# Chapter Reading, Lecture Notes and Videos

Read Ch 12- Managing Cash Flow

Chapter 12. managing cash flow

****Part 1: Learning Objectives****

1. Explain the importance of cash management to a small company’s success.
2. Differentiate between cash and profits.
3. Understand the five steps in creating a cash budget.
4. Describe fundamental principles involved in managing the “big three” of cash management: accounts receivable, accounts payable, and inventory.
5. Explain the techniques for avoiding a cash crunch in a small company.

****Part 2: Class Instruction****

****Introduction****

Running out of cash has driven countless small companies into bankruptcy.  A cash forecast is essential for new businesses because they usually do not generate positive cash flow right away.  It is essential to collect accounts receivable.  New businesses must forecast how much cash the company will need to get through the ***valley of death***, which is the time period during which start-up companies experience negative cash flow as they ramp up operations, build their customer bases, and become self-supporting.  Refer to Figure 12.1, The Valley of Death.

****Cash Management                                              LO 1****

Cash is the most important, yet least productive, asset that a small business owns. Businesses must have enough cash to meet their obligations or run the risk of declaring bankruptcy. It is entirely possible for a business to earn a profit and still go out of business by running out of cash. Disruption to cash flow is most often caused by customers paying their bills late or not at all.  The Great Recession has intensified this problem, as demonstrated in Figure 12.2, Small Business Owners’ Ratings of Their Companies’ Cash Flow.

***Cash management*** is the process of forecasting, collecting, disbursing, investing, and planning for the cash a company needs to operate smoothly.  Any excess cash should be invested, even if for a short time.  Managing cash flow is also an acute problem for rapidly growing businesses, which are also likely to run out of cash to meet the needs of a growing business with a booming sales volume because of the requirement to hire more employees, expand plant capacity, etc.  Refer to Table 12.1, Signs of an Impending Cash Flow Crisis, and Table 12.2, How Much Cash Is Required to Support an Increase in Sales?

The first step in managing cash more effectively is to understand the company’s ***cash flow cycle*** which is the time lag between paying suppliers for merchandise or materials and receiving payment from customers.  The longer this cycle, the more likely the business will encounter a cash crisis.  Refer to Figure 12.3, the Cash Flow Cycle.

The next step is to analyze their cash flow cycle, looking for ways to reduce its length.  Business owners should calculate their cash conversion cycle whenever they prepare their financial statements, at least quarterly. On a daily basis, business owners should generate reports showing the following: total cash on hand, bank balances, summary of day’s sales, summary of the day’s cash receipts, summary of the day’s cash disbursements, and a summary of accounts-receivable collections.

****Cash and Profits                                        LO 2****

As important as earning a profit is, a company’s survival depends on its ability to generate positive cash flow.  Profitability is not necessarily highly correlated with cash flow. Cash and profits are not the same. Profit is the net increase over a period of time in capital cycled through the business, indicating how effectively the firm is being managed.

Cash is the money that flows through the business in a continuous cycle. In other words, the profit a business shows does not mean they have that same amount of money in their checking account!

Profit (or net income) is the difference between a company’s total revenues and total expenses. It measures how efficiently the business is operating.

***Cash flow*** is a method of tracking a company’s liquidity and its ability to pay its bills and other financial obligations on time by tracking the flow of cash into and out of the business over a period of time. Cash flow is the volume of actual cash that comes into and goes out of the business during an accounting period.

****Consider using Hands On… How To: “Manage Cash Flow in a Highly Seasonal Business” at this point.****

****The Cash Budget                                                LO 3****

The need for a cash budget arises because the uneven flow of cash in a business cycle creates surpluses and shortages throughout that period.  This uneven flow of cash creates periodic cash surpluses and shortages.

A ***cash budget*** is a “cash map” showing the amount and the timing of cash receipts and cash disbursements on a daily, weekly, or monthly basis.  It is used to predict the amount of cash needed to operate smoothly over a period of time.   This provides the entrepreneur the opportunity to anticipate cash crunches and handle them, or to avoid them.

 A project monthly cash budget should be developed for at least one year into the future, and quarterly estimates for another.  It must take into consideration seasonal fluctuations in sales; the more variable the sales pattern, the shorter should be its planning horizon.

