# Reducing the Risk of Failure and Improving the Profitability of New Consumer Products with the ASSESSOR Pre-Test Market Evaluation System

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ABSTRACT

An integrated modelling and measurement system was designed to provide management with forecasts and diagnostic information about the sales potential of new packaged goods at the pre-test market stage of their development. Over the past decade, Management Decision Systems has applied the methodology to 450 new products. A study of this experience indicated that the predictive value of ASSESSOR had helped reduce the failure rate of new products in test market by almost a half and saved the 100 firms who have used it an estimated $120 million.

# INTRODUCTION

Test marketing is typically the final step in the development of new, frequently purchased consumer products. Such experimental introductions of new brands are intended to provide information about their market performance that otherwise would come to light only after a full-scale launch was in progress. The fact that the abandonment of new products following test marketing is a commonplace occurrence in the packaged goods industry serves to underscore both the riskiness of these ventures and the value of early appraisals of their economic viability. Furthermore, not only is the failure rate of new products in test markets substantial, it appears to have been increasing over time, as has the cost associated with conducting a test market.

The most comprehensive body of data available on the failure rate of new packaged goods in test markets is that compiled by the A.C. Nielsen Co. (1971, 1979) who monitor the proportion of new brands which are test marketed but subsequently not launched nationally. In the most recent year reported (1977) the incidence of such failures was found to be 64.5 per cent, which, when compared to the 53.4 per cent and the 45.6 per cent observed in 1971 and 1961 respectively, indicates a trend toward higher test market failure rates over a period of a decade and a half. Failure rates consistent with these Nielsen estimates have been reported in other studies relating to particular firms (Business Week 1973, Cadbury 1975) and product categories (Buzzell and Nourse 1967, Crawford 1977, O'Connor 1975). Given that the direct costs of a test usually range from $1 million to $2 million, test marketing is clearly an expensive means of detecting a new product failure.

The circumstances outlined above have stimulated efforts to devise methods for conducting more thorough evauations of new products before embarking on test marketing programs. This paper reports on the experience that has accumulated over a decade with an integrated modeling and measurement system, known as ASSESSOR, explicitly designed to provide management with predictive and diagnostic information about the sales potential of new packaged goods needed to support strategic decisions arising at the pre-test market stage of their development. We begin with an overview of the ASSESSOR system, highlighting its objectives and the principal features of the models and data collection procedures which comprise it. Following this, we review the history and scope of the system's commercial applications and consider the factors which have contributed to its acceptance as well as difficulties encountered in implementing it. The third section of the paper addresses the question of predictive validity and examines a body of evidence that has been assembled relating to the accuracy of pre-test market forecasts made using ASSESSOR. Lastly, we offer an appraisal of the overall impact which the system has had on practice. Results of a study which attempted to estimate the value of information provided by ASSESSOR from a decision theory point of view are discussed. Also presented are evaluations and reflections offered by management personnel from a sample of firms which have made substantial use of ASSESSOR. The paper concludes with a brief summmary section.

## OVERVIEW OF THE ASSESSOR SYSTEM

The original technical work on the ASSESSOR system was carried out by Silk and Urban at MIT with crucial research assistance and managerial insights being provided by a number of people whose contributions are sincerely acknowledged below. The research began in 1972 and a full account of that work, including details of the models and measurement and estimation procedures, was reported in a working paper circulated in 1975 and subsequently published in the Journal of Marketing Research (Silk and Urban 1978). As is evident from a reading of that paper, both the overall conception of the system and many of its specific features were strongly influenced by earlier research on consumer behavior and market response to new products and made use of numerous theoretical ideas and methods drawn from various social science disciplines. The initial work and its subsequent applications have stimulated a continuing program of empirical research on related modeling and measurement questions (Kalwani and Silk 1980, 1982) as well as on the overriding issue of paramount managerial relevance -- ASSESSOR's forecast accuracy (Urban and Katz 1983). Research aimed at extending the methodology to new consumer durables is also underway (Hauser and Urban 1982 and Hauser, Roberts, and Urban 1983).

Efforts to develop pre-test market forecasting methods may be traced back to the late 1960's and a short review of previous work may be found in Silk and Urban (1978, pp. 172-173). Since publication of the Silk and Urban paper (1978), others in the U.S. and abroad have independently applied and adapted the ASSESSOR models and measurement procedures, and one published account of such work has apppeared (Erickson 1981). A number of alternative methods for making pre-test market evaluations of new packaged goods are now available and

such services presently represent a substantial volume of business done by major U.S. and international marketing research firms. Descriptions of these alternative methods appear in Pessemier (1982), Urban and Hauser (1980), Wind (1982), and Wind, Mahajan, and Cardoza (1981). Some technical comparisons are provided by Factor and Sampson (1983) and Robinson (1981). Discussions of practitioners' views on the use of pre-test market evauation methods may be found in Khost (1982) and Main (1983). Here we provide a brief sumary of the ASSESSOR model and measurement procedures and refer the interested reader to Silk and Urban (1978) for technical details.

## Objectives and Structure

ASSESSOR is specifically designed to aid management in evaluating new packaged goods before test marketing when the product, packaging, and advertising copy are available and an introductory marketing plan (price, promotion, and advertising) has been formulated. Given these inputs the system is intended to: (1) rapidly predict the new brand's long-run sales or market share at a low cost (duration less than 3 months; cost about $50,000); (2) produce actionable diagnostic information for product improvement, and (3) permit evaluation of alternative marketing plans (advertising copy, brand name, price, and package design). Decision-support technology oriented to other stages in the overall process which packaged goods manufacturers follow in developing new products is discussed in Pessemier (1982), Urban and Hauser (1980), and Wind (1982).

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INSERT FIGURE 1 HERE

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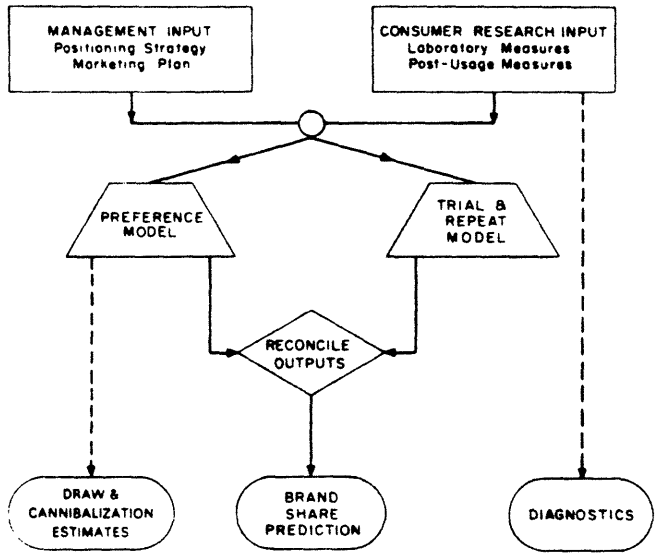


FIGURE 1

STRUCTURE OF THE ASSESSOR SYSTEM

(Silk and Urban, 1978, p. 173)

Figure 1 shows the overall structure of the system developed to meet these requirements. The critical task of predicting the brand's market share is approached through two models -- one relates preference to purchase probability and the other is a straightforward flow representation of the trial-repeat process. The two models are similar in structure, but are calibrated in different ways. Convergent results strengthen confidence in the prediction, whereas divergent outcomes signal the need for further analyses to identify sources of discrepancy and to provide a basis for reconciliation. The measurement inputs required for both models are obtained from a two stage research design involving laboratory and in-home usage tests. The key outputs are a sales and/or market share prediction plus diagnostic information which can be used to make a decision as to the brand's future. A poor showing may lead to either termination or further developmental efforts directed at improving the product. If performance is good, plans for test marketing can proceed.

## Measurement

The measurement inputs required to develop the desired diagnostic information and predictions for ASSESSOR are obtained from a research design structured to parallel the basic stages of the process of consumer response to a new product. To simulate the awareness-trial stages of the response process, a laboratory-based experimental procedure is used wherein a sample of consumers are exposed to advertising for the new product and its principal competitors already established in the market. Next, the consumers enter a simulated shopping facility where they have the opportunity to purchase quantities of the new and/or established products. The ability of the new product to attract repeat purchases is assessed by one or more waves of

follow-up interviews with the same respondents conducted after enough time has passed for them to have used or consumed a significant quantity of the new product at home.

The laboratory phase of the research is executed in the immediate vicinity of a shopping center. "Intercept" interviews are conducted along the floor of the shopping center to screen and recruit a sample of consumers having attributes that characterize the target market for the new product. Upon arriving at the laboratory facility, respondents are asked to complete a self-administered questionnaire that measures awareness, perceptions, preferences, and past purchases. Respondents then proceed to a separate area where they are shown a set of advertising materials for the new brand plus the leading established brands. The final stage of the laboratory experiment takes place in a simulated retail store where quantities of the full set of competing brands including the new one are displayed and can be inspected. There, participants have the opportunity to make an actual purchase at normal prices prevailing in the local market area with the funds they were previously given as compensation for their time. The sum given is typically $2-$3 but always more than the amount required to make a purchase. Although respondents are told in advance that they are free to forego buying and keep the money, most, generally two-thirds or more, do make a purchase.

The post-usage survey is administered by telephone after enough time has passed for usage experience to have developed (usually, a few weeks). Respondents are offered an opportunity to make a repurchase of the new brand (to be delivered by mail) and respond to essentially the same set of perception and preference measurements that was used in the laboratory stage, except that they now rate the new brand as well as established ones.

Two innovative features of the ASSESSOR measurement methods deserve mention. To minimize the effect of unfamiliarity as a source of measurement error, a respondent provides perception and preference ratings only for those brands that comprise his or her "relevant set" of alternatives -- i.e., that subset of available brands which are familiar to the respondent regardless of whether they are judged favorably or unfavorably as choice alternatives. Each respondent's idiosyncratic relevant set is revealed by a series of unaided recall questions which identify brands previously purchased or used plus any others considered to be satisfactory or unsatisfactory alternatives.

After a respondent's relevant set of brands is identified, a constant sum, paired comparison procedure is used to assess brand preferences ("Divide these eleven chips between these two brands to indicate how much you like one brand compared to the other"). The method, borrowed from psychophysical measurement (Torgerson, pp. 105-7), has certain attractive features here in comparison with other ad hoc procedures used to measure consumer preferences. Each respondent's brand preferences can be scaled individually, thereby avoiding potential aggregation problems arising from the pooling of data across subjects. The values obtained are ratio scaled, a property consistent with Luce's (1959) probabilistic theory of choice which provides the theoretical foundation of the model used to link brand preferences to purchase probabilities.

