

Defining Marketing Problems

Don't spin your wheels solving the wrong puzzle.

By Lawrence D. Gibson

Before they can solve a marketing problem, marketers and researchers must first make sure they are working on the *right* problem. Defining problems accurately is more art than science; it's a combination of data and judgment that demands real thought and effort. The author offers some real-world examples to demonstrate the thinking behind successful problem definition.

israeli probably had the last word about data when he said, "There are lies, damned lies, and statistics." If we are to outwit Disraeli and get the right data to solve marketing problems—useful statistics not doubledamned lies—we must have a precise problem definition before collecting the data.

This is not a new thought. Marketing and marketing research executives have always known that research must start with a definition of the marketing problem and that the success of every project depends on that definition.

Yet these same executives offer little help in how to go about defining a problem. They do not explain what a problem definition is; they do not even tell us what a problem is. Most textbook authors touch on the issue briefly, devoting only a few paragraphs in a several-hundred-page text to this vital subject. They might consider research problem definition but skip lightly over marketing problem definition.

Problem definition is best thought of as solution definition—the selection of a domain likely to be rich in ideas to solve the problem. Problem definition is a creative act. We should identify a variety of alternative definitions and carefully consider each before one is finally accepted. Sometimes original research is needed, but often thoughtful analysis of the existing data will do the job.

The payoff from good marketing problem definition is enormous—nothing else we do has so much leverage on profit. When we develop our skills in problem definition, we do ourselves, our function, and our companies an extraordinary service. We begin to live up to our promise and to our potential.

A PROBLEM MISDEFINED

Let us confront the question of problem definition head on with a real-world example.

In France, chocolate is regarded as just another food ingredient, not an indulgence as it is in the United States. The favorite after-school snack for children is a large chocolate cream-filled cookie called a *gouter*—a "taste."

Biscuiterie Nantaise, then a subsidiary of General Mills, marketed BN, the most popular gouter brand in France. Prince, a fancier, more expensive gouter, was an aggressive national competitor, and there were several other competing regional brands. After many years of stable sales and profits, Biscuiterie Nantaise faced a major problem. BN gouter sales had slipped two years earlier and then dropped significantly in the most recent year. Clearly something was wrong.

The French management group noted that Prince had initiated a heavy, new advertising campaign in the most recent year and its sales and share of market had risen. BN managers attributed BN weakness to Prince strength. As a result, they defined their problem as an advertising weight problem and asked for a significant increase in the BN advertising budget.

Defining the Real Problem

The General Mills international executive vice president (EVP) received the request for more advertising and reviewed the available data. To say the least, he was skeptical. He had long been concerned about the BN share-of-market trend and he sent our team to Nantes to study the problem and make appropriate suggestions.

First, we reviewed the new Prince commercials. To American eyes, they seemed much like the previous Prince commercials. Simply adding more weight behind old commercials has rarely caused a significant change in market share—at least in our experience. So we came to share the EVP's skepticism about increasing the BN advertising budget.

Next, we made a detailed analysis of the basic market data and identified two significant patterns:

- All over France, regional competitors were gaining share at the expense of BN. In the Northeast, Competitor A was strong and BN was weak. In the Northwest, Competitor B was strong and BN was weak, etc.
 Conclusion: Because BN was being hurt by each regional competitor, the issue must be BN weakness—not the strength of any single competitor.
- BN price relationships, relative to regional competitors, had been weakening for several years. BN had traditionally enjoyed a premium price. However this premium had shrunk year-by-year until it disappeared altogether two years earlier. Sales dropped only when Biscuiterie Nantaise stopped cutting BN price relative to the regional competitors. Conclusion: Because BN relative price had been weakening for years, BN weakness was not a recent phenomenon—it was long standing.

Finally, we studied the file of ad hoc research reports, especially noticing the number of in-home product tests. The repetition of a particular phrase in the preface of these reports—"Avant de realizer ces economies..."—struck us. While our knowledge of French was limited, the phrase seemed to mean "Before realizing these economies." What economies? Was it possible they had been fiddling with the product formulation to save money?

