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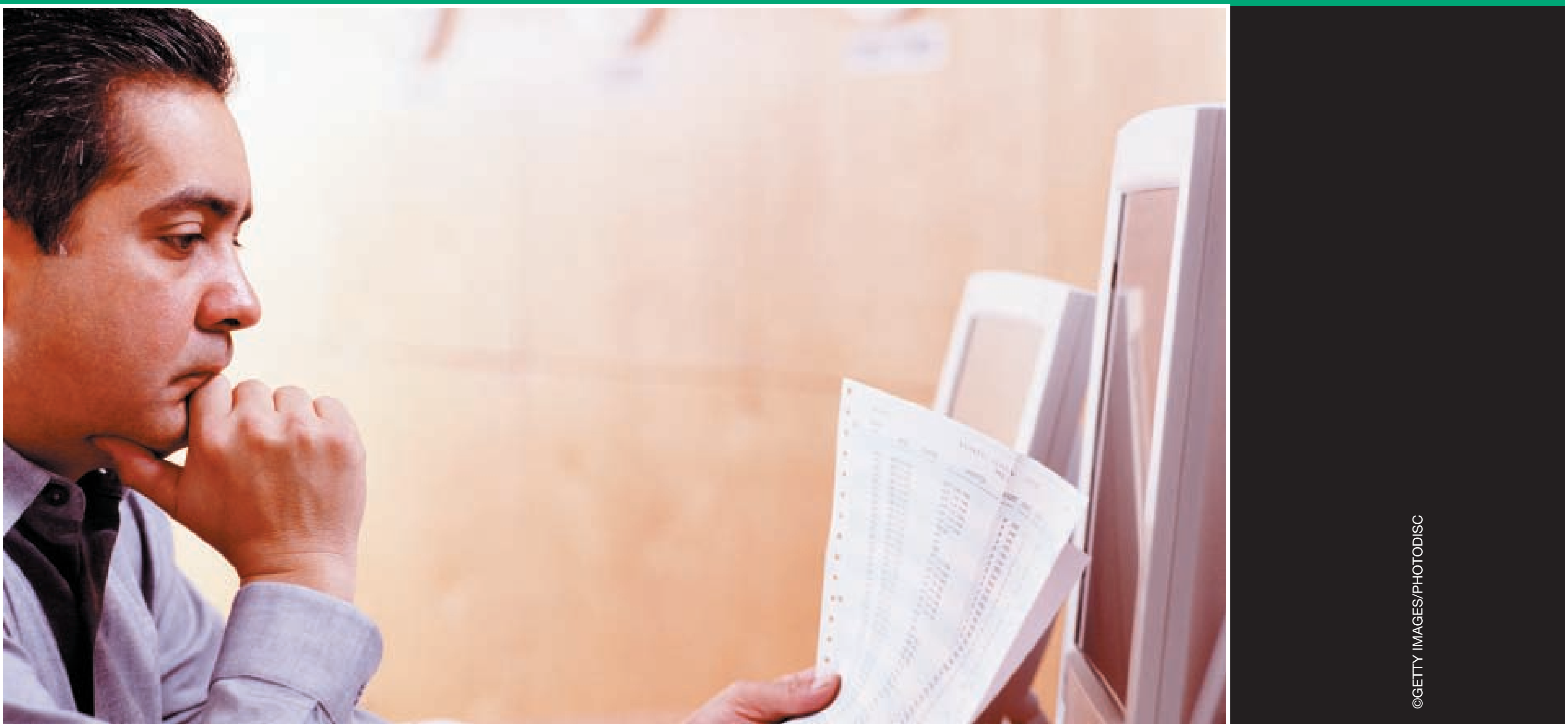
Chapter 16

Management Control Tools



Objectives

16-1 Describe management techniques used by small businesses.

16-2 Explain the importance of monitoring and controlling revenues.

16-3 Discuss the most effective ways to control inventory.

16-4 Analyze how inventory fluctuations affect business operations.

16-5 Describe technology tools that assist entrepreneurs.

16-6 Discuss methods of preventing employee and customer theft.

THE CONTROL FUNCTION

Along with planning, organizing, and directing, controlling is one of the four management functions. Controlling requires developing programs to monitor the activities of a business and make corrections when necessary. Again, the small business owner has the advantage of faster and more flexible responses. When things get out of line, you can make quick decisions to correct the imbalance without calling numerous meetings and waiting for the go-ahead from top management.

In her book *When Giants Learn to Dance*, Dr. Rosabeth Ross Kanter points out that large businesses have become so bureaucratic that they can no longer keep up ("dance") with the times. She goes on to say that they must become more flexible, like small businesses, to be successful in today's marketplace. At the same time she warns that without well-established policies, procedures, and discipline, small businesses run the risk of losing their focus and going off track. It is a balancing act—small businesses need policies and procedures, but not to the extent that those become handicaps in reaching the business's goals.

The importance of monitoring cash flow, performing effective appraisals of employee performance, and operating with a suitable accounting system has been discussed in earlier chapters. These are all essential control tools for managing small businesses. But if management does not have a clear vision of how the business is to be controlled, the business will flounder. Two management theories that guide many small businesses are management by objectives and total quality management.

Management by Objectives

By clearly stating the goals of the business and meshing them with the goals of the employees, entrepreneurs make use of a management technique called **management by objectives**, or MBO. MBO serves as a planning tool when the objectives are being set and as a control tool when the results are monitored and measured. Objectives should be set in all areas of the business's operations to ensure that resources are used efficiently. The planning function—setting the objectives—should follow the steps shown in Figure 16-1.

The control function—monitoring results—can be effective only if the standards against which results are measured are fairly and uniformly established. Proper standards

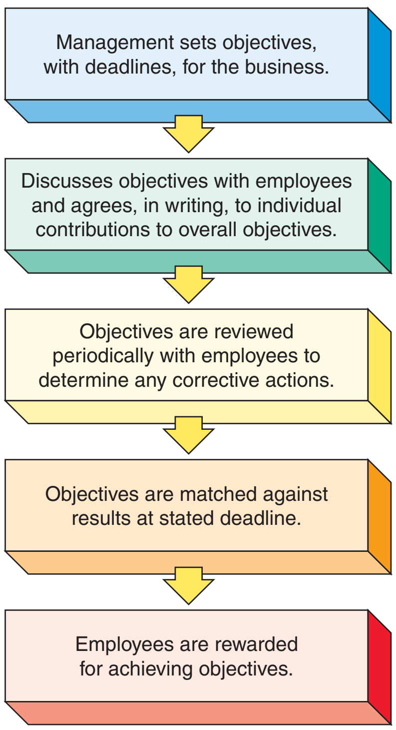
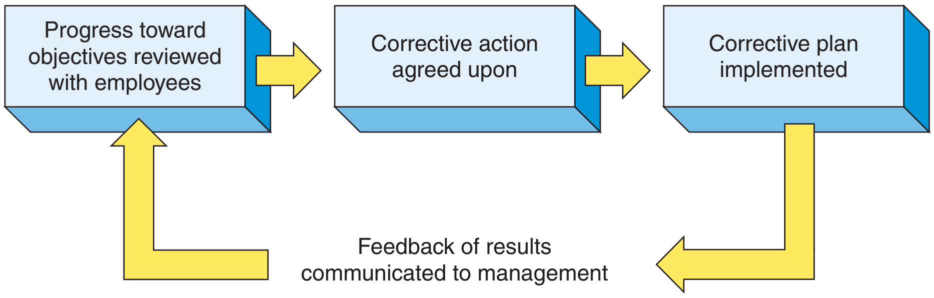


FIGURE 16-1

MBO Planning Steps

FIGURE 16-2

MBO Control Cycle



allow an effective feedback system that is consistent and clearly understood by everyone concerned. Figure 16-2 illustrates the steps involved in the controlling function of the MBO technique.

Although both large and small businesses can benefit from the MBO technique, it is better suited for small businesses. In large businesses the bureaucratic process of setting, monitoring, and changing objectives can be too slow and often results in missed opportunities. Small business owners can tailor a system to their particular business that establishes and monitors their objectives in a fair, efficient, and responsive manner. It is not enough simply to announce what you expect to achieve in a particular area of your business operation. Detailed objectives must be defined, discussed, and agreed to by all employees concerned, and the results should be closely monitored.