A cash budget is based on the cash method of accounting, meaning that cash receipts and cash disbursements are recorded in the forecast only when the cash transaction is expected to take place.  Credit sales to customers are not recorded until the customer actually pays, and purchases made on credit are not recorded until the owner pays them. Depreciation, bad debt expense, and other noncash items that do not involve cash transfers are omitted entirely from the cash budget.

Formats for preparing a cash budget vary depending on the pattern of a company’s cash flow.  Refer to Table 12.3, Cash Budget for a Small Department Store.

There are five basic steps to preparing a cash budget.

Step 1: Determining an Adequate Minimum Cash Balance

Some suggest that a firm’s cash balance should equal at least one-fourth of its current liabilities, while others recommend a cash reserve large enough to cover three to six months’ of operating expenses.  Highly seasonal businesses often require an even larger reserve fund.

The most reliable method is based on past experience. For example, past operating records may indicate that it is desirable to maintain a cash balance equal to five days’ sales. Determining a minimum cash balance is also important. A range of cash balances gives you an insight to know the amount of cash that is acceptable, enough to get you through time of need, but not too much to have cash that is not effectively working for your business.

Step 2: Forecasting Sales

Sales forecasts are the heart of the cash budget and are based partially on past patterns of existing businesses.  This is a much more difficult process for a startup business.  The startup could do research on similar firms and their sales patterns in the first year of business.  A local chamber of commerce, trade associations, publications such as the *Annual Statement Studies* published by the Risk Management Association and Bizminer are also potential sources of this information.  Market research, census reports, newspapers, radio and television customer profiles, polls and survey, and local government statistics could possibly provide information.  Talking with owners of similar businesses (outside the local trading area) can provide realistic estimates of sales.  Refer to Table 12.4, Forecasting Sales for a Business Start-Up.

Financial analysts suggest a business create three estimates—optimistic, pessimistic, and most likely.

Step 3: Forecasting Cash Receipts

The budget must account for the delay between the sale and the actual collection of the proceeds. It is vital to act promptly once an account becomes past due. Collecting delinquent accounts is critical to keep cash flow moving in a positive direction and can be a challenging task for the entrepreneur. Refer to Figure 12.5, Probability of Collecting Accounts Receivable, and Table 12.5, The High Cost of Slow Payers.

Many banks now offer cash management tools designed to speed up collection of invoices.  ***Electronic (Automated Clearing House) collections***, which is a bank service that allows businesses to deduct automatically invoice amounts from customers’ accounts and deposit them into the seller’s account within 24 hours.  ***Remote deposit*** is a bank service that allows businesses to scan customers’ checks and deposit them from anywhere using a portable scanner, a computer, and an Internet connection.  Entrepreneurs should compare the benefits and costs of these services at various banks.

Step 4: Forecasting Cash Disbursements

Every entrepreneur should know his or her company’s “burn rate,” the amount of cash it spends each month.  Refer to Figure 12.6, Cash Flow Concerns among Small Business Owners.  The key factor when forecasting disbursements for a cash budget is *to record them in the month in which they will be paid, not when the obligation is incurred*.

Many cash payments are fixed amounts due on specified dates. Others are standard like the purchase of inventory, salary and wages, overhead, selling expenses, and so on. Financial analysts suggest that new owners add an additional 25 to 50 percent to estimate disbursement totals as a cushion. Forecasting cash disbursements can become more meaningful through recording disbursements, noting their due dates, reviewing the checkbook and expenses, adding a cushion to those estimates, and making a daily list of items that generate and consume cash.

Step 5: Estimating the End-of-Month Cash Balance

The cash balance at the end of the month becomes the beginning balance for the following month. Estimating the end-of-the-month balance will give you insight and may help to avoid a shortage or identify a cash surplus. Anticipating cash shortages and surpluses can reduce lending expenses and time.  However, business owners should also look for trends that could indicate a pending cash crisis.  Refer again to Table 12.3.