At the next meeting with the general manager, we simply asked, "What have you been doing to BN over the last few years to reduce product costs?" And he replied unselfconsciously, "We have reduced product costs by a variety of steps. We started to recycle the broken cookie crumbs. We lowered ingredient costs. We changed to a less expensive...."

When we seemed surprised at these revelations, the general manager expressed his surprise at our surprise. "After all," he said, "Minneapolis had to know what we were doing since it was Minneapolis who demanded that we improve gross margins. They knew we couldn't raise prices so we had to cut costs." (Obviously, there was a communications problem as well as a marketing problem.)

Now the cause of the marketing problem was revealed. For years, the company had been cutting product quality to maintain profit margins; lowering prices to compensate for the lower product quality; and holding volume and share of market. When it stopped cutting prices, both volume and share of market had to drop.

Solving the Problem

This analysis was quickly accepted. We agreed that our problem was a *product* problem requiring product change—not an *advertising* problem requiring more or different advertising. And everyone agreed we must restore our former product quality. However, no one believed that simply returning to the original quality standard would restore the brand's former dominance. Something more was needed.

We decided to go to a multiple flavor strategy, developing and testing milk chocolate, dark chocolate, regular chocolate, and nut chocolate cream fillings for BN. We found that each flavor was preferred by some of the children. We realized that with the largest share of market, BN was uniquely positioned to take advantage of these different tastes.

The strategy proved to be a winner. The BN sales decline was reversed and share rose. Margins improved on these volume gains despite higher product costs. The price cutting strategy was no longer necessary.

THE FAMILY OF GAPS

Problems, opportunities, and "nonproblem" problems are closely related in structure. Together they make up a family—a family of gaps.

Recognizing a Problem

Our first awareness that we have a problem, any problem, is when we see a gap—a gap between what was supposed to happen and what did happen, between our objective and our accomplishment, between our plan and our performance. Sales fall behind program, profit margins are less than budget, share of market slips below the target, a new product introduction falls behind schedule, or a distributor refuses to stock our new product.

A problem is a negative gap (see Exhibit 1). The gap is not a symptom; it *is* the problem and, if we can close the gap, our problem goes away. It is solved.

Three elements are necessary to recognize that we have a problem—we must expect something to happen, we must have feedback on what actually happens, and we must compare our expectations to our feedback. If any one of these elements is missing—if objectives are not set or feedback is not available or the objectives and the feedback are not compared—we will not even know that we have a problem.

If any one of the elements is weak—if expectations are vague or feedback is not routine or the comparison is sporadic—our ability to recognize problems, quickly and surely, is compromised. A key strength of all formal planning processes is that objectives, feedback, and comparison points must be built-in so that problems are quickly identified.

Opportunities as Gaps

Opportunities also present themselves as gaps (see Exhibit 2). When we see a gap between what did happen and what could have happened, between our accomplishment and our potential, we say we have an opportunity. We could do better: sales could be higher, margins better, product quality higher, share of market stronger.

It is no wonder that the intimate relationship between problems and opportunities is common knowledge. When what actually happened is less than we expected, we call the gap a "problem"; when what actually happened is less than what could have happened, we call the gap an "opportunity."

Both problems and opportunities appear when we see a gap and each disappears when we close that gap. Again, the gap is not a symptom; it is itself the problem or the opportunity.

Exhibit 1

Problem: a gap between plan & actual

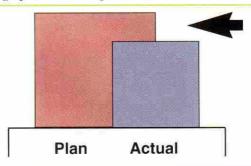


Exhibit 2

Opportunity: a gap between actual & possible

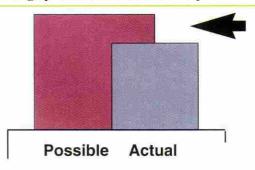
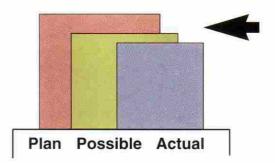


Exhibit 3

'Nonproblem' problem: a gap between plan & possible



The Frustrating 'Nonproblem' Problem

In marketing, we often face an especially frustrating kind of problem, a special subclass that might be called the "nonproblem" problem (see Exhibit 3). Like any other problem, the nonproblem problem appears as a gap between performance and plan. However, unlike other problems, this gap arises because of unrealistic expecta-

tions—a gap between what was expected and what was possible.