Small business owners use a variety of reports that serve as checklists for achieving objectives. Sales objectives are the first to be set. Nearly every aspect of a business is dependent on achieving sales objectives, so entrepreneurs must accurately estimate what sales totals will be for different time periods. Sales affect inventory levels, cash flow, personnel scheduling, and all other operating conditions.

Total Quality Management

The total quality management theory (TQM) has become a buzzword representing quality and efficiency throughout the business world. In Chapter 10, it was discussed how the idea was adapted from the Japanese after World War II in an effort to increase quality and at the same time decentralize (spread out) decision-making in businesses. Dr. Edward Deming was one of the first to cite the Japanese as operating with a superior system of control in production and customer service techniques. Its adaptation has been evidenced by improved quality of U.S. products and increased attention to customer service and product warranties.

The underlying principle of TQM is a relentless push toward continuous improvement, which is accomplished through better relationships with customers and suppliers, reduced production or replacement time, and more open input from employees. It requires implementing a large number of small improvement steps to reach goals in all areas of the organization.

TQM strategies include:

- **Benchmarking** The company continually measures its products against those of the competition and, when necessary, not only copies what the competition does but improves on it.

- **Outsourcing** The company relies on outside sources to perform certain functions that the company does not do well, such as creating graphics or managing payroll.
- **Quality circles** Teams of employee volunteers meet regularly to freely discuss how products and customer services can be improved.

The TQM way of thinking was new to many large businesses in the beginning, but in some ways it has always been practiced by successful smaller companies. Small businesses have traditionally placed great emphasis on constantly improving customer service and doing whatever it takes to produce products superior to those of their larger competitors. The most effective way to do this is to set high standards and make sure those standards are understood and achieved by all employees.

CONTROL REVENUES

If you set your business's sales objective at $200,000 at the beginning of the year, the business will be in sad shape if you do not discover until July that sales are running 30 percent behind the objective. It would be too late at that point to take corrective action. By monitoring your sales income daily, weekly, and monthly, you are better equipped to detect any problems early and then design and implement a plan to correct them. The plan that calls for sales to total $200,000 per year might require that 7 percent of sales be received in January. Therefore the January sales objectives would be $14,000—approximately $3,500 per week or $500 per day. The comparison of actual sales results with sales objectives can be shown on a daily and weekly sales report and summarized in a monthly report. For future reference, it is a good idea to add written notes explaining any change or discrepancy. Examples of such reports are shown in Tables 16-1 and 16-2.

If the numbers in your daily or weekly report are higher or lower than the sales objective, you may need to adjust those objectives. For example, if the sales income for the first two weeks of the month is $7,800 instead

TABLE 16-1 DAILY AND WEEKLY SALES REPORT

Week of: June 14		
Daily Sales	**Objective**	**+/(-)**
Monday	$1,400	$150
Tuesday	$1,200	$75
Wednesday	$1,400	($200)
Thursday	$1,500	$125
Friday	$2,100	($350)
Saturday	$2,600	$400
Sunday	$1,000	$100
Weekly Total	$11,200	+ $300 [$11,500]

Comments: Antique car show in mall added to Saturday traffic. Poor weather on Friday.

TABLE 16-2 MONTHLY SALES TO OBJECTIVES REPORT

Month	Sales	Objective	+(–)	Comments
January	$21,200	$20,500	+700	Increase open-to-buy $500
February	18,400	18,550	(-150)	No action necessary
March	23,000	24,500	(-1,500)	Decrease open-to-buy $1,000
April	26,700	24,300	+2,400	Increase open-to-buy $2,000
May	23,100	22,900	+200	No action necessary
June	19,650	19,900	(-250)	No action necessary

of the $7,000 projected, you might reset the monthly sales objective at $15,600 instead of the $14,000 originally set. If this new objective is achieved, your annual sales objective might be reset for an additional $1,600. The same logic would apply if sales are not meeting your daily or weekly objectives.

Cash Flow Budgeting

If you have a firm grasp on how to handle a cash flow budget, you will learn how to best utilize extra available cash or react to a negative cash flow situation. Extra cash might be used to make an early note payment, which would save on interest, or it might be put in an interest-generating account to increase revenues. Extra cash may also allow early payment of an invoice, thereby increasing the vendor discount. Payroll hours might be increased to spur production or sales. Often extra income is used to pay for more advertisements or promotional activities. Used correctly, it can generate a snowball effect on the entire operation.

On the other hand, not meeting cash flow expectations can be devastating. As discussed in Chapter 15, entrepreneurs must be prepared to handle difficult cash flow situations with contingency plans such as a revolving line of credit arranged in advance to overcome short-term cash shortages.

Collecting Accounts Receivable

Small business owners who operate with an accounts receivable system must stay on top of collections at all times. It may be tempting to allow a favorite or important customer to take extra time to pay off invoices. But giving an extension one time sets a precedent that customers will often take advantage of. Allowing someone to pay you late might cause you to pay someone else late, which is not fair to you and not fair to the party you owe.

The credit record of a business is so important that it should not be placed in jeopardy by a poor collection system. Good businesses can quickly go bad when they cannot collect the money owed to them in a timely and efficient manner. Strict enforcement of company policies on bill collecting is essential to avoiding future revenue problems.

CONTROL INVENTORY

There is a direct correlation between sales and **inventory**. Inventory is the number of units, and the value of those units, that are available for sale or manufacture. Theoretically, the more units a business has on hand to sell or manufacture, the more it should sell. In this way, inventory affects sales, and consequently inventory levels are controlled by sales. If a business does not have sufficient inventory, there will be a drop-off in expected sales revenues. If it sells more units than expected, its inventory will fall below the desired level. If a business does not sell the expected number of units, the inventory will be higher than the desired level. Closely monitoring sales revenues allows the entrepreneur to adjust inventory levels to the demands of the market.

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As a business owner, your goal is to have the quantity of goods available that will give you the highest level of sales without over-investing in inventory. It is impossible to always have the exact amount of inventory on hand that will yield the greatest profit, but with the proper controls in place, you can maintain a level that will produce a healthy sales income and a profitable return on investment. For example, if you invest $10,000 in inventory and the net profit received from the sale of that inventory is $2,000, you have received a return on investment of 20 percent.

Business owners must make a profit from the purchase of inventory. If they have leftover or excess inventory, they are forced to sell it at a price that yields less profit or possibly a loss. If the inventory does not sell, it decreases the return on investment. Having too little inventory, on the other hand, can be even more dangerous. A deficit will lead to lost sales, lost profits, and dissatisfied customers. Manufacturers who run out of parts or materials may be forced to shut down production until replacement parts or materials arrive. Retailers who run out of merchandise before a major holiday lose business at a time when they should be making high profits. In addition, they are sending customers to their competitors with no assurance that those customers will return when inventory levels are brought back in line.

The Purchasing Process

Inventory suppliers, called **vendors**, must be carefully chosen. They must be dependable, stand behind their products, ship efficiently, and care about their customers. Good vendors are not out to make a quick profit but instead appreciate the long-term value of every customer. They understand that if

FUN FACTS

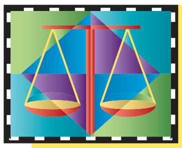
Atlanta's AmericasMart claims that it is the largest wholesale marketplace of its kind in the world. It hosts 23 different wholesale markets that attract 548,000 trade show attendees from every state in the U.S. and 80 foreign countries. Its gift show market alone has 2,000 permanent exhibitor showrooms and 4,000 temporary exhibitor display booths.

their customers do well with the goods or materials they supply, they will do well also. Vendors work closely with each customer to build a partnership. Everyone profits from this partnership as long as there is open communication and dependable and consistent service.

The ideal inventory plan is the **just-in-time inventory plan**. The inventory arrives just in time, or as close as possible to the time needed, to make the sale. The advantage to receiving inventory as close as possible to the point of selling it is that less money is tied up in inventory. With today's efficient production and transportation capabilities, it has become the norm not to accumulate inventory in warehouses six months in advance of selling the goods. Retailers and manufacturers have come to expect quick delivery from most of their vendors and will quickly change suppliers if orders are not delivered on time.

Entrepreneurs begin to purchase inventory after they have established their purchase plan objective. Depending on the industry, goods might come from one or more of a number of sources: trade shows, sales calls, print or online catalogs, and telemarketers.

