# greenhouse management

# Reflections on Greenhouse Cost Accounting

Real world tips on cost accounting to make your business more profitable.

# By Jim Faust

rowers are biologists, plant-lovers, engineers, artists, mechanics and gardeners, but most of us are not accountants. As a result, many greenhouse businesses struggle with the concept of cost accounting; yet the need to run a successful business dictates that we occasionally sit down in front of a computer and push some numbers.

Over the past couple of years, Peter Konjoian, Konjoian Floriculture Services; Kim Williams, Kansas State University; and I have had the opportunity to speak at several venues on the topic of cost accounting. I still claim no particular expertise on the subject, yet over time, I have gleaned a few key components to successful cost accounting. These ideas are not purported to be "truths," just some ideas that make sense to me.

There is no right way to do cost accounting. Cost accounting is simply a means of identifying all business expenses and attributing them to different categories. Half of the benefit of cost accounting is undertaking the process of discovering your actual costs. If you do nothing more than identify your costs of operation, you will have learned a lot about your business.

## THE BASICS

Turn over every rock. Uncover every expense and find a category for each item. Nothing beats real numbers. Expenses are placed into different categories simply to help manage all the numbers. The two most general categories are production expenses and non-production expenses. Production expenses are usually determined on a per-unit basis; for example, tags, plugs, pots and media can be calculated for individual plants. These costs are usually referred to as variable costs. Nonproduction expenses are the costs of being in business, regardless of the number of units grown; for example, insurance, maintenance, taxes, professional fees and office equipment. These costs are usually referred to as overhead costs. Finally, there are a group of costs that could fall into either category depending on how much detail you want. For example, utilities and trucking costs vary based on your greenhouse production, so technically they are variable costs; however, it can be difficult to



If you do nothing more than identify your costs of operation, such as the actual cost of hanging basket space, you will have learned a lot about your business.

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calculate these costs for individual plants since tall plants are more expensive to ship than short plants, and an early spring crop may be more expensive to produce than a late spring crop. As a result, these costs are often lumped into the overhead expenses category to make the calculations easier.

*Salaries.* The costs of labor and office staff often cause confusion. The simplest method for dealing with salaries is to add up the annual payroll, and call it all overhead. A more accurate method would be to consider the office staff salaries as overhead, while the actual greenhouse labor salaries are attributed to the crops grown (variable costs). This becomes increasingly difficult for smaller businesses where the labor is performing multiple tasks on a daily basis.

#### GREENHOUSE PRODUCTIVITY

Square Foot Weeks. Overhead expenses are most commonly attributed to production through the use of the square foot week concept. This concept takes all overhead expenses and divides them by the number of square feet of production space and the number of weeks that space is in production. Most often the number should be between \$0.20 and \$0.25 per square foot week (depending on what costs are labeled as overhead). This means that just to be in business costs you \$0.25 for every square foot of production space every week.

Hanging Basket Gravy Train. The first question that arises after discussing the square foot week concept is, "how do you handle hanging baskets?" Most often, growers will consider this space to be free, hence hanging baskets become a gravy train. The baskets will appear to be incredibly profitable, since the greenhouse space has been prepaid by the bench crop. In my opinion, this is crazy and defeats the purpose of cost accounting. It is more interesting to assign a production area to those baskets, e.g., a basket occupies an area of 18x18 inches for six weeks  $(13\frac{1}{2})$ sq.ft. weeks). This allows you to make realistic comparisons between hanging basket production and bench crop production. If hanging baskets really are all that profitable, we should consider growing them

on the benches too! The beauty of this method is that one can see how growing hanging baskets reduces the overhead costs attributed to all other crops by effectively increasing the greenhouse production area.

When in doubt, guess. It is often difficult assigning certain expenses

to certain crops. For example, what is the pesticide cost attributable to different crops? Well, one could try to account for every individual application, but this can be tedious. Yet, it may not make sense to split the pesticide bill evenly between the bedding plants and the herbaceous perennials. Therefore, it is perfectly fine to say that the bedding plants should account for 70 percent of your total pesticide bill, while the perennials account for the remaining 30 percent. In this example, a guesstimate saves time, and your educated guess may well be very accurate.



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### PROFITABILITY

Unprofitable crops can improve *profitability.* This sounds crazy, but it certainly can be a true statement. For example, if you choose not to grow an unprofitable crop, the overhead expenses previously covered by the sales of this crop must either be covered by another crop, or your overhead costs must be reduced. In most cases, it is difficult to reduce overhead expenses enough, thus the profit margin on other crops is reduced. As a result, growing an unprofitable crop can make other crops more profitable by paying for some of those unavoidable overhead costs.

Losses erase profits. Killing plants

is a quick method of shaving your profit margin. Whether plant losses are due to death, disease, destruction or overproduction, losses come directly from your bottom line. If a \$2 plant provides \$0.20 in profit, then you would need to sell 10 plants to pay for every one that dies!

#### FINAL THOUGHTS

Wholesale is all about efficiency. Push enough numbers, and it soon becomes evident that the wholesale business is simply a game of minimizing costs and maximizing sales. The danger for most businesses is to allow costs to drift upwards over time, while prices remain flat. Diligence is



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required to annually re-evaluate your costs of production and the productivity of your personnel.

Retail is all about customer psychology. While wholesale businesses worry about pennies, the flexibility in retail pricing for many of our products is incredible. Outside of a few major commodity items (e.g., bedding plant flats and 6-inch poinsettias), most customers have no fixed idea of what a particular item costs. The price for a 4-inch annual may be \$2.49 or \$3.99. The challenge for retailers is to maximize customer traffic while maintaining maximum prices. These issues are human psychology issues more than anything else. Identify your most profitable customers, and get to know what motivates them to come to your business to purchase your products.

Business is about people, not *plants.* While plants are a challenge to grow, people are a bigger challenge to manage, and wages are always your single largest cost category. It is often very easy to look at your labor costs and try to think of means of reducing those costs; however, the other option should not be overlooked, namely increasworker productivity. ing Productivity may be limited by physical factors, such as equipment, greenhouse design and layout. Productivity may also be limited by psychological factors. Your success as a business is often defined not on how good a grower you are, but how good of a motivator, leader, communicator and trainer you are.

Most of us would rather be holding a hose in the greenhouse or loading a truck than spending time in front of the office computer; however, you know your business better than anyone else. You can hire someone to perform greenhouse tasks, but you can't hire someone else to run your business. Your time spent pushing some numbers in the office and thinking of methods of motivating your staff may well be the most cost-effective way that you can spend your time and make your business more profitable. GPN

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