## Models

As shown in Figure 1, two different models are used to generate separate predictions of the new brand's steady-state market share. The first relates strength of post-trial preference for the new brand to the probability of purchasing it as follows:

$$L_i(t) = \frac{[A_i(t)]^{\beta}}{[A_i(t)]^{\beta} + \sum_{k=1}^{m_i} [A_i(k)]^{\beta}} \qquad (1)$$

where:

$L_i(t)$ = probability that consumer i chooses the brand t after having tried the new brand,

t = index for the new brand,

k = index for established brands,

$m_i$ = the number of brands in respondent i's relevant set of established brands,

$A_i(t)$ = estimated preference of consumer i for the new brand t after having tried the new brand,

$A_i(k)$ = estimated preference of consumer i for established brand k after having tried the new brand,

ß = parameter

The probabilities predicted from (1) are conditional upon the brand being an element of each consumers' relevant set. To calculate an expected market share for the new brand, one must take into account that the new brand will not necessarily become an element of the relevant set of brands for all consumers when it does become available in the market. Therefore,

$$M(t) = E(t) \frac{\sum_{i=1}^{N} L_i(t)}{N} \qquad (2)$$

where:

M(t) = expected market share for the new brand t,

E(t) = proportion of consumers who include brand t in their relevant set of alternatives,

$L_i(t)$ = predicted probability of purchase brand t by consumer i, i = 1,..., N

The model (1) used to estimate purchase probabilities from the observed preference measures obtained in the post-usage survey, is a variation of the multinomial logit model which has a well-developed theoretical foundation in psychology and economics (McFadden 1981). In particular, the multinomial logit represents an econometric specification of Luce's (1959) probabilistic theory of individual choice behavior. Hence, brand choice is treated as a heterogeneous, stationery, zero-order Bernouilli process, a view consistent with existing models and empirical evidence relating to household purchasing of branded packaged goods. Bass, Jeuland, and Wright (1976) provide a formal analysis of the connections between the Luce model of individual choice and stochastic models of brand switching and market penetration that have been successfully used in marketing to describe household purchase patterns and brand shares.

The second model used to predict the new brand's steady-state share is an extension of Parfitt and Collins' (1968) well-known and widely used test market model previously proposed by Urban (1975). Following Parfitt and Collins, the equilibrium share, M(t), a new brand attains in test market may be expressed as:

$$M(t) = TS, \tag{3}$$

where:

T = ultimate cumulative trial rate for the new brand, t (proportion of all buyers in the target group who ever try the new brand),

S = ultimate repeat purchase rate for the new brand, t (i.e., the new brand's share of subsequent purchases in the product category made by buyers who have ever made a trial purchase of t).

A further decomposition of the trial (T) and repeat (S) rates suggested by Urban (1975) allows the influence of certain marketing policy variables on consumer response to be represented in a simple fashion. Trial (T) is assumed to emanate from two sources: (a) receipt and use of free samples or (b) initial purchases. The incidence of first purchase of the new brand is taken to be dependent on the level of awareness induced by advertising or other forms of promotion and the extent of its retail availability. As an approximation, the probability of becoming aware of the new brand and that of having it available are presumed to be independent. We also assume that the probability a consumer makes a first purchase is independent of the probability of receipt and use of a sample. Combining these assumptions, we can model trial by:

$$T = FKD + CU - (FKD)(CU), \tag{4}$$

where:

F = long-run probability of a consumer making a first purchase of the new brand given awareness and availability of it (i.e., proportion of consumers making a trial purchase in the long run given that all consumers were aware of it and distribution was complete),

K = long-run probability that a consumer becomes aware of the new brand,

D = long-run probability that the new brand is available to a consumer (e.g., proportion of retail outlets that will ultimately carry the new brand weighted by their sales volume in the product category),

C = probability that a consumer will receive a sample of the new brand,

U = probability that a consumer who receives a sample of the new brand will use it.

Note that K, D, and C depend on the design and size of the marketing program to be employed in the test market or launch.

The other component of (3), the repeat rate, S , is modelled as the equilibrium share of a first-order two-state Markov process:

$$S = \frac{R(k,t)}{1 + R(k,t) - R(t,t)} \qquad (5)$$

where the transition probabilities are defined as follows.

$R(k,t)$ = probability that a consumer who last purchased <u>any</u> of the established brands (k) will switch to the new brand (t) on the next buying occasion,

$R(t,t)$ = probability that a consumer who last purchased the new brand will repurchase it on the next buying occasion.

Results of some empirical tests of (4) and (5) are reported in Urban (1975). For further discussion of the assumptions underlying both models as well as details of the procedures used to estimate the inputs they require from the consumer research outlined above, the reader is referred to Silk and Urban (1978, pp. 177-184).

Application of (2) and (3) produces two forecasts of the new brand's expected market share. As explained elsewhere (Silk and Urban 1978, pp. 181-182), both models represent market share as the product of two conceptually similar quantities but the sub-models and measures used to estimate the components of each are distinct. The generation of two forecasts by alternative plausible methods allows a meaningful check for convergence to be made and the applications experience accumulated over time has served to emphasize that this is an advantageous feature of the system. Finding that the two models yield forecasts that are in close agreement can serve to strengthen confidence in the prediction. On the other hand, divergent forecasts trigger an investigation of possible sources of error that might account for the discrepency. Such analyses are guided by systematic consideration of the assumptions underlying each model and its inputs which

draw attention to the conditions under which equivalent or dissimilar results are to be expected. Clearly judgment must be exercised in reconciling differences in forecasts but that process is greatly facilitated by an understanding of the structural comparability of the two models. Some comparisons of the share predictions obtained in applications of the two models are reported in Silk and Urban (1978, Table 5, p. 188).

## IMPLEMENTATION

The development of ASSESSOR grew out of discussions held in 1972 with the marketing research director of a large packaged goods firm. He was intimately involved in formulating the overall goals of the system and supported several early test cases out of which grew a number of methodological improvements. Management Decision Systems, Inc. and Novaction S.A., its international partner, began conducting ASSESSOR studies in 1973. During the past 10 years, approximately 450 new products have been evaluated for more than 100 client firms in 15 countries using the ASSESSOR methodology. These applications have been distributed across different product categories as follows: food (32%), household cleansers (23%), health and beauty aids (34%), over-the-counter pharmaceuticals (9%), and other (2%). Almost three quarters of the studies were carried out in the U.S., while the other quarter were done in a diverse set of international markets including numerous locations in Western Europe, Japan, Australia, Canada and Latin America. Applications have encompassed a wide spectrum of new product situations: 65 per cent were major new products, 35 per cent were line extensions, 15 per cent were in categories where purchase frequency was less than 3 purchases per year and 15 per cent involved circumstances where the product category was either ill-defined or

non-existent. In addition, 38 per cent of these studies have been "multi-cell" studies involving two or more simultaneous replications of the basic design that allowed experimental evaluation to be made of variations in advertising copy, package, product formulation, or price level. Many clients use this simple experimental design feature of the ASSESSOR system to test strategy alternatives. Sixty per cent of the clients have done two or more projects and in the case of ten firms, more than 10 studies have been conducted for each.

## Acceptance Process

Initially, it ws extremely difficult to convince prospective clients to use ASSESSOR. Most companies had no experience with formal methods of evaluating new products prior to test marketing and the few who did tended to be sceptical of their accuracy and usefulness. Clients first needed to be convinced that accurate pre-test market forecasting was possible and that ASSESSOR was the appropriate technique for them to use. Favorable results attained by experienced management scientists in early applications established the system's credibility. An important transition in the implemention of ASSESSOR occurred after four or five years when prospective clients began to identify themselves as personal recommendations flowed from existing to potential users.

Today, the implementation process commonly begins with an inquiry from someone in the marketing research department of a packaged goods manufacturer. If the ASSESSOR system is appropriate for the product or products that the firm is developing, a formal presentation to their marketing management and marketing research groups will be made. This presentation

usually covers the data collection process, the technical aspects of the models, and any unique marketing issues which must be addressed for the product under consideration.

Some firms have moved rapidly in adopting ASSESSOR to screen new products while others have proceeded more cautiously. In the latter cases, the first few projects are conducted in an experimental mode in order to evaluate the model's usefulness and to build confidence among top management. One noteworthy client conducted a quite formal and rigorous adoption process. During the first year, they used ASSESSOR only in parallel with actual test markets, withholding the in-market results until after the ASSESSOR results were reported. During the second year, they conducted ASSESSOR studies prior to test market, but they allowed all products to go to test market, even if the forecast was well below their objectives. Finally, in the third year, after a long track record of accurate forecasting had been established, the model was institutionalized and began to be used routinely as a formal screening device. While most clients do not take three years to evaluate ASSESSOR, the practice of initially using it on an experimental or trial basis in order to build confidence and understanding has become an integral step in the implementation of the system.

## Project Activities

The conduct of an individual study consists of four major phases. The first phase is the study design, an activity requiring close client collaboration. The important marketing issues must be identified (e.g. advertising copy, relative price, target group definition, cannibalization) and the appropriate questionnaire and model customization specified. Some of

the questions typically addressed are: what screening criteria to use for respondent selection, which competitive products to show in the advertising exposure and how to price products displayed in the simulated store?

The second phase is the execution of the consumer research. The laboratory field work may be carried out in anywhere from two to ten different cities and requires one to two weeks to complete. The post-usage survey is conducted several weeks later, ordinarily via WATS line telephone from a central location, or in some special cases, by personal interviews.

Phase three entails the preparation and analysis of data and modeling. The analysis is conducted in an on-line interactive mode using the EXPRESS Decision Support System software which provides the flexibility required to address a variety of ad hoc issues that invariably arise in the course of a study.

The fourth and final phase is the reporting of results. Early on, it was realized that presenting the final results of an ASSESSOR study to a group of anxious executives who were unprepared for the conclusions often resulted in an explosive meeting -- especially when the outcome was contrary to expectations. The fate of a new product is often linked to personal career advancement and pressures to meet financial and other goals. To avoid the dysfunctional aspects of such circumstances, the practice was introduced of first conducting a technical review session with only a few representatives from the client corporation in attendence. Results can be presented in a lower-key setting where the client can ask challenging questions, suggest additional analyses, and gain a fuller understanding of the findings and their implications which later gradually filter back to other concerned parties not in attendence.

When the formal management presentation is made one or two weeks later, most of the participants already know the share forecast or "bottom line." This encourages a more constructive meeting to take place in which the participants focus on clarifying the policy implications of the forecast and other diagnostic information. A final written report is issued shortly thereafter and management then decides whether to drop the brand, go to test market, or attempt to improve the product and re-evaluate it later.

## Factors Contributing to Success

In addition to the above project system, several other factors have contributed to the record of utilization and acceptance which ASSESSOR has achieved. Its development was initiated by a manager, and many of the design parameters addressed the needs that he deemed important. But while one user played a crucial role in its conception, ASSESSOR was, from the outset, intended to serve a broad range of firms who market frequently purchased consumer products. The ASSESSOR system has fit well into the organizational structures of consumer packaged goods manufacturers. They generally possess sophisticated marketing research departments who perform a key staff function for marketing management and are experienced in managing major marketing research projects like ASSESSOR.

The presence of a strong internal advocate within a client firm has often been critical for the successful implementation of ASSESSOR. This role has usually been performed by either a marketing research director or a new products director. He or she builds management support for the use of ASSESSOR at a high level, and if their early experience is favorable, ASSESSOR becomes internalized as a formal part of their new product development process. The quality of the delivery staff has also been a vital ingredient

in ASSESSOR's acceptance. Its client contact personnel have shown themselves able to address real world marketing issues with sophisticated analytic techniques and skilled at communicating the results to management.