Trade Shows Industry representatives frequently gather at central points in the marketplace and invite potential buyers to visit their exhibits. Trade shows can be as small as a few companies renting space at a local motel or as large as thousands of vendors exhibiting their goods, entertaining customers, and making new contacts at a permanent commercial arena in a major city. A trade show is an opportunity for buying, selling, and networking. **Networking** is the process of making business contacts by meeting people who can assist in business development. Trade shows can be exciting ventures whether entrepreneurs are shopping for goods or selling their own. For potential buyers, trade shows are an opportunity to discover what is new in their industry that can help increase profits and gain competitive advantages over the competition. They can buy unique goods, compare the prices of different vendors, or learn about new opportunities and industry developments.



Ethics for ENTREPRENEURS

Some vendors violate the rules at trade shows. They may "pad" orders by adding small increments to the number of units purchased in the hope that a small change will not be noticed. The buyer orders 15 dozen units, but the vendor records 16 dozen. This 6 percent add-on can make a significant difference to a seller who writes dozens or even hundreds of orders in a day. If the buyer happens to notice the discrepancy, the vendor apologizes for an "unintentional" error. However, the buyer with a sound purchase plan will notice and may sense what is happening. The vendor is risking a long-term relationship in an effort to sell a dozen more units—not a sound decision.

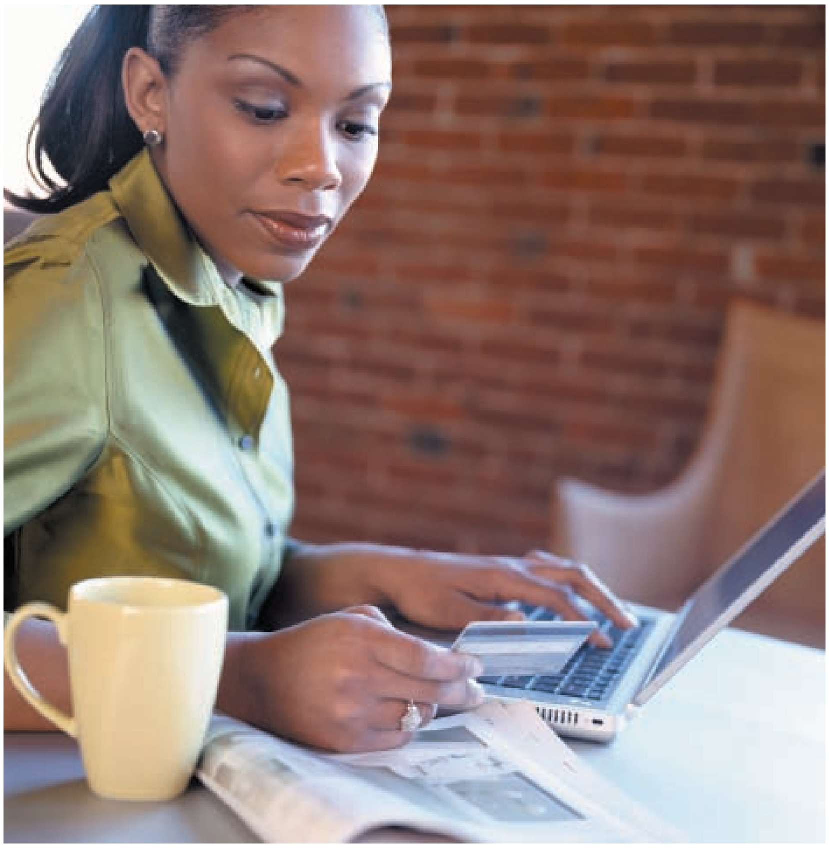
Think Critically

1. This type of violation correlates to cheating. Many students cheat. Discuss the ethical issues involved.
2. Can you think of any ways that buyers might violate vendors at trade shows?

Many trade shows offer educational seminars as well as buying and selling opportunities.

Sales Calls When not selling at trade shows, sales representatives are usually traveling through their assigned sales territories demonstrating their goods or services to customers—business owners, purchasing agents, and store managers, among others—at their places of business. Often, sales representatives make presentations and contacts at trade shows and then close the sales deal with the entrepreneur later, at the business itself. Buyers may also purchase a certain amount of inventory at a trade show and hold back a portion of their "open-to-buy" to have available when the sales representative visits their business. **Open-to-buy** is the term used to express the purchasing budget of a business.

Catalogs/Internet Just as people use catalogs and the Internet at home for convenient buying, entrepreneurs can use them to purchase inventory. Vendors often spend considerable amounts of money on designing web sites and creating catalog presentations of their products or services. Catalogs and web sites offer a method of ordering inventory that allows entrepreneurs to order whenever they find it convenient, without having to travel.



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Telemarketers Some vendors contact potential clients over the telephone. Obviously, when acquiring new inventory, business owners cannot rely on telemarketing. However, the telephone is an excellent means for sales follow-up and sometimes for sales closing. It is less effective as a cold-call tool since it does not allow the customer—in this case, the business owner—to see or touch the product.

The Inventory Purchase Plan

The amount of inventory a business should purchase can be calculated from the sales forecast. You must ask the question "How many units do I need to add to what is presently available to reach my sales objective for a particular period of time?" You need to know how much inventory is on hand at the beginning of the sales period and how much inventory you desire at the end of the sales period. For instance, if you wish to increase the amount of inventory on hand at the end of the period, you must add the amount of the desired increase to your purchase plan. If you want less inventory on hand, you subtract the amount.

The formula for calculating inventory purchases is:

beginning inventory + purchases – sales – markdowns = ending inventory

Suppose that a merchant has a beginning inventory worth $45,000 and projected sales of $100,000 over a period of six months. She wishes to increase the inventory on hand to $50,000 at the end of the six months and plans to mark down $10,000 of the inventory and sell it at cost. Since markdowns represent inventory that is sold without profit, that amount must be subtracted from the plan. To calculate the needed purchase (represented as *x*), the merchant inserts these figures into the formula.

beginning inventory + purchases – sales – markdowns = ending inventory

$$\$45{,}000 + x - \$100{,}000 - \$10{,}000 = \$50{,}000$$
$$x - \$65{,}000 = \$50{,}000$$
$$x = \$115{,}000$$

Once the inventory purchase amount has been determined, the entrepreneur must make sure the inventory arrives at the proper time. If all the inventory arrives at the same time, such as at the beginning of the sales period, it would all have to be paid for at one time. This could cause serious cash flow problems, and there would be no control tools available to raise or lower the inventory level in the event that sales were higher or lower than planned. A better strategy is to break the plan into smaller periods of time and stagger inventory purchases. With a detailed purchase plan it is easier to maintain the desired inventory levels. A six-month purchase plan for the example described above could be broken down into a month-by-month plan such as that in Table 16-3.

TABLE 16-3 6-MONTH RETAIL SALES AND INVENTORY PURCHASE PLAN

	July	August	September	October	November	December	TOTAL
Beginning Inventory	$45,000	$45,800	$47,600	$48,200	$50,600	$55,600	
+ Purchases	14,000	15,000	16,000	20,000	27,000	23,000	115,000
(–) Sales	12,000	12,000	14,000	16,000	20,000	26,000	100,000
(–) Markdowns	1,200	1,200	1,400	1,600	2,000	2,600	10,000
= Ending Inventory	45,800	47,600	48,200	50,600	55,600	50,000	

Note that in the table, the merchant plans to gradually increase the inventory level as the Christmas selling season approaches. It is imperative that the inventory level at the beginning of each month be sufficient to accommodate projected sales for that particular month. The key to proper inventory levels is being flexible and changing course in midstream when necessary to adjust to sales that are higher or lower than projected. Table 16-3 can apply to a retail store. A manufacturing company would have a new-materials inventory (unfinished raw materials), a work-in-process inventory (goods in the manufacturing process), and a finished goods inventory (goods ready for delivery).

For example, if September sales are $5,000 lower than the objective, there will be a $5,000 inventory surplus (in terms of sales dollars) on hand at the beginning of October. As soon as it is clear that the sales slippage is a trend, the entrepreneur should alter the purchase plan to reflect the situation. Otherwise there is a risk of ending up with an increasing disparity at the end of each month. Conversely, if sales are higher than projected, it may be wise to order additional inventory. Smart entrepreneurs keep an open-to-buy reserve to handle such situations. An **open-to-buy reserve** is money available for additional purchases outside the detailed purchase plan. When sales are poor it is not used, but when sales are on the upswing it is money that is immediately available to help cover additional purchases.