A classic example occurs when marketing believes that a new advertising campaign can compensate for a more fundamental weakness in the product (e.g., noncompetitive production costs and selling prices) and that advertising alone will reverse the declining sales trend. New advertising is approved, an unrealistic sales target is set, and sales improve but not to the target sales level.

In this situation, there is a gap between

be related to brand selection but the relationship cannot even be discussed, let alone tested, unless it is articulated.

planned and actual sales but it was caused by poor problem analysis and problem definition, not weak advertising. (Of course, the organization's "nonproblem" could become a very serious career planning problem for the marketing director.)

Nonproblem problems are common in marketing because we seldom have good precedents on which to base our expectations.

Each new product introduction or price advance or competitive promotion is somewhat unique and its effects are difficult to predict. In production and distribution, activities are more repetitive, expectations more realistic, and nonproblem problems less common.

As our problem definition skills develop and our understanding of marketing grows, let us hope that these nonproblem problems will occur less often.

THE STARTING POINT

Actually, most research discussions do not start with a problem; they start with a question.

Someone asks, "Do customers like the color of our product?" or "Is our new product better than the old?" or "Is our product as good as the competitors'?" or "Is our advertising any good?"

Questions Imply Theory

These questions are more than simple requests for data. The data will be used in some theory about solving the problem—a theory about what caused it and what should be done about it. For example, when someone asks, "Do customers like the color of our product?" the questioner is theorizing that color does affect customers' brand selection and he is hinting that he himself has never liked the product color. If customers also find the color unattractive, he will change the color, believing that this will fix the problem.

These prior ideas or theories may or might not be valid but they are seldom even spelled out. Color preference may be related to brand selection but the color-preference relationship cannot even be discussed, let alone tested, unless it is articulated.

If the researcher simply answers the original question, he runs the risk of conducting valid research to supply accurate data for an invalid theory. When an action based on the data and the theory fails—e.g., changing the color doesn't fix the problem—everyone blames the data. No one blames the unspecified theory.

Theories Are Often Invalid

Another example—research is often asked, "Is our improved product really 'better' than the original product it is replacing?" and a paired comparison, blind product test of the new vs. the old product is requested. The question is based on a theory that customer preference for the new product—as measured in a paired product test—will result in higher sales when the new product is introduced.

This theory is invalid and can lead to disastrous consequences. For example, a new sweeter Coca-Cola was preferred over the original by huge margins in conventional paired testing. Unfortunately, a sweeter cola—Pepsi—was already on the market, and the new Coke failed as a replacement for the original.

In the breakfast cereal market, a new and improved Trix was preferred at the 99% confidence level in such a test, but when it was actually introduced, sales fell by a third! When the original product was reintroduced, sales returned to the earlier level.

Even more often, the question is, "Is our product better than that of competitors'?" This question is based on a widely held theory that competitive product superiority—having the "best" quality product—is necessary for successful marketing. It also suggests that the questioner fears that her own product quality may be not be better and must be improved.

In fact, the competitive product superiority theory itself is highly suspect. In a wide variety of markets, it can be shown that customers are extremely idiosyncratic in their values and perceptions. Each wants a somewhat different assortment of product or service characteristics. So in principle, there may be as many "best" products or services as there are customers.

There are markets where it might be useful to think of one product as being superior to its competitors and consequently selling better. A detergent which really does clean better, for example, probably will sell better. However, in highly differentiated markets, the concept of product superiority simply does not apply and, in many other markets, it is totally unrelated to market success. What is the meaning of the question, "Is Wheaties superior to—that is, of better quality than—Corn Flakes?"

In the *gouter* example, BN *gouters* are different from Prince *gouters*. BN *gouters* are not as fancy (also not as expensive) as Prince; BN *gouters* could be seen as inferior. However trying to make BN superior to Prince would require a complete repositioning—a dangerous repositioning—of the brand.