      By planning cash needs ahead of time, a small business can achieve the following benefits of effective cash management:

* Increase the amount of cash and the speed of cash flowing into the company
* Reduce the amount of cash and speed of cash flowing out of the company
* Make the most efficient use of available cash
* Take advantage of money-saving opportunities such as quantity and cash discounts
* Finance seasonal business needs
* Develop a sound borrowing program
* Develop a workable program of debt repayment
* Impress lenders and investors
* Reducing borrowing costs by only doing when needed
* Provide funds for expansion
* Plan for investing surplus cash

****The “Big Three” of Cash Management             LO 4****

There are three essential factors for the effective management of cash flow:

1. Accounts receivable – Extending credit to customers.  
    A firm should always try to accelerate the collection of its receivables. If possible, a firm should also work to reduce or even eliminate credit sales.
2. Accounts payable – Suppliers and others extend credit to you.  
    Take advantage of extending accounts payable and never abuse those opportunities.
3. Inventory – The largest expense for retail and manufacturing businesses.  
    Product-based businesses need to monitor, manage, and control their inventory on a continual basis.

***Cash conversion cycle*** is a measure of the length of time required to convert inventory and accounts payable into sales and accounts receivable and finally back into cash.  Equals day’s inventory outstanding + day’s sales outstanding – days’ inventory outstanding.  Ideally, a company cash conversion cycle is negative, meaning that it turns over its inventory quickly and collects payments from its customers before it pays its vendors and suppliers.  Refer to Figure 12.7, Amazon’s Cash Conversion Cycle.

****Accounts Receivable.****

Many customers expect to buy on credit, and business owners extend it to avoid losing customers even though it is expensive, requires more paperwork and staff, and more cash to service accounts receivable.  Establishing a credit and collection policy and process is essential. This will provide clear and consistent direction for you, your employees, and your customers.  Every business that sells on credit encounters customers who pay late or never pay at all.

How to Establish a Credit and Collection Policy.  Establishing a credit and collection policy begins by screening customers carefully by developing a detailed credit application and then checking the potential customer’s credit references by using a credit reporting service.   Know when to walk away from an order—why make the sale if you won’t get paid?

Next, a small business should establish a written credit policy and let every customer know the company’s credit terms in advance.

Once the credit policy is firmly in place, the small business can send invoices promptly because customers rarely pay a bill before they have received it.  ***Cycle billing*** is a method in which a company bills a portion of its credit customers each day of the month to smooth out the uneven cash receipts.

The business must take *immediate* actions when an account becomes overdue.  The longer an account is past due, the lower the probability of collecting it.  Steps to accelerate the collection of accounts receivable through encouraging the prompt payment of invoices include: start with a friendly reminder to avoid damaging the relationship with a good customer.  When contacting a delinquent customer get a commitment to pay the full amount of the bill by a specific date.  Then follow up with an e-mail or letter that summarizes the verbal commitment.

If the customer still refuses to pay, collection experts recommend the following:

* Send a letter from the company’s attorney.
* Turn the account over to a collection attorney.
* As a last resort, hire a collection agency.

Business owners must abide by the provisions of the federal Fair Debt Collection Practices Act, which prohibits any kind of harassment when collecting debts, and also prevents collectors from making false statements and from contacting debtors at inconvenient times.  Refer to Table 12.6, Ten Collection Blunders and How to Avoid Them.

Techniques for Accelerating Accounts Receivable.  There are other techniques to speed cash inflow from accounts receivable, including:

* Speed up orders by having customers e-mail or fax them to you.
* Send invoices when goods are shipped or when the job is completed.
* Service firms may be able to offer retainer packages in which their clients pay in advance.
* Insure all invoices are clear, accurate and timely.
* Include a telephone number and contact person in case the customer has questions.
* Call the customer a week after sending the invoice to make sure it arrived.
* Highlight the balance due and terms of sale on all invoices.
* Allow customers to use multiple payment methods such as checks, credit cards, etc.
* Offer incentives to encourage customers to pay early and impose penalties for paying late.
* Restrict a customer’s credit until past-due bills are paid.
* Deposit cash, checks, and credit card receipts *daily*.
* Identify the top 20 percent of customers, create a separate file system for them, and monitor them closely.
* Ask customers to pay at least a portion of the purchase price up front.
* Watch for signs the customer may be about to declare bankruptcy.
* Use technology to manage cash flow.
* Track the results of the company’s collection efforts.