Small business owners should keep a running written record of inventory levels, called a **perpetual inventory**, at all times. By recording the amount of inventory a business receives and how much it sells on a daily, weekly, and monthly basis, you will have a record that shows approximate inventory levels at any given time. This informal record will not be exact because it does not take into account defective or stolen inventory. Nor does it include an accurate account of markdowns taken. It must be corrected for accuracy at least once a year with a **physical inventory**, an actual physical count of all the inventory the business owns. The items are counted manually and recorded on a list with a detailed description that may include size, color, and, if used, a stock number. Table 16-4 shows a sample physical inventory sheet.

TABLE 16-4 PHYSICAL INVENTORY REPORT

Description	Qty.	Sizes	Colors	Wholesale Each	Retail Each	Wholesale Total	Retail Total
Bags, duffle, equipment, nylon	9	n/a	black, navy, gray	3.50	7.00	31.50	63.00
Bags, duffle, equipment, canvas	9	n/a	same	4.50	9.00	40.50	81.00
Belts, stretch, cinch, women's	45	S, M, L	yellow, white, pink, gray, blue	2.50	5.00	112.50	225.00
Gloves, Triangle, leather	24	n/a	gray, white	10.00	20.00	240.00	480.00
Jump rope, heavy rope, rubber	3	3-1/2 lb	black	12.50	25.00	37.50	75.00
Jump rope, heavy rope, rubber	3	5 lb	black	15.00	30.00	45.00	90.00
Jump rope, aerobic	6	n/a	white	5.00	10.00	30.00	60.00
Leg warmers, Softouch	72	n/a	yellow, white, pink, gray, navy, orchid, black, blue	7.00	14.00	504.00	1,008.00

Inventory Delivery

Because sales projections never exactly match actual sales, you must build flexibility into your purchase plan. Most businesses make planned purchases well in advance of the targeted sales period. For example, a retail store might place orders for the Christmas selling season six to nine months beforehand to ensure receiving the best selection of merchandise from vendors. When doing this, the entrepreneur must recognize that numerous conditions might change that would require altering sales projections made so far in advance. Poor economic cycles, natural catastrophes, and terrorist threats are examples of events in the external environment that can cause a major disruption of a business's plans. For this reason, dependable suppliers and a flexible open-to-buy program are essential.

Astute business owners place orders in advance for the sales they feel most confident about. Many industries need lead time to produce or possibly import their products, so a high percentage of purchasing may have to be done well in advance. It is extremely important to have a well-thought-out backup plan, an open-to-buy reserve, and dependable suppliers in order to accommodate any unexpected changes. It is also important to recognize that customer tastes can change quickly, particularly in the retail sector. New fashions, fad products, and overnight technology changes are some of the reasons product demand might change between the time the original purchase plan is created and the selling season arrives. Good entrepreneurs have the flexibility and cash flow to adjust their plans as dictated by changes in the marketplace. As an example, a business owner operating with the plan in Table 16-3 might place orders totaling $70,000 at a trade show at the beginning of the sales period and keep $45,000 available as an open-to-buy. If sales are higher than expected, more than the planned $45,000 in inventory should be purchased. If sales are lower, some amount less than $45,000 should be spent.

The Global ENTREPRENEUR

The greatest concern about selling to overseas buyers is getting paid. Suing in a foreign court for unpaid goods is extremely difficult and expensive. Most international transactions are performed on a CIA, COD, or credit card basis, at least initially. If credit has been established, collection techniques must be given close attention. One alternative is to use the services of an international factor that performs the collection process for the exporter. Factors research the credit record of buyers and offer to pay, in this case, the exporter at the time the shipment is delivered and accepted by the buyer. The exporter must accept a discount on the invoice total for this service, but using a factor alleviates a major concern of international entrepreneurs.

Think Critically

1. What do you believe would be a reasonable fee for a factoring service?
2. Is it ethical to build the cost of the factoring service into the invoice total?

Terms of Sale

It is very important to buy from sources that offer fair terms of payment. Payment terms, also known as trade credit, on goods and services vary from industry to industry. However, in most industries it is common for vendors to give discounts to buyers who order large quantities and pay promptly. Vendors must be paid in order to maintain a positive cash flow and have the money available to reinvest in inventory as soon as possible.

The terms of sale are shown on the **invoice**, a statement the seller delivers to the buyer that lists the contents of a shipment or delivery, the number of units or items delivered, the unit price, the total cost, and the payment terms of the sale.

Some examples of the more common terms of sale are as follows:

- **CIA (cash in advance)** The invoice is paid in full to the vendor before being released for shipment.
- **COD (cash on delivery)** The amount of the invoice is collected by the deliverer upon delivery of the goods.
- **2/10/n30 ROG** The buyer receives a 2 percent discount if the invoice amount is paid within 10 days of the date the buyer receives the goods. The net amount (n) is due by the 30th day after receipt. ROG stands for "receipt of goods."
- **2/10/n30 EOM** The buyer receives a 2 percent discount if the invoice amount is paid by the 10th day of the month following delivery. The net amount is due by the 30th day of that month. EOM stands for "end of month."

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- **3/10, 1/15, n60** The buyer receives a 3 percent discount if the invoice is paid within 10 days of delivery, or 1 percent if it is paid within 15 days. The net amount is due in 60 days.
- **EOM** The amount billed is due at the end of the month. No discounts apply.

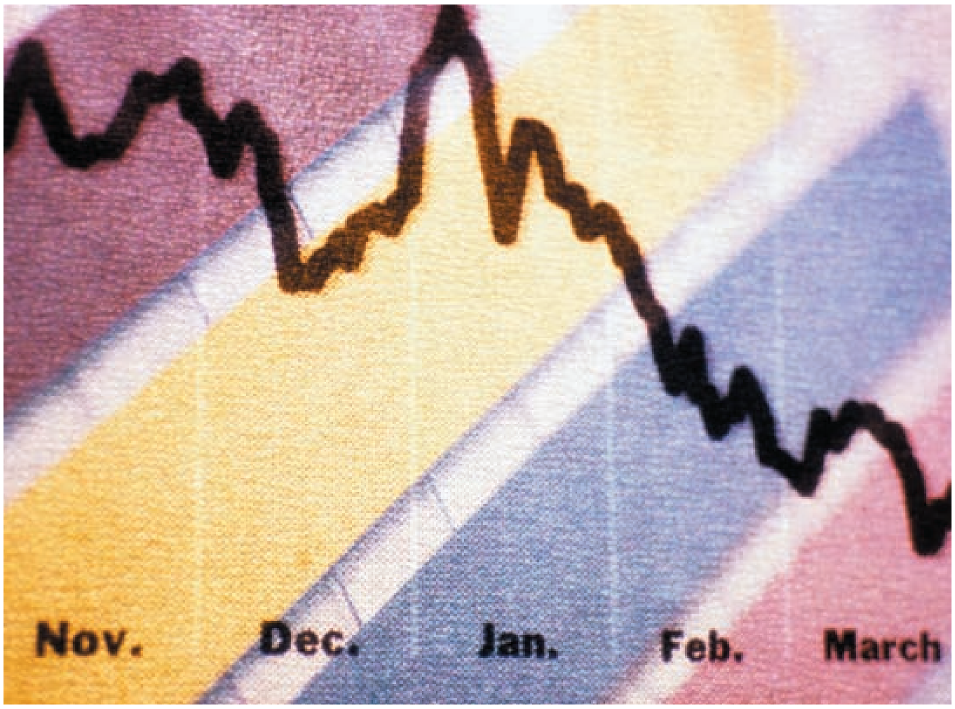
Terms of sale can have a significant impact on cash flow projections. Business owners wish to have as much time as possible to pay for inventory purchases. Ideally, they would prefer not to pay the vendor until ample time has passed to sell the inventory. For cash in advance (CIA) or COD purchases, the money for the inventory is invested immediately and taken out of the cash flow. If generous terms, such as n/60 or n/90, are granted to the buyer, the total sales price, including the profit, might be collected before money is taken out of the cash flow. This can make quite a difference to a business that makes a high percentage of its annual sales during the Christmas holiday selling season. Paying in January for merchandise sold in November and December, instead of paying in September when the merchandise is delivered, has a very positive cash flow impact. If merchandise must be paid for before it has had a chance to sell, business owners often find it necessary to borrow money from the bank until the merchandise sells. Paying interest on the borrowed money decreases the potential net profit. Taking advantage of discounts for early invoice payment, on the other hand, means additional profit.

