Flavors ... A Business with Taste!

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I think about flavors as an elegant, sophisticated business that appeals to one of the human race's earliest pleasure centers. Quite simply, our business provides pleasure to a vast segment of humanity, and for that reason it gives us satisfaction as well. It's a "fun" business, yet sophisticated and founded on scientific principles. There are few businesses that could be so characterized.

Several years ago when I transferred to H&R from the chemical giant Bayer, I was fully aware of flavor. My taste buds functioned quite beautifully, as they do yet, but my primary field of expertise in this specific area had more to do with picking an acceptable wine to go with veal or fish. Flavor and essence as a field of endeavor was only a vague idea. I had not yet heard of processed flavors or nature-identical flavor ingredients.

As the old saying goes, appetite comes with eating. Now, having been deeply involved in this business for several years, I have developed a keen interest in it. I have learned a great deal, have come to enjoy very much my association with the people involved in this global business.

Market Structure of the Flavor Industry

The commercial environment in our major markets has been changing in recent years. Free trade zones and common markets (such as the European Union, NAFTA, ASEAN and Mercosur) create larger trading areas in which to operate and compete. These zones entail broad consequences for industry in general, and for our industry in particular. For years, the food and beverage industries—our main partners and customers—have demonstrated through mergers, joint ventures and acquisitions) their ability to utilize these changes as new world market opportunities for growth and further success. The flavor industry has performed well in the last decade with an average annual growth rate of 6-7%.

For the flavor business, exact market data are almost as secret as our formulations. We must gather data piece by piece in order to develop a systematic picture of the total market. While we do this, we have to ensure that our definitions of flavor are consistently applied in each market. Therefore, in the analysis presented in this article, I have excluded any preparations (such as essential oils, syrups and fruit preparations) that are not traditionally considered flavors, and I have excluded the captive use of flavors by major beverage or food manufacturers.

Worldwide Flavor Market

We see the 1994 worldwide flavor market in the range of $4.5 billion. More than 90% of the current flavor business exists in North America, Europe and Asia, although growth is definitely shifting eastward, toward the accelerating markets of Southeast Asia, where processed foods are finding rapidly increased acceptance. Most apparent is the dynamic growth in China, where the market for flavor products is expanding and shifting upscale with the increasing standard of living.

Europe still represents more than 40% of the total flavor market, due not only to the many roots the flavor industry has in Europe and the R&D activities centered there, but also to the large number of consumers of sophisticated food and beverage products.

Still almost untapped in this respect are the countries of Eastern Europe and the former Soviet Union. Our chances in these markets will develop, but not at the speed some may desire. Furthermore, there are vast differences from country to country, with Poland, Chechen and Hungary at the forefront of positive change.

Areas of application (Figure 1) are relatively rough estimates. Again, captive use by the multinational beverage companies and the product groups mentioned earlier are excluded. The data comprise only the flavor requirements supplied by our industry. Beverages—soft and alcoholic—comprise 35% of the market, representing the single largest application for our products. The use of savory flavors in everything from snacks to soups to meat products is another substantial fraction at 26%. Baked goods, dairy and confectionary applications are also significant.

Top Ten International Flavor Suppliers

In our subjective view of the major competitors (Figure 2), the individual shares may have been over- or underestimated, based on the data exclusions described earlier. But it is clear that over the years the ten globally operating companies have gained a substantial share of the total market, though no one has more than 10%.

However we look at our figures, the size of the global
flavor industry is minuscule compared to such industries as automobiles, health care or food. Indeed, some of our multinational customers have revenues that exceed the worldwide sales of our entire industry.

This is easy to understand, since we supply only relatively small quantities of product to our customers; a fact that in no way reflects the importance of flavors to the acceptance of the end product. Our products represent an element critical to the success of consumer products globally and, commensurately, our industry is expected to render important product development support to our customers.

**Factors Influencing the European Food Industry**

The European food industry, employing about two million people, represents about 8% of total EU industrial production. The 25 largest companies represent only about 15% of the total food manufacture. Together with more than 100,000 small- and medium-size companies, they have a tough time in the slow-growing European market. The boom years of 1990 and 1991, after the fall of the Iron Curtain, provided too short an interval of robust growth for the German food industry. The growth stagnated in 1993, and in 1994 it contracted by 3-4%.

There are 5,200 food producers in Germany, with an average of 110 employees per company. The ten largest of these represent only 11% of the total output. It’s no wonder that mergers and acquisitions continue throughout Europe, and the 25 leading companies continue their search to acquire medium-size companies with good brand names in order to enter new markets.

Concurrently, the concentration at the retail end has been dramatic, not only in specific countries but throughout Europe.

