Financial and Legal Management

Chapter 8

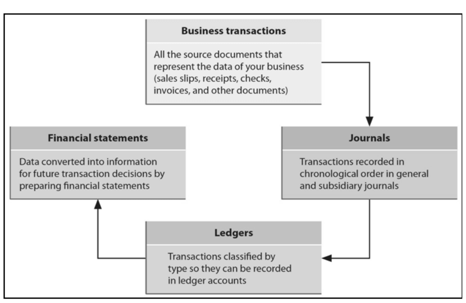
Accounting Records and Financial Statements

Small Business Accounting

- Information
  - Is data from source documents (like invoices, sales receipts, bills, and checks) that is organized in a meaningful and useful way.
  - Is used by managers to make business decisions.
- The Importance of Accounting
  - The accounting process helps translate numbers—the language of business—into plain English.

Source: Hatten, Small Business Management, 4th Edition

Figure 8.1: The Accounting Process



Source: Hatten, Small Business Management, 4th Edition

Small Business Accounting (cont'd)

- Starting the Accounting Process
  - Purchase a simple accounting software package.
  - Use the services of a professional who specializes in developing accounting systems for small businesses.
  - Consult an accountant about the firm's requirements under the Sarbanes-Oxley Act.
- Importance of Financial Records
  - Prevent mismanagement
  - Focus on key issues and threats

4 Source: Hatten, Small Business Management, 4th Edition

How Important Are Financial Records?

- Accurate Information for Management
  - Value and age of accounts receivable
  - How quickly and what inventory is turning over
  - How much debt is owed and when it is due
  - How much is owed in taxes and FICA
- Banking and Tax Requirements
  - Information on financial statements is needed to prepare tax returns.
  - Bankers and investors use financial statements to evaluate the condition of the business.

5 Source: Hatten, Small Business Management, 4th Edition

Small Business Accounting Basics

- Double-Entry Accounting
  - Transactions are recorded as debits and credits in both an asset account and a liability or owner's equity account such that the accounts will balance.
- Asset
  - A resource owned and with a useful benefit
- Liability
  - A debt owed to another organization or individual
- Owner's Equity
  - What the business owner would receive if all assets were sold and all of the liabilities were paid.

6 Source: Hatten, Small Business Management, 4th Edition

Small Business Accounting Basics (cont'd)

- Single Entry Accounting
  - Records income and expenses in a running log— "checkbook accounting".
  - Is a simple but not a self-balancing system.
  - Does not produce a balance sheet, an income statement, or other financial records.

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Source: Hatten, Small Business Management, 4th Edition

Small Business Accounting Basics (cont'd)

- Accounting Equations
  - Balance Sheet:
    - Assets = Liabilities + Owner's Equity
  - Income Statement:
    - Profit = Revenue – Expenses
  - Cash Flow Statement:
    - Cash flow = Receipts – Disbursements

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Source: Hatten, Small Business Management, 4th Edition

Small Business Accounting Basics (cont'd)

- Generally Accepted Accounting Principles (GAAP)
  - Standards established by the Financial Accounting Standards Board (FASB) so that all businesses produce comparable financial statements.
  - Flexibility in GAAP methods is acceptable as long as consistency is maintained within the business.

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Source: Hatten, Small Business Management, 4th Edition

Small Business Accounting Basics (cont'd)

- Journal
  - A chronological record of transactions (debit and credits) of a business
    - Sales, purchases, cash receipts, cash disbursements
- General Ledger
  - A record of transactions divided into accounts; usually compiled at the end of each month
  - At the end of the accounting period or fiscal year, each individual account is closed and totaled in the general ledger.

Source: Hatten, Small Business Management, 4th Edition

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Financial Statements

- Income Statement
  - Shows revenue and expenses (profit and loss) of a firm for a given period:
    - Net Sales
    - Cost of Goods Sold
    - Gross Margin
    - Expenses
    - New Income (or loss)
  - Equation:
    - Profit = Revenue – Expenses
  - Common-size financial statement
    - A percentage breakdown of each item of expense as the item relates to sales.