Since it is in your best interest to tie up money in inventory for the shortest time possible, you must devise an inventory system that allows for the most efficient use of money. A just-in-time inventory system avoids having inventory that sits in a stockroom. Again, the key to this system is knowing the capability and reliability of vendors and closely monitoring inventory levels.

Most businesses assign a reorder point for inventory used on an everyday basis. When the stock of an item falls to this level—the reorder point—the item is automatically reordered. The reorder point is determined by the delivery time of the replacement inventory. Some businesses use a computerized inventory system that alerts management when it is time to reorder. This type of system is often used in cashiering systems that record each sale by a stock number. You can also create your own manual system to check inventory levels on a daily or weekly basis.

INVENTORY AND SALES FLUCTUATIONS

What happens when sales objectives are either exceeded or not met? Using the sales and inventory purchase plan in Table 16-3, assume that August's total sales are a disappointing $10,000 rather than the $12,000 projected. The immediate result is that the cash flow projection is $2,000 less than planned and the inventory level is $2,000 higher. Unless there is reason to believe that the lower sales are a long-term trend, simple short-term corrections should be made.



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Postponing planned inventory arrivals by $2,000 in the next 30 days will correct the inventory level by October 1. At the same time, the planned future inventory purchases could be reduced by $2,000. In this way, the cash flow deficit will also be brought back in line.

If sales had exceeded the projection by $2,000, the business owner should attempt to speed up the planned inventory arrivals and at the same time order additional inventory using the open-to-buy reserve. If she fails to do this, the $2,000 inventory shortage will cause a decrease in anticipated sales sometime in the near future. As you can see, fluctuations in sales can easily get out of hand when they are not closely monitored. If corrections are not made immediately, a string of three or four months of sales revenue not being met or exceeding expectations will seriously disrupt the entire operation. This is why control reports must be kept up to date.

Poorly planned and controlled sales and inventory purchase objectives can have a domino effect throughout the entire business operation. In addition to cash flow problems, the business will experience disruptions in personnel scheduling, insurance expenditures, and promotional efforts.

Personnel Scheduling

The organization chart and personnel needs are designed to accommodate projected sales objectives. In the event these projections get out of line, the entrepreneur has to adjust personnel schedules. If sales are too low, there will be employees with not enough work to do. Some may have to be laid off, or their hours may need to be decreased. Some companies reduce their employees' pay rate. All these measures have a negative impact on employee morale. Poor morale can cause excessive personnel turnover, which could result in the expensive task of employee recruiting and training.

If sales exceed objectives, the owner may have to hire extra personnel or pay overtime to handle the added business. If the business is understaffed, customers may not receive the quick, efficient assistance to which they are accustomed, and they might go to the competition instead.

Personnel schedules, like inventory purchase plans, should be designed with flexibility. Successful business owners have a contingency plan of action to handle both slow and busy sales periods. They cross-train employees, who are then qualified to handle additional responsibilities. They also keep the names of people who can work on a part-time or temporary basis always on hand.

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Business owners should warn employees in advance of possible courses of action the company will take to handle periods of high or low sales. For example, there may be times when employees are asked to work overtime or their working hours are cut back. Entrepreneurs and their families should be prepared to work extra hours themselves when needed. If it is necessary to lay off employees because of poor sales, owners should provide as much notice as possible to give the affected personnel time to search for other jobs.

Insurance

Unexpected changes in sales and inventory plans also have an impact on the insurance requirements of the business. Entrepreneurs must carry insurance to protect against losing their investments as a result of fire, accidents, or other unexpected events. Insurance premiums are based on the value of the business. The more property that is insured, the higher the premiums. Additional inventory increases the value of the business, which in turn means that additional insurance coverage should be purchased. If the value of inventory increases by $25,000, the insurance should increase by the same amount. The insurance company should be informed of changes in the value of the business, or coverage will not be sufficient. Many businesses carry "peak season" coverage that automatically expands during times of the year when inventory increases are anticipated. In case of fire or other emergency, the owner will not receive reimbursement for lost property that has not been reported to the insurance company.

Promotions

Since promotional events and sales activities are often scheduled months in advance, a change of inventory levels can be devastating to a planned promotion. If the business is planning an event to showcase its newest products, but poor sales have forced the business to cut back or postpone delivery of inventory, plans will have to be changed as soon as possible. Seasonal advertising will be misspent if the proper amount of inventory is not on hand to satisfy the demand created by the advertising.


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Likewise, if a manufacturer does not have the completed goods ready for shipment, the business's sales force will have nothing to sell. In this situation poorly planned inventory production will demoralize the sales force and cause resignations as sales personnel who receive commissions will suffer financially.

Future Implications

When a business fails to meet its sales objectives, the ramifications can be felt for a long time. Coming out of a fall selling season with too much inventory reduces the amount of money available to buy spring goods, which then adversely affects purchases for the following fall season. Unless contingency plans and control tools are planned and implemented, this domino effect can gain momentum until it crushes the operation. Conversely, dramatic upswings can change not only the immediate but the long-term opportunities of a business. Good business cycles open up *strategic windows* of opportunity—times when opportunities and expansion should be sought and will only be available for a certain amount of time. You must take the time to formulate strategic, long-term plans that take into consideration all possible outcomes to your decisions.

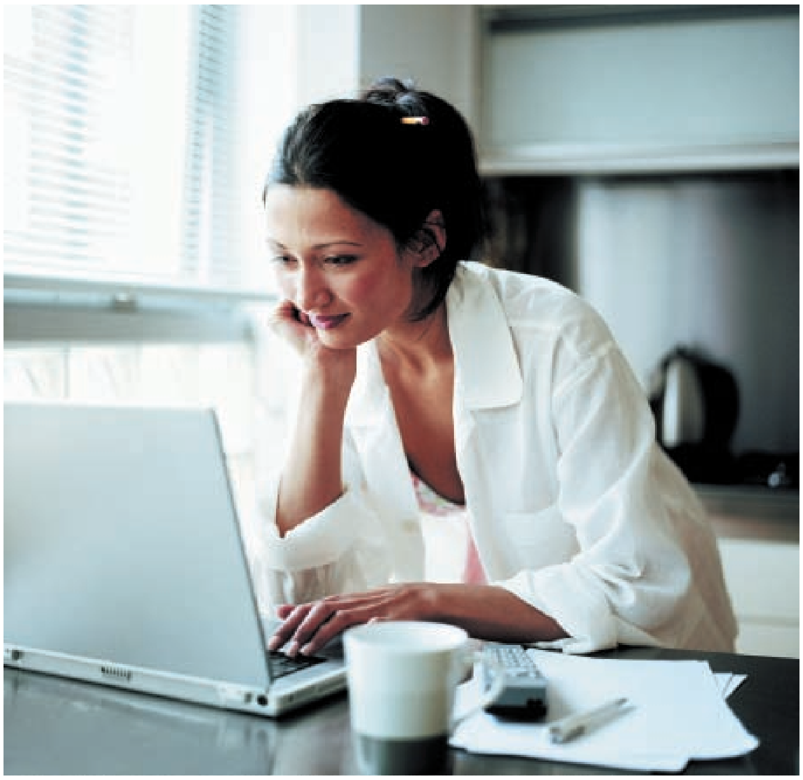
COMPUTERS AS CONTROL TOOLS

Personal computers have become great tools for business owners. There is a wide range of hardware to choose from. Among the many software packages available for business use, some are designed for manufacturers and others for service, retail, or wholesale businesses.

Entrepreneurs must shop carefully for the software system that best fits their particular business, then find the computer hardware that accommodates the chosen system. Computer hardware consists of the computer, monitor, keyboard, printer, and speaker system. For many start-up businesses, systems that cost less than $2,000 are sufficient. As the business matures, so should the system. It might start as an individual PC and end up a network of computers, all tied into one central system. If you are not up to date in the use of PCs, look into taking courses at a local college or private computer learning center. In today's world it is becoming almost impossible to operate a business without at least a rudimentary knowledge of computer technology.