Forecast accuracy is clearly the key performance criteria which commands users' attention and evidence bearing on this issue is presented below. The marketing research field is a tightly knit community, and ASSESSOR's reputation for strong predictive validity and high quality management scientists available to work with the clients has been important in the diffusion of the system. As acceptance grew, other competitors have entered the pre-test market forecasting business, some with methods modelled after ASSESSOR. This has tended to legitimize the approach. Even as shares have been carved out, the entire market for such services has grown enormously, and it is becoming standard practice to pre-test market a new brand.

Finally, ASSESSOR has succeeded because it addresses a crucial, highly risky and visible decision which every packaged goods manufacturer must periodically confront. The decision to launch a new product is usually a major strategic step with many millions of dollars at stake. Profits and careers ride on it. New product failure is an embarassment within a firm and within an industry. Pre-test market evaluations serve a valuable function when they help reduce the pain of failure as well as when they promise future gains.

## Difficulties

While all of the above factors have contributed to the successful implementation of the system, the process has not been without its difficulties. One of the real issues in implementation work has been certain clients' unwillingness to accept a low market share forecast. Some

have a tendency to want to "shoot the messenger" who bears the bad news. Favorable forecasts are generally received with a brief presentation and few questions. But low share forecasts are often greeted with scepticism and attempts to discredit the model, the study design, or the findings themselves. While a critical and questioning attitude is appropriate and even helpful, it sometimes happens that a client will attempt to reject the system instead of the product under consideration. This has occurred less frequently as the body of evidence bearing on the validity of the system has grown, but occasionally it is still a problem, which impairs the successful utilization of the system's capabilities in some organizations. In one company, the system became known by the brand group as "REJECTOR" because disquieting forecasts were obtained for four successive products. The problem was not the ASSESSOR methodology, but the pressure on the brand group to get new products to market which led to a proliferation of projects involving small modifications to existing products. After the corporate strategy was changed to focus for major new opportunities, several products were developed which achieved encouraging forecasts and evaluations from ASSESSOR studies.

Forecast errors are another difficulty we must contend with from time to time. The system attempts to reduce risk, but cannot eliminate it completely and a realistic understanding of what the system can and cannot do is the foundation required for long term satisfaction and acceptance. Sometimes gross discrepencies between the pre-test forecast and test market outcome have occurred not because the methodology incorrectly captured the process but rather because the execution of the company's marketing program in test market was inconsistent with the pre-test plans. ASSESSOR forecasts are conditioned on estimates of certain quantities such as awareness and retail availability which, in turn, reflect specific plans for employing advertising, sampling,

and couponing. If the client does not faithfully follow the previous plans when they go to test market, then the original forecast can scarcely be expected to remain relevant.

Similarly, the products themselves sometimes undergo changes between the time of their ASSESSOR evaluation and subsequent test marketing. While some adjustments may be a direct result of diagnostic information provided by the ASSESSOR study, others are unplanned but adversely affect the new product's performance. An example would be a modification in advertising claims to meet legal restrictions or a change in the formulation of the product to meet health and safety standards. When these differences are substantial, the original ASSESSOR forecast is no longer relevant to the product that actually went to market. Disappointing test market performance as a result of failure to execute the strategy previously tested in an ASSESSOR study has occasionally been misperceived as a pre-test market forecasting error which erodes confidence in the model and makes implementaton difficult.

## VALIDATION

Doubtless, the issue of prime concern to users of a pre-test market evaluation system is: Can it accurately predict test market performance? Some limited evidence bearing on ASSESSSOR's predictive capability derived from early applications was included in the original published report on the system (Silk and Urban 1978). More recently, another systematic investigation of its track record was undertaken, a full account of which appears elsewhere (Urban and Katz 1983). Below, we summarize the main findings from the latter study.

Predictive Accuracy

In 1980, an effort was made to gather validation data on the entire population of new products which had ever been subjected to an ASSESSOR test as of that date. So defined, that universe consisted of 215 new products. For each case, the pre-test market forecast was available from the final ASSESSOR report delivered to the client. Questionnaires were sent to firms sponsoring the original ASSESSOR study requesting, among other things, information about whether or not the new product had been subsequently test marketed and if so, what market share it ultimately attained. Management's qualitative assessments of both pre-test market prediction and the test market outcome were also obtained.

After two follow-up mailings and telephone calls, responses were obtained for 81 or 38 per cent of the original populations of 215 products. The test market history of these 81 cases was as follows: 29 had never been test marketed, 5 were currently in test market but final results were not available, and 47 had completed test marketing. In 3 of the latter 47 cases, market share information from the test markets was not available because the ASSESSOR studies had been sponsored by one firm testing a competitor's product and the ASSESSOR sponsor was not privy to the test market research.

Figure 2 shows a scatter plot of the pre-test market forecasts and the observed test market shares for the 44 cases where both pieces of data were available. The 45 degree line represents perfect prediction. The computed value of the product moment correlation coefficient for these data is .95. The mean predicted test market share was 7.77 while the mean observed test market share was 7.16. Thus, on average, the ASSESSOR forecast exhibited an upward bias of .61 share points. The latter difference is significant from zero at the 10 per cent level ($t=2.0$). The standard deviation of the differences between the predicted and observed shares is 1.99 share points.

In some cases, the conditions actually encountered in test market were not those assumed in the original model forecast. Information pertaining to differences between the pre-test and test market conditions was obtained in the survey and used to rerun the model so as to derive an "adjusted" share prediction. These adjustments were limited to only three variables: awareness, distribution, and sampling. Adjustments were made in 36 of the 44 cases. As expected, the comparisons between adjusted and test market shares show less error -- mean difference of -.01 and standard deviation of 1.12. The correlation of the adjusted predictions with test market shares was .98. In most of these, the adjustments improved the accuracy of the forecast, but in six of the cases the deviation increased. The systematic overprediction for lower share values shown in Figure 2 was reduced substantially by the adjustments.

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INSERT FIGURE 2 HERE

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Given returns for only 81 of 215 products tested, non-response is a threat to the validity of the preceding estimate of forecast accuracy and must be examined. The pre-test forecasts for all 215 studies have a mean of 7.13 and a standard deviation of 6.55. The 44 products in the validation sample have a pre-test share mean of 7.77 and a standard deviation of 5.72. The latter are not significantly different estimators of the former population values of the mean and variance ($t = .48$ and $F(214,43) = 1.31$). This would suggest the absence of any strong self-selection bias. Further analysis of non-response was done by comparing the first wave of 24 responses to the 20 later

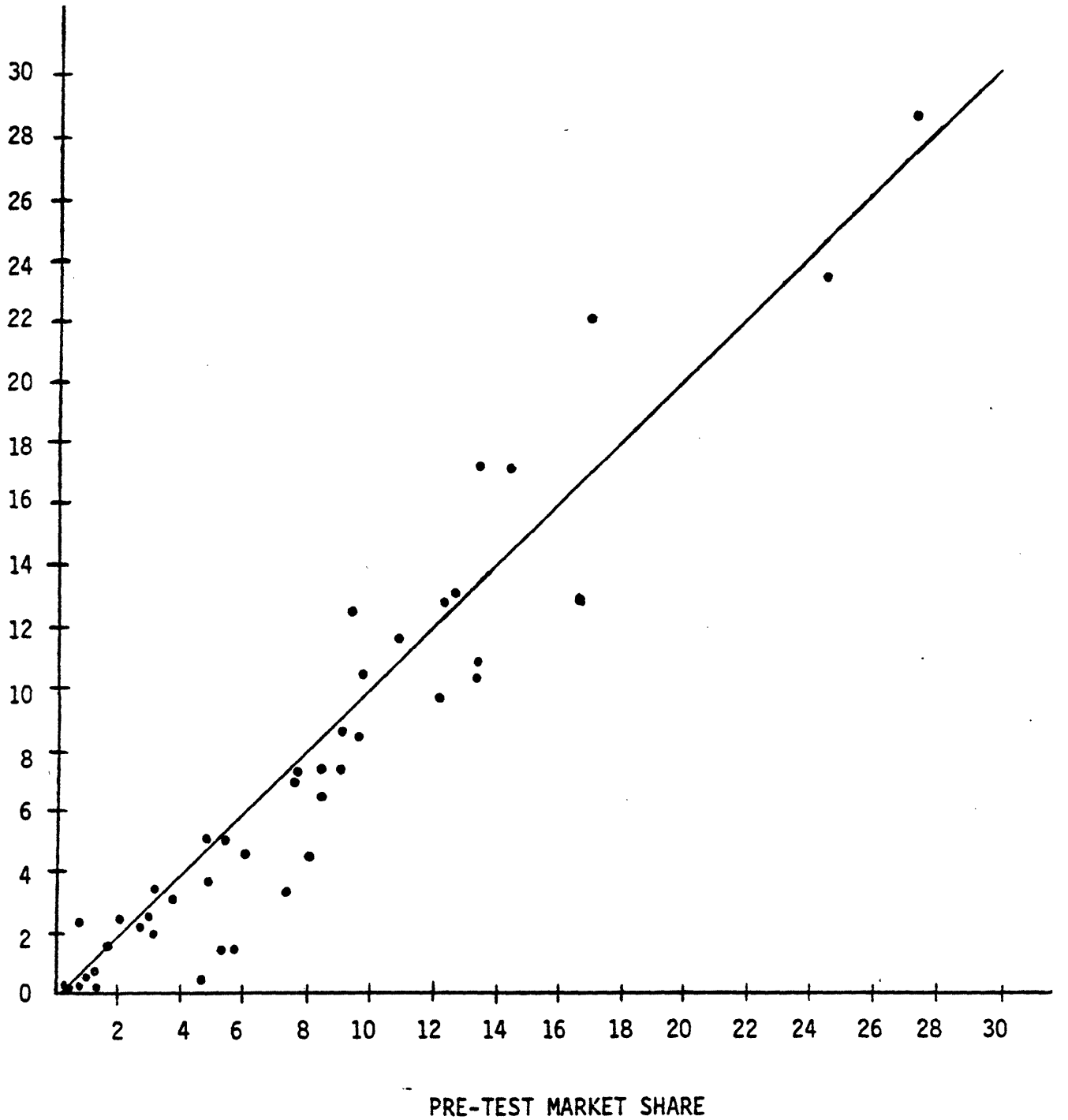


FIGURE 2: COMPARISON OF PRE-TEST MARKET AND TEST MARKET SHARES

(Urban and Katz, 1983)

responses. The mean shares were 7.9 for the first 24 questionnaires and 7.7 for the last 20 questionnaire responses. These differences are not significant at the 10 per cent level. The standard deviation between pre-test and test market shares were virtually identical (2.0 versus 2.0 for unadjusted and 1.0 versus 1.1 for adjusted comparisons). Thus, there is no apparent evidence of a non-response bias and the available validation sample does not appear to differ significantly from the total population of 215 new products which had been submitted to ASSESSOR studies.