Small companies that sell high-priced items can couple a security agreement with a financing statement.  A ***security agreement*** is a contract in which a business selling an asset on credit gets a security interest in that asset (the collateral), protecting its legal rights in case the buyer fails to pay.

****Accounts Payable.****

The second element of the big three of cash management is accounts payable.  Entrepreneurs should strive to stretch out payables as long as possible *without damaging their companies’ credit rating.*  Tips to accomplish this include:

* Set up a payment calendar each month to pay bills on time and take advantage of cash discounts for early payment.
* Verify all invoices before payment.
* Negotiate the best possible terms with suppliers. Table 12.7 shows the same most likely cash budget from Table 12.2 with one exception; instead of purchasing on C.O.D. terms as shown in Table 12.2, the owner has negotiated “net 30” payment terms.  Note the drastic improvement in the company’s cash flow that results from improved credit terms.
* Communicate with creditors about your status if your payment will be delayed.
* Schedule and stagger cash disbursements so they do not come due at the same time.

****Inventory.****

Few small business owners use any formal method for managing inventory. Entrepreneurs may find that they have either too much inventory, or the wrong type of inventory that has become outdated or obsolete. This inventory ties up cash and is expensive to the firm. A typical manufacturing company pays 25-30 percent of the value of its inventory in handling and finance costs; however, retailers that carry too little inventory experience stockouts and lost sales.

The goal is to minimize the company’s investment in inventory without sacrificing sales, selection, and customer satisfaction.  Inventory should grow no faster than a company’s sales.

Inventory management also plays an important cash management role:

* Schedule inventory deliveries at the latest possible date to prevent premature payment of invoices.
* Purchase goods of comparable quality and price from the fastest supplier to keep inventory levels as low as possible.
* Treat suppliers as partners.
* Take advantage of ***quantity discounts***, which are discounts that give businesses a price break when they order large quantities of merchandise and supplies. They exist in two forms: cumulative and noncumulative.
* Take advantage of ***cash discounts***, which are discounts offered to customers as an incentive to pay for merchandise promptly. Refer to Table 12.8, A Cash Discount.

Consider using You Be the Consultant: “In Search of a Cash Flow Forecast” at this point.

****Avoiding the Cash Crunch                                 LO 5****

Young firms cannot afford to waste resources, especially one as vital as cash.  Tools that allow small business managers to get the maximum benefit from their companies’ pool of cash include:

****Barter.****

***Bartering*** is the exchange of goods and services for other goods and services rather than for cash.  Bartering became more common during the Great Recession.  It is also a good way to transform slow-moving inventory into needed product and services.  More than 500 bartering exchanges exist today, in which businesses accumulate trade credits (think barter dollars) when they offer goods or services through the exchange.  Then they use their trade credits to purchase needed goods or services.  The typical exchange charges membership and maintenance fees.

****Trim Overhead Costs.****

High overhead expenses can strain a small firm’s cash supply. Ways to trim overhead costs include:

* Ask for discounts and “freebees”
* Conduct periodic expense audits
* When practical, lease instead of buy. An ***operating lease*** is a lease at the end of which a company turns the equipment back to the leasing company and has no further obligation.  A ***capital lease*** is a lease at the end of which a company may exercise an option to purchase the equipment, usually for a nominal sum.
* Avoid nonessential cash outlays
* Buy used or reconditioned equipment, especially if it is “behind-the-scenes” machinery
* Hire part-time employees and freelance specialists whenever possible
* Outsource
* Use e-mail rather than mail
* Use credit cards to make small purchases
* Negotiate fixed loan payments to coincide with your company’s cash flow cycle
* Establish an internal security and control system
* Develop a system to battle check fraud
* Change your shipping terms
* Start selling gift cards
* Switch to zero-based budgeting
* Be on the lookout for shoplifting and employee theft
* Build a cash cushion
* Invest surplus cash. Entrepreneurs must put surplus cash to work immediately rather than allowing it to sit idle; the goal is to invest every dollar not being used to pay current bills.  The primary concerns for investing surplus cash should be safety and liquidity. This will ensure the cash is not going to be put in a risk position and that it will be available if needed. Second, this cash should be “put to work” to generate revenue or build the business for future earning potential.