With proper training, you can keep records and monitor activities as efficiently as large businesses do. Business operations that can be handled efficiently through the use of computers include:

- **Financial Statements** Updated income statements, balance sheets, and cash flow statements can be easily maintained and reproduced as needed.
- **Inventory Control Records** Perpetual inventory totals can be tracked by product line as well as accumulated totals. Many businesses have computerized sales terminals that automatically subtract each item sold from its product category.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Small Business Technology

Entrepreneurs carry their control tools with them—laptops on airplanes and PDAs at trade shows. Cell phones have become part of their wardrobe, clipped to their belts each morning. When they travel, business owners check in with the office, pull up daily cash flow information on their computers, and keep track of their schedules. At trade shows they calculate changes in their open-to-buy budget with each order placed. In today's marketplace it is essential to stay in touch with what's going on around you.

- **Personnel Payroll Records** Payroll software makes it possible to maintain year-to-date payroll records showing all tax and other payroll deductions per employee. A payroll program automatically calculates all tax and other deductions for each pay period and prints the paychecks. This saves considerable time for the person in charge of payroll.
- **Accounts Payable and Receivable Records** By recording all incoming and outgoing invoices, the business keeps current and convenient records of all monies owed by vendors and customers.
- **Correspondence** Word processing software programs make writing and keeping records of all business correspondence simple. Numerous graphic art and publishing programs assist in developing brochures, advertising layouts, and announcements.

Database Applications

Most entrepreneurs routinely develop lists of various kinds of information. The names of customers, potential customers, vendors, and competitors are examples of information that should be collected and organized. A **database** is a collection, depository, and list of information used by businesses to stay informed about their customers. Database software is a set of instructions used with a computer to set up and provide access to this listing of data.

A database stored in a computer makes it easy to organize information, keep the information up to date, and produce printed copies of the information. A database is organized so that many people can retrieve information from it, use it for different reasons, and format it in different ways. Table 16-5 is an example of how information about customers can be stored in a database.

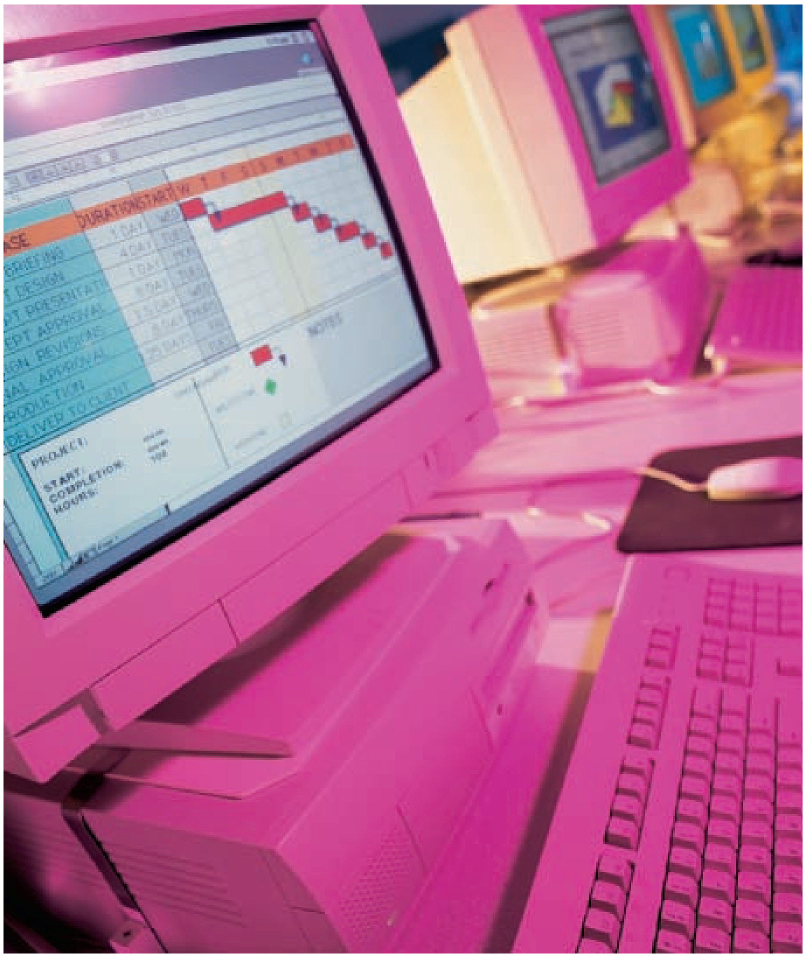
TABLE 16-5 CUSTOMER DATABASE

Name	Address	Phone	Purchases Year to Date
Dinges Works	341 Colfax Rd.	303-243-5436	$ 10,365.89
Johnson Sales	802 South St.	303-245-9898	30,143.09
Reed Manufacturing	104 Constitution Ave.	303-248-1010	18,296.54
Stein Manufacturing	143 S. Hampton Rd.	303-245-7777	76,243.65
Sultan Manufacturing	2101 Industrial Rd.	303-243-1999	25,389.89
Wong Energy	567 Wales Ave.	303-248-0753	100,945.10
Zu Welding	557 Colorado St.	303-245-9183	7,512.76

When creating a database, you must first decide what information about your customers is important to keep on file. The entrepreneur who developed the database in Table 16-5 wanted a list of all customers, including the address, phone number, and year-to-date purchases of each. If the entrepreneur later decides that other information would be useful as well, that information can be added to the database. For instance, the year that each customer began purchasing from the business could be added as a fifth category.

Information can be retrieved from the database and sorted on the basis of a particular characteristic that you choose. For example, if you want to know which customers are located in the area of town that has phone numbers with the prefix 243, you could search the database for all phone numbers that begin with 243. The search would yield two customers: Dinges Works and Sultan Manufacturing. You can use this information to arrange to call on both customers when you are in that part of town. Or perhaps you decide to reward all customers who have ordered at least $25,000 worth of merchandise in the year to date. Your search brings up Johnson Sales, Stein Manufacturing, Sultan Manufacturing, and Wong Energy.

Searches based on many other characteristics can also be made. A restaurateur in need of additional revenues can keep a list of customers and their birthdays. Sending an invitation for a free dessert on their special day is bound to bring in extra business.



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A database can be used to create mailing labels, generate reports, and track accounts payable and receivable. The ability to store and organize information in different ways can be a valuable asset for the busy entrepreneur.

Spreadsheet Applications

As discussed in Chapter 15, one of the major responsibilities of an entrepreneur is to maintain accurate accounting records. The most efficient way to keep these records is with spreadsheet software. A **spreadsheet** is an electronic replacement for an accountant's columnar ledger, pencil, and calculator. You can use spreadsheets to calculate budgets, prepare financial statements, and analyze financial problems—in fact, you can apply them to almost any math problem that can be solved with a calculator. As numbers are changed on the spreadsheet, totals are automatically recalculated. This feature facilitates planning different financial scenarios. For example, when you are completing the initial capitalization portion of your business plan, you will find it very useful to experiment with different figures to determine actual operating costs and cash flow. If you wanted to see what your total operating costs would be with a building rent of $650 per month instead of the $800 per month you had originally estimated, you could substitute the $800 figure with $650. The spreadsheet would then automatically recalculate your initial operating cost estimates, as shown in Table 16-6. To recalculate all the figures with pencil and paper would be time consuming, but the computer can perform the same function for you instantly.

TABLE 16-6 SAMPLE SPREADSHEET OF BUSINESS START-UP COSTS: FIRST AND SECOND ESTIMATES

	Expense Item	First Estimate	Second Estimate
1	Telephone	$ 100	$ 100
2	Equipment	10,000	10,000
3	Wages	4,000	4,000
4	Rent	800	650
5	Utilities	350	350
6	Advertising	400	400
7	Merchandise	20,000	20,000
8	TOTAL	$35,650	$35,500

CONTROL THEFT

It is an unfortunate fact of life that some people steal. Businesses are often victims of theft by customers and employees. If business owners do not take proper security measures, inventory theft can have a serious impact on their inventory control system and their profits.

The best method of controlling inventory theft is through prevention. Measures for preventing customer theft include the following.

- Train the staff to watch all customers closely, but not in an annoying or obvious manner. If potential thieves know they are being watched, they generally will not steal. In a retail environment, all customers should be acknowledged as they enter. It is not only polite, but it also gives notice to shoplifters that the employees are aware of their presence.