Obviously, I'm not trying to excuse shoddy merchandise or service. Every brand should aim to deliver superior performance to its customers. However, this goal cannot be achieved by a simple-minded commitment to competitive product superiority as measured by traditional blind paired-comparison product tests. (See "Crisp Wars" on page 10 for an example of how one company enjoyed a statistically significant product superiority over its competitor yet was outsold by a 3 to 1 margin.)

GAP ANALYSIS

Understanding the problem is a necessary prerequisite to valid problem definition. This step must not be skipped. Even though it may take a good deal of time and effort, skipping this step invites failure and any time saved in problem investigation is likely to prove illusory.

We start with the concept of the gap-as-problem to help us conduct a formal gap or problem analysis. As in the *gouter* example, we analyze the "where" of the problem. Where does the gap exist and where does the gap not exist. Is the gap in volume, margin, or both? Is the gap regional or is it national? Is the gap in large accounts or in small accounts? Is the gap in all flavors and all package sizes?

We also want to learn the "when" of the problem. Did the gap suddenly appear last month or last year or has it been there for some time? Did the gap first appear in one region or did it appear everywhere at the same time? Is the gap spreading or is it confined to the original area? Is the gap growing or shrinking?

Most important, when we know where and when, we can approach the "why" of the problem by trying to find a congruent "something." What else happened or did not happen in the same territory, sales channel, function, and time period as the gap? Did a competitor lower prices? Did we adopt a new supplier for a key ingredient? Did a competitor introduce a new product or improve an existing product? Did we lose an important distrib-

utor? Did we change something in our product?

Of course, gap analysis does not always provide clear direction. Often, no congruent "something" is identified as a possible cause. Sometimes the gap develops gradually and is pervasive. Nonetheless, gap analysis usually simplifies the problem by eliminating many possible causes.

The usefulness of gap analysis also depends on the level of detail in which the analysis is conducted. The finer the analytical detail, the more precise our understanding of the problem. If we know that sales began to weaken in June 1995 in the Western region, we have a far better start on answering where, when, and why than if we only know that sales first slipped in the United States sometime in 1995.

In turn, the level of analytical detail possible depends on the detail of our planning and tracking. Obviously, we cannot pursue a sales gap down to a particular package size or sales region or month unless we have both a sales objective and sales performance for that package size, region, or month.

The Real Reasons

Finding an event that is congruent with the problem could, but does not necessarily mean that we have identified what really caused the problem. Like correlation, gap analysis demonstrates association not causation, and gap analysis is much better at eliminating possible causes than confirming them.

In the *gouter* example, gap analysis did more than simplify the problem. It eliminated the advertising domain from the discussion and directed our attention to the product domain. The continuing degradation of the product emerged as the probable cause of the problem. However, even restoring the former product quality was not enough to eliminate the problem. We needed the multiple flavor strategy.

In the crisps example in the sidebar, we were

not able to identify any single "something" that caused the problem. The successful problem definition resulted from a creative insight—later validated—not—from—an understanding of the cause of the problem.

Formal gap analysis is only one part of a more general attempt to understand a prob-

lem. Understanding requires a great deal of homework. Analysis should include a review of the market structure, recent marketing activities, and market trends. Is the market growing? Where? At what rate? What brands are gaining share? What are they

Every brand should aim to deliver superior performance to its customers.

CRISP WARS

hortly after the successful resolution of the *gouter* problem,
General Mills faced a similar issue with its Smith's Crisps (potato chips) in Holland. Sales and market share for the brand had fallen steadily for several years. To keep the factory operating at capacity, more and more production of lower margin private-label crisps was needed. The once dominant Smith's brand was threatened with delisting in a major retail chain and this could have triggered a cascade of other distribution losses.

During a detailed review, the new
Dutch marketing manager noted a curious
anomaly. Smith's Crisps were widely seen
as more expensive than Croky, the principle competitor, even though the prices
were essentially the same. He hypothesized that this price misperception was the
source of the sales problem and requested
additional advertising funds to correct it.
(Isn't it interesting how frequently we rush

to define any and every problem as an advertising problem.)