A ***money market account*** is an interest-bearing account that allows depositors to write checks without tying up their money for a specific period of time.  A ***zero-balance account (ZBA)*** is a checking account that never has any funds in it.  A company keeps its money in an interest-bearing master account tied to the ZBA; when a check is drawn on the ZBA, the bank withdraws enough money from the master account to cover it.  A ***sweep account*** is a checking account that automatically sweeps all funds in a company’s checking account above a predetermined minimum into an interest-bearing account.

* Keep your business plan current in case an unexpected cash crisis forces an entrepreneur to seek emergency financing.

Consider using You Be the Consultant: “Controlling Employee Theft” at this point.

****Conclusion****

Successful owners run their businesses “lean and mean” by trimming wasteful expenditure, investing surplus funds, and careful planning and managing the company’s cash flow. Entrepreneurs must learn how to manage cash flow to insure long-term success for the venture.

****Part 3: Chapter Exercises****

****Hands On… How To “Manage Cash Flow in a Highly Seasonal Business”****

1. ****What impact do highly seasonal sales have on a small company’s cash flow?****

The impact is dramatic and can cause an unsuspecting entrepreneur to fail in the first year.

1. ****What other advice can you offer owners of seasonal businesses about coping with the effects of their companies’ highly irregular sales patterns? About managing cash flow in general?****

All of the advice provided in this feature is excellent.  Students might suggest that working with a financial consultant who has experience in the pertinent industry may also be helpful.  Another suggestion is to look for ways to bootstrap the business throughout the year, and to make it a habit to verify cash flow on a daily basis.

****You Be the Consultant: “In Search of a Cash Flow Forecast”****

1. ****Assume the role of the SBDC consultant and help Douglas put together a cash budget for the six months beginning in October. (LO 4) (AACSB: Application of knowledge)****

Students should prepare a cash budget, by month, for the period of October through March. Students may be directed to run the numbers on all three sales forecast scenarios and/or by some weighted average.   The cash budget for Douglas follows:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ****CASH BUDGET**** | ****Oct.**** | ****Nov.**** | ****Dec.**** | ****Jan.**** | ****Feb.**** | ****March**** |
| ****Sales**** | $17,450 | $16,400 | $13,840 | $12,460 | $13,540 | $17,180 |
| ****Credit Sales**** | 12,390 | 11,644 | 9,826 | 8,847 | 9,613 | 12,198 |
| ****Collections**** |  |  |  |  |  |  |
| ****68% - 1 mo. After**** | 12,131 | 11,866 | 11,152 | 9,411 | 8,473 | 9,207 |
| ****19% - 2 mo. After**** | 3,648 | 3,390 | 3,316 | 3,116 | 2,630 | 2,367 |
| ****7% - 3 mo. After**** | 1,313 | 1,344 | 1,249 | 1,222 | 1,148 | 969 |
| ****Cash Sales (29%)**** | 5,061 | 4,756 | 4,014 | 3,613 | 3,927 | 4,982 |
| ****Total Cash Receipts**** | $22,153 | $21,356 | $19,731 | $17,362 | $16,178 | $17,525 |
| ****Cash Disbursements**** |  |  |  |  |  |  |
| ****Inventory**** | $11,239 | $10,994 | $10,332 | $8,719 | $7,850 | $8,530 |
| ****Rent**** | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 |
| ****Truck Loan**** | 317 | 317 | 317 | 317 | 317 | 317 |
| ****Utilities**** | 800 | 800 | 800 | 800 | 800 | 800 |
| ****Office Supplies**** | 95 | 95 | 95 | 95 | 95 | 95 |
| ****Maintenance**** | 75 | 75 | 75 | 75 | 75 | 75 |
| ****Computer Supplies**** | 75 | 75 | 75 | 75 | 75 | 75 |
| ****Advertising**** | 550 | 550 | 550 | 550 | 550 | 550 |
| ****Legal & Acct.**** | 250 | 250 | 250 | 250 | 250 | 250 |
| ****Misc. Expenses**** | 60 | 60 | 60 | 60 | 60 | 60 |
| ****Insurance**** |  |  |  |  | 1,200 |  |
| ****Taxes**** |  |  | 1,400 |  |  |  |
| ****Wages & Salaries**** | 2,040 | 1,825 | 1,725 | 1,725 | 1,950 | 2,425 |
| ****Total Cash Disbursements**** | $16,701 | $16,241 | $16,879 | $13,866 | $14,422 | $14,377 |
| ****End of Month Balance Cash (beginning)**** | $8,750 | $14,202 | $19,317 | $22,169 | $25,665 | $27,421 |
| ****+ Cash Receipts**** | 22,153 | 21,356 | 19.731 | 17,362 | 16,178 | 17,525 |
| ****- Cash Receipts**** | 16,701 | 16,241 | 16,879 | 13,866 | 14,422 | 14,377 |
| ****Cash Ending**** | $14,202 | $19,317 | $22,169 | $25,665 | $27,421 | $30,569 |
| ****Borrowing**** | 0 | 0 | 0 | 0 | 0 | 0 |