Source: Hatten, Small Business Management, 4th Edition

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Figure 8.2: Stereo City Income Statement

		Percentage of Sales
INCOME		
Net Sales	$450,000	100.00
Cost of Goods Sold	270,000	60.00
GROSS PROFIT ON SALES	$180,000	40.00
EXPENSES		
Selling Expense		
Advertising	$ 12,000	2.67
Delivery and Freight	10,000	2.22
Sales Salaries	25,000	5.56
Miscellaneous Selling Expenses	1,000	0.22
Administrative Expense		
Licenses	$ 150	0.03
Insurance	2,400	0.53
Nonsales Salaries	38,000	8.44
Payroll Taxes	6,300	1.40
Rent/Mortgage	12,400	2.76
Utilities	6,000	1.33
Legal Fees	1,500	0.33
Depreciation	42,000	9.33
Miscellaneous Administrative Expenses	500	0.11
TOTAL EXPENSES	$157,250	34.94
INCOME FROM OPERATIONS	$ 22,750	5.06
OTHER INCOME		
Interest Income	$ 300	0.07
OTHER EXPENSES		
Interest Expense	$ 15,000	3.33
NET PROFIT (LOSS) BEFORE TAXES	$ 8,050	1.79
INCOME TAXES	$ 3,220	0.72
NET PROFIT (LOSS) AFTER TAXES	$ 4,830	1.07
NOTE:		
Cash Flow from Operations Equals Net Profit or Loss After Taxes plus Depreciation	$ 46,830	

Source: Hatten, Small Business Management, 4th Edition

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Financial Statements (cont'd)

- Balance Sheet
  - Provides a "snapshot" of the business at a given moment.
  - Sections include:
    - Assets
    - Liabilities and owner's equity (capital)
  - Equation:
    - Assets = Liabilities + Capital
  - Common-size balance sheet
    - Percentages of assets, liabilities and equity indicate accounts and areas that are out of line compared to industry averages.

13 Source: Hatten, Small Business Management, 4th Edition

Figure 8.3a: Stereo City Balance Sheet

ASSETS		Percentage of Total Assets
Current Assets:		
Cash	$ 3,500	1.08
Accounts Receivable	12,000	3.71
Inventory	125,000	38.64
Prepaid Expenses	5,000	1.55
Short-Term Investments	10,000	3.09
Total Current Assets	$155,500	48.07
Fixed Assets:		
Building	$150,000	46.37
Equipment	25,000	7.73
Leasehold Improvements	20,000	6.18
Other Fixed Assets	15,000	4.64
Gross Fixed Assets	$210,000	64.91
Less: Accumulated Depreciation	42,000	12.98
Net Fixed Assets	$168,000	51.93
Total Assets	$323,500	100.00

14 Source: Hatten, Small Business Management, 4th Edition

Figure 8.3b: Stereo City Balance Sheet (cont'd)

LIABILITIES AND OWNERS' EQUITY		Percentage of Liability and Equity
Current Liabilities:		
Accounts Payable	$ 75,000	23.18
Accruals	7,500	2.32
Current Portion of Long-Term Debt	17,500	5.41
Other Current Liabilities	5,000	1.55
Total Current Liabilities	$105,000	32.46
Long-Term Liabilities:		
Mortgage Loan	$ 93,000	28.75
Term Loan	39,500	12.21
Total Long-Term Liabilities	$132,500	40.96
Total Liabilities	$237,500	73.42
Owners' Equity		
Paid-in Capital	$ 75,000	23.18
Retained Earnings	11,000	3.40
Total Owners' Equity	$ 86,000	26.58
Total Liabilities and Owners' Equity	$323,500	100.00

15 Source: Hatten, Small Business Management, 4th Edition

Financial Statements (cont'd)

- Statement of Cash Flow
  - Shows the cash inflows and outflows of a business.
  - Equation:
    - Cash flow = Receipts – Disbursements
  - Forecasting cash flow is often more critical than profits to the survival of a business.
  - Negative cash flow: a situation in which more cash goes out than comes in—indicative of possible undercapitalization of the firm.

