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## Session 129 CS

The Price Is Right: Market Research for Actuaries

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**Moderator:** WILLIAM R. HORBATT **Panel:** JOHN PARSONS†

J. SAMUEL RAY‡

**Recorder:** WILLIAM R. HORBATT

Summary: How many times has an actuary listened to other peoples interpretation of customer needs without knowing whether or not they were on target? This half-day case study exercise introduces actuaries to market research techniques that have become standards within other industries. The session begins with a short presentation on market research techniques that have become standards within other industries. The session continues with a short presentation on what market research is, where it can be used, and the primary techniques applied. The participants are presented with a "real life" situation to be solved by participant teams.

Mr. William R. Horbatt: We're starting off with the introduction, then we're going to go through a series of presentations, and finally there will be a case study. The presentations deal with four basic topics of market research as it applies to what we do. One is what causes product failures, which is intended to set the stage for why you should care about the topics we'll be discussing in the other three sessions. The second is the product development process, and it's a somewhat different perspective than we as actuaries normally follow. Third is marketing research concepts. This is the really high-tech stuff, like fancy graphs that few of us understand. Finally we have database marketing; that's the topic that's really in vogue. It's basically going to issues such as who is your profitable customer?

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<sup>†</sup>Mr. Parsons, not a member of the sponsoring organizations, is Senior Vice President of Nagdeman & Company in New York, NY.

<sup>‡</sup>Mr. Ray, not a member of the sponsoring organizations, is Managing Director of Nagdeman & Company in New York, NY.

I'm Bill Horbatt. I am a consulting actuary with KPMG Peat Marwick. I've been in the industry for over 20 years, half with companies, half in consulting. Most recently, I had been out with a small consulting group that was attempting to change the way consulting was being done. What we felt at that time was that companies don't really need a bunch of consultants to come in and fix their problems, they generally have the best and brightest people right on board. So we came in, say, for reorganization or strategy projects, and we simply facilitated the company's own path to go through the processes that they had to go through to get to the objective they wanted to achieve. We eventually merged with KPMG Peat Marwick.

Sam Ray spent nine years in Hong Kong, and he spent a fair amount of time in a fair number of jobs wandering around the world. He studied at Stanford, Oxford, and the London School of Economics. He was marketing director for the Business International Corporation, and he went on and worked for Citicorp, and subsequently the British National Group.

John Parsons started out in the commercial banking field, and wandered around London, Asia, Europe, and India, until he finally landed in the U.S., working at American Express in their international banking arm. He did some interesting things after that, including working with the management consulting firm of Booz Allen. He's worked at KPMG, and he's been a principal of his own firm. Most recently he was the CFO of Total Research Corporation. This is the kind of company that if you really are doing market research you'll know about them, and if you don't, you should. I would like to start with Sam Ray, who is going to discuss what causes product failure.

**Mr. J. Samuel Ray:** As we go through the presentation, I would like to clarify what is probably obvious: We have tried to structure this in fairly concise crisp bits, which of necessity means that it's not totally comprehensive. Looking at something as complex as product failure, narrowing it down to three basic categories is probably arbitrary and may not be comprehensive, but as we go through, I think it will flesh itself out.

Typically, we look at the elements of success as product market end distribution. The converse applies equally as useful little demarcations for looking at the causes of failure. If we look at the product element of reasons for failure, we typically make a distinction between the features of the product, its structure, and the benefits. Features are typically from its manufacturer, or the technical product

development point of view, and the benefits from the end user's point of view. Often they can be quite different: either the structure or the perception of that structure and what it can be to the end user; the cost: how complex is it to put this thing together and what it costs you; and the pricing: how much margin have you built in, and is it something the market's willing to bear.

The market is typically willing to accept pricing as long as it believes it's perceiving value. When price becomes an issue, it's because that value is simply not seen by the client or the beneficiary. That perceived value relates to the benefits as perceived by the end customer, or in some cases, the benefit to the distribution channel, and not to the features or structure of the product itself. When we look at the market place, it looks like a simple pair of words—needs and wants—but we have attached somewhat more meaning to that. Looking at needs being essentials and wants being nice to have—add-ons, or additions to the core elements—there is a hierarchy, and it's very important in the product development process to look at the priority that the target attaches to that particular benefit. There's also the ability and willingness to pay: what economic status are you targeting. Not only do they have the means to buy it, does it fit within their budget, but are they willing to part with it? It goes back to the question of perceived value.

