How to manage inventory in excel

No business is too small for an inventory control system. Despite this, options such as an integrated electronic system are neither necessary nor cost-effective. On the other hand, striking a balance between having too much and too little inventory can be difficult with a manual system. If this describes your business, using an Excel spreadsheet to track inventory can be a cost-effective alternative. Although Excel can’t automate everything, formulas and conditional formatting rules can help you calculate on-hand stock levels and assist with accurate and timely inventory ordering. Create a spreadsheet from scratch or download a free inventory-tracking template from the Microsoft Office website at office.microsoft.com. For a simple system, an 11-column spreadsheet will work for inventory-tracking tasks. Create column labels for inventory ID, product name, description, unit price, quantity in stock, items sold, current quantity, reorder level and a column label to identify discontinued items. You will need to fill in the spreadsheet with current information, so this may also be a good time to conduct a physical inventory count. Enter current inventory data in all but the items sold, current quantity and discontinued columns. The discontinued items column serves as an alternative to deleting information from the spreadsheet as items become unavailable. As you update the spreadsheet by entering items-sold data, a formula will calculate the quantity currently on hand. If the current quantity levels are equal to or less than the reorder level, the background color in the current quantity column will alert you to reorder by changing color. Enter a quantity in stock minus items sold formula in the current quantity column. To create it, click in the first cell under the current quantity column label and enter an equal sign. Next, click in the first cell under the quantity in stock label, enter a minus sign, click in the first cell under the items sold label and press "enter." For example, the formula might appear as “=E3-F3.” To extend the formula, click the cell, position the mouse pointer over the bottom-right corner of the cell so that the pointer resembles a cross. Hold the left mouse button down and drag to the bottom of the spreadsheet. Change the background color of the current quantity cell to red to alert you when it’s time to reorder. To do this, click in the first cell under the current quantity column label, select “conditional formatting” from the Excel ribbon, choose "highlight cell options" and select “between.” In the dialog box that opens, type the number 5 in the first text box, type zero in the second text box and choose “light red fill” from the drop-down box. Extend the rule by dragging through all of the cells in the column just as you did with the formula. If you are a business owner, it’s important to keep an up-to-date list of your inventory. Inventory items are considered business assets, and should be listed as such in your financial records. You also need this information to accurately compute how much insurance you need in case of a theft, fire, flood, or other incident that could affect your inventory. If an incident does occur, your inventory list will help you when you file an insurance claim. Decide what type of computer software you want to use to record and update your inventory. Many companies use an Excel spreadsheet to list their inventory items. Enter information such as a description of each item; quantities of items; serial numbers on equipment; the name of the manufacturer; purchase price; and date of purchase. Every type of business will have different things to include. A law office might only have office equipment; a construction company could have bull dozers, trucks, trailers and tools; a grocery store could have cash registers, shelving, refrigerators, freezers and the food products they sell. A large store or company may need to inventory items on a daily basis; a small office might only need to inventory equipment once a year. Not everything needs to be inventoried. Office supplies such as paper, pens, and paper clips don't need to be inventoried (unless you have an office supply store). As a general rule, you should inventory anything that you would include on an insurance report. Include scanned copies of receipts from your original purchase in your computer records. Include scanned or digital copies of photographs of your inventory in your computer records. For example, take photos of computers, copiers, cars, trucks, jewelry (if you own a jewelry store), machinery, etc. Save your computer records in a secure location where a password would be required to access. Only provide the password to those you trust with this information. Make sure you have a number of copies of your inventory kept offsite in a secure location. Provide an electronic copy of your inventory to your lawyer, accountant, and insurance agent. Consider getting a safe deposit box at your bank where you can keep printed and electronic copies of your inventory. Inventory recording, when applicable, is one of the types of accounting activities required by law under the FASB and regulated by Generally Accepted Accounting Principles or GAAP. Two kinds of companies must regularly take inventory: merchandizing companies that sell goods and manufacturing companies that make goods. No matter what kind of company, items recorded for inventory share two characteristics. First, the items are owned by the company recording the inventory. Second, the inventory items are ready for sale in the normal course of business activity. As long as the commodity is ready for sale (the way the company sells it), the product could be in any form, from raw material to finished or even refurbished good. Count the inventory. How a company counts inventory is dependent on the type of good. Some products are individually counted, while other products are weighed or measured. The denomination used for counting is called the “unit.” For example, in a perfume inventory counted as individual bottles of perfume, each bottle would be unit. In a perfume inventory counted as raw liquid, a gallon might be the unit. Determine the ownership of the goods. Products of questionable ownership include goods in transit and goods held by other parties. Depending on the circumstances, goods in transit become owned property either when the product leaves the destination it was sold from or when it arrives at the place of business. Goods held by other parities, called consigned goods, are usually property (and therefore inventory) of the owner, not the holder. Apply the unit cost to the inventory quantities to determine the total cost of the inventory and the cost of sold goods. Record the total inventory cost on the company balance sheet using one of three methods. The three generally accepted methods for inventory recording are: first-in, first-out; last-in, first-out and average cost. As each method is legally acceptable, it’s up to management and company accountants to decide which recording method is most appropriate. Assume that the first goods to be bought are the first goods to be sold. Record sold inventory as though the oldest goods were sold first. Adjust historical cost, deprecation and other factors accordingly. Assume that the last goods to be bought are the first goods to be sold. Use this type of recording in situations where the inventory is piles of raw material. Record sold inventory