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Gestão de empresas

Enterprise Management

Jones Electrical Distribution

Case Study 1

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Case Study Introduction

Jones Electrical Distribution (**JED**) sells electrical components and tools to customers (namely general contractors and electricians) and is entirely owned by Nelson Jones.

The company managed to **build up sales volume** and **show profit**. For the competitive business sake, Jones maintained tight control over operating expenses, paying salesforce mostly on commission, keeping overhead to a minimum and taking advantage of quick payment discounts. This profit allowed Jones to expand his inventory greatly to try to meet demand forecasts.

Nevertheless, the company faced a **shortage of cash** and now needs a **larger loan** from a new bank (Southern Bank & Trust) terminating the relationship with Metropolitan Bank.

Case Study Introduction

Facing a desperate need for **more financing** and **tense relationships** with suppliers, due to the scarce amount of purchase discounts taken recently, Jones now needed to **plan** the company’s future **carefully**.

This case study aims to **provide strong and informed recommendations** to JED as an attempt to fix the current state of business and set up a robust scenario for the company’s future.

Problem Identification

Jones Electrical Distribution has been having a good performance, to the point where Jones decided to pursue an aggressive sales growth strategy by increasing their inventory.

However, due to poor cash management (as we will explain further in the presentation), the amount of cash that the company has available has reached critical numbers. The profits aren't keeping up with the increasing expenses of the company's growth and it is reaching its credit limit from Metropolitan Bank.

Nelson Jones has the option to accept an extension of his line of credit from a new bank (Southern Bank & Trust), or consider other financing options. Not only that, the company must decide if it is still worthwhile pursuing a rapid sales growth instead of a Slow/No Sales Growth and if chasing the 2% discounts does more harm than good for the company.

Answered Questions

Questions in case study 1 moodle section

1 Jones Electrical Distribution has a profit of $30.000 per year. Why does it need a bank loan?

Jones Electrical Distribution has been experiencing increasing values of Gross Profits (an increase of 17% in net sales) however, this is not enough. Looking at the company's numbers, we can see that there was a 14% increase in Accounts Receivable and an increase in inventory of 36% . We can identify two main problems here:

- The increase in Accounts Receivable is increasing more than profits which makes it unsustainable. The company is not being paid on time which is hurting the amount of cash the company has, which is specially bad when pursuing the 2% discounts from the suppliers
- The company has an unsustainable amount of inventory which is increasing higher than sales, meaning there is too much money being spent on inventory

These two problems led to a shortage of cash and for JED to continue its rapid sales growth it will require a new bank loan.

	2005	2006	Increase
Inventory	$278	$379	36%
Accounts Receivable	$231	$264	14%

2 What drove the increase in Jones' accounts receivable and inventory balances in 2005 and 2006?

Jones' business experienced an increase in both accounts receivable and inventory in from 2004 to 2006, totaling 77.000$ and 136.000$ respectively. Looking at inventory:

Inventory was increased by the growing sales volume of Jones' business. As sales increased, Jones was forced to keep more items in stock to meet the demand for his products and avoid being outcompeted by the larger players in the market that could always meet this demand.

Inventory at the end of 2006 stood at 379$. With an increase of 35.000 in 2005 and 101.000 in 2006, we see a 56% increase in the 2 year period. The inventory growth in 2006 in particular seems disproportionate to the net income rise during this period.

It stands to reason that this contributed greatly to the shortage of cash that Jones finds himself experiencing.

Regarding accounts receivable, they are increasing at a more steady rate. These are assets that are not useful to cover the short term cash needs for inventory purchasing of JED.

3 How well is “Jones Electrical Distribution” performing? Do a complete financial analysis.

Components:

- Vertical Income Statement analysis
- Profitability Ratios
- Efficiency Ratios
- Liquidity
- Financial Stability

3

How well is "Jones Electrical Distribution" performing? Do a complete financial analysis.

Vertical Income Statement analysis

Vertical Income Statement analysis				
	2004	*2005*	*2006*	*2007 (1st Quarter)*
Sales	100.00%	100.00%	100.00%	100.00%
Cost of goods sold	80.30%	80.11%	81.09%	82.07%
Gross profit on sales	19.70%	19.89%	18.91%	17.93%
Operating expense	16.75%	16.02%	15.48%	15.46%
Net income	0.86%	1.51%	1.34%	0.82%

Rising as discount is lost

Decreasing as discount is lost

Decreasing steadily

Increase from 2004 to 2005

Unrepresentative of full year as most sales are in the summer season

3

How well is “Jones Electrical Distribution” performing? Do a complete financial analysis.

Profitability Ratios

Profitability Ratios				
	2004	*2005*	*2006*	*2007 (1st Quarter)*
Return on Sales	0.86%	1.51%	1.34%	0.82%
Return on assets	2.38%	4.36%	3.83%	2.31%
Return on equity	7.61%	13.62%	12.35%	8.06%

The drop from 2005 to 2006 stands as less relevant than the general tendency depicted by the greater rise from 2004 to 2005

Full column unrepresentative of 2007 as most sales are in the summer season

3

How well is “Jones Electrical Distribution” performing? Do a complete financial analysis.

Efficiency ratios

Efficiency Ratios				
	2004	*2005*	*2006*	*2007 (1st Quarter)*
Inventory Turnover	6.68	6.89	5.92	5.63
Total asset Turnover	2.76	2.88	2.86	2.81
Age of inventory	54.62	52.96	61.70	64.84

2006’s dip explained by 100.000$ inventory growth to stay competitive

Stability indicative that inventory growth was positive

Inventory growth

As efficiency ratios stay stable even in possibly the worst quarter of the year (Farthest from the summer season) we can conclude that the relative seasonality of the business does not pose a problem to its year-round operations

3

How well is "Jones Electrical Distribution" performing? Do a complete financial analysis.

