



Fragrance and Product Functionality

By John J. Hiller, PhD, Lehn & Fink Products Co., Sterling Drug Inc., Montvale, New Jersey

In discussing the working relations between marketing and R&D, it probably makes sense to review some of the basic laws of marketing. Since it is critical for product development and perfumery people to understand marketing and its impact on product performance as perceived by the consumer, I would like to quickly review some of Odioso's Laws, as codified by Dr. Ray Odioso, vice-president of Drackett. These are to be published soon in their entirety in *Research Management*. Odioso's first law states:

MS = MD

Loosely translated from the mathematical equation, this becomes Monkey See, Monkey Do. Perhaps the best recent product manifestation of this law are the one hundred or so mousse products on the store shelves in the United States. It seems to follow that if their product sells, mine might also. Terms such as trends, fads and "me too" are monuments to MS = MD.

Odioso's second law is often the source of complete frustration for many product development people:

$$MI = 1/TF$$

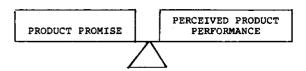
Marketing Interest is inversely related to Technical Feasibility. If you can make it, no one wants it. A verbal interpretation of this law as stated in Hiller's Canon—"All we have around here are Marketing successes and Technical failures." Finally, I feel a sense of professional obligation to mention Hirsch's Law of Career Development:

1F > 100S

One Failure outweighs one hundred product Successes so don't ever—I mean *never*—be associated with a product failure.

Now, let's talk seriously about the marketing/ product development interface and the significant role that fragrance and fragrance selection plays in coupling marketing effort to product performance efforts via fragrance. Our objective is to create a product with the best possible performance.

For simplicity I'm going to refer to marketing, product development, perfumery and the consumer as separate people, but in truth I see very little distinction and feel that a successful new products person is one who knows a lot about all disciplines, but concentrates on one.



We are going to concentrate on fragrance as a tool to accomplish the critically important task of making sure that the *promise to the consumer* and *the product performance* are in sync—that the product performs as well as you have promised it will. This promise—in the form of an idea, concept or advertising—must appeal to consumers and offer them a solution to a problem. The actual solution to the problem is the product and it has to perform up to the promise.

The preliminary program for this International Perfumery Congress states that "selecting a fragrance is one of the most important steps in product development, often the most important step." It also says that "several speakers from major consumer products companies will discuss the policies and procedures in fragrance selection as an aspect of the product development process."

As one of those speakers I want to concentrate on the policies part rather than the procedures part in fragrance selection to emphasize that fragrance selection is not an isolated event, but an integral step in the complex product development process. Now you might be thinking, "Well, that's obvious; everyone knows that." But I want to emphasize it because, intentional or not, the fragrance selection process often ends up being conducted in an environment that is not natural—not integrally connected to the realworld use of the product.

In thinking about this presentation it occurred to me that my comments are a reflection of both my evolved personal style and the environment in which I operate. Fragrance selection policies and procedures should be determined in part by the kinds of products developed and the company served. Therefore, I had better set the stage before further discussing my views about fragrance selection.

Lehn & Fink Products Company, the major household products marketer of Sterling Drug Inc., is a large company with significant technical and marketing resources available to it. Within Lehn & Fink, I'm primarily interested in the development and successful introduction of new household products, as opposed to re-formulations or line extensions.

In most of our work on the development of new household products, fragrance serves as a strong consumer signal to clearly communicate the product concept to the consumer. Fragrance is also a significant method of demonstrating a meaningful product point-of-difference. It is normally not intended to be the point-of-difference itself. Everyone recognizes that advertising and packaging are major communication elements, ways to tell our customers what a product is intended to do. Fragrance has a dual role—to communicate intent and to help in delivering performance.

This dual role is particularly important in functional products since it provides an immediate performance connection that the consumer can comfortably use as a decision attribute with respect to performance of the product. In technology-driven new products, particularly those that represent new ways of doing things or unique problem solutions that the consumer has never before encountered, fragrance is one of the few attributes that connects the new product to a household task familiar to the consumer. It is an easy bridge for the consumer to use in quickly judging performance of the product with respect to its intended use. Therefore, for these technology-driven products, fragrance helps position the product to the consumer and helps focus on performance.

User Perception of Performance

Performance judgment by the consumer is a complex process. Performance consists of both objective and subjective components. With initial impressions being very important the product user develops a perception of performance over time. Fragrance is critical to this process and, therefore, should be chosen at least as much for its ability to affect the consumer's performance judgment as for purely aesthetic reasons.

