratio

This ratio is the ratio of the market price "investors willing to pay" of a common stock to the company's earnings per share. This amount will show what the market price of \$ 1 of earnings. The Price/Earnings ratio is calculated by taking the market price per share of common stock and divide by the company's earnings per share. The price/earnings ratio for Competition Bikes in Year 7 was 29.41. This was more than the Two Wheel Racing ratio of 29.00. Even with the P/E at 29.00 for Two Wheel Racing, Competition Bikes seem to be in the same stable position as Two Wheel Racing. However, Competition Cycles did decrease their P/E to 23.33 in Year 8. With this lower P/E ratio, this signals that investors have lost willingness to pay the previous 29.41 like in Year 7. This is very bad news and not very good Competition Bikes.

Times Interest Earned

The Time Interest Earned Ratio is a measure to determine the company's ability to honor its debt payments. This can be calculated as either EBIT or an EBITDA divided by the Total Interest Payable. This ratio shows the financial safety level to creditors. It shows whether the money the company earns is enough to cover its' interest payments. It is represented by the

number of times operating income can cover the interest expense. Competition Bikes had a 5.27 in Year 7. This is a very good ratio and shows that the company would not have a problem with paying their interest expense. Two Wheel Racing showed a 4.24 which is very good for them as well. Unfortunately in Year 8, that ratio decreased to 1.77 which shows that Competition Bikes could have a difficult time paying their interest expenses in the future. If this number goes below 1.5, the company will have problems covering their interest payments. If it drops below 1, this means the company will be unable to cover its' interest payments because it is earning less money than the amount it has to pay as interests.

A2. Working Capital

Working capital is defined as the difference between current assets and current liabilities. The working capital is available to pay your company's current debts and represents the cushion or margin of protection you can give your short-term creditors. (Working Capital, 2013) Working Capitals acts like a gauge for both the company's efficiency and its short-term financial health. Here is the working Capital for Competition Bikes for the Year 6, Year 7 and Year 8:

Year 6: Total Current Assets 1,029,303 – Total Current Liabilities 105,080 = 924,223

Year 7: Total Current Assets 1,353,044 – Total Current Liabilities 233,700 = 1,119,344

Year 8: Total Current Assets 1,575,831 – Total Current Liabilities 300,200 = 1,275,631 Competition Bikes did not have the issue or problems associated where a company might not have enough assets to exceed their current liabilities. Working Capital appears to have increased every year for Competition Bikes. This is a good trend. A company that decreases every year

would indicate that they have problems. If the problems are not resolved this could eventually leads to the company's bankruptcy. Typically, a company that has a decline in working capital is the result of a declining sales volume. A declining sales volume would result in Accounts Receivable to also decrease in size. However, this does not appear to be the issue with Competition Bikes. Competition Bikes working Capital had an increase every year since Year 6. This does not mean a problem might not exist within the company.

Working Capital can reveal the company's operational efficiency. Increases and decreases in Working Capital will also show a company that is not operating in the most efficient manner. When a company has a constant increase every year this could be operation efficiency issue. This appears to the situation for Competition Bikes. A company that appears to be doing very well in their Working Capital could have some serious issues. These issues could be from a number of problems. Money that clients and customers still owe the company that has not been paid money tied up in inventory and even the company's investing strategy.

Here are a couple of strategies to use cash and working capital to improve operations:

The first way to improve operations is by concentrating on the inventory. By lowering the inventory, this will increase the working capital that could be applied other areas of investment. Excess inventory lying around will tie up a great deal of money. A solution to this issue would to get everyone to embrace a Kaizen philosophy of improvement with a lean just-in-time supply chain system. This increase of efficiency would reduce the costly inventory and the fixed costs associated with storing that inventory while increasing the cash conversion cycle.

A second solution could be for Competition Bikes to work with suppliers to get better pricing. This could be by having price negotiations for net 30 from the current net 15. This will allow more time to free up the cash flow and increase liquidity.

The third solution would be to increase and improve collections. Competition Bikes did this successfully before in Year 7. The company should look into their collection process and see if there are others ways to improve this process.

Another good solution would be for the company to sell more shares of common stock.

The selling of common stock would increase their available capital.