16 Source: Hatten, Small Business Management, 4th Edition

Figure 8.4: Stereo City Cash Flow Statement

	October	November	December	January	February	March	April	May	June	July	August	September	Total
Cash Receipts:													
Retail Receipts (a)	$46,875	$46,875	$46,875	$28,125	$28,125	$28,125	$37,500	$37,500	$37,500	$37,500	$37,500	$37,500	$450,000
Interest Income				100				100				100	300
Total Cash Receipts	$46,875	$46,875	$46,875	$28,225	$28,125	$28,125	$37,500	$37,600	$37,500	$37,500	$37,500	$37,600	$450,300
Cash Disbursements:													
Cost of Goods Sold (b)	$28,125	$28,125	$28,125	$16,875	$16,875	$16,875	$22,500	$22,500	$22,500	$22,500	$22,500	$22,500	$270,000
Sales Expenses	2,603	2,603	2,603	1,562	1,562	1,562	2,083	2,083	2,083	2,083	2,083	2,090	25,000
Advertising	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000
Insurance	0	600	0	0	600	0	0	600	0	0	600	0	2,400
Legal and Accounting	0	0	375	0	0	375	0	0	375	0	0	375	1,500
Delivery Expenses	1,042	1,042	1,042	625	625	625	833	833	833	833	833	834	10,000
**Fixed Cash Disbursements	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	4,328	51,930
Mortgage (c)	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,037	12,400
Term Loan (d)	1,466	1,466	1,466	1,466	1,466	1,466	1,466	1,466	1,466	1,466	1,466	1,466	17,592
Total Cash Disbursements	$39,596	$40,197	$39,972	$26,889	$27,489	$27,264	$33,243	$33,843	$33,618	$33,243	$33,843	$33,630	$402,822
Net Cash Flow	$ 7,279	$ 6,679	$ 6,904	$ 1,337	$ 637	$ 862	$ 4,258	$ 3,758	$ 3,883	$ 4,258	$ 3,658	$ 3,971	$ 47,478
Cumulative Cash Flow	$ 7,279	$13,957	$20,861	$22,197	$22,834	$23,695	$27,953	$31,710	$35,593	$39,850	$43,508	$47,478	
**FCD													
Fixed Cash Disbursements:													
Utilities	$ 6,000												
Non-sales Salaries	38,000												
Payroll Taxes and Benefits	6,300												
Licenses	150												
Misc. Selling Expenses	1,000												
Miscellaneous	480												
Total FCD	$51,930												
Avg FDC per month	$ 4,328												
Cash on Hand:													
Opening Balance	$ 3,500	$10,779	$17,457	$24,361	$25,697	$26,334	$27,195	$31,453	$35,210	$39,093	$43,350	$47,008	
– Cash Receipts	46,875	46,875	46,875	28,225	28,125	28,125	37,500	37,600	37,500	37,500	37,500	$37,600	
– Cash Disbursements	(39,596)	(40,197)	(39,972)	(26,889)	(27,489)	(27,264)	(33,243)	(33,843)	(33,618)	(33,243)	(33,843)	(33,630)	
Total = New Cash Balance	$10,779	$17,457	$24,361	$25,697	$26,334	$27,195	$31,453	$35,210	$39,093	$43,350	$47,008	$50,978	

(a) This assumes that all sales are collected in the month the sale is made.
(b) This is just the Cost of Goods row from the monthly income projection worksheet. Cost of Goods is calculated as 60 percent of the estimated total sales for the month.
(c) The mortgage payments (including both principal and interest) are for a $93,000 15-year loan at 10.6 percent. You can use the spreadsheet function @PMT( ) to calculate this:
Payment = @PMT (loan amount, rate per month, number of months)
= @PMT (93,000, .106/12, 15*12)
(d) The loan is $39,500 for 2 ½ years at 8.5 percent. The amount shown includes both principal and interest and is calculated as follows: Payment = @PMT (39500, .85/12, 2.5*12)
(e) A typical strategy for established businesses with fairly predictable revenues and expenses is to open an account such as a "Money Market Deposit Account" with their bank. This account, which is interest earning, is used to store excess cash balances and cover cash shortages.

17 Source: Hatten, Small Business Management, 4th Edition

What If You Are Starting a New Business?

- Pro Forma Financial Statements
  - Are used to project what a firm's financial condition will be in the future.
  - Are budgetary estimates of:
    - How much money is needed
    - What expenses will be at different sales levels
    - How much profit can be expected
  - Should reflect realistic assumptions about the business and future business conditions.

18 Source: Hatten, Small Business Management, 4th Edition

Liquidity Ratios

- Current Ratio
  - Measures the number of times the firm can cover its current liabilities with its current assets.
    - Current ratio = $\frac{\text{Current assets}}{\text{Current liabilities}}$
  - Assumes that both accounts receivable and inventory can easily be converted to cash.
  - Interpretation:
    - Ratios of 1.0 or less are considered low and indicative of financial difficulties.
    - Ratios of more than 2.0 often suggest excessive liquidity that may be adverse to the firm's profitability (i.e. funds not invested.)

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Source: Hatten, Small Business Management, 4th Edition

Liquidity Ratios (cont'd)

- Quick Ratio
  - Measures the firm's ability to meet its current obligations with the most liquid of its current assets.
    - Quick ratio = $\frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}}$
  - Assumes that a liquid asset can easily be converted to cash without excessive loss in value.
  - Interpretation:
    - Ratios of less than 1.0 can indicate the need for additional sources of liquidity.