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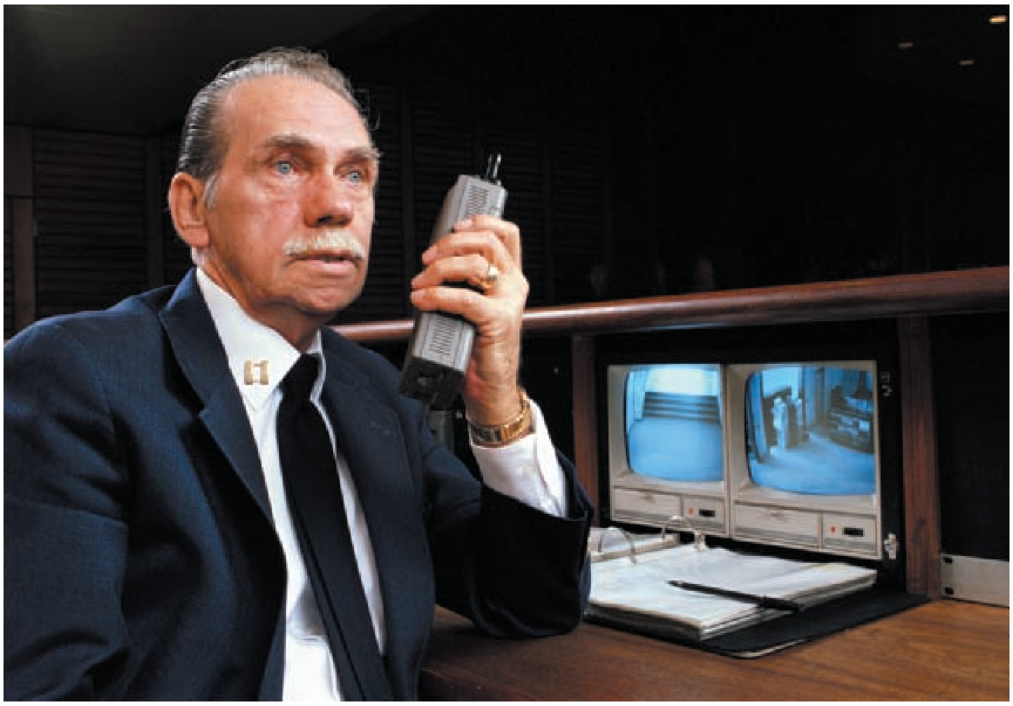
- Teach employees the procedures to follow in the event they witness a theft. Call your local police department and ask about procedures or training available to business owners. If a shoplifter is apprehended and arrested, it serves as notice to others that the business does not tolerate shoplifting.
- Invest in security devices. Alarm systems, hidden cameras, and security tags on merchandise are commonly used devices. The cost of some security systems may be partially offset by reduced insurance premiums. As a prevention tool, it is usually a good idea to publicly post the security measures being used.



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Businesses must also establish prevention measures against employee theft, which is actually far more common in many industries than customer theft. Common methods include the following.

- Set a policy that allows checking all articles taken out of the business at closing time or at employee work shift changes. Articles that may be checked include purses, tote bags, briefcases, and lunch bags.
- Devise a system of checking inventory levels against sales results. If an item is not accounted for, compare sales receipts with physical inventory to determine whether it may have been stolen.

The best way to ensure employee honesty is to cultivate an open relationship between employees and management. Employees who work as a team and take pride in their work are less likely to be tempted to steal from the business. In the event there is theft, loyal employees will find a way to report infractions by their fellow employees.

The amount of stolen inventory can be calculated when a physical inventory is taken. Business owners can assume that merchandise, products, or parts not accounted for by sales, use, or damage have been stolen. A significant incidence of theft reduces inventory levels and causes problems in achieving sales objectives.

Successful entrepreneurs are very attuned to properly monitoring operations in all areas of their business. Whenever things go astray—whether it be cash flow, inventory fluctuations, or stolen goods—a business will suffer in its profitability. There is no perfect business plan that is able to predict and project its operations exactly. There are times that circumstances arise that are a total surprise and are impossible to predict. Good managers develop guidelines to rely on when plans change and are able to move quickly and decisively to correct imbalances. This contingency planning ability is developed through experience and instilling a strong monitoring program throughout the business operation.

FUN FACTS

According to the U.S. Department of Commerce, employee theft is responsible for nearly one-third of business bankruptcies. The 2002 National Retail Survey estimates the cost of shoplifting at $10 billion per year. There are a reported 800,000 shoplifting incidents every day.

Chapter Review

Ship in a BOTTLE

Taking Control

With five product lines, three employees, and an operating budget of over $2,000 per month, Ship in a Bottle was on its way to becoming a full-fledged business. Fred was ready to take the plunge into full-time ownership/management and build the business into a $1,000,000-per-year operation. But if he was going to reach that objective, he would have to install some management controls that he had neglected.

He started by reviewing his objectives. No longer could he get by with "guesstimating" sales. He would have to set annual sales objectives and strategies to achieve them. He consulted with his employees, with Johann, with the nautical weather instrument and clock manufacturer, and met with his flag, nautical print, and home decor vendors at trade shows. He reviewed each vendor's production and delivery capabilities. Fred then reviewed his retail accounts and decided to visit the stores on a regular basis. He considered hiring a sales representative to do this.

Fred developed a purchase plan for each product line based on three-month periods. The difficult part was coordinating various production and delivery schedules. Flags were available almost immediately, ship in a bottle took three months, clocks and weather instruments one month, and nautical prints and decor four to six weeks. He had decided months earlier that he would rather be too long on inventory than too short. Losing orders because of shortages would be unacceptable because he knew customers would find a substitute product.

Fred had also learned that the seasons varied greatly in terms of promotional possibilities. December was the best month for the retail web site, October was good for the wholesale trade, June offered Father's Day and graduations, Valentine's Day was a bright spot, but January stank. He would need to arrange his inventory arrivals to coordinate with the various seasons. He hoped to persuade his vendors to loosen up in their selling terms as they got to know him better. Of course, he knew his retail store accounts would request the same treatment—they would want special terms, too. One of the first policies he put into effect was that all customers would be treated equally no matter their size or status.

Fred had learned the value of a computer in a small business. It made his job much easier and allowed him to keep an eye on important financial information. He would soon need to add some computers to the network for the telephone answering crew to forward orders.

It was exciting, exhilarating—and frightening. A year earlier he had been looking for a ship in a bottle, and now he was setting up a business that would support his family. He was living the American dream of business ownership. Fred Johnson, Entrepreneur: it sounded pretty good.

Think Critically

1. Do you think Fred is ready to operate his business on a full-time basis?
2. Make a list of policies Fred can use to stay on top of his enterprise.
3. What areas should Fred investigate for future expansion?

Summary

Entrepreneurs must control all aspects of their business operations. Management by objectives clearly states the goals of the business and meshes them with the goals of the employees to ensure that everyone is involved. Objectives are stated for all operational aspects of the business, and results are measured against fair and uniform standards. Another management technique is total quality management, or TQM, which involves implementing a program of continuous improvement through stronger relationships with customers and suppliers, reduced production or replacement time, and greater employee involvement.

Once sales objectives are set, sales results are monitored on a daily, weekly, and monthly basis to make sure the business is operating as planned. If objectives are off the mark, there will be a ripple effect throughout the operation. Missed sales objectives force changes in inventory levels, personnel scheduling, insurance requirements, and promotional plans. Cash flow budgeting and the timely collection of accounts receivable are two ways to control revenues.

Entrepreneurs should monitor inventory and design purchase plans. The purchase plan must be flexible to accommodate changes in sales revenue forecasts. The just-in-time inventory plan is ideal. Building a strong relationship with dependable and cooperative vendors allows the entrepreneur to negotiate for the best payment terms, manage inventory levels, and maintain a positive cash flow.

Personal computers are invaluable control tools. Database and spreadsheet software programs are used to create financial statements, budgets, inventory control records, payroll records, accounts payable and receivable records, and customer databases.

Employee and customer theft are an unavoidable aspect of running a business. Security measures must be built into the business plan, and an open relationship must be cultivated between management and employees.

A Case in POINT

Unrealistic Expectations

Benny's desk was piled high with invoices. He was discussing his problem with Suzanne, a consultant from the local Small Business Development Center. "I can't keep up with all these bills, Suzanne. I'm totally confused about which to pay now and which to hold off on."

Suzanne was not surprised. Benny's business *was* a mess—a gift shop stuffed with random goods and no theme or direction. "How many vendors do you have, Benny?"

"Fifty or 60, maybe more. When I go to trade shows I buy whatever looks like it'll sell."

Suzanne handed him a blank pad. "A shop this size doesn't need so many suppliers. List all of your suppliers by category so you can see what percentage of your total sales comes from each category."