Here are a few strategies to use and employ the excess capital to generate profits:

The company needs to invest in Research and Development. Even though the company had a decrease in sales, a decrease in research and development will hurt their future potential earnings because the competition might be able to produce a better developed bike. The competition is always trying to find ways to innovate and cut costs. Even though the lack of sales had cause money to be tight, the company needs to find another way to cut expenses.

Competition Bikes can quickly generate profits by increasing advertising. This is a crucial time for Competition Bikes to advertise since sales have dropped. Since Competition Bikes had decreased their advertising this also impacts on their public awareness of the product. Competition Bikes should set-up trade booths at bike races, biathlons, triathlons, sponsor race teams and even promote a race event for the riders. This should attract other professional riders in that target market.

Another way Competition Bikes can increase profits with the excess working capital is to

reinvest in the manufacturing facility. This can be accomplished by investing in updating and modernizing the equipment. This modernization can help lower the cost of labor and increase automation. Computerized Automation could decrease the labor time in manufacturing their products. It appears that Competition Bikes had not used any of their capital to improve their manufacturing process.

A3. Internal Controls

Internal controls are policies, procedures and practices that a company uses to guide its operations. Internal Controls can help the organization direct, monitor and measure their resources. If it is effective in that it means people know what they are supposed to do. Any activities are done the same time and time again because you have policies that dictate what and how things are supposed to be done. Good Internal control will have well-defined procedures with appropriate separations of duties, reviews and approvals. The separations are designed so that one person is not responsible for everything. This will ensure that the resources of the company are used appropriately.

The most common aspects of Internal Controls are to promote operational efficiency, encourage employees to follow the company policy, safeguard assets, ensure accurate and reliable accounting records. Internal Control process works best when they are specifically designed and planned for the company.

After reviewing the Competition Bikes Internal controls, there are several weaknesses that need to be addressed in the purchasing system. I would recommend the following changes to the process.

"The purchasing department will issue a purchase order to the supplier based on the monthly budget projections." This does not show where the budgeting projections are coming from. This needs to be identified so that everyone knows the person who is in charge of the projections. The process should also list the suppliers the order should be sent to. The purchasing department should not be making decisions based on the monthly projections.

"Purchasing checks with three sources for similar quality materials and selects the low bidder from the three." There needs to be some type monitoring of the three bids to ensure the bids were accepted, and the lowest one was taken. Without this monitoring, there is no way to tell if the lowest bidder got the order. The bidding process should have some type of explanation on how which bids were selected. Is the list just three random suppliers or is there an existing list? Further explanation on this process needs to be addressed.

"The purchase order is sent to the supplier by the purchasing department on the first of the projected month." This needs to be verified that the right amount was ordered. The purchase needs to be verified by someone other than the purchasing department. Most importantly was this the lowest bid accepted.

"Upon receipt of the goods they will be brought to the production line for use during the month." The receipt of the goods does not explain how they were received. Did the person that received the goods verify the amounts and quality of the product delivered? There needs to be a person assigned to ensure and check that the order was accurate. The items delivered needs to be checked against the original purchase order to know that they are getting what they have paid for.

"Any unused parts are sent to the raw materials inventory stores on the last day of the

month." Any unused parts needs to be accounted for by comparing it to the inventory that was used. This also needs to be checked to ensure that the inventory is being sent to the inventory stores. This check is to make sure that inventory is not being lost or stolen. The company needs to look into why extra unused parts are being ordered. In order to be efficient, the company needs to be lean with their inventory and have just enough inventory for that month. An evaluation of the raw materials inventory stores needs to be audited for the unused parts that could put back into the production line.

"Purchasing sends the supplier's invoice to accounting and accounting writes a check to pay the invoice." The accounting department needs to have an overseer or verification system to make sure that checks are for the right amount and are being sent out. This process would also require the comparing the purchase order to the invoice to ensure continuity of product ordering and pricing.

A3a) Recommended Corrective Actions

Competition Bikes will have to put in place a process that will help with inventory control and verification for their purchasing department. Below are the recommended steps that should be taken to ensure that the internal controls are effective.

A. A process or system should be put into place that shows the required amount of supplies that needs to be ordered. By using the previous month's data, the inventory should be compared to planned production. Once this accomplished, the requested resources should be sent to the production manager to review and approve it before sending it to purchasing.