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Source: Hatten, Small Business Management, 4th Edition

Activity Ratios (cont'd)

- Inventory Turnover
  - Measures the liquidity of the firm's inventory—how quickly goods are sold and replenished.
    - Inventory turnover = $\frac{\text{Cost of goods sold}}{\text{Inventory}}$
  - Assumes that a high inventory turnover ratio generally implies efficient inventory management.

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Source: Hatten, Small Business Management, 4th Edition

Activity Ratios (cont'd)

- Average Collection Period
  - Measures how long it takes a firm to convert a credit sale (internal store credit, not credit card sales) into a usable form (cash).
    - Average collection period = $\frac{\text{Accounts receivable}}{\text{Average sales per day}}$
  - Assumptions:
    - High average collection periods usually indicate many uncollectible receivables.
    - Low average collection periods may indicate overly restrictive credit-granting policies.

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Source: Hatten, Small Business Management, 4th Edition

Activity Ratios (cont'd)

- Fixed Asset Turnover
  - Measures how efficiently a firm is using its assets to generate sales.
    - Fixed asset turnover = $\frac{\text{Sales}}{\text{Net fixed assets}}$
  - Assumptions:
    - The higher the ratio, the more effectively the firm is using assets to generate sales.
    - A low ratio indicates ineffective marketing efforts or that the firm's core business areas are not currently feasible.

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Source: Hatten, Small Business Management, 4th Edition

Activity Ratios (cont'd)

- Total Asset Turnover
  - Measures how efficiently a firm uses all of its assets to generate sales.
    - Total asset turnover = $\frac{\text{Sales}}{\text{Total assets}}$
  - Assumptions:
    - A high ratio generally reflects good overall management.
    - A low ratio may indicate flaws in the firm's overall strategy, poor marketing efforts, or improper capital expenditures.

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Source: Hatten, Small Business Management, 4th Edition

Leverage Ratios (cont'd)

- Debt Ratio
  - Measures the proportion of a firm's total assets that is acquired with borrowed funds.
    - Debt ratio = $\frac{\text{Total debt}}{\text{Total assets}}$
  - Assumptions:
    - A high ratio indicates a more aggressive approach to financing and is evidence of a high risk, high-expected–return strategy.
    - A low ratio indicates a more conservative approach to financing.

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Source: Hatten, Small Business Management, 4th Edition

Leverage Ratios (cont'd)

- Times Interest Earned
  - Calculates the firm's ability to meet its interest requirements.
    - Time interest earned = $\frac{\text{Operating income}}{\text{Interest expense}}$
  - Assumptions
    - A high ratio indicates a low-risk situation but indicate an inefficient use of leverage.
    - A low ratio calls for immediate action to be taken so that no debt payments go into default status.

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Source: Hatten, Small Business Management, 4th Edition

Profitability Ratios (cont'd)

- Net Profit Margin
  - Measures the percentage of each sales dollar that remains as profit after all expenses, including taxes, have been paid.
    - Net profit margin = $\frac{\text{Net income}}{\text{Sales}}$
  - Assumption:
    - A low ratio indicates that expenses are too high relative to sales.

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Source: Hatten, Small Business Management, 4th Edition

Profitability Ratios (cont'd)

- Return on Assets (Return on Investment)
  - Measures the firm's effectiveness in generating profits from its available assets.
    - Return on assets = $\dfrac{\text{Net profit after taxes}}{\text{Total assets}}$
  - Assumption:
    - A high ratio shows effective management and good chances for future growth.

Source: Hatten, Small Business Management, 4th Edition

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Profitability Ratios (cont'd)

- Return on Equity
  - Measures the return the firm earned on its owner's investment in the firm.
    - Return on equity = $\dfrac{\text{Net profit after taxes}}{\text{Owner's equity}}$
  - Assumption:
    - The higher the ratio, the better off financially the owner will be—highly affected by the amount of financial leverage (borrowed money) used by the firm.

Source: Hatten, Small Business Management, 4th Edition

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Table 8.1: Comparing Company and Industry Ratios

	Stereo City	Industry
Liquidity		
Current Ratio	1.48	1.60
Quick Ratio	0.29	0.50
Activity		
Average Collection	9.7	8.0
Total Asset Turnover	1.4	4.2
Leverage		
Debt Ratio	73.0	61.5
Times Interest Earned	1.5	6.1
Profitability		
Return on Assets*	2.5	6.2

*Uses pretax Profit

SOURCE: *Financial Studies of the Small Business*, 17th ed. (Winter Haven, FL: Financial Research Associates, 1994).