Success and Failure Rates

Based on managers' reported interpretations of the ASSESSOR results, approximately 63 per cent of the products in the validation study were judged by clients to have attained satisfactory pre-test results and hence survived the pre-test market screen. Among those products that received favorable pre-test market evaluations, only 34 per cent subsequently failed in test market. The latter figure may be compared to the 64.5 per cent failure rate reported in the Nielsen (1979) study of 1977 test market results. The implication of this comparison is that use of the ASSESSOR methodology reduced the odds of failure in test market by almost one-half (48 per cent).

Unfortunately, we have been able to obtain very little data relevant to estimating the risk that reliance on ASSESSOR's results may eliminate new products that would otherwise succeed in test market. The validation sample turned up only six cases where a new product had been test marketed despite a negative ASSESSOR pre-test evaluation. However, all six were judged to be "big" failures when test marketed.

## IMPACT

In this section we attempt an appraisal of the impact which ASSESSOR has had on practice over the course of its 10 year history of application in the packaged goods industry, in the U.S. and abroad. We first consider a formal estimate of the value of information generated by ASSESSOR obtained through a simulation study of a Bayesian decision model (Urban and Katz 1983). Following that, a sample of managerial evaluations from frequent users of ASSESSOR will be presented.

### Analysis

The validation study discussed above indicated that ASSESSOR's record for forecast accuracy was quite favorable in a statistical sense. However, from a managerial point of view, several further questions naturally arise. Are the pre-test market forecasts dependable enough, given the nature and consequences of the decisions they are intended to support? Are pre-test market evaluations worth what they cost?

The ASSESSOR pre-test market analysis system is a screening device intended to eliminate product failure at a low cost (e.g. $50,000) rather than carrying them on to test market where they would be rejected at a high cost (e.g., $1 - 2 million). The validation data referred to in the preceeding section indicates that the failure rate can be cut from 64.5 per cent to 34 per cent. However, there is danger that, while eliminating failures, the pre-test evaluation may also screen out a product that would have been a success. That is, account must be taken of the risk of making a type II error. Recall that the evidence bearing on the incidence of type II error turned up in the validation study was quite encouraging but extremely limited

in scope. Clearly, a trade-off must be made between two types of errors in making screening decisions. If a very high cut-off is set, few products will pass the pre-test screeen, and those that survive are unlikely to fail subsequently. But many potentially successful products may be eliminated. If a very low cut-off is set, few good products will be eliminated, but many poor ones will be carried forward and later fail in test market. The manager's task, therefore, is to set GO/NO cut-off values that balance these errors and maximize the firm's expected profit. This is a sequential decision problem and can be modeled by the use of decision theory (Raiffa and Schlaiffer, 1961; DeGroot, 1970). Such analyses of new product decisions have often been advocated (Alderson and Green 1964, Bass 1963, and Sands 1981) but seldom applied.

The approach taken by Urban and Katz (1983) begins with the prior distribution of the true market shares of products which is assumed to be measurable, subject to the error components mentioned above in the discussion of the ASSESSOR validation study. A GO/NO cut-off is applied to the pre-test result and if a GO decision is reached, another GO/NO cut-off is applied to the test market result. A GO decision at the latter stage results in a national launch which produces profit as a function of the true market share. The expected profit for the testing system can be calculated and the best cut-off levels estimated via search.

Urban and Katz (1983) estimated the maximum expected profit for a testing system which includes ASSESSOR and compared it to a system with no pre-test marketing. They simulated the testing system using data on the distribution of market shares and pre-test errors obtained in the aforementioned validation study and estimates of the accuracy of test markets from published sources. A "typical" profit function for national marketing was defined based on client

experience. With a system that includes both a pre-test and a test market, the expected profit in this "typical" case is $28.44 million and the best combination of cut-offs is 4.5 share points for pre-test and 5.5 for the test market. With neither a pre-test nor a test market, the reward is $16.74 million, so the expected value of testing is $11.7 million ($28.44-$16.74) for a product entering the sequential decision system. If only a pre-test is done, the total reward is $28.02 million and the expected value of pre-testing is $11.28 million ($28.02-$16.74). If only a test market is done, the total reward is $28.16 million and the expected value of test marketing is $11.42 million ($28.16-$16.74). Either test can contribute the majority of the value of testing. However, the incremental expected value of a test market given that a pre-test is done is $420,000 ($11,700,000 - $11,280,000) and the incremental vlue of the pre-test given that a test market is to be done is $280,000 ($11,700,000 - $11,420,000). Thus the simulation indicated that both pre-test and test market are worthwhile and valuable components of a new product development system.

If we assume that this simulated case is indeed typical, we can make an estimate of the profit impact of ASSESSOR. Taking the conservative net profit figure of $280,000 discussed above as the value contributed by the ASSESSOR procedure and using $50,000 as the expected cost, we find a 6.6 to 1 benefit-cost ratio (net profit of $280,000 plus the $50,000 cost, divided by the $50,000 cost = $330,000/$50,000 = 6.6). Extrapolating these results to ASSESSOR's entire 10 year history, we estimate the total impact over 450 applications is $126 million dollars (450 x $280,000) of additional profit -- a quite substantial amount.

Managerial Assessment

In order to obtain a more direct evaluation of the system's contributions, we approached a number of ASSESSOR's more frequent users for their comments concerning the ways in which use of ASSESSOR had impacted their organizations. Eleven firms were asked to participate and nine responded. (The two who refused cited "legal considerations" and "confidentiality" as their reasons.) Over 150 applications are represented by the set of responding client companies. Due to space limitations we are able to present only selected excerpts from the written responses received. The full text of the letters are reproduced in the working paper version of this article which is available from the authors on request.

Predictive Accuracy: Certainly the most basic benefit users described was the model's forecasting accuracy. Individual company experiences confirm the validation study reported above. For example:

> Accurate point-in-time assessment within the highly seasonal suntan/sunscreen category was provided by simulation of a new product entry which was within a plus or minus 5% of actual equilibrium share attainment in a concurrent high CDI test market. The combination of the ASSESSOR and the single test market provided independent confirmation that the consumer premise was valid and projectable. The brand subsequently became the number one national brand in the fast-growing sunscreen segment."
>
> Donald N. Scott
> Director
> New Product Development
> Armour-Dial, Inc.

"Before we would accept ASSESSOR as an operational technique, we put it through a thorough evaluation process in which we compared ASSESSOR results to actual marketplace results in order that we could assure ourselves that the results were actionable. Too much is a stake to risk having research steer us away from a product opportunity.

ASSESSOR is now an operational technique for Procter & Gamble. We consider using it for most new products. The use of ASSESSOR, and similar approaches, has brought more discipline and systematic thinking to new product planning. The very act of preparing for an ASSESSOR study forces us to review our objective for the new brand in a much more organized way than previously. This by itsef often helps us spot unreasonable marketing assumptions."

W. D. Peterson
Group Manager
Market Research
Procter & Gamble Co.

"Since the advent of ASSESSOR in the late 70's, we have used the methodology, together with its related PERCEPTOR image model, to predict the potential in the marketplace of a large number of new products, and the potential for relaunch of our existing brands. The predictions have been accurate, and in our company now in Japan, an ASSESSOR evaluation is a necessary criterion for consideration of any new marketing project.

In 1978, when I first proposed that the technique be used in Japan, there was some doubt expressed as to whether it would work in a culture so different from Europe and the USA. I therefore conducted an ASSESSOR test on a competitor's brand which was just being launched in the market with high expectations. The ASSESSOR predicted a 2% market share for the brand -- and now 5 years later that brand has never exceeded 2%. This test gave us the confidence to use the tool operationally."

R. M. Brookin
Director
Marketing Research
Nippon Lever K.K. (Japan)

"In general, we have found the system to be highly accurate. This accuracy is judged against two criteria: (1) How do the results from ASSESSOR compare to other research data which we have generated for a project; and (2) Do the predictions from ASSESSOR hold up in market. In both cases we have found the system to be quite accurate. Although we have limited market results (5 cases), we feel very confident in the system..."

J. S. Figura
Corporate Director
Market Research
Richardson-Vicks, Inc.

Role in Strategy Formulation: Clearly, the share forecast is not the only useful output ASSESSOR provides. To some managers it is not even the most important benefit.

"ASSESSOR's greatest value is in providing a framework within which judgment can be exercised and tempered, and realistic expectations set. ASSESSOR does this by answering such key questions as:

> Can the core strategic concept, advertising positioning, execution, packaging, name and product work together synergistically to produce to produce trial and repeat levels capable of meeting the business goals set for the brand?
>
> Can the goals be met within the context of the proposed marketing plan elements of price, sampling, awareness and distribution attainment assumptions?

In my experience ASSESSOR has established an impressive track record answering these questions prior to the commitment of funds and reputations to full-scale test marketing, and within a much shortened time frame. Importantly, if problems are detected, the diagnostic capabilities of the systems allow for problem identification and recycling is possible."

Donald N. Scott
Director
New Product Development
Armour-Dial, Inc.

"A new brand was developed for the Japanese market based on an existing European product, and we were required to assess the potential. ASSESSOR showed that once people had tried the product, repeat rates were high, but that product trial was difficult to achieve by the traditional routes. ASSESSOR's simulated product sampling showed that sampling could be cost effective, and the brand in Japan now exists at a high sales level which would not have been achieved without the insights into consumer behavior generated by ASSESSOR."

R. M. Brookin
Director
Marketing Research
Nippon Lever K.K. (Japan)

"ASSESSOR is an excellent strategic planning tool with major defensive, as well as offensive capabilities.

Test market introduction by a major competitor of a unique product targeted directly at our dominant category leader resulted in product research and ASSESSOR simulation of the competitive entry. Product tests showed a strong product and extensive defensive plans were developed pending an expected national launch. The brand was also simulated, with a major synergistic conclusion:

> In use, performance was again strong; however, the synergistic effect of positioning copy execution, packaging and name predicted the brand would have major problems attaining trial.

Subsequently, as the competitor rolled national, we were in a position to selectively cut $600,000 in planned defensive spending. These funds were reallocated to more effective long-term growth objectives, rather than short-term defensive efforts.

One other benefit; the Brand Group had a lot less anxiety knowing the franchise was not threatened, while gaining additional insight into critical category dynamics.

The competitor subsequently failed.

Donald N. Scott
Director
New Product Development
Armour-Dial, Inc.

Diagnostic Function: In An ASSESSOR study, the full range of components which comprise a new product marketing program are tested as an integrated whole. Many clients value the system's diagnostic capability which allows the functioning of marketing mix elements to be checked.

> "We encourage the use of simulators as diagnostic tools. The 'bringing together' of the various elements of the marketing mix permits analyses not available via testing of the individual components.
>
> Marion A. Klein
> Vice President
> Market Research
> Bristol-Myers Company

> "Although the modeling capabilities and projections of ASSESSOR are the aspects primarily mentioned when people speak of the system we have also found the diagnostics generated from the system to be very helpful. The main way the diagnostics have been used is to understand problems with any particular product and how we can rescue hopeful opportunities."
>
> J. S. Figura
> Corporate Director
> Market Research
> Richardson-Vicks, Inc.