We were sent off to Holland to investigate. Formal gap analysis showed that the problem was pervasive and long standing. Sales and share had been lost to Croky for some years, throughout Holland, in all regions and in all outlets. No congruent "something" was identified. Curiously, the gap persisted even though Smith's Crisps continued to beat Croky by small but consistent margins in standard blind taste tests

Although total potato chip consumption was growing moderately, panel data showed that consumption was heavily skewed toward teenagers and young adults.

Croky and Smith's Crisps had very different marketing styles. The Croky position focused on fun. Its brand symbol was a cartoon parrot, with different colored parrots used for the different flavors. A variety of parrot paraphernalia—dolls, pins, and decals—was given away as promotions. In a typical Croky commercial, two different colored parrots fought over whose flavor tasted best, the bags broke, and the room filled with potato chips. It

was like a child cereal commercial here in the United States.

In contrast, Smith's Crisps had no real focus. The package was conventionally attractive but it looked, as someone said, like a "three-piece vested suit." A typical promotion was a sweepstakes to win a family vacation. Commercials stressed the traditional product quality of Smith's Crisps.

To us, this suggested the possibility of a brand image problem. Compared to the tight, consistent Croky focus on fun for younger consumers, the Smith's Crisps all-family, quality position seemed dull and stodgy. We could easily imagine young adults and teenagers reaching for Croky despite their nominal product inferiority.

DECIDING BETWEEN DEFINITIONS

The suggestion that brand image might be the problem caused an impasse. Dutch management found the brand image hypothesis imaginative but very difficult to accept. They knew that their product was superior and they could not believe that brand imagery could offset that superiority.

doing to gain share? Who uses the product or service? When? With what other products? How are heavy users different?

The marketing strategies of the various competitors also should be reviewed. How are the various brands positioned. How do they advertise? How do they price and promote? What are their strengths and weaknesses?

In addition, the investigation should include detailed study of recent marketing plans, market analyses, advertising materials, and especially marketing research projects. A visit to the production site itself can be useful. Investigators need to interview the advertising and marketing staff as well as key financial and production executives to learn their opinions. In some cases, more marketing research might be needed. In short, we must immerse ourselves totally in the product, its market, and its management.

PROBLEM DEFINITION

Just what do we mean when we say, "define the problem." First, let's dispose of some common misconceptions:

· The problem is not defined until the original

cause of the problem has been identified. Many problems are so complex that no single factor can be identified as the cause.

- A problem is defined when the alternative actions have been specified. Each alternative action does imply a problem definition but the problem definition process, as such, may actually have been skipped.
- A problem is defined when the information expected from the research has been specified (as many authorities suggest). The research problem might have been defined but not necessarily the marketing problem.

A far more useful view of problem definition was suggested by Russell Ackoff, a well-known operations researcher, in this story: "Suppose a child is playing outdoors, near the street, against parental instructions. The child trips on a broken curb and falls into the street. A car exceeding the speed limit hits the child. What kind of a problem is this? How should it be defined? Is it a parental control problem? A street maintenance problem? A traffic control problem? A legal problem? A lack-of-play-area problem?

They were still convinced the problem was perceived price. We continued to doubt that price perception was the problem and, even if it was, we argued that advertising was not the way to correct it.

So, we decided to conduct formal tests of the alternative problem definitions. Dutch management agreed to an in-store test of end-aisle displays featuring Smith's Crisps at a lower price. They agreed this would be the best way to correct the price misperception as well as the fastest way to learn whether correcting that misperception would help sales.

We agreed to matched taste tests to prove or disprove the brand image hypothesis. One group of target market users would taste and choose between the brands from unmarked bowls; a matched group would taste and choose between the brands from actual packages.

The results of the tests were definitive. We found a group of stores in which Smith's Crisps had already been on display at lower-than-Croky prices for several audit periods. During this time, Smith's Crisps sales did not trend up and Croky

sales did not trend down. Price misperception could not be the problem.

In the taste tests, Smith's Crisps was preferred by its usual narrow margin when tasted from unmarked bowls in the "blind" panel. However Croky was preferred by a wide margin when tasted from the real packages in the "identified" panel. Brand identification did have a dramatic effect on taste preference. Obviously, something was wrong with the Smith's Crisps brand image.