Figure 3 shows the market share of the top ten retailers in various European countries, including some newcomers to the EU. Their shares range from 40% to over 80% in individual markets.

**Largest Food Retailers in the German Market**

Figure 4 shows the German market, where in 1993 the largest retail chains covered significant fractions of the market. In 1994 the top ten retailers held a share of 78%.

Figures 3 and 4 clearly show the significant influence a few companies have on the total European retail food market, a situation not unlike the one that prevails in the United States.

Looking at various segments of retailing in major markets (Figure 5), you begin to see the important influence of the discounters, for whom price is the most important selling tool. The retail concentration and the fight for
market share have had a dramatic influence on food producers, forcing them to become more cost efficient.

The growth of private-label products and their influence on brand-name manufacturers is another important factor in our customers' markets. Figure 6 shows the share growth of private-label grocery products in several European markets. Since 1992, the private labels have achieved a further increase in market share.

Trends in consumer food markets are important to the evolution of food manufacturers and retailing. The most important of the recent trends are freshness, convenience, low fat, healthful, dietetic and ethnic, all of which have had an enormous influence on both food retailing and food service, and ultimately on flavor development.

**Global Beverage Growth**

As part of the continuing evolution in the global quest for convenience, the beverage market will continue to expand.
The new markets opening in Eastern Europe and Asia offer tremendous potential for prepackaged beverages, particularly the "branded" beverages. In 1994, carbonated soft drink consumption increased 15% in Eastern Europe. Poland set a one-year growth record with an increase of 25%. Chinese soft drink production is rising at an annual rate of 27%. In the fully developed markets of Europe, the United States and Japan, the emphasis on segmentation and innovation will continue unabated, offering additional sport or dietetic beverages and alternatives to the old standbys, coffee and tea. There are still untapped possibilities.

Teas and Isotonic Beverages—Europe

Ready-to-drink teas were the largest growth segment in beverages in 1993 and 1994. In 1994, ice tea volume grew by 33% in Europe, and consumption was 1 billion liters. The top three ready-to-drink tea markets in Europe are Italy, Switzerland and Germany. In the United States and Europe, ready-to-drink teas had higher sales than sport beverages. This latter sector, though, will continue to grow to fill the desire for nutritional and functional beverages delivering high fiber, antioxidants, vitamins, nutrients and so on. Total sport drink volume in Europe is 356 million liters. Germany consumed more sport drinks than any other European nation: 45% of all isotonic volume on the continent. Austria had the highest per capita consumption of these beverages at 2.7 liter/year. In Germany, consumption is 1.9 liter/year.

Factors Influencing the European Food Industry

The emergence of discounters and the growth of private labels have combined to significantly influence food pricing at the retail level in Europe. A similar situation exists in the United States, but there the trend has been partially counteracted by brand segmentation and everyday low-price policies. Still, margins have been affected. The consumer has demonstrated that he no longer accepts price premiums of 20-50% for branded goods over private-label or white-label products. This effect has caused a general reduction, or at least a stagnation, of prices over the past three years. Such pricing reductions must, of course, be accompanied by reduction in cost, advertising and marketing, in turn leading to a squeezing of suppliers. We call this the Lopez effect, named for the ex-CM operating head who has now succeeded in putting pressure on Volkswagen suppliers. The flavor industry is not immune.

Brands are not dead, however. The leading purveyors of name brand goods press hard to maintain their position. They are protecting their market share now by offering unique flavors, lower prices and innovations such as co-branding. Brand segmentation probably will continue, but I don't know how much further the marketers can productively pursue this tack. Already the consumer is presented with such a mind-boggling array of goods on the shelves that consumer indecision has become a certified mental illness. Should this concern or affect us? Definitely.

On the one hand, we feel the pressure on pricing our products, and on the other, we experience the cost of meeting the demand for ever-increasing service or compliance with evolving regulatory requirements. To respond and still remain successful and profitable, we must improve our efficiency throughout all areas of our operations. At the same time, we must maintain our ability to invest in new facilities, in personnel and in systems necessary to stay on the cutting edge of technology, as well as provide a consistently high level of service to our customers, who will no longer pay the cost of inefficiency by our industry.

Flavor Development

In today's world, with 10,000-15,000 new products developed by European and US food and beverage companies each year—not to mention the 1,000 or more new soft drinks developed in Japan annually—there is plenty for the flavor industry to do.