B. An established list of suppliers should be used by the purchasing department. The purchasing department should submit a request for bids from the suppliers. The returned bids should go to another department or person to review the bids. After the review, those bids should go to the purchasing manager for a final review and selection.

- C. At the first of the month, the purchasing manager should submit the selected bid and purchase order to the chosen vendor.
- D. Once the supplies are delivered, they should be checked against the purchase order. If there are issues with the order, those issues should be addressed immediately.
 Inventory that is received should be entered into the inventory system upon approval of the order.
- E. During the usage of the supplies in production, all supplies used showed be entered in the inventory system.
- F. At the end of each month, an inventory check should be done to compare the actual inventory to the inventory system for accuracy.
- G. Leftover supplies needed to be accounted for and recorded so that they are included in the quantity decision needed for the next month.
- H. To ensure all steps are followed, the accounting needs to be held responsible. The accounting department must retain all of the required documents before the payment is prepared. The accounting manager should also be able to verify that the payment was made for the appropriate amount.

A3b) Identified Risks to the company

Based on the evaluation of the internal controls in section A3, these are the identifiable risk to the company.

- A) Supply Acquisition and Procurement: The current plan does not include oversight of the supply acquisition and attainment. It appears there is no set process on how to supplies are to be procured. This includes the amount of supplies ordered and the process on how the supplies should be ordered. There needs to be a process that prevents the over and under purchasing of supplies. This process would also include the oversight of supplies received, used and even left over at the end of the month.
- B) Supply Handling and Management: There is not a quality control process to make sure that the supplies ordered were actually received. There needs to be a quality checking system in place. This quality checking system can confirm that the right amount of supplies and quality was ordered. Competition Bikes currently does not have any accountability as to what supplies are being used and the time that were being used.
- C) Accounting Practices and Accountability: The accounting department is not assuming any type of accountability. When the accounting department get the invoice, there does not appear to be a system to show that the invoice was paid or if the correct amount was paid. The accounting department needs to compile and record all related paperwork for the order before the invoice is paid. An Accounting Manager needs to verify the invoice was sent out, and the appropriate amount was paid. Accountability and record keeping will help reduce the misallocation of funds. Each of the departments is taking on a variety risks. These risks would include inflexible

controls, poor control set-up and deficiency in management review. Competition Bikes should revamp their whole purchasing system to prevent excessive waste, efficiency abuse and even corruption.

A3bi) Risk Mitigation

Good companies know that they need to mitigate their risks. One of the best ways for mitigating risks is the implementation of an ERM system. Enterprise Risk

Management ("ERM") is a strategic business discipline that supports the achievement of an organization's objectives by addressing the full spectrum of its risks and managing the combined impact of those risks as an interrelated risk portfolio. (What is ERM?, 2013)

Competition Bikes needs to mitigate the risks that are arising from the following internal control weaknesses:

Competition Bikes will need to create a step by step system that is specifically defined to accomplish their needs. Each step of every process will be required to have a checks and balances system to ensure they are being followed. This Risk Mitigation system with all of the controls in place will be able to quickly identify areas of possible risks and failures.

The utilization of this system must be used by all employees including upper management. Every employee and manager needs to be trained properly and understand the whole process for this system to be a success.

Every step of the procedures for operations needs to be clearly defined for every employee. This would include the every invoice that is submitted to be checked for accuracy. Every shipment that is shipped will have to be checked to ensure everything is correct. Also, every check that is written will need to be reviewed for accuracy. Every process will need to be

verified and validated by a separate employee to make sure that all appropriate step were adhered to.

After every step of the process has been clearly defined, there needs to be a checks and balances system put into place to make sure everything is correct. An example of checks and balances would include checking every shipment against the invoice and then entering this information into the inventory system. This inventory system is also updated every time inventory is removed. At the end of the month, an audit of the inventory needs to be conducted to ensure that the inventory system numbers match the actual inventory on hand. This process will identify possible places of risk for failure or even areas of demand. This system will quickly identify areas of too much inventory or not enough inventory. Another aspect of this system would be able to identify incomplete shipments or order errors. Likewise, a check could have been written for the wrong amount or for inventory not ordered. It would help to make sure all inventory is received and accounted for, and every check that was written was for the correct amount. Having each step of the process reviewed and checked will help mitigate the risk to the company.