as though the newest goods were sold first. Adjust historical cost, deprecation and other factors accordingly. Assume that previously bought and recently bought inventories are similar. When a new batch of goods is purchased, factor the cost of each batch into the overall inventory average. When inventory is sold, subtract the unit average for each sold good form the inventory total. Tips In both first-in, first-out and last-in, first-out, the way the inventory is recorded is most often not the way it was actually sold. The system runs on assumptions, as it would be nearly impossible to determine the order in which each sold product was initially received. Inventory is goods or stock a business keeps on hand to meet the demands of customers or to be used in the manufacture of a product. It can be the food on your grocer’s shelf, the replacement parts stocked by a hardware store or the manufacturing components necessary to make a computer. In general, inventory can be divided into four groups: raw material, spare parts, work-in-process and finished goods. Raw materials inventory consists of items purchased from an outside source. It can be anything from ore and paper to nuts, bolts or seats. Raw materials can even be partially assembled items or an item that the supplier would consider a finished good. What makes these items raw materials to a purchaser is that the buyer had no input into the product’s manufacture. This type of inventory is used to both support the production process and to support the finished good. It is typically a component of the manufacturing process such as a circuit board for a computer. For instance, a spare part would be used in production if a current component fails a quality control test. Spare parts are also used for repairing a manufacturer’s product that has failed after being purchased by the customer. As soon as a raw material enters the manufacturing process it enters the work-in-process category. It remains in this category until the finished item comes off the production line and, if part of the production process, goes through inspection and quality control. An item is considered a finished good when it can be delivered to a customer. It has come off of the production line and is moved from work-in-process to final inventory. It can now be sold to a retailer, a wholesaler or shipped to fulfill a specific customer order. Inventory systems are designed to help a business keep track of its merchandise, including where it is stored and how it is sold. Inventory moves in a complex cycle between manufacturers, storage rooms, shelves and consumers. Some inventory that does not sell must be discarded, while inventory that does sell well must be re-ordered at the right time to minimize to storage costs but meet demand. Businesses use a number of different tactics for inventory control, which have steadily advanced with inventory management technology. Manual methods are the oldest and simplest inventory system. Essentially, business managers simply count the merchandise they have. If certain types of inventory are looking low, then they order new merchandise from their suppliers. Even in manual systems, businesses typically use basic formulas to decide when inventory is running low. The manual system is inexpensive and very easy to teach, making it ideal for small businesses that deal in only a few types of merchandise, especially if it is supplied by local producers. Batch-based systems divide the inventory up into different groups and use these groups to make decisions on inventory management. For instance, a business may choose to divide its inventory between a bin back in storage and the units on the shelves. When the bin is emptied in storage, the business knows it is time to re-order products. Other businesses use more complex systems: they divide inventory in A, B, and C groups based on how well it is selling. The A inventory is repurchased frequently, while B and C inventories are cycled more slowly, and lower groups of inventory may be dropped entirely. UPC stands for universal product code, a popular bar code system, especially for larger businesses. The bar codes are used to track products as the enter the company and when they are sold to customers. Using bar codes makes it easy for companies to identify where lost products belong, and allows them to manage shipping and stocking procedures more effectively, making bar codes ideal for large amounts of merchandise that must be frequently replaced. RFID, or radio frequency identification, is an emerging technology that is spreading throughout the inventory management industry. This system uses tags that emit specific radio frequency patterns which can be picked up by receivers and translated to product information. This allows companies to track products remotely from shipping through selling, even tracking product movement around stores. This makes it easy to stop pilfering, judge consumer buying habits and immediately order new products when necessary. It is still an expensive option, and is used most often for larger products or pallets. October 4, 2006 3 min read Q: I yo-yo between having too much of my product in stock and not enough. How can I find a better system for controlling my inventory? A: You're already taking a step in the right direction by thinking about finding a better system. When businesses self-destruct, if an entrepreneur later looks for the lit fuse, they can often find it began with their inventory. After all, if you spend $20,000 on inventory, and that inventory sits in your warehouse for three months until it's finally sold, that's $20,000 you might have had for three months to spend on other aspects of your business. It's a simple way to put it, but we don't have much space for complexities here. There are other reasons, of course, for not wanting too much inventory--if, for instance, your $20,000 in inventory can be ruined by insects eating your raw materials or by a hurricane destroying your warehouse. As for finding that better system, it really depends on how big your operation is. There are numerous inventory software programs that specialize in keeping track of inventory and the costs that go with them. There are industry consultants who you could hire to take stock of your stock and see where you're wasting money. For instance, some bars and nightclubs outsource firms to come in and check their inventory every week, to make sure that bartenders aren't over-pouring drinks or simply giving away the product to friends or customers who they hope will tip them well. It's all about cash flow. If you're spending more than you need to on your inventory, your business is wasting money. That's why many companies employ what's called a just-in-time inventory strategy, in which they have a solid relationship with a supplier who can fill inventory needs virtually as fast as you're filling orders. There can be problems with that, however--if there's a truckers' strike or some other variable you're not expecting--which is why some entrepreneurs also use a "just in case" inventory strategy, with enough key items in reserve to help if there's an emergency. Inventory is one of those things that you can think about for hours--and occasionally, you should--but your system for controlling it, ultimately, shouldn't be too time-consuming. But it's definitely worth thinking about, as there's almost always a better way. More Solutions Inventory Control Shipping 101 How to Find and Work With Suppliers