In response to a moving target and the need for greater service, our strategies and methods have changed drastically just in the past ten years. No longer is flavor creation the only discipline needed.
Our analytical capabilities have improved dramatically. Bench-top GC/MS equipment is routinely found in our flavor labs, aiding our identification of unknown flavor substances in natural sources. Through these very sensitive analytical methods we have learned that Mother Nature biologically synthesizes innumerable trace components, many of which provide a notable flavor impact in food. Through evolutionary use of sophisticated analytical techniques, the flavorists' range of raw materials has increased dramatically, permitting the creation of high impact and cost-effective flavors.

Other important issues are today's flavor delivery systems and flavor stability in different applications. Encapsulated and extruded flavors have gained importance.

Differences in global tastes are moderating, as you would expect with many more global companies, ease of migration and travel, and better communication. Flavor houses no longer can rely only on the knowledge of their home base; they have to know the taste preferences of faraway countries, even if that knowledge is only needed for the ethnic market at home.

Biotechnology has dramatically influenced the flavor business and will continue to do so. The use of natural aroma chemicals produced by fermentation or enzymatic processes is growing worldwide.

**European Flavor Regulations**

On the subject of European flavor regulations, I just want to emphasize the following points:

- First, no positive list will be published before all products submitted to the EU inventory are evaluated by the Scientific Committee for Foods. The evaluation will start with artificial substances; nature identical substances will follow.
- Second, the evaluation should realistically consider the total exposure of the general population to the small quantities used, and the cost of the evaluation must be economically bearable. Otherwise R&D in our industry will stop.
- Third, the list should be open for additions and should allow for confidential protection of new substances for a specified period of time.

The nature identical inventory presently collected by the EU flavor industry may consist of 800-1,000 products not evaluated by FEMA or the Council of Europe. Of course, we all hope that FEMA/GRAS substances and substances already evaluated by the Council of Europe will not be reevaluated.

The majority of these artificial and nature identical substances have an annual consumption of less than 5 kg.
Quite a number are powerful substances developed with analytical tools available only in recent years.

Finally, we hope that we have an approved list larger than the present FEMA/GRAS list, and one which would be acceptable in other parts of the world. This truly would be of great benefit for all of us operating in a global market, and would represent a development that could only be topped by an understanding between United States and European experts on what constitutes "natural."

Customer Service

In the evolution of food and beverage products, our customers' needs for ideas, concepts and new products based on interesting and innovative flavor systems have expanded greatly. I am pleased to say that the flavor industry is up to the challenge of seeking greater value and service from our industry. Traditionally, this has been one of our strengths.

As in the fragrance industry, the market—our customer base—demands more and more finished product concepts. Flavor houses operating worldwide may have an advantage in seeing very early trends or product concepts in distant parts of the world that, having been strongly accepted in one market, can make it in another.

This is a strength, recognized by our customers as a valuable contribution that derives from partnership with their flavor supplier. At the same time, however, we in the flavor industry must constantly remind our customers that no benefit derives without an accompanying cost. Furthermore, the truly innovative, efficient flavor supplier recognizes the need to stick with core competencies; it is not necessarily advantageous to be pulled into forward integration such as sophisticated finished product developments.

If customers feel that a flavor's price is the only consideration, if the lowest possible cost of the flavor component is uppermost, we won't be able to continue to provide our innovative development, and our customers will lose the benefits of a fully functional, multinational flavor supplier. Both customers and suppliers must operate from a mutually beneficial business arrangement; an arrangement that also respects and protects the intellectual property contained in our formulations.

Service and loyalty are expected from suppliers. In our changing business environment, our customers may practice inventory reduction and place more small orders, thus placing additional burdens on our production capacity and increasing costs to our industry. Customer/supplier partnerships are important to smooth out these changes and to ensure that both customer and supplier operate from the concept of "value for price."

Within this context of resources and customer service, quality is and will remain our top priority. Image and past performance no longer command attention, nor should they. ISO 9000 certification is becoming an almost certain requirement, achieved solely through sophisticated and costly quality assurance systems. Total quality management has become a key business principle.

Once these processes are implemented, however, they return dividends to flavor supplier and customer alike, and the returns far exceed the cost of implementation. H&R has placed considerable emphasis on quality processes and has achieved positive results over the past few years, leading to an integrated approach to quality systems for the company and culminating in an ISO 9001 certification of our strategic manufacturing centers.

In conclusion, I would like to challenge our global industry to maintain the flavor business as a business with taste:

- Be open-minded to change. Accept the dynamics of the marketplace as an opportunity for innovation in products and operations.
- Be global in your thinking, in your product concepts and in your business strategies.
- Pursue excellence; not only in product development, but in operational stewardship and total service to the customer.

I am convinced that our industry and the dedicated workforce within it will make the most of the considerable opportunities of the evolving, ever more sophisticated markets, and will continue to contribute to the quality of life of people throughout the world.

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