In order to control all of the possible risks, every step of the process needs to be identified and then the procedures can be put into place. After the steps are completed, the process will require someone else to overlook and review for accuracy. To ensure the accuracy on every level, there should be internal and external audits conducted to measure whether the steps are being followed. These audits should also be done to oversee the mitigating process and examine for weaknesses in the steps are also being addressed.

A4. Compliance & Sarbanes Oxley

The Sarbanes-Oxley Act was passed by congress in 2002. This act was passed to protect investors from the possibility of fraudulent accounting activities by corporations. SOX mandated strict reforms to improve financial disclosures from corporations and prevent accounting fraud. (Investopedia, 2013) There are eleven sections total in this act.

The Competition Bikes annual report state that they are using the criteria set forth by the COSO Committee of Sponsoring Organization of the Treadway Commission. It appears from the description that Competition Bikes is doing the very bare minimum that is required of them. This company does not appear to have a functioning plan in process and claims to delivery "reasonable" assurance to their internal control system. Competition Bikes did not state if they have their audit controls in place except for the annual requirement for the Philadelphia Stock exchange. The statement does not identify the person responsible for overseeing the purchasing or accounting processes. Competition Bikes has not shown any required financial controls except the very basic compliance within the COSO internal control-integrated framework. There is also nothing stated about their security of the company's financial records.

Competition Bikes claims to have certain internal controls but never mentions the department or individuals that are responsible for those internal controls. This leads me to believe that there are many items that are not being met. Here are the items that should be discussed or met are:

Competition Bikes has a process for the receiving and ordering component parts.

However, the statement never mentions the responsible parties for establishing and maintaining

adequate internal control.

Competition Bikes says they have a reasonable framework for compliance without identifying the framework used by management to evaluate the effectiveness of the internal controls.

This company does not give reasonable assurance that the company's transactions are recorded within the Generally Accepted Accounting Principles GAAP.

The company cannot provide reasonable assurance of prevention and/or detection of misstatements on their financial statements but "believe" that their company's internal controls are effective.

A4a) Recommend Corrective Actions for Noncompliant Areas

Here are the Non-compliance corrective actions that Competition Bikes needs to make bring the company into compliance.

Competition Bikes needs to work on overhauling the purchasing, inventory control and financial processes. This overhaul should be done very soon so that the company certified that they are in complete compliance with the SOX requirements. Even though the company states they use the COSO internal control –integrated framework, they should review the system completely and then effectively apply it to their company.

Competition Bikes needs to create a comprehensive plan that involves every department of the business process. This comprehensive plan must be documented where it can be verified by all of the company's employees. Every step of any process must have a checks and balances system. In order to ensure every step is followed, documentation should be noted at each step. This will help confirm every step has been followed appropriately. In conjunction with self

checks, there should be other human checks to possibly identify what the self checker might have missed. Self checking the inventory quantities can see if the quantities match on the system records and even reference specific invoices. A system should be able to reference all aspect of the Competition Bikes operations. As a result, the system will be able to immediately provide accurate real time data to management and comprehensive information for the auditors.

References

Earnings Per Share - EPS. (2013). Retrieved from Investopedia:

http://www.investopedia.com/terms/e/eps.asp

Harvey, C. R. (2012). *Gross profit margin*. Retrieved from The Free Dictionary:

http://financial-dictionary.thefreedictionary.com/Gross+Profit+Margin

Horngren, C. H. (2008). Accounting 8e. Prentice Hall; 8 edition (December 12, 2008).

Investopedia. (2013, October 26). Sarbanes-Oxley Act Of 2002 - SOX. Retrieved from

Investopedia: http://www.investopedia.com/terms/s/sarbanesoxleyact.asp

investopedia. (n.d.). Average Collection Period. Retrieved from Investopedia:

 $http://www.investopedia.com/terms/a/average_collection_period.asp$

McBride, C. (2013). How to Calculate the Operating Profit Margin. Retrieved from Chron:

http://small business.chron.com/calculate-operating-profit-margin-826.html

Profit Margin. (2013). Retrieved from Investopedia:

http://www.investopedia.com/terms/p/profitmargin.asp

 $\textit{What is ERM?} \ (2013). \ Retrieved \ from \ RIMS: http://www.rims.org/erm/pages/WhatisERM.aspx$

Working Capital. (2013, October 26). Retrieved from SBA.gov:

http://www.sba.gov/content/working-capital