> "This market being quite new to the company, we needed major inight into the consumer response process. The ASSESSOR project quickly identified the risk area - trial generation through lack of advertising identification, therefore risk of slow penetration. The repeat behavior being quite healthy, launch took place and the market response was slow to build up as predicted. Another MDS/Novaction management science technique (SPRINTER) was used to help to drive quicker penetration by changes in advertising levels. ASSESSOR and SPRINTER gave the company a clear understanding of the nature of the risk, ways to control it, and confidence in living with it in the short term."
>
> Marcel Schubert
> Director
> Marketing Research
> Public Product Division
> L'Oreal S.A. (France)

"While the main role of simulated test marketing and ASSESSOR in our company is to allow us to forecast the share of market to be achieved for a new product, we have found the diagnostic measures in ASSESSOR extremely useful in understanding why a particular result was achieved. Specifically, the brand ratings data collected in ASSESSOR allow us to position the concept and the product on a perceptual map which helps us to explain how the brand is to be perceived by consumers in the marketplace. That is, the diagnostic information is useful in helping us understand the net impression that is going to be left in the mind of our consumers after exposure to the advertising and use of our test product."

Richard F. Chay
Director of
Marketing Research
S. C. Johnson & Son, Inc.

Testing Alternatives: Most of the products which reach the ASSESSOR stage of evaluation have undergone a great deal of traditional market research in order to develop the advertising, packaging, product formulation, and other marketing mix components. Nevertheless, because of time constraints or simply the inability of previous research to establish a preferred approach, many clients use ASSESSOR to conduct experimental evaluations of two or more strategic alternatives.

"We have used ASSESSOR . . . on a number of occasions to look at the likely effects of alternative

- prices
- positionings
- advertising expressions.

In our experience the ability to experiment in this way with different mixes has been one of the most valuable aspects of such systems. It can be an encouragement to be more adventurous in testing mixes which otherwise would on judgment have been thought to be too risky. The findings of such tests have, for example, led us in at least one case to use an advertising approach which was rather more "way out" than might have been acceptable on judgment grounds alone, and in another case to consider going into the market at a higher relative price than had previously been planned.

John Downham
Director of
International Research
Unilever, Ltd. (U.K.)

"An additional benefit of the ASSESSOR system which we have recognized in two cases to date has been the ability to choose between alternative products."

J. S. Figura
Corporate Director
Market Research
Richardson-Vicks, Inc.

Dollar Benefits: The most recognized source of dollar savings derives from the use of the model to screen out those products which have a low probability of success in test market. Some managers evaluate this in terms of benefit/cost estimates:

". . . used on a number of occasions to stop products going into a test market when ASSESSOR has indicated there is little chance of the necessary market share action standard being reached. Since the cost of a market test may often be 10-20 times that of an ASSESSOR test, the costs of using such a system can be recovered many times over if it serves only to prevent a minority of inadequate products being put into test market."

John Downham
Director of
International Research
Unilever, Ltd. (U.K.)

"We accept the technique as a 'negative' tool; that is, if a brand cannot achieve its share objective within the artificial conditions imposed, the probabilities are high the goals will not be reached in the marketplace."

Marion A. Klein
Vice President
Market Research
Bristol-Myers Company

Others estimate the average per product savings:

"S. C. Johnson & Son has been using the ASSESSOR pre-test market laboratory simulation model since 1974. While the actual number of ASSESSORS that we have done is proprietary, we have conducted many of them in our Personal Care and Household Product Divisions.

> Of the total ASSESSORS we have done, about two-thirds of them have indicated that the new product we tested would not meet share or volume expectations which were specified in advance of the test. Given today's cost of test marketing, which is a standard next step following laboratory simulations, we estimate the savings to our company to be in the neighborhood of $750M to $1 million per product . . .
>
> As a result of our experience with ASSESSOR and the confidence of our management in this technique, we have been able to eliminate products from our national launch plans which were not going to meet their share objectives. As such it has helped us to reduce the risk of introducing products that were destined to fail in the market."
>
> Richard F. Chay
> Director of
> Marketing Research
> S.C. Johnson & Son, Inc.

It bears noting that S. C. Johnson's assessment of value is consistent with the simulation study cited above. The former estimate would imply a total benefit of $125 million for ASSESSOR simply from preventing failures -- i.e., 450 products times the observed rejection rate of 37 per cent times $750,000 of savings per product rejected.

> "Probably one of the most important areas of evaluation of any system is the cost implications. In the case of ASSESSOR, we have been able to recognize significant monetary savings over time. Although we do not have a hard number in terms of the money saved or earned, we estimate about five million dollars. This figure is derived through several factors. The first is that in several cases we have been able to go faster to market and therefore recognize opportunity sales. The second is related to the first, but since we are skipping test markets when we expand broadly without going through the traditional system, we save significant costs at that point. Finally, we have used the ASSESSOR to stop spending on product opportunities that were clearly not meeting our criteria."
>
> J. S. Figura
> Corporate Director
> Market Research
> Richardson-Vicks, Inc.

Richardson-Vicks has tested 15 products, so if their estimate of $5 million is correct, the per product benefit is $333,000. This would imply $150 million in savings across all of the 450 ASSESSOR applications. The savings due to faster decisions have been reported by S. C. Johnson:

> "Our most successful use of ASSESSOR was with Agree Creme Rinse, a brand which was launched nationally in 1977. This brand was one of the most successful in the history of the Personal Care Business, and we moved quickly with this product following extremely favorable ASSESSOR test results. We were able to collapse the amount of time required in test market to confirm the ASSESSOR results by more than six months, which helped to blunt any competitive reaction that might have taken place."
>
> Richard F. Chay
> Director of
> Marketing Research
> S.C. Johnson & Son, Inc.

The strategic evaluation capabilities of the model can also generate more efficient use of resources:

> "We were considering the launch of a new product which would replace the existing range (i.e. product line), which was felt to be somewhat old-fashioned and lacking in competitive edge. Share expectations were high, and the company envisaged spending a large amount of money on the launch, and withdrawing support from the existing range. ASSESSOR showed a market share potential of only 2.2%, with little substitution from the existing range. The substitution plans were shelved, and the product launched as a low key range extension -- where it has achieved a share of 2.3%. The company saved not only the total launch costs in excess of 1 billion Yen (approximately $4.2 million), but also its position in this market, a saving which cannot be quantified in Yen.
>
> R. M. Brookin
> Director
> Marketing Research
> Nippon Lever K.K. (Japan)

The measurement of dollar savings has been difficult in some firms:

> "As in all aspects of research, it is difficult to put a dollar value on the contribution simulated test markets have made to our company particularly since we recommend that use be in conjunction with other research and marketing input. However, the savings of not taking an unsuccessful product to test market would be in the millions. Our assessment of the value is best illustrated by our continued use."
>
> Marion A. Klein
> Vice President
> Market Research
> Bristol-Myers Company

Although the measurement of dollar benefits from use of ASSESSOR is complex, the estimates obtained from managers are consistent with the simulation results.

World Wide Utilization

The implementation of ASSESSOR in international markets has been conducted by Novaction S.A. (Paris) through a network of regional offices and affiliations with local market research vendors in a number of Western European and far eastern countries. Over 100 products have been evaluated outside the U.S. Studies have been conducted in such diverse markets as Japan, Australia, Brazil, Mexico, as well as in several European countries. Only minor adjustments in the data collection have been required and this reflects favorably the system's cross national applicability and relevance. The forecast accuracy internationally is similar to that in the U.S. (10 of 44 products in the validation study cited above were international). This predictive capability is particularly valuable because in many countries test marketing is simply not feasible for technical and/or cost reasons. Therefore, the high risk of failure must be confronted in the national marketplace, frequently at a direct cost of the equivalent of many millions of

dollars. ASSESSOR contributes more profit to the international firm than a domestic one when it replaces a test market which is often not an available option.

## SUMMARY AND CONCLUSION

The failure of new products in test markets represents a multi-million dollar problem for packaged goods manufacturers. ASSESSOR is a methodology which provides accurate pre-test market forecasts which reduce the risks of test market failures. A systematic comparison of pre-test market forecasts and subsequent test market shares observed for new products indicates that the system possesses strong predictive capability. During the past decade, ASSESSOR has been applied more than 450 times in over 100 firms operating in 15 countries. A formal analysis of this experience estimated the value of information generated by ASSESSOR to be $120 million. At the current rate of 100 applications per year, another $20 milion of benefits are expected to accrue annually from continuing utilization of the system. Such improvements in the efficiency and effectiveness of new product development are, we believe, indicative of the impact and value of a larger body of marketing decision-support technology which has emerged with advances in marketing science (Little 1979).

ACKNOWLEDGEMENTS

We represent a large team of management scientists, marketing researchers and users who have helped build and implement ASSESSOR. Bob Klein, Cal Hodock, Donna Coburn, and Jacques Blanchard deserve special thanks for their significant contributions to the development of the system. The efforts of Sue Bass, Antoine Chevallier, Mark Deck, Ken Dill, Bruce Donath, Jim Findley, Carlos Harding, Margie Jacobson, Phil Johnson, Walt Lankau, Kathy Moore, Jiri Nechleba, Oscar Schneersohn and Ed Wolkenmuth in implementing ASSESSOR are gratefully acknowledged. Finally, a special note of thanks is due to the more than 100 firms who use ASSESSOR for their ideas and support over the past ten years.

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APPENDIX 1

Letters from some of the most frequent users of ASSESSOR. Eleven letters were requested, and nine companies responded. (The two who refused cited "legal considerations" and "confidentiality" as reasons.) The full texts of their letters are included in this appendix. Approximately 150 new product applications of ASSESSOR were conducted with this set of firms.

ARMOUR-DIAL COMPANY

February 18, 1983

Mr. G. M. Katz
Management Decision Systems, Inc.
200 Fifth Avenue
Waltham, Massachusetts 02254

Re: ASSESSOR Validation

Dear Gerry:

Per our conversation, I'm outlining several of the key experiences that have validated the ASSESSOR test market simulation model.

ASSESSOR's greatest value is in providing a framework within which judgment can be exercised and tempered, and realistic expectations set. ASSESSOR does this by answering such key questions as:

- Can the core strategic concept, advertising positioning, execution, packaging, name and product work together synergistically to produce trial and repeat levels capable of meeting the business goals set for the brand?

- Can the goals be met within the context of the proposed marketing plan elements of price, sampling, awareness and distribution attainment assumptions?

In my experience, ASSESSOR has established an impressive track record answering these questions prior to the commitment of funds and reputations to full-scale test marketing, and within a much shortened time frame. Importantly, if problems are detected, the diagnostic capabilities of the systems allow for problem identification and recycling is possible.

Several key experiences will serve to demonstrate the range of applications:

- Accurate point-in-time assessment within the highly seasonal suntan/sunscreen category was provided by simulation of a new product entry which was within +/-5% of actual equilibrium share attainment in a concurrent high CDI test market. The combination of the ASSESSOR and the single test market provided independent confirmation that the consumer premise was valid and projectable. The brand subsequently became the number one national brand in the fast-growing sunscreen segment.

- ASSESSOR is an excellent strategic planning tool with major defensive, as well as offensive capabilities.

