

HIGH TECH, HIGH TOUCH

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There are three areas of management that lead to a successful business: technical skills, human resource creative skills. Let's look at how floriculture ranks in each.

Technical Skills

High technology has arrived in floriculture. Over the last 10 years, production has undergone tremendous change. A grower who left floriculture 10 years ago would be hard pressed to step in and produce a crop today using all the new mechanization and technology available.

For example, plug production has revolutionized the scheduling of bedding plants. Ten years ago, petunias took 8-12 weeks to produce from seed in the Northern U.S. Today they require only 4 weeks to flower, when grown from the proper plug. Plugs have replaced seeds in most greenhouses. They have turned both 8- to 10-week impatiens and 10 to 12 week vinca into 17-day crops.

New findings on plug storage are continuing the revolution. Plug storage allows us to maximize the germination and plug-growing areas. Once the plugs reach the right stage, they can be stored under proper conditions for 2 weeks to 4 months until it's time to grow them on. This is like depositing plugs in the bank and making a withdrawal the day you need them.

Today, 200,000 flats can be produced in the same amount of time and space that produced only 100,000 flats 10 years ago. Plug technology has doubled our capacity.

In addition, greenhouses have become more sophisticated, turning into computer-controlled caretakers of our plants. They check and adjust temperatures and light intensity—and water automatically. Today's high-tech grower can wake up in the morning, call the greenhouse's computer, and have an entire 2- or 3-acre greenhouse watered automatically while he drinks a cup of coffee and reads the paper.

Greenhouse computers have another use: Computer models of plants' developmental cycles are fast becoming a practical reality. Using computer-assisted growing, a grower can enter basic facts, such as the date planted and height of the plant, and the computer can predict the final height and days to flower. This enables the grower to spot problems early and make any necessary cultural adjustments to produce a finished plant according to desired specifications. This "Care System" will be marketed for commercial use on poinsettias this year.

Mechanization has made big changes in plant-handling procedures, too. Conveyors, cars, and centralized loading have greatly increased efficiency. Ten years ago it may have taken all day to fill two or three semi-trailer trucks with plants. Today, 10-15 trucks can be loaded during the same time with the same labor.

Floriculture certainly has experienced a renaissance in the area of technical skills. Research continues to help the grower produce a high-quality product in a shorter period of time. Most of our scientific research and grower interest has been in the technical area.

Human Resource Skills

In order to take full advantage of the technological advances available to our industry, we have to realize what the increased speed and volume of production capacity mean to the people working on the crop. When you talk with growers at the end of the season, most are tired and worn out. Many can't keep up the pace.

Perhaps it's time to become "high touch" as well as "high tech." Most growers get technical training in college, but few have taken the time to school themselves in human resource management. They may read research on plant technology, but they don't read the recent research on dealing with people. We assume growers will pick up those skills on the job or through trial and error-and the result is that many growers go through more employees than plants.

What makes people management more difficult than plant management is that while most plants will respond the same way when exposed to a similar set of circumstances, people exposed to a similar set of circumstances will vary greatly in their behavior.

Labor is still the largest single cost of production, and therefore warrants a great deal of time and attention. Here are some ways to develop the human resource aspects of floriculture:

1. **Recruitment**-Know what you want the person to do. Ask yourself if there is someone in your business who can handle this position or if you will have to search outside.
2. **Selection**-Choose the best individual for the job. Match employees' personality types to the type of work they will be doing. Knowing how to select the right individual will be a key to a successful business.
3. **Training**—This is the process of developing qualities in people that will make them more productive in your organization.
4. **Performance Appraisals**—It's important to let people know how they are doing, how they can improve in weak areas, and to affirm and praise them in areas in which they excel.

Most greenhouses do little or no training of new employees and they never give a formal evaluation of the employee's performance. When workers are unsure about what they're doing and how they're doing, you can be sure they're not doing their best.

If you can't "grow employees," your business will never grow. Some growers are so lacking in human resources skills that they consciously limit their growth by refusing to hire "outside help."

Creative Skills

Some say one must be born with creative skills, yet many of these skills can be developed from one's experiences.

A manager must answer many questions to assess the total business environment and determine how the business will survive:

- What is the competition doing?
What new government rules and regulations will affect the business?
What does the customer want?
- What new technology is coming on line?
How will this affect production and marketing?
What new cultivars and products are being introduced?
What mechanization is available and how can we use it?
- What will happen in international trade?
How will this affect our business?
What about the new competition?
Where is our niche?
Do we still offer the same old products?
Has the demand for them increased?
- What happens if the weather is bad?
Top managers must spend a great deal of time considering all these external factors. Only by successfully evaluating the total external environment will they be successful in the business. Let me give you a few examples:

Carnation growers in Michigan—

In 1966 there were 20 carnation growers in Michigan. We held meetings and talked about how to grow more flowers per square foot—but our technology could not compete with Colorado, California, and, finally, Colombia. The last Michigan carnation grower stopped production in 1988. We couldn't compete. Extreme factors such as foreign competition and environmental conditions killed this industry.

Cutting chrysanthemum growers in the North—

The cost of energy increased, light intensity was low, the need for excellent plant protection against pests and diseases was high, and there was chrysanthemum stunt. As a result of these factors, competitively priced chrysanthemum cuttings could only be produced in southern areas, and very few northern mum cutting producers survived. Only a few new cultivars have been produced recently. Total chrysanthemum sales are flat. What is their future?

Small retail florists—

Chain stores now do over 50% of the retail florist business, 800-numbers are advertising, and wire services are fighting for survival. This is an extremely competitive market, and many small retail florists are marginal or dying. Who will survive?

The bedding plant grower—

In 1960 this was the smallest part of the market. In 1990 it was the largest—the growth area. There are many new operations getting into the business. When will the saturation point be reached? With increased technology and volume of production, bedding plant growers will soon get to the point where they can grow more than they can sell.

The perennial grower—

This is a growth area that is still growing. New technology and research on scheduling will revolutionize perennial production. The trend will be away from field production and into the greenhouse where this industry will be “bedding plant-ified.” In 1970 we predicted that all bedding plants could be grown in 10 weeks or less. I believe by the year 2000, all major perennials will be produced in 20 weeks or less.

Top management needs the creative skills to assess all factors affecting business—internal and external—and to position the business to survive and grow. Floriculture is high-tech, so everyone in the industry needs technical skills. As one moves up in the organization, however, he or she will also need human resource and creative skills. Those who can add these skills to their technical expertise will be the valued employees or owners of profitable businesses.