Fragrance is often the consumer's major reflection of product functionality if chosen correctly. It can be a confusing signal if done incorrectly. Therefore, you might consider making your product development selection on the basis of choosing the fragrance that best reflects or communicates the functional performance attributes of the product, rather than for its hedonistic value. Whether the product is intended to satisfy consumer *functional needs* as in a household product or *psychological needs* as in many alcoholic perfumes, the fragrance should be chosen to best match those needs for which the product is intended.

We tend to think of fragrance in purely aesthetic terms, in terms of perfume artistry. On several occasions, I have spoken about and pleaded for recognition of the functional aspects of perfumery—about the tangible, real-world role the fragrance holds in communicating to the consumer as much as possible about the functional properties of the product.

Understanding and predicting the functional attributes of perfumes is as abstract and complex as understanding and predicting the aesthetic message, perhaps even more so, because of the intermixing of the aesthetic and functional messages received by the consumer. For instance, understanding why a "baby powder" fragrance might do a good job in delivering the performance message of a hard surface cleaner is not inherently obvious and perhaps is best left to the psychologists. And yet, the fragrance supplier and product marketer have the responsibility, through the perfumer and product development chemist, to select the fragrance that is used in a functional product.

Many complex factors have to be considered in such a selection process. The theme I want to develop today is that close cooperation and complete exchange of all available information between the fragrance supplier and the marketer is necessary to have the maximum chance of choosing well. A great deal has been written and discussed about this subject. I suppose most of us assume that what I have just said is so obvious and thoroughly practiced that it hardly justifies a trip to this beautiful resort to repeat it. Nevertheless, I have to conclude that it's not that simple. We're not doing such a good job since we all have and know of product failures and disappointments that are clearly and unambiguously fragrance-related.

Let's spend a few minutes talking about the steps that occur before the physical action of fragrance selection itself—not the procedures followed by different companies in testing and screening, but the thinking that goes into the project before the actual selection process begins.

I teach a graduate school course in product development and in that course I try to emphasize that the old expression of "1% inspiration and 99% perspiration" as a formula for success may be true for many things, but a successful formulation requires a different balance between thinking and action. In my opinion, those of us involved in product development, both supplier and marketer, don't spend enough time thinking in-depth about the fragrance profile for a product. We concentrate, instead, on developing statistically significant, sophisticated methodologies for selecting between submitted fragrances. I do not mean we spend too much time on testing, just too little time on thinking before testing.

The marketer's product development people dream about the "halo effect," or the hope for a final fragrance that will make a product test better in market research than the competitor, even if it is not developed as a superior base product to begin with.

The supplier tries to figure out how to win the customer roulette game of testing a submission against those of the competitors.

Why not work together in the first place to create the correct fragrance for the product, to make the entire execution—concept, product base, fragrance, package—test perfectly together instead of engaging in a game of chance?

Please let me hasten to add that I am not arguing against the increasingly effective testing procedures we all use to one degree or another. They are needed, necessary, valuable and, therefore, very important. I'm not saying that we don't think about our fragrance needs before we start the selection process and that we don't discuss this with the supplier and that the supplier doesn't think before creating.

What I am trying to say is that the amount of strategic formulation thinking done before soliciting fragrances from the suppliers is important. This thinking needs to be accurately and completely communicated to the fragrance suppliers before they start the creation process, particularly for the product strategies that interest me. It is in this regard that market research done before formulating the product and fragrance is so important.

Focus groups and other common market research techniques to qualitatively test product ideas and concepts help us learn a lot more than just which of our ideas are possibly good. Such qualitative research teaches us a great deal about consumer wants and needs, i.e., their understanding of our communications, and begins to give us a mental picture of the customer's perception of our ideas. It gives us a great deal of knowledge about the eventual product formulation, including the fragrance. We should be able to come out of this early phase of development with a word picture idea about the fragrance characteristics needed to best deliver our idea in product form to the customer. Notice I did not say information about winning a selection process. What we can learn is information about how we can best physically deliver the product idea or concept.

A Winning Fragrance Selection

Winning the fragrance selection is certainly critical to the supplier. The marketer often also falls into the trap of believing that the winner of a *selection process* is also a *product winner!* A product test often doesn't have much in common with a fragrance selection test since these are not truly reflective of a real-world product use situation. Triangle tests, paired comparison tests, mall intercepts of various types, smelling strips or six evaluators around a conference table are not reflective of the real world.