SOLVING THE PROBLEM

Once we agreed on the problem definition, the organization moved quickly to change the brand image. We commissioned a major strategic choice-modeling study to guide us in a reintroduction of the Smith's Crisps brand. The study, which involved the use of SUMM, a proprietary self-explicated modeling procedure, confirmed the brand's image problem and also predicted that the consumer perception of knappering—the crunchy sound of a fresh chip being eaten—would increase Smith's

Crisps' share of choice significantly.

The entire reintroduction, built around knappering, was designed to "lighten up" the brand. A new, expensive aluminum foil package guaranteed that the chips would really be crisp, fresh, and knappering. The brand was renamed Smith's Crispy Chips. New humorous, television commercials showed windows, mirrors, and glasses breaking from the knappering when people ate Smith's Crispy Chips. A unique, new trade introduction plan supported the reintroduction. Product changes were nominal.

The Smith's Crispy Chips introduction was brilliantly successful. Market share jumped from 12% to 20% in the first period following introduction. Soon, Smith's Crispy Chips required the entire plant production capacity and private-label production had to be dropped. Prices were raised but sales and share continued to grow. Two years after the introduction, Smith's Crispy Chips' share of market passed 40%—after taking two price advances.

-Lawrence Gibson

"Right now, it is a medical problem! The child must be cared for. Later it may be useful to define it as parental control problem or a street maintenance problem or a traffic control problem or a legal problem or a play area problem. But right now, it is a medical problem!"

Notice that there are at least six possible definitions for this one problem and each of these six different definitions could be useful at some point in time. However, notice that the problem itself is not changed or affected in any way by the definition we choose. The real effect of the definition is to determine the direction or the domain in which we look for a solution to the problem.

Solution Definition

In other words, a so-called "problem" definition is really "solution" definition! When we put a modifier in front of the word "problem," we define where we will look for a solution to the problem. We decide which domain will be most useful, most likely to yield a solution. Should we look to the domain of medicine or the domain of street maintenance or the domain of traffic control or the domain of parental authority?

The definition tells us where to look for a solution and it tells us where we should not look. If the definition we choose does not point us to the right domain, we may never be able to solve the problem. So long as the *gouter* problem was defined as an advertising problem, it could not be solved. Only when it was defined as a product problem could it be solved.

"Good" problem definition points us toward future actions; it does not simply explain the past, but directs our attention to that domain which is most likely to be rich in possible solutions to our problem.

Each definition points to a different domain with a different set of solutions. We should consider what solutions are included from the domain dictated by the definition and what solutions are excluded from that domain. A product problem requires a change in the product—not a change in pricing or advertising or distribution. A packaging problem requires a change in the package, not a change in the product.

So we must be very careful before we decide what kind of a problem we have. We should identify a variety of possible problem definitions and consider each very carefully. We should look down the road and see what kinds of solutions are included in the domain of each definition and what kinds of solutions are excluded.



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How do we finally decide which definition to adopt? In the end, problem definition is and will always be a creative act. Sometimes gap analysis will help us identify the probable cause of the problem and this cause will help us select the best definition. Sometimes we will simply decide, based on our intuition and judgmental evaluation of the solutions in the domains dictated by each definition. Perhaps we will choose to define the problem as a product problem because we can see that major product improvements are feasible and we believe these changes are most likely to solve the problem.

Definitions Make a Difference

Some time ago, the Institutional Foods Division of a major company found that it could not get adequate wholesale distribution for its products. Managers defined this as a distribution problem and attempted to solve it with ideas from the domain of distribution problems: sales contests, promotional prices, and special deals. These ideas didn't work.

A new marketing director observed that his institutional foods had never really been designed for institutional use. They were simply lowercost, larger-pack versions of the company's consumer food products. He concluded that the products had never been designed for institutional use so there was no reason for institutional wholesalers to stock them. He redesigned his products for institutional use, packaged them in appropriate institutional packages, and his "distribution" problem disappeared.

To summarize, good marketing problem definition is a prerequisite for successful marketing research—marketing research that really does solve marketing problems.

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