



the Autonomous Management School of
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Case Report: Thomas Quinn Manufacturing

Financial Accounting

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1 Analysis of the events of the first year of operations

- A. TQM would sell 100 duplicators during the first year. The sale price of the duplicator would be \$ 12.000.
→ Total sale price of the duplicators during the first year would be \$ 1.200.000.

An estimated 75% of the sales would be collected during the year of sale, and the remaining 25% during the following year.

- 75% of \$ 1.200,000 = \$ 900.000 would be collected during the first year,
25% of \$ 1.200.000 = \$ 300.000 would be collected during the following year.

- B. Raw materials totaling \$ 342.000 would be purchased and paid for in the first year of operations.

- During the first year there would be a payment in cash of \$ 342.000 in order to purchase the raw materials.

- C. The firm would make the required interest and principal payments on the bank loan.

- During the pre-production stage of the company, TQM obtained a five-year \$ 25.000 loan (notes payable in pre-production Balance Sheet) from the bank. The loan was to be repaid in five equal annual installments, plus 12 percent interest payable annually.

This means that this year (and the next four years) TQM has to repay an annual installment of $\$ 25.000/5 = \$ 5.000$.

Furthermore, as the outstanding amount of the loan during the first year is \$ 25.000, TQM has to pay an interest of 12% of $\$ 25.000 = \$ 3.000$.

- D. Direct labour costs for production in the first year would be \$ 48.000. Selling and marketing costs were estimated to be \$ 450.000. General and administrative expenses would amount to \$ 120.000. All these expenses would be paid during the year.

- During the first year expenses would be paid in cash for a total amount of \$ $48.000 + \$ 450.000 + \$ 120.000 = \$ 618.000$.

- E. Additional equipment costing \$ 165.000 would be purchased and paid for near the beginning of the year.

- During the first year there would be a payment in cash of \$ 165.000, in order to purchase the additional equipment.

- F. Raw materials on hand at the end of the first year would total \$ 16.000.

- After event B , raw materials are totaling \$ 4.000 (asset at the beginning of the first year – see pre-production Balance Sheet) + $\$ 342.000 = \$ 348.000$. As we have no information in what way the raw materials are decreasing from \$ 348.000 to \$ 16.000, we consider the decrease as an expense.

- G. The equipment and software were estimated to have a six-year life and a 15-year life, respectively.

- At the end of the first year we would have to make an adjustment to the value of the assets equipment and software.

Near the beginning of the year equipment would be totaling \$ 15.000 (asset at the beginning of the first year – see pre-production Balance Sheet) + \$ 165.000 = \$ 180.000. Software would be totaling \$ 30.000.
 The depreciation of the equipment at year-end would be \$ 180.000/6 = \$ 30.000.
 The depreciation of the software at year-end would be \$ 30.000/15 = \$ 2.000.

- H. The firm would keep no finished inventory of duplicators on hand.
- I. Income taxes were estimated to be 35% of the pre-tax income.
- J. TQM would pay a cash dividend of \$ 0.35 a share.
 → As there are 400.000 shares of TQM, the total dividend to be paid in cash would be 400.000 x \$ 0,35 = \$ 140.000.

2 Open the ledger accounts with their unadjusted balances

| ASSETS | | | |
|--|---|--|--|
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">cash</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;">\$ 516.000,00</div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">raw materials</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;">\$ 4.000,00</div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">equipment</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;">\$ 15.000,00</div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">software</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;">\$ 30.000,00</div> |
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">accounts receivable</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">accr deprec equipment</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">accr deprec software</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | |
| LIABILITIES | | | |
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">notes payable</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;">\$ 25.000,00</div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">tax payable</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | | |
| STOCKHOLDER'S EQUITY | | | |
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">common stock</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;">\$ 540.000,00</div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">dividends</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | | |
| REVENUE | | | |
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">sales revenue</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | | | |
| EXPENSES | | | |
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">interest expense</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">labour expense</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">selling and marketing exp</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">general and admin expense</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> |
| <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">material expense</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">depr. expense-equipment</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">depr. Expense-software</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> | <div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">income tax expense</div> <div style="border-bottom: 1px solid black; padding: 2px 5px;"></div> |

3 Journal entries

Based upon the analysis of the operations during the first year, the following journal entries can be made.

| event | journal | debit | credit |
|-------|--|---------------------------------------|------------------------|
| A | cash accounts receivable revenue | \$ 900.000 \$ 300.000 | \$ 1.200.000 |
| B | raw materials cash | \$ 342.000 | \$ 342.000 |
| C | notes payable interest expense cash | \$ 5.000 \$ 3.000 | \$ 8.000 |
| D | direct labour costs selling and marketing costs general and administrative expenses cash | \$ 48.000 \$ 450.000 \$ 120.000 | \$ 618.000 |
| E | equipment cash | \$ 165.000 | \$ 165.000 |
| F | raw materials expense raw materials | \$ 330.000 | \$ 330.000 |
| G | depreciation expense - equipment accumulated depreciation - equipment depreciation expense - software accumulated depreciation - software | \$ 30.000 \$ 2.000 | \$ 30.000 \$ 2.000 |
| H | | | |
| I | income tax expense cash tax payable | \$ 75.950 | \$ 30.380 \$ 45.570 |
| J | dividends cash | \$ 140.000 | \$ 140.000 |

4 Posting in the ledger accounts

All entries are posted in the ledger accounts as follows.