Again, I'm not complaining about or degrading the evaluating processes, all of which are necessary and an important part of product development. I am trying to point out that raw material screening in the lab and fragrance screening at the supplier or shopping center are separate steps in the overall complex process of product development. The product formulation process is not at all dissimilar to formulating a fragrance. After each change, the developing formula has to be balanced, re-tested, changed and balanced again. After developing a particular accord, we still expect to make subsequent changes when it is added to a formula we are creating for a specific end use. Similarly, the fragrances selected via laboratory and market research testing have to be adjusted to make them fit the total product concept when they are compounded into the product.

Please consider the possibility that a panel's aesthetically most preferred fragrance *might* be the wrong fragrance for our product. Consider the possibility that a sophisticated screening process conducted on six beautiful fragrances created by excellent perfumers, using a particular fragrance brief, might select the wrong fragrance.

If the objective is to choose the best fragrance for a floor cleaner and our floor cleaner's concept is a product so gentle that it cleans nonwax floors without affecting the shine, do we really want a lemon or pine fragrance in such a product? The selection panel that chose the fragrance didn't make a mistake. Lemon or pine makes sense for floor cleaners in general, but perhaps it makes no sense for this floor cleaner.

Yes, there are ways of customizing the selection process to better satisfy the product's needs and this is what I am advocating. Selecting a beautiful woody pine scent with subtle citrus top notes that is appropriate for the category vis-a-vis the competitors, yet superior aesthetically to all of them, is great—but not for our particular product.

We might need a fragrance that doesn't screen well in such a standard comparison even when the concept is included, but *is the right scent* for our product. Perhaps it's that baby powder fragrance we discussed a few minutes ago. Our consumer does not analyze fragrance nuances, but does make a critical judgment about fragrance fit for the particular product. The fragrance brief given to the perfumer requires a great deal more than pH, concentration, price/Kg, coupled to a generic product description; and the selection process needs to be designed with the product promise in mind, not just blind tested against other submissions and a major competitor.

A properly conceived and executed selection process can obviously only screen the submissions received from the perfumers, and only they can create the quality required. The perfumer who doesn't really know what a product is intended to do simply can't supply the need. Any good perfumer from any good supplier can create what is needed, but the perfumer has to know what is wanted and has to be given the chance to develop the best fragrance by sequential improvements. I find it important to communicate to the perfumer-supplier what I've found our fragrance has to do. It is very important that the fragrance supplier's perfumer, evaluators, salesperson or whomever be aware of what we have learned about the consumer's perception of the product idea.

The Unique Ingredient

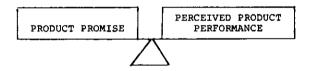
The fragrance is a unique ingredient since it is usually the only one that is individually customized for such product. The product formulator can obtain a wide range of available standard non-fragrance ingredients and formulate, balance, test and so on, alone without much meaningful communication with the involved suppliers. But the fragrance has to be re-worked by the fragrance supplier and not the formulator, at least in the case of most of us who do not create our own fragrances. Even when a marketer has a staff perfumer, the perfumer is not the person formulating the functional product using the fragrance. Therefore, I go back to my original thesis-fragrance is unique, is critical and its development requires close cooperation and complete exchange of all available information between the supplier and the marketer for them to have the maximum chance of choosing well.

Next, I propose that selecting the fragrance supplier is at least as important as selecting the fragrance. Although not the topic of this session, this decision is a particularly critical pre-formulation decision made by the formulator. The supplier's style, resources and creative talent has to fit with the marketer's objectives and resources available for work on that particular product. For the same reasons, I don't think a fragrance coordinator at the marketer can make these decisions. The formulator responsible for creating the product must do it.

While it's very difficult to articulate clearly the nuances and harmony of a fragrance even among professionals, it's equally difficult to communicatae verbally the nuances and perception of the product by the consumer. The marketer is primarily interested in the fragrance's ability to sell product—to complement and amplify the product's performance. In most cases, the appropriateness of the fragrance type for the product category is more important than the straight aesthetics of the fragrance itself.

The fragrance is one of the most powerful tools we have at our disposal to deliver immediate information to the consumers before they actually use the product (often on the shelf before they buy it), during use and after use. While my motivation is clearly "enlightened self-interest," fragrance is extremely potent advertising, not intended as blatant sell, but as a clear introduction to the consumer of what a product does.

A critical equation is mentally performed by consumers when they try a product, and important components of this equation are calculated before the product is even used. There is a sequential series of events and a critical balance between product promise and product delivery. First, we elicit the consumer's interest by communicating an idea, and then the product performance has got to be judged by the consumer as at least equal to the idea itself. Purchase intent before use of the product has to be in harmony with purchase intent after use of the product. A utopian product promise coupled with a consumer judgment of mediocrity after use is worthless. A lot of people can promise greatness. The need is to deliver against a reasonable promise. This balance between promise and delivery is key to success. A good case can be made for a modest but meaningful product promise that is delivered. Consumers are intelligent and we are not in the "one-time purchase" business.