A week later Benny presented a list to Suzanne.

Classification	# of Suppliers	% of Sales
Greeting cards/stationery	11	21
All occasion gifts	15	23
Special occasion gifts	12	20
Novelty gifts	18	26
Fine gifts	7	10

continued

Chapter Review

"Benny, you have 63 suppliers. That's less than 2 percent of sales per supplier. If you consolidate your buying, you'll get better service and have a better grip on your business. If you cut the list to 20 or 25—so 4 or 5 percent comes from each supplier—you'll save on shipping costs, and possibly get discounts for your higher-volume purchases."

Working together, Benny and Suzanne made a new list.

Classification	# of Suppliers	% of Sales
Greeting cards/stationery	5	25
All-occasion gifts	6	25
Special-occasion gifts	4	20
Novelty gifts	5	20
Fine gifts	3	10

"Well, that's a start," Suzanne said. "Choose your vendors carefully. Buy only from those you can depend on, who will offer help when you need it. Choosing the best vendors will make your inventory selection better. Also, the more established the vendor, the more flexible the payment terms. Design a detailed purchase plan and a strict budget before you go to the next trade show—and stick to it. Hold some money back as an open-to-buy after the show so that you can adjust to any changes in your projected sales during the selling season."

Think Critically

1. What caused Benny's inventory problem in the first place?
2. What control tools should he implement now for the future?

Vocabulary Builder

Write a brief definition of each word or phrase.

1. database
2. inventory
3. invoice
4. just-in-time inventory plan
5. management by objectives
6. networking
7. open-to-buy
8. open-to-buy reserve
9. perpetual inventory
10. physical inventory
11. spreadsheet
12. vendors

Review the Concepts

13. Why is management by objectives both a planning and control tool?
14. What are the primary components of total quality management?
15. Why is it necessary to monitor sales results daily, weekly, and monthly?
16. Explain two important ways to control revenues.
17. What is the advantage of a just-in-time inventory control system?
18. What are four ways that a business owner can shop for inventory?
19. What does the notation 2/10/n30 mean?

20. How do inventory and sales fluctuations affect personnel scheduling, insurance, and promotion?
21. Name five ways that a small business owner can use a computer.
22. Name three uses for a database and three uses for a spreadsheet.

Critical Thinking

23. What is the starting point of a purchase plan, and how are planned purchases determined?
24. What can happen to a business owner who fails to maintain an open-to-buy budget after planned purchases have been ordered?
25. Discuss the importance of establishing trust and dependability with vendors.
26. What do you believe is management's responsibility to employees when poor sales force a reduction in payroll?
27. How much should a business purchase if it has a beginning inventory of $75,000, a planned ending inventory of $80,000, projected sales of $200,000, and projected markdowns at cost of $10,000?
28. Why is building a database on a computer essential for a small business owner?

Project

Build Your Business Plan

Prepare a six-month purchase plan for your hypothetical business. Start by stating what you believe will be your beginning inventory and your ending inventory. (Note: Since it is a new business, the inventory should be in a growth stage.) By inserting your six-month sales forecast and calculating a percentage for markdowns, you will be able to determine your initial open-to-buy. Refer to Table 16-3 to create your plan.

Now determine from which vendors you will purchase inventory. Visit would-be competitors in your community. Find out if any trade shows are scheduled for your industry in or close to your locale. If possible, find out if you can attend as a guest.

Determine the type of database your new business should maintain. Consider a separate database for customers, vendors, and competitors.

It is now time to conclude your business plan by writing the executive summary, which is placed at the beginning of the report. Review your total plan and summarize its most attractive features. Remember the executive summary should act as a catalyst for the reader to continue. Tell your reader what lies ahead in the report.

Best wishes for an exciting entrepreneurial career!

Unit 4 Case Study

The Banker

Mary Yost was reviewing Gavin Ross's loan application for his proposed candy manufacturing and distribution company. Mary is a commercial loan officer at First National Bank. Her primary responsibility is to review business loan applications, interview applicants, and make recommendations to the loan committee for approval or disapproval.

Her first task was to determine whether Gavin had the expertise and experience to run a business. She was pleased to note from his resume that he had worked for a large confectionery for over five years, honing his managerial skills. He also had an outstanding personal credit rating.

Mary had to determine whether Gavin's financial proposition was a good risk. The bank directors were cautious about granting new business loans because so many new businesses fail. The bank usually required that a new business loan be 100 percent collateralized by easily liquidated personal assets. Exceptions were sometimes made if the applicant had a strong business plan. Gavin's loan would have to be an exception—he did not have enough collateral to fully support his $50,000 loan request. Mary reviewed Gavin's personal financial statement.

Assets		Liabilities	
Cash on hand	$ 1,500	Notes payable (automobile)	$ 4,500
Stocks and bonds	25,000	Credit card debt	1,300
Real estate (home)	110,000	Mortgage loan	70,000
Automobile	8,000	Misc. accounts payable	900
Personal assets	11,000		
Total assets	$155,500	Total liabilities	$76,700

Total assets ($155,500) – Total liabilities (76,700) = Net worth ($78,800)

The financial plan to start the business called for a total of $75,000. Gavin, willing to contribute $25,000 from the sale of stocks and bonds, was $50,000 short. Mary reread the statement for other possible sources of collateral. Gavin's car was too old, and his personal belongings could not be easily liquidated if the bank had to call in the loan. But the home equity—the $40,000 difference between the mortgage loan and the value of the home—could be used to help secure the loan. The bank could lend Gavin up to 80 percent of his home equity, or $32,000.

There was still an $18,000 deficit in available start-up funds. Mary turned her attention to the pro forma balance sheet for the new business.

Assets		Liabilities and Owner's Equity	
Current assets		Current liabilities	
Cash	$15,500	Accounts payable	$ 300
Inventory	19,300	Current portion of long-term	
Supplies	2,200	debt (3 yr. $50,000)	16,700
Total current assets	37,000	Total current liabilities	17,000
Fixed assets	37,500	Long-term debt	33,300
		Owner's equity	24,200
Total Assets	$74,500	Total liabilities/owner's equity	$74,500

Although Gavin had hoped to use the inventory and equipment as collateral, Mary knew they would be difficult for the bank to liquidate if necessary. After contacting a buyer of used candy-making equipment she penciled in $5,000 as its true collateral value. She still needed to find $13,000 in collateral for a $50,000 loan.

She reviewed Gavin's pro forma income statement. He had prepared both best- and worst-case scenarios. Mary studied the worst-case scenario to determine the level of risk.

Based on Gavin's conservative projections, the business could afford a $1,400 monthly payment, the approximate amount required for a three-year payout of $50,000 at 6.5 percent interest. This would pinch Gavin's cash flow a little during the first year, but the second- and third-year projections indicated that by then he could easily meet the payment.

Mary reviewed the capital-needed statement again. She noted approvingly that Gavin had put in a reserve fund of $10,000 for unexpected expenses. The cash flow projection did not indicate any months of excessive deficits.

Mary decided to propose that the bank lend Gavin $40,000 on a three-year note, collateralized by his $32,000 home equity and liquid business assets of $5,000. She would also recommend approval of a short-term $10,000 line of credit in case of a cash flow shortage. The loan committee would have misgivings about issuing a loan to a new business that was less than 100 percent collateralized, but the bank would benefit from the use of Gavin's deposits of $250,000. Mary recognized the risks but also felt it was a solid recommendation. If the business failed, she would be held responsible for recommending the loan. If it succeeded, her recommendations would be treated with greater respect. Mary wrote "Recommend Approval" across the top of the application.

Pro Forma Income Statement, Year Ending June 30, 2006

Sales	$250,000	
Cost of goods sold	97,000	
Gross profit		$153,000
Operating expenses		
Payroll (including owner)	75,000	
Rent	18,700	
Operating supplies	9,900	
Maintenance	6,000	
Utilities	8,600	
Interest	3,600	
Advertising	2,500	
Insurance	3,700	
Depreciation	4,000	
Other	4,000	
Total operating expenses		$136,000
Net Profit (before taxes)		$17,000

CASE QUESTIONS

1. Do you believe the loan committee should accept Mary's recommendation? Why or why not?
2. Do you think Gavin should accept the loan as recommended, or should he hold out for his original request of a $50,000 three-year loan?
3. Do you believe commercial lending institutions are too cautious about making new business loans? Can you think of anything they could do to lower the risks associated with new business loans?