  Test market introduction by a major competitor of a unique product targeted directly at our dominant category leader resulted in product research and ASSESSOR simulation of the competitive entry. Product tests showed a strong product and extensive defensive plans were developed pending an expected national launch. The brand was also simulated, with a major synergistic conclusion:

  - In use, performance was again strong; however, the synergistic effect of positioning copy execution, packaging and name predicted the brand would have major problems attaining trial.

  Subsequently, as the competitor rolled national, we were in a position to selectively cut $600,000 in planned defensive spending. These funds were reallocated to more effective long-term growth objectives, rather than short-term defensive efforts.

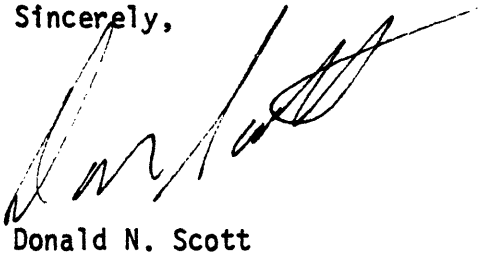
  One other benefit; the Brand Group had a lot less anxiety knowing the franchise was not threatened, while gaining additional insight into critical category dynamics.

  The competitor subsequently failed.

- ASSESSOR has been used to predict the incremental volume resulting from new flanker additions to a brand line with excellent success.

Overall, MDS' ASSESSOR is one of the most powerful strategic, total marketing plan evaluative methodologies available today. Linked to the short range SPRINTER model for time path projections of trial and repeat development, it is a basic component of my new product development process.

Sincerely,



Donald N. Scott
Director, New Product Development
ARMOUR-DIAL, INC.

DNS/p

BRISTOL-MYERS COMPANY
345 PARK AVENUE
NEW YORK, NEW YORK 10154

MARION A. KLEIN
VICE PRESIDENT-MARKET RESEARCH

February 18, 1983

Mr. Gerald M. Katz
Vice President
Management Decision Systems, Inc.
200 Fifth Avenue
Waltham, Massachusetts 02254

Dear Gerry:

Three of Bristol-Myers' domestic consumer divisions have been active in utilizing simulated test markets: Bristol-Myers Products Division (analgesics, general cold remedies, deodorants, etc.), Clairol Products Division (haircoloring, hair fixatives, shampoos, conditioners, etc.) and Drackett (household products). Simulated test markets have also been used extensively by our Canadian division.

At one time we conducted test markets to take the risk out of national introductions. As the costs of test marketing has escalated, we have attempted to utilize simulators to take the risk out of test marketing.

Most of our simulated test market experience has been with ASSESSOR. We accumulated a series of tests across divisions for brands which were subsequently taken into regular test markets or introduced nationally. This permitted an evaluation of our own experience to determine the value of the technique to Bristol-Myers. As a result of this evaluation, we issued an internal position paper on simulated test markets. In essence it said ....

Continued ....

| Position | Application |
|---|---|
| o We encourage the use of simulators as diagnostic tools. The "bringing together" of the various elements of the marketing mix permits analyses not available via testing of the individual components. | Do not use simply for "go/no go" decisions but rather to identify strengths to be capitalized on and weaknesses to be rectified. |
| o We do not look on simulators as substitutes for upfront research or for skipping test markets. | It is an important piece of information to be analyzed in conjunction with other research, marketing and financial input. |
| o We accept the technique as a "negative" tool; that is, if a brand cannot achieve its share objective within the artificial conditions imposed, the probabilities are high the goals will not be reached in the marketplace. | Eliminate high risk products prior to investing in test markets. |
| o We caution against acceptance of an absolute share that can be directly translated into an in-market expectation. The achievement of a share goal is not "insurance" that you will get that share in-market; however, it establishes probabilities (over-achievement enhances success, etc.). | You must do better in the simulator than you expect to do in-market. Too, share goals should not be raised on the basis of better than expected ASSESSOR results. |

As in all aspects of research, it is difficult to put a dollar value on the contribution simulated test markets have made to our company particularly since we recommend that use be in conjunction with other research and marketing input. However, the savings of not taking an unsuccessful product to test market would be in the millions. Our assessment of the value is best illustrated by our continued use.

Sincerely

eh

S. C. Johnson & Son, Inc.
Racine, Wisconsin 53403
Phone: (414) 631-2000

Johnson wax

March 10, 1983

Mr. Gerald M. Katz
Vice President
Management Decision Systems, Inc.
200 Fifth Avenue
Waltham, Massachusetts 02254

Dear Gerry:

I am pleased to share with you our general experience with ASSESSOR, and to give you some insight as to how we have used it, how our management perceives it, and just how effective this important tool has been in reducing the financial risks associated with new product development and marketing.

In our company, we think of our products as moving through a multi-stage new product development program. This program starts with measuring the feasibility of a new product idea, development, optimization, and test market. These stages lead to what we hope will be the successful commercialization of a new product opportunity. ASSESSOR is part of our optimization stage, and fits well with other consumer marketing research tools.

S. C. Johnson & Son has been using the ASSESSOR pre-test market laboratory simulation model since 1974. While the actual number of ASSESSORS that we have done is proprietary, we have conducted many of them in our Personal Care and Household Product Divisions.

Of the total ASSESSORS we have done, about two-thirds of them have indicated that the new product we tested would not meet share or volume expectations which were specified in advance of the test. Given today's cost of test marketing, which is a standard next step following laboratory simulations, we estimate the savings to our company to be in the neighborhood of $750M to $1 million per product.

Of the cases where we have in-market experience following an ASSESSOR, half the time ASSESSOR was accurate in predicting the in-market results. We believe that this is an acceptable level of accuracy, given that we have often changed our marketing plan when proceeding to test market.

Our most successful use of ASSESSOR was with Agree Creme Rinse, a brand which was launched nationally in 1977. This brand was one of the most successful in the history of the Personal Care Business, and we moved quickly with this product following extremely favorable ASSESSOR test results. We were able to collapse the amount of time required in test market to confirm the ASSESSOR results by more than six months, which helped to blunt any competitive reaction that might have taken place.

While the main role of simulated test marketing and ASSESSOR in our company is to allow us to forecast the share of market to be achieved for a new product, we have found the diagnostic measures in ASSESSOR extremely useful in understanding why a particular result was achieved. Specifically, the brand ratings data collected in ASSESSOR allow us to position the concept and the product on a perceptual map which helps us to explain how the brand is to be perceived by consumers in the marketplace. That is, the diagnostic information is useful in helping us understand the net impression that is going to be left in the mind of our consumers after exposure to the advertising and use of our test product.

As a result of our experience with ASSESSOR and the confidence of our management in this technique, we have been able to eliminate products from our national launch plans which were not going to meet their share objectives. As such, it has helped us to reduce the risk of introducing products that were destined to fail in the market.

I hope that this letter is a useful update on how we see ASSESSOR, and the nature of our experiences with this valuable technique.

Sincerely,

Richard F. Chay
Director of Marketing Research

RFC/sjp

# L'OREAL ASSESSOR EXPERIENCE

THE ASSESSOR MODEL HAS BEEN USED BY OUR COMPANY FOR SEVERAL YEARS ON SEVZRAL EUROPEAN COUNTRIES AND PRODUCT FIELDS FOR MAJOR INNOVATIVE PROJECTS. THE TENDENCY OF THE COMPANY IS TO GENERATE LOTS OF IDEAS, TO SELECT MAJOR ONES FOR THOROUGH SCREENING AND AT THE SAME TIME TO MOVE FAST INTO THE MARKET PLACE.
A FAST AND THOROUGH DIAGNOSTIC AND PREDICTIVE MECHANISM IS THEREFORE QUITE VALUABLE. THE IMPACT OF ASSESSOR ON THE COMPANY MARKETING PROCESS CAN BE ILLUSTRATED BY TWO RECENT SETS OF STUDIES.

1. ENTRY IN A NEW CATEGORY.

   THIS MARKET BEING QUITE NEW TO THE COMPANY, WE NEEDED MAJOR INSIGHT INTO THE CONSUMER RESPONSE PROCESS. THE ASSESSOR PROJECT QUICKLY IDENTIFIED THE RISK AREA - TRIAL GENERATION THROUGH LACK OF ADVERTISING IDENTIFICATION, THEREFORE RISK OF SLOW PENETRATION. THE REPEAT BEHAVIOUR BEING QUITE HEALTHY LAUNCH TOOK PLACE AND THE MARKET RESPONSE WAS SLOW TO BUILD UP AS PREDICTED. ANOTHER MDS / NOUWCTION MANAGEMENT SCIENCE TECHNIQUE SPRINTER WAS USED TO HELP TO DRIVE QUICKER PENETRATION BY CHANGES IN ADVERTISING LEVZLS. ASSESSOR AND SPRINTER GAVE THE COMPANY A CLEAR UNDERSTANDING OF THE NATURE OF THE RISK, WAYS TO CONTROL IT, AND CONFIDENCE IN LIVING WITH IT IN THE SHORT TERM.

2. A MAJOR INNOVATION IN A WELL KNOWN EXPERTISE AREA.

   THE R AND D GROUP HAD DEVELOPPED A MAJOR TECHNICAL INNOVATION. THE INNOVATION WAS SUCH THAT ALTHOUGH THE MANAGEMENT HAD AN EXPECTATION OF HIGH POTENTIAL SUCCESS, AT THE SAME TIME EVERYONE HAD A PERCEPTION OF HIGH RISK IN THE WAY TO DEFINE AND IMPLEMENT THE MARKETING PLAN.

ASSESSOR WAS USED IN 3 EUROPEAN COUNTRIES. WE PERCEIVED THE APPLICATION BENEFITS IN :

- A BETTER FORMALISATION OF THE MARKETING PROBLEM : TARGET GROUP AND COMPETITION DEFINITION,
- A KEY DIAGNOSTIC : A PERCEPTUAL MAPPING INDICATED THAT WRONG PRIORITIES WERE SET UP IN THE ADVERTISING PLATFORM TO EXPRESS THE COMPLEX PRODUCT QUALITIES : TRIAL WAS POOR AND REPEAT VERY HIGH,
- THE IDENTIFICATION OF THE FINANCIAL RISK : WITH SALES PROJECTION WELL BELOW THE OBJECTIVES, WE AVOIDED THE IMMEDIATE NATIONAL LAUNCH WHICH WOULD HAVE TAKEN PLACE OTHERWISE,
- INTER-COUNTRY PRIORITIES AND ADAPTATION : RANKING OF POTENTIAL BY COUNTRIES COME OUT VERY DIFFERENT FROM PRIOR EXPERIENCE ON OTHER PROJECTS AND CRITICAL SUCCESS FACTORS COME OUT DIFFERENT AS WELL.

BY ADVERTISING STRATEGY REDEVELOPMENT AND REPETITIVE EXPERIMENTATION THROUGH TEST MARKETING WITH SPRINTER READING, THE PROJECT BECAME FINANCIALLY VPABLE. COUNTRY LAUNCH PRIORITIES WERE CHANGED FROM THE USUAL PATTERN AND IN THE FIRST NATIONAL INTRODUCTION THE NEW PRODUCT IS NOW A CLEAR SUCCESS. ASSESSOR AND ITS DISCIPLINE TURNED INTO A WINNER WHAT COULD HAVE BEEN A MAJOR FIMANCIAL LOSS.