Liquidity Ratios

Liquidity Ratios				
	2004	*2005*	*2006*	*2007 (1st Quarter)*
Current ratio	2.14	1.91	1.64	1.54
Quick (Acid test) ratio	1.05	0.97	0.71	0.66
Working Capital	$253	$268	$259	$265

More than enough to cover short term Liabilities

Dependency on inventory

Positive

With a positive working capital, a stable current ratio, and a quick ratio that's paired with the previously seen very high inventory turnover, Jones Electrical Distribution is more than able to cover its short term liabilities.

3 How well is “Jones Electrical Distribution” performing? Do a complete financial analysis.

Financial Stability

Financial Stability				
	2004	*2005*	*2006*	*2007 (1st Quarter)*
Equity to assets	0.31	0.32	0.31	0.29
Debt to equity	2.20	2.12	2.23	2.49

Stable even with growing liabilities

Not ideal but stable

While not ideal, the stability of these ratios shows that the growth of Jones Electrical Distribution has not been fueled by a loss of control over the expected payment of its long term liabilities. This insight is valuable to Southern Bank & Trust’s, as there is an expectation of return on their investment.

3 How well is "Jones Electrical Distribution" performing? Do a complete financial analysis.

Then how well is Jones Electrical Distribution performing?

We assess that the performance of the company is positive, but recognize that relevant insights on this area would be gained by comparing the obtained results with industry averages. Adding to this, other financial ratios would be available for analysis with more complete information.

Regardless, the stability of the analysed ratios paired with the growth of the business allows us to confidently predict the success of the business, particularly while maintaining good inventory management.

4

Jones is asking for a $350.000 line of credit for 2007. Is this value adequate? Make the projections for 2007 using the auxiliary spreadsheet.

Considering the data from 2006, it’s expected for Jones Electrical Distribution to increase its net sales (to an expected $2.700.000). Given a situation in which Jones discards the trade discounts, the cost of goods sold increases to $2.244.000, whereas if Jones takes the trade discounts, it only increases to $2.190.000. This led to a gross profit growth from $424.000 to $510.000, in the case of taking discounts, or to $456.000 in the case of discarding them.

This leads to a net income of $40.000 (with trade discounts) and $5.000 (without trade discounts).

4 Jones is asking for a $350.000 line of credit for 2007. Is this value adequate? Make the projections for 2007 using the auxiliary spreadsheet.

Given the desired sales growth for 2007, the $350.000 line of credit is only adequate for the case in which Jones discards the trade discounts, as the payable line of credit in this situation is $346.000, lower than what Southern Bank & Trust is willing to offer.

In the case in which Jones takes the discounts, the payable line of credit is $424.000. Since that exceeds the maximum amount of credit the bank is able to borrow, that is $350.000, then this is an inadequate scenario.

4

Jones is asking for a $350.000 line of credit for 2007. Is this value adequate? Make the projections for 2007 using the auxiliary spreadsheet.

	2006	December 31, 2007P	
		Take Discounts	Skip Discounts
Accounts receivable	$264	$318	$318
Inventory	$379	$456	$467
Accounts payable	$120	$60	$184
Line of credit payable	$249	$424	$346
Accrued expenses	$14	$14	$14
Long term debt, current portion	$24	$24	$24
Current liabilities	$407	$523	$568
Property, net	$118	$118	$118
Total assets	$784	$915	$926

75% Accounts receivable	$198	$238,5	$238,5
50% Inventory	$ 189,5	$228	$233,5

5 What could Jones do to reduce the size of the line of credit he needs? And what if the bank refuses the loan, what can Jones do?

JED should continue to rely heavily on **trade credit** and **slow down sales growth** to a sustainable level.

Trade credit offers a competitive edge over firms who pay upfront, because of the flexibility it brings to the business. It also brings good reputation. Sales growth can be overwhelming to a certain extent for JED as the increase in sales demands vast resources that may create instability and bring a lot of uncertainties to Jones' business. Slowing down the sales growth to a sustainable level leaves financial stability less at risk.

If the bank refuses the loan Jones should attempt raising funds through **equity investments** which is a process of raising capital through the sale of shares of ownership in the business in return for cash.

	2005	2006
Trade Credit	$6	$77

Recommendations

In order to achieve a balanced financial state, Mr. Jones has several alternatives:

1. The most viable, and the one that provides the safest way to balance the finances, is to accept the Southern Bank & Trust's offer for a line of credit. This would mean that **JED** should discard the supplier discounts, as these impede the company from taking the line of credit, and the short invoice payments within 10 days, necessary for the discounts to apply, don't allow for a more flexible management of inventory and production. As an extension for this approach, **JED** could negotiate larger invoice payment deadlines.

2. As a secondary approach, **JED** could seek outside investment by selling company shares. This in turn leads to a decrease in the strength of ownership of the company, but would also allow for the investors to share recommendations and improve the company's management.

Recommendations

In order to achieve a balanced financial state, Mr. Jones has several alternatives:

3. Seeing as the cost of goods sold is increasing at a faster rate than net sales, it would be advisable to seek better ways to manage inventory, making the company's growth much more sustainable.

4. A less desirable alternative would be to reduce the company's growth rate, by reducing the inventory available, as subsequent sales. This allows for a more gradual approach to the company's financial growth.