Source: Hatten, Small Business Management, 4th Edition

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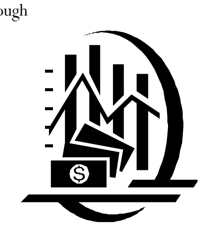
Managing Cash Flow

- Cash Flow
  - The sum of net income plus any noncash expenses, such as depreciation and amortization.
  - The difference between the actual amount of cash a company brings in and the actual amount of cash a company disburses in a given time period.
- Goal
  - To have enough cash on hand when needed.
- Basic Strategy
  - To maximize the use of cash by ensuring consistent cash inflows and a disciplined approach to outflows.

31 Source: Hatten, Small Business Management, 4th Edition

Cash Flow Fundamentals

- Understanding the Cash Flows
  - Why do we need cash flow?
  - How is cash flow generated?
  - How do firms become insolvent even though they are profitable?



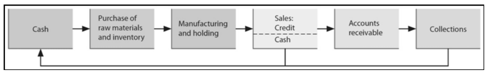
32 Source: Hatten, Small Business Management, 4th Edition

Cash Flow Fundamentals (cont'd)

- Motives for Having Cash
  - To make transactions—the ability to pay the bills (obligations) incurred by the business.
  - To protect against unanticipated problems—continued insolvency leads directly to bankruptcy.
  - To invest in opportunities as they arise.
- Cash-To-Cash Cycle
  - Period of time from when money is spent on raw materials until it is collected on the sale of a finished good.
  - Cash is replenished immediately by cash sales, but receivables (credit sales) must be collected to secure cash.

33 Source: Hatten, Small Business Management, 4th Edition

Figure 8.5: Cash-to-Cash Cycle



34 Source: Hatten, Small Business Management, 4th Edition

Table 8.2: Cash Budget Format

	January	February	March	April	May
Beginning Cash					
Plus Receipts:					
Cash Sales					
Receivable Collections					
Interest					
Owner Contributions					
Other Receipts					
Total Receipts					
Minus Disbursements:					
Cash Purchases					
Payment of Accounts Payable					
Wages and Salaries					
Payroll Taxes					
Advertising					
Office Supplies					
Rent/Mortgage					
Utilities					
Telephone					
Insurance					
Legal/Accounting					
Taxes and Licenses					
Interest Payments					
Loan Principal Payments					
Dues and Subscriptions					
Travel					
Miscellaneous Disbursements					
Total Disbursements					
Ending Cash (Beginning Cash + Receipts – Disbursements)					

35 Source: Hatten, Small Business Management, 4th Edition

Cash Flow Fundamentals (cont'd)

- Aging Schedules
  - A listing of a firm's accounts receivable according to the length of time they are outstanding
- Macro-Aging Schedule
  - A list of accounts receivable by age category
- Micro-Aging Schedule
  - A list of accounts receivable showing each customer, the amount owed, and the amount that is past due

36 Source: Hatten, Small Business Management, 4th Edition

Table 8.3: Macro-Aging Table

Age of Receivables	Percentage
0–30 days	25
31–60 days	50
61–90 days	20
Over 90 days	5

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Source: Hatten, Small Business Management, 4th Edition

Table 8.4: Micro-Aging Table

			Past-Due Days			
Customer	Amount	Current	1–30	31–60	61–90	+90
Aardvark Supply	$ 1,500	$ 1,000	$ 200	$ 500	$ 2,250	
Beaver Trucking	2,250					
Canary Labs	1,000	500	500			
...						
Total	11,000	5,000	750	3,000	2,250	
Percentage	100	45	7	27	21	

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Source: Hatten, Small Business Management, 4th Edition

Strategies for Cash Flow Management: Accounts Receivable

- Establish sound credit practices.
- Process orders quickly.
- Prepare the invoice the same day as the order is received.
- Mail the invoice the same day it is prepared.
- Offer discounts for prompt payment.
- Aggressively follow up on past due accounts.

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Source: Hatten, Small Business Management, 4th Edition

Strategies for Cash Flow Management: Accounts Receivable (cont'd)

- Deposit payments promptly.
- Negotiate better terms from suppliers and banks.
- Keep a tight control on inventory.
- Review and reduce expenses.
- Pay bills on time, but not before they are due.
- Be smart in designing your invoice.

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Source: Hatten, Small Business Management, 4th Edition

Strategies for Cash Flow Management: Managing Inventory

- Compute inventory turnover ratio to determine how much inventory is needed.
- Commit just enough cash to inventory to meet demand.

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Source: Hatten, Small Business Management, 4th Edition

Strategies for Cash Flow Management: Banks

- Request an Account Analysis to Determine:
  - Banking services used and charges for each service
  - Balances in all accounts and required minimum balances
  - Excess account balances on deposit
  - How quickly checks deposited are available as cash

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Source: Hatten, Small Business Management, 4th Edition