THE ASSESSOR PROCEDURE FOLLOWED BY SPRINTER AIDED MARKET TEST FOSTERED THE INTER-COUNTRY COMPARISON, HENCE THE OVERALL UNDERSTANDING OF THE CONSUMER RESPONSE BY GIVING A FORMAL FRAMEWORK OF REFERENCE.

MR MARCEL SCHUBERT
MARKETING RESEARCH DIRECTOR
PUBLIC PRODUCT DIVISION.

March 7, 1983

Mr. Gerald Katz
Management Decision Systems, Inc.
200 Fifth Avenue
Waltham, Mass. 02254

Dear Gerry:

In my experience I have used Assessor as a "go/no-go" decision point in the new product development process prior to test marketing. The current cost of test marketing is in excess of one million dollars and has run as high as two and one-half million dollars - in major categories. Assessor, at a cost of $50,000 to $100,000 is an excellent tool to determine which products to put into test market. I have validated Assessor six times at this point and the results have never been more than 1½ share of the market points off the actual share of market achievement in test market.

Looked at another way, Assessor is an exceptionally strong tool in determining the affect of advertising, packaging and product name and in establishing a new position in an existing market. The launch of an analgesic product today would cost anywhere from $30,000,000 to $50,000,000. In working in this area I used Assessor for accurately predicting the share of market performance for a test product and saved the corporation millions of dollars by preventing us from moving forward. I have used Assessor in a number of different ways, to evaluate the next performance of a competitive new product in the market, thus saving the firm millions of dollars in competitive counter measures to "fight" the new launch. If we had not used Assessor we would not have known the product was going to be unsuccessful and would have spent our dollars unnecessarily.

Another way I have used Assessor is to evaluate the transfer of a product in foreign markets to the United States market. In this instance we were able to evaluate a major cough and cold product in Europe to see if it made sense to move the product forward in the United States.

In my opinion, purchase labs, i.e. Assessor, are the most important marketing research tool to be developed in the last ten years. They offer manufacturers a whole range of strategic options for assessing markets.

Sincerely,

THOMAS E. HATCH
Vice President
New Business

TEH:fk

# Nippon Lever K.K.

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28 February 1983

Mr J Katz
Management Decision Systems Inc
200 5th Avenue
Waltham
Mass 02254
USA

Our ref: 76/RMB/no

Dear Jerry

I am very happy to comply with your request for my experience in working as a user of the Assessor model, but must stress that these comments are made purely in the context of the TIMS award and must request that you ask for our specific clearance if you wish to quote from this in any other context. Also, these comments should be taken in the context of the more general views on Unilever experience already supplied by Mr Downham.

As you know, I have been working with MDS and their systems from the early 1970s, first in England, then in Brasil and finally here in Japan. In the early days, before Assessor, the disciplined modelling approach to marketing problems helped our understanding of a what lay behind number of marketing issues, and was instrumental in the success of our approach to several markets in the UK.

Since the advent of Assessor in the late 70's, we have used the methodology, together with its related Perceptor image model, to predict the potential in the marketplace of a large number of new products, and the potential for relaunch of our existing brands. The predictions have been accurate, and in our company now in Japan, an Assessor evaluation is a necessary critereon for consideration of any new marketing project.

In 1978, when I first proposed that the technique be used in Japan, there was some doubt expressed as to whether it would work in a culture so different from Europe and the USA. I therefore conducted an Assessor test on a competitor's brand which was just being launched in the market with high expectations. The Assessor predicted a 2% market share for the brand - and now 5 years later that brand has never exceeded 2%. This test gave us the confidence to use the tool operationally.

Two recent examples of how the technique has helped.

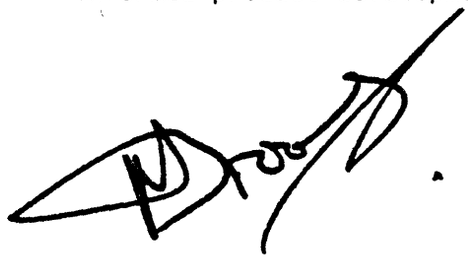
We were considering the launch of a new product which would replace the existing range, which was felt to be somewhat oldfashioned and lacking incompetitive edge. Share expectations were high, and the company envisaged spending a large amount of money on the launch, and withdrawing support from the existing range. Assessor showed a market share potential of only 2.2%, with little substitution from the existing range. The substitution plans were shelved, and the product launched as a low key range extension -where it has achieved a share of 2.3%. The company saved not only the total launch costs in excess of ¥1 billion, but also its position in this market, a saving which cannot be quantified in Yen.

A new brand was developed for the Japanese market based on an existing European product, and we required to assess the potential. Assessor showed that once people had tried the product, repeat rates were high, but that product trial was difficult to achieve by the traditional routes. Assessor's simulated product sampling showed that sampling could be cost effective, and the brand in Japan now exists at a high sales level which would not have been achieved without the insights into consumer behaviour generated by Assessor.

It will obviously not always be the case that the Assessor predictions are so precisely in line with the marketplace results - indeed if the marketplace situation changes or if we do not achieve our goals in terms of awareness levels, price or distribution the share prediction may be different from reality, but I have not come across a situation yet where the underlying consumer behaviour in the market has been different from that predicted by the model.

Back in 1978 I was convinced that Assessor was the state of the art for predicting the behaviour of brands in the marketplace and that Perceptor was among the best diagnostic tools available. Since then the Assessor product itself has continued to be refined, and experience over the last four years has only confirmed that opinion.

In my view, as a professional Marketing Researcher of over 15 years experience, Assessor has greatly contributed to the quality of marketing decisionmaking in my company, saving costly marketplace experiments and guiding investment levels, but more importantly providing a tool for informed product development and market exploitation.



R M Brookin

CC J S Downham Unilever London
M S Perry Nippon Lever Tokyo

THE PROCTER & GAMBLE COMPANY

GENERAL OFFICES

P O BOX 599 CINCINNATI, OHIO 45201

March 7, 1983
RL: March 7, 1984

Mr. Gerald M. Katz
Management Decision Systems, Inc.
200 Fifth Avenue
Waltham, Massachusetts 02254

Dear Gerry:

The purpose of this letter is to outline how Procter & Gamble feels about the Assessor system; our experience to date and how we see it serving the Company in the future.

We have long recognized the need for a valid system which would give us a measure of consumer reaction to a new product without the time and expense involved in actually placing the product in a test market situation. Traditionally, we thoroughly researched all the individual elements which make up a new brand, i.e., product, advertising, package, etc. However, until we began using Assessor and similar systems, we didn't have a research system which ties all the elements together. We needed research which could spot "losers" before we spent the huge amount of money and time needed to test market a new brand.

Before we would accept Assessor as an operational technique, we put it through a thorough evaluation process in which we compared Assessor results to actual marketplace results in order that we could assure ourselves that the results were actionable. Too much is at stake to risk having research steer us away from a product opportunity.

Assessor is now an operational technique for Procter & Gamble. We consider using it for most new products. The use of Assessor, and similar approaches, has brought more discipline and systematic thinking to new product planning. The very act of preparing for an Assessor study forces us to review our objective for the new brand in a much more organized way than previously. This by itself often helps us spot unreasonable marketing assumptions.

And finally, the results of the Assessor studies help us fine tune marketing plans for a new brand, i.e., we can see what changes have to be made in order to improve the brand's chance of success.

W. D. Peterson

WDP:bjb
5134E

RICHARDSON-VICKS INC.

TEN WESTPORT ROAD
MILTON, CONNECTICUT 06897
TELEPHONE 203 762-2222
CABLE ADDRESS RICHVIC WILTON

February 18, 1983

Mr. Gerald Katz
Management Decision Systems Inc.
200 Fifth Avenue
Waltham, MA 02254

Dear Gerry:

Richardson-Vicks has been using the Assessor pre-test market model since 1978. To date, 15 tests have been conducted worldwide. The following represents my assessment of our experience with the technique.

In general, we have found the system to be highly accurate. This accuracy is judged against two criteria: (1) How do the results from Assessor compare to other research data which we have generated for a project; and (2) Do the predictions from Assessor hold up in market. In both cases we have found the system to be quite accurate. Although we have limited market results (5 cases), we feel very confident in the system mainly because of the good correlation with other research.

Prior to the use of Assessor we had not used management science techniques widely at Richardson-Vicks. I would have to say that through the use of Assessor we have gained broad acceptance for such techniques among our key management groups. Again, I think that the reason for this acceptance comes primarily from the accuracy of the results but also from the ability of management to clearly understand how the results are derived.

Probably one of the more important areas of evaluation of any system is the cost implications. In the case of Assessor, we have been able to recognize significant monetary savings over time. Although we do not have a hard number in terms of the money saved or earned, we estimate about five million dollars. This figure is derived through several factors. The first is that in several cases we have been able to go faster to market and therefore recognize opportunity sales. The second is related to the first, but since we are skipping test markets when we expand broadly without going through the traditional systems, we save significant costs at that point. Finally, we have used the Assessor to stop spending on product opportunities that were clearly not meeting our criteria.

An additional benefit of the Assessor system which we have recognized in two cases to date has been the ability to chose between alternative products.

Although the modeling capabilities and projections of Assessor are the aspects primarily mentioned when people speak of the system, we have also found the diagnostics generated from the system to be very helpful. The main way the diagnostics have been used is to understand problems with any particular product and how can we rescue hopeful opportunities.

As I mentioned in the beginning, we have been applying Assessor worldwide. Having a method that is transportable is not available with other modeling techniques. We are, therefore, able to apply one technique consistently and do not have to re-educate our management every time we want to run pre-test market research.

I hope this has been helpful to you in understanding how Assessor is being used and the benefits that are being derived.

Best regards,

J. S. Figura

W/JSF/H6

# UNILEVER (U.K.) ASSESSOR EXPERIENCE

FROM JOHN DOWNEY MARKETING DIVISION UNILEVER PLC LONDON
TO MR GERRY KATZ MANAGEMENT DECISION SYSTEMS INC WALTHAM MASSACHUSETS

MY COMMENTS ON ASSESSOR/PERCEPTOR SYSTEMS ARE AS FOLLOWS:

THE FOLLOWING COMMENTS ARE BASED ON EXPERIENCE OF USING ASSESSOR/PERCEPTOR (AND TO A LESSER EXTENT SIMILAR SYSTEMS) IN A DOZEN OR SO COUNTRIES OVER THE COURSE OF FIVE YEARS OR MORE. THEY ARE IN NO SENSE A FINAL APPRAISAL OF THE SYSTEMS - WE CONTINUE TO LEARN HOW BEST TO MAKE USE OF THEM.