The consumer judgment on delivery of the product promise is also a complex decision on the part of the consumer and the key operational phrase is "consumer perception." The consumers use the product in the midst of a number of sensory stimuli-they see cleaning and shine, they feel smoothness and viscosity, and they smell the product and the surrounding environment. These stimuli are integrated into an overall performance perception and this, in turn, is balanced against their expectations resulting from the promise. It is here that fragrance plays a critical role—the role of delivering the product's performance in the context of use. The fragrance judgment is not made on aesthetics alone, although aesthetics are important. The fragrance judgment is made relative to its ability to deliver, in conjunction with all of the other product components, the perceived product performance against the product promise.

It is in this area where both marketers and fragrance suppliers can make major fragrance mistakes. By habit and ease of testing, we often make two mistakes in testing fragrance: we screen fragrances by comparison testing
we screen fragrances outside the actual use environment and conditions of the product

Comparison Testing

It is rather easy and straight forward to screen fragrances by evaluation panels at the supplier or by market research panels at the marketer using some form of comparison testing. So-called triangle tests against a simple "concept statement" is not at all uncommon. The fragrance supplier often uses "expert" panelists to make comparison judgments vs. a target market leader on a blind basis.

Consumers do not make their decisions this way. The products are branded, positioned and judged in a real-world use situation relative to the consumers' memory of other fragrances they have used and their expectations.

Paired comparison triangle tests and the like are easy, logical and perhaps better than nothing. They're okay for screening, but not for selecting. Fragrance is used as a critical part of the purchasing decision and this is based on a perceived performance conclusion relative to the consumers' expectation. They are making a product decision, not a fragrance decision. The decision is often made because of fragrance, but it is still a product decision. Forcing a fragrance comparison decision is useful and valuable, but can be dangerous.

Use Environment

Please think about the use environment in which suppliers and marketers select the fragrance they're going to use in a product. I'm talking about screening between fragrance candidates. Even if two or more fragrances are selected for further testing, it is fairly common to screen between candidates in a conference room, a shopping center or some other similar setting. Why not select a "safe" choice and also a "maybe we'll get lucky choice"? While screening between candidates in some objective protocol is critical, if you accept my thesis that the fragrance is an important performance factor, then the product and, therefore, the fragrance must be evaluated under real use conditions and in context of the real product promise. Otherwise, the screening will select only aesthetic superiority and not connect it to product performance. You want to know which test product is best. If the only difference between test products is fragrance, you've got your fragrance answer.

Fragrance screening and selection processes that are based on a comparison of fragrance candidates with each other and with competitive

products within the category are not of great interest to me. We are not selling fragrance per se and we are not selling products solely because of a fragrance superiority versus the competitors. We are selling product performance that solves consumer's needs so I want to know how various fragrance candidates affect that performance. I do want to know how we perform as a complete product relative to the competitors, but I'm primarily interested in making our product work well. Then it's their problem to worry about us. Therefore, I find it most productive to work with one or two carefully selected fragrance suppliers as partners in product development. The actual fragrance selection procedures are cusomized for the project, but fragrance decisions are based on overall product performance and this is done in a step-wise fashion throughout the formulation development rather than having a competitive "shoot-out."

I believe we would all—the marketer, the supplier and the consumer—be better off if we screened less, if we conducted less of a roulette game. We should work with each other on a much more selective basis where the marketer chooses the supplier initially, then forms a close team to jointly develop the fragrance that is specifically designed for our product. I would rather do this than screen twenty to thirty submissions from six suppliers in an environment that doesn't have any relation to reality. The object is to please the consumer.

I really believe that new products, like household and other functional specialty products, place such a demand on the fragrance from a product performance aspect that we need to custom-develop the fragrance rather than choose it.

Product development is a horizontal linkage between a series of formulation events and consumer reactions. Creativity amounts to a novel association between seemingly unrelated facts. Creative perfumery then becomes the act of providing a fragrance to serve as a logical connection between a concept and a product formula. The concept is eventually translated into advertising and package copy when the product is actually marketed.

Please recognize that my comments are reflective of very specific product strategies. They may make absolutely no sense at all for other situations. However, I hope that the reader might find something of value in them.

Address correspondence to John J. Hiller, PhD, Divisional Vice-President, New Products Research, Lehm & Fink Products Co., Sterling Drug Inc., 225 Summit Avenue, Montvale, N.J. 07645 U.S.A.