ASSETS

| cash | |
|--------------------|-------------------|
| \$ 516.000,00 | |
| (A) \$ 900.000,00 | |
| | \$ 342.000,00 (B) |
| | \$ 8.000,00 (C) |
| | \$ 618.000,00 (D) |
| | \$ 165.000,00 (E) |
| | \$ 30.380,00 (I) |
| | \$ 140.000,00 (J) |
| Bal. \$ 112.620,00 | |

| raw materials | |
|-------------------|-------------------|
| \$ 4.000,00 | |
| (B) \$ 342.000,00 | |
| | \$ 330.000,00 (F) |
| Bal. \$ 16.000,00 | |

| equipment | |
|--------------------|--|
| \$ 15.000,00 | |
| (E) \$ 165.000,00 | |
| Bal. \$ 180.000,00 | |

| software | |
|-------------------|--|
| \$ 30.000,00 | |
| Bal. \$ 30.000,00 | |

| accounts receivable | |
|---------------------|--|
| (A) \$ 300.000,00 | |
| Bal. \$ 300.000,00 | |

| accr deprec equipment | |
|-----------------------|------------------|
| | \$ 30.000,00 (G) |
| Bal. \$ 30.000,00 | |

| accr deprec software | |
|----------------------|-----------------|
| | \$ 2.000,00 (G) |
| Bal. \$ 2.000,00 | |

LIABILITIES

| notes payable | |
|-------------------|--------------|
| | \$ 25.000,00 |
| (C) \$ 5.000,00 | |
| Bal. \$ 20.000,00 | |

| tax payable | |
|-------------------|------------------|
| | \$ 45.570,00 (I) |
| Bal. \$ 45.570,00 | |

STOCKHOLDER'S EQUITY

| common stock | |
|--------------------|---------------|
| | \$ 540.000,00 |
| Bal. \$ 540.000,00 | |

| dividends | |
|--------------------|--|
| (J) \$ 140.000,00 | |
| Bal. \$ 140.000,00 | |

REVENUE

| sales revenue | |
|----------------------|---------------------|
| | \$ 1.200.000,00 (A) |
| Bal. \$ 1.200.000,00 | |

6 Financial statements

6.1 Income statement

Income Statement

| | | |
|-----------------------------|---------|-----------------------|
| Sales | | 1,200,000 |
| Less Cost of Sales: | | |
| Raw Materials | 330,000 | |
| Direct labour | 48,000 | |
| Depreciation Software | 2,000 | |
| Depreciation Equipment | 30,000 | |
| Cost of Sales | | <u>410,000</u> |
| Gross Margin | | 790,000 |
| Operating Expenses: | | |
| Sales & Marketing | 450,000 | |
| General | 120,000 | |
| Operating Expenses | | <u>570,000</u> |
| Operating Income | | 220,000 |
| Other revenues(expenses) | | |
| Interest Expense | -3,000 | |
| Other Revenues and Expenses | | <u>-3,000</u> |
| Net Income before taxes | | <u>217,000</u> |
| Less: Income Tax | | <u><u>-75,950</u></u> |
| Net Income | | 141,050 |

6.2 Statement of retained earnings

| | |
|--|-------------------|
| Thomas Quinn Manufacturing Statement of Retained Earnings for the year ended December 31, 200X | |
| Retained Earnings 1/1/200X | \$ - |
| Net Income | \$ 141.050 |
| | <u>\$ 141.050</u> |
| Dividends | \$ 140.000 |
| Retained Earnings 12/31/200X | \$ 1.050 |

6.3 Balance Sheet

| ASSETS | | LIABILITIES AND SHAREHOLDERS' EQUITY | |
|---------------------------------|----------------|--------------------------------------|----------------|
| Current Assets | | Current Liabilities | |
| Cash | 112,620 | Notes Payable Next Year | 5,000 |
| Accounts Receivable | 300,000 | Taxes Payable | 45,570 |
| Raw Materials | 16,000 | Current Liabilities | 50,570 |
| Total Current Assets | 428,620 | Non Current Liabilities | |
| Non Current Assets | | Notes Payable | 15,000 |
| Equipment | 180,000 | Non Current Liabilities | 15,000 |
| Less: Depreciation Eq | -30,000 | Total Liabilities | 65,570 |
| Software | 30,000 | | |
| Less: Depreciation So | -2,000 | Shareholders' Equity | |
| Total Non Current Assets | 178,000 | Common Stock | 540,000 |
| | | Retained Earnings | 1,050 |
| | | Shareholders' Equity | 541,050 |
| Total Assets | 606,620 | Total Liabilities and S.E. | 606,620 |

6.4 Cash flow statement

Cash Flow Statement

| | |
|--|-------------------|
| Cash Flows - Operating activities | |
| Net Income | \$ 141,050 |
| Adjustments to reconcile net income to net cash provided by operating activities | |
| Depreciation | 32,000 |
| Changes in operating working capital | |
| Accounts receivable | -300,000 |
| Raw Materials | -12,000 |
| Tax Payable | 45,570 |
| Net change in operating working capital | -266,430 |
| Net cash provided by operating activities | -93,380 |
| Cash Flows - Investing Activities | |
| Buying Equipment | -165,000 |
| Net cash used in investing activities | -165,000 |
| Cash Flows - Financing Activities | |
| Repayments of long term debt | -5,000 |
| Dividends paid | -140,000 |
| Net cash used in financing Activities | -145,000 |
| Net (Decrease) Increase in Cash and Cash Equivalents | -403,380 |
| Cash and Cash Equivalents - Beginning of Year | 516,000 |
| Cash and Cash Equivalents - End of Year | \$ 112,620 |