IN COMMON WITH OTHER COMPANIES WE HAVE FOR A LONG TIME BEEN TRYING TO DEVELOP SATISFACTORY SUBSTITUTES FOR THE TRADITIONAL TEST MARKETS. THE LATTER HAVE ALWAYS HAD THEIR PRACTICAL LIMITATIONS, ESPECIALLY OUTSIDE THE USA, BUT THESE LIMITATIONS HAVE BECOME MORE AND MORE SERIOUS DURING RECENT YEARS. SINCE THE LATE 1960'S WE HAVE THEREFORE BEEN USING PRE-TEST-MARKET PREDICTION SYSTEMS SUCH AS THE 'MINI-VAN' TO GIVE EARLIER INDICATIONS OF THE LIKELY LEVELS OF MARKETPLACE SUCCESS.

EVEN NOW IT IS UNUSUAL FOR SUCH SYSTEMS COMPLETELY TO REPLACE TEST MARKETING. AS WE HAVE GAINED A BETTER UNDERSTANDING OF THEIR VALUE AND MORE CONFIDENCE IN USING THEM, THERE HAVE BEEN SOME INSTANCES IN WHICH WE HAVE GONE STRAIGHT FROM SUCH A TEST INTO A FULL-SCALE LAUNCH. HOWEVER, GIVEN THAT SUCH PRE-TEST-MARKET SYSTEMS CANNOT BY DEFINITION HANDLE ALL THE MARKETING VARIABLES - FOR EXAMPLE CERTAIN DISTRIBUTION AND ADVERTISING ISSUES - THEIR EFFECT HAS MORE OFTEN BEEN TO CHANGE THE NATURE OF SUBSEQUENT TEST MARKETING. IN SUCH CASES THE TRADITIONAL SET PIECE TEST MARKET MAY BE REPLACED BY A ROLLING LAUNCH IN WHICH THE FIRST STAGE OF LAUNCH IS DESIGNED TO CHECK OUT ( AND FINE-TUNE) THE MARKETING APPROACH IN A REAL-LIFE MARKET RATHER THAN ATTEMPT TO PROVIDE A PRECISE ESTIMATE OF LIKELY NATIONAL SALES.
AGAINST THIS BACKGROUND, WHAT IS OUR PRESENT VIEW OF THE VALUE AND VALIDITY OF SYSTEMS SUCH AS ASSESSOR AND PERCEPTOR?

(1) THEIR VALUE FOR A ' GO/NO GO' DECISION SYSTEM. AS ALREADY MENTIONED IT IS NOT OFTEN THAT THEY COMPLETELY REPLACE A TEST MARKET EVEN IF A PRODUCT DOES WELL IN SUCH A TEST. THEY HAVE HOWEVER CERTAINLY BEEN USED ON A NUMBER OF OCCASIONS TO STOP PRODUCTS GOING INTO A TEST MARKET WHEN ASSESSOR HAS INDICATED THERE IS LITTLE CHANCE OF THE NECESSARY MARKET SHARE ACTION STANDARD BEING REACHED. SINCE THE COST OF A MARKET TEST MAY OFTEN BE 10-20 TIMES THAT OF AN ASSESSOR TEST, THE COSTS OF USING SUCH A SYSTEM CAN BE RECOUPED MANY TIMES OVER IF IT SERVES ONLY TO PREVENT A [illegible] OF INAPPROPRIATE PRODUCTS BEING PUT INTO TEST MARKET.

(2) 'MARKET PREDICTION' V.'MARKET POTENTIAL'. ALTHOUGH TEST MARKETS ARE OFTEN VERY INADEQUATE PREDICTORS OF LIKELY NATIONAL SALES, IT IS ONLY FAIR TO SAY THAT PRE-MARKET SYSTEMS SUCH AS ASSESSOR ALSO HAVE SOME LIMITATIONS IN THIS RESPECT. THIS IS DUE PARTLY TO THE FACT THAT CERTAIN ELEMENTS IN THE PREDICTION MODEL HAVE TO BE BASED UPON MARKETING JUDGEMENTS (E.G. OF THE LIKELY LEVELS OF DISTRIBUTION AND AWARENESS WHICH WILL IN PRACTICE BE ACHIEVED), AND THESE JUDGEMENTS CAN BE WRONG.
ANY MODELLING DEVELOPMENTS, INCLUDING THOSE CURRENTLY BEING WORKED ON, WHICH WILL THEMSELVES HELP TO IMPROVE THE QUALITY OF SUCH JUDGEMENTS WILL CLEARLY REDUCE ERRORS FROM THIS SOURCE.

MORE IMPORTANT IN OUR EXPERIENCE IS THE FACT THAT THE PARAMETERS INCLUDED IN THE ASSESSOR TEST SITUATION SOMETIMES ARE NOT/CANNOT BE REPLICATED IN THE REAL LIKE MARKET. ONE FREQUENT SOURCE OF DIFFERENCE, PARTICULARLY IN INFLATIONARY CONDITIONS, IS THAT OF THE RELATIVE PRICE OF TEST AND COMPETING BRANDS IN THE PRE-TEST SITUATION COMPARED WITH THAT FOUND IN THE MARKETPLACE. AGAIN, VERY STRONG COMPETITIVE REACTIONS IN THE REAL-LIFE MARKET CAN ON OCCASION REDUCE MARKETPLACE PERFORMANCE BELOW THAT PREDICTED IN THE ASSESSOR TEST.

SUCH DIFFERENCES SHOULD NOT IN THEMSELVES BE REGARDED AS A CRITICISM OF ASSESSOR - WHERE PRE-TEST AND MARKETPLACE CONDITIONS HAVE BEEN COMPARABLE THE ASSESSOR PREDICTIONS HAVE ON THE WHOLE TIED IN WELL WITH REAL LIFE. WHAT THIS DOES MEAN IS THAT AN ASSESSOR PREDICTION MAY UNDER CERTAIN CONDITIONS BE BETTER THOUGHT OF AS INDICATING THE POTENTIAL FOR A NEW BRAND. THE ACHIEVEMENT OF THIS POTENTIAL IN PRACTICE MAY BE DISTORTED BY CHANGES IN MARKETPLACE AND COMPETITIVE SITUATIONS BUT MAY NEVERTHELESS CONTINUE TO BE A REALISTIC TARGET IF WE CAN 'PUT THE MARKETPLACE RIGHT'. A FAVOURABLE ASSESSOR PREDICTION HAS UNDER THESE CIRCUMSTANCES GIVEN US CONFIDENCE TO CONTINUE WITH A NEW BRAND, RATHER THAN TO KILL IT OFF TOO QUICKLY WHERE UNDER ACHIEVEMENT IN ITS INITIAL MARKETPLACE LAUNCH CAN REASONABLY BE ATTRIBUTED TO SPECIFIC UNFAVOURABLE MARKETPLACE CONDITIONS - CONDITIONS WHICH WE MAY BE ABLE TO COUNTER OR AT LEAST TO RIDE OUT.

(3) THE IMPORTANCE OF SENSITIVITY ANALYSIS. FOR THE KINDS OF REASONS ALREADY MENTIONED, IT MAY BE DANGEROUS TO FOCUS EXCLUSIVELY ON ONE PREDICTION OF SHARE. IT IS BETTER TO UNDERTAKE A SENSITIVITY ANALYSIS IN ORDER TO DETERMINE THE LIKELY EFFECT OF CHANGES IN THE PRE-TEST ASSUMPTIONS ON THE PREDICTED SHARE AND PROFITABILITY OF THE BRAND. THIS WE FIND IS LIKELY TO LEAD TO A MORE INFORMED DECISION AND A MORE SENSIBLE LAUNCH STRATEGY.

(4) CHOICE BETWEEN MARKETING STRATEGIES. WE HAVE USED ASSESSOR AND PERCEPTOR ON A NUMBER OF OCCASIONS TO LOOK AT THE LIKELY EFFECTS OF ALTERNATIVE:

- PRICES
- POSITIONINGS
- ADVERTISING EXPRESSIONS.

IN OUR EXPERIENCE THE ABILITY TO EXPERIMENT IN THIS WAY WITH DIFFERENT MIXES HAS BEEN ONE OF THE MOST VALUABLE ASPECTS OF SUCH SYSTEMS. IT CAN BE AN ENCOURAGEMENT TO BE MORE ADVENTU ROUS IN TESTING MIXES WHICH OTHERWISE WOULD ON JUDGEMENT HAVE BEEN THOUGHT TO BE TOO RISKY. THE FINDINGS OF SUCH TESTS HAVE, FOR EXAMPLE, LED US IN AT LEAST ONE CASE TO USE AN ADVERTISING APPROACH WHICH WAS RATHER MORE ' WAY OUT' THAN MIGHT HAVE BEEN ACCEPTABLE ON JUDGEMENT GROUNDS ALONE, AND IN ANOTHER CASE TO CONSIIER GOING INTO THE MARKET AT A HIGHER RELATIVE PRICE THAN HAD FREVIOUSLY BEEN PLANNED.

SUMMING UP OUR EXPERIENCE WE WOULD SAY:

(1) THE BASIC PREDICTION SYSTEM APPEARS TO BE SUFFICIENTLY ACCURATE TO BE ABLE TO USE IT WITH REASONABLE CONFIIENCE,

(2) ALTHOUGH IT MAY BE UNWISE IN CERTAIN CIRCUMSTANCES TO EXPECT A PARTICULAR ASSESSOR MARKETSHARE PREDICTION TO BE EXACTLY REPLICATED IN THE MARKETPLACE, IN WHICH CASE THE ABILITY OF THE SYSTEM TO GIVE INSIGHTS INTO THE DYNAMICS OF CONSUMER RESPONSE IS VERY IMPORTANT, SO THAT

(3) AT LEAST AS VALUABLE AS THE PREDICTIVE ASPECTS OF SUCH MODELS ARE THE UNDERSTANDING THEY CAN PROVIDE OF MARKET STRUCTURE AND ALTERNATIVE BRAND POSITIONINGS.

THE ASPECT OF SUCH APPROACHES ON WHICH AT PRESENT WE HAVE THE MOST TO LEARN IS IN THE CASE WHERE ONE SEEKS TO APPLY THEM TO COMPLETELY NEW MARKETS, OR TO ILL-IEFINED MARKETS, WHERE THE CONCEPT OF BRAND SHARE IS UNREALISTIC. IT IS POSSIBLE TO USE SUCH TOOLS TO PROVIDE A SALES VOLUME ESTIMATE, BUT THERE ARE IN SOME CASES PRACTICAL PROBLEMS ASSOCIATED WITH THIS WHICH AT PRESENT WE ARE NOT CONFIDENT CAN BE COMPLETELY RESOLVED EXPECT BY MOVING TO- WARDS SOME FORM OF MORE AMBITIOUS AND ELABORATE MINI-TEST MARKET, MEASURING PURCHASING BEHAVIOUR OVER TIME. HAVING SAID THIS, WE HAVE FOUND THAT THE ASSESSOR/PERCEPTOR SYSTEMS CAN PROBABLY BE APPLIED TO THE GREAT MAJORITY OF THE MARKET PREDICTION PROBLEMS WHICH WE ENCOUNTER IN NEW BRAND DEVELOPMENT.
YOU ARE WELCOMCE TO USE THESE COMMENTS IN CONNECTION WITH THE TIMS AWARD BUT PLEASE CHECK WITH ME FIRST IF THERE IS ANY QUESTION OF QUOTATION OR USE IN OTHER CONTEXTS.

REGARDS.

JOHN.

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