1. ****What conclusions can you draw about Douglas’s business from this cash budget? (LO 4) (AACSB: Analytical thinking)****

Overall his business has a positive cash flow. There are questions about the annual expense of $6,600 for advertising while other expenses seem very reasonable. Sales reflect a normal cycle. Focus on increasing revenues and negotiating a high discount on purchases as sales increase.

1. ****What suggestions can you make to help Douglas improve his company’s cash flow? (LO 4) (AACSB: Analytical thinking)****

After assessing the situation, expect students to make recommendations that may include shortening the receivables period, lengthening the payables period, buying more efficiently, and other cost cutting or revenue enhancing applications that would affect cash flow.

****You Be the Consultant: “Controlling Employee Theft”****

1. ****Identify the factors that led Kelly Morris and her business partner to become a victim of employee theft and embezzlement. What impact does this crime have on a company’s cash flow? (LO 5)  (AACSB: Application of knowledge)****

The company made the mistake of believing that employees would not steal from them.  They allowed one employee to work alone for an hour, had no alarm system to prevent employees from entering the restaurant during the middle of the night, and used garbage bags that prevented anyone from seeing what was inside.  Any unscheduled or unknown drainage of funds due to employee theft or embezzlement will adversely affect a firm’s cash flow.  If it continues, this may threaten the viability of the venture.

1. ****Are small businesses are more likely to be victims of employee theft? Explain. (LO 5)  (AACSB: Reflective thinking)****

Small businesses often lack the knowledge, and financial and control procedures that large companies impose. Therefore, small businesses are disproportionately more likely to be victims of employee theft. When the business lacks a system of checks and balances, opportunities for embezzlement increase.

1. ****List at least five steps that entrepreneurs should take to prevent their businesses from becoming victims of employee theft and embezzlement. (LO 5)  (AACSB: Reflective thinking)****

Students will discover a variety of resources that address employee theft. Responses may relate to the following:

·         Screen potential employees thoroughly.·         Monitor inventory closely.·         Use technology to discourage theft.·         Set up a hotline.·         Embrace a zero-tolerance policy.·         Be aware of frequently used theft schemes.·                     Watch for signs of internal theft, such as an unexplained rise in their living standards. ·                     Pay close attention to management-level personnel who insist on handling routine clerical tasks themselves. ·                     Be on guard for clients complaining about overcharging or inconsistencies in shipping and billing practices. ·                     Make it difficult to steal through careful supervision that removes easy opportunities. ·                     Keep inventory and accounting records current.·                     Periodically inspect bookkeeping activities. ·                     If possible, install physical obstacles to theft, such as alarm systems, video cameras in secured and restricted areas. ·                     Work with employees to create an environment in which they think there is a good chance of being caught. ·                     Set up systems so employees know they can turn over incriminating information on anyone in the company without fearing job loss or other repercussions. ·                     Stress that management and supervisors are not above suspicion and that employee complaints will be taken seriously. ·                     Watch for substance abuse and have a procedure for screening workers for drugs or alcohol.·                     Determine clear policies by distributing clear, written policies on ethical behavior to be signed by each employee—including the owner.

* Set an example—employees need to know that one uniform ethical standard applies to everyone and owners and managers should be positive role models for workers.

****Part 5: Case Studies****

The following text case may be used for lecture and assignments for topics presented in this chapter.

* Case 5: Jimmy Beans Wool
* Case 7: James Confectioners, Part 2