It may be a bias on our part, but we often believe that it is the distribution channel that can be critical in the success or failure of a product. Their job is to diagnose and prioritize the needs and wants of their ultimate customer. Then they have the matchmaking job to figure out which product benefits meet the needs of that target market, and the criteria that they have attached to their purchase decision process. They also are your negotiator to justify the price you've attached to the product, and it's their job to bring the decision process to a closure. To a certain extent, it is the job or the task of the manufacturer to arm the distribution channels to do these pieces of the puzzle.

After looking at some of the causal factors, what are the symptoms, how do you tell that you have a product that's off track? Typically, it's because assumptions or predictions were made that just didn't pan out and didn't happen to tally with reality. Often those can be things like economic forecasts, in particular, personal income expectations, and alternative investment yields can play a role in whether people believe a product has merit based on price. Also, the predicted interest rates, which are a subset of alternative investment yields, the crediting rate, and as you look retrospectively, the reserve adequacy or the claims ratio that's actually experienced.

What are the consequences of a product that's failing? Probably the clearest indicator is that too few policies are being sold. I can recall a client that I began to dissect in terms of products. They had twenty-seven major categories of policies, and the highest one was 117 variants on one single policy, so we had about a nine-page printout of policy types, and some of them had two, five, seven policies in the last 17 years during which the particular policy had existed. It probably was too finely cut to some particular agent's definition of how that policy had to be written and probably simply was applicable to a very minute section of the market place.

Time lapse rate: it looked good on day one, a year later it didn't look so hot, two years later, forget it. Low profitability: sometimes it's selling like hotcakes. There must be a glitch in there. If it's that salable, I must have missed something. I'd like to give you a couple of case illustrations that track back to these. What we're really doing is trying to make a bridge from theory into practice. Theories try to simplify things, or try to make direct causal links, and we try to be sure that it's in this category and not that category. It's very exclusive, it's very compartmentalized. In fact, practice requires that we really look at many things in play simultaneously, at multi-varied analysis, at the contributing factors rather than the direct causal change, and at the inner relationships of problems and opportunities and how both we and our clients and our distribution channels respond to them.

For each case we're going to look at manufacturing or product development, the marketplace, the distribution channel, and the regulatory environment, and you may want to make notes of other things that you think are pieces of the puzzle. To this you can see that you've taken product market and distribution and added regulatory, and you may see some other compartments that you'd like to note. When we look at manufacturing or the product side, we're looking at what is the basis of competitive advantage: is there any real differentiation. I think we all acknowledge that we live in a world of commodity products, and we try to put a few little bells and whistles and ribbons on them so that they are distinct, but if it's any good, 25 people will clone it by lunch. It's very hard to maintain long-term differentiation.

Often we look beyond just pure structure and how products are positioned, how their benefits are conveyed. We look at the product design and structure and at the pricing. When looking at the market component of success or failure, think back again to my comment about wants and needs—the wants being desirable factors, the needs being absolutely drop-dead essentials—and the hierarchy in which the target market holds those criteria and also the perception of value. From the distribution channel, I don't think you can say the word "distribution" without saying "incentive" and it's what their motivation is to select this product. They're the arbitrator, the matchmaker. Training: what did we arm them with in terms of the explanation of

benefits and the relativeness, the comparative advantage. Also, what's their access to the target market? If we're targeting high-net-worth individuals and this guy drives a twelve-year-old Ford truck and wears jeans and combat boots, is he likely to get through to doctors, lawyers, and university professors? Maybe not.

In the regulatory field, what's considered regulatory change that may begin to obsolete or to erode the appropriateness of certain products? Regulatory constraints often deter product innovation. That's a great idea, but the impact of cost, also what it takes to manufacture, administer, and distribute the product, the price you attach to it, and most importantly, what are the benefits that it conveys.

Let's consider a couple of case illustrations of why products fail. The first is a mutual fund complex that invented a product that was essentially a mutual fund composed of various kinds of government securities. It was a front-end-load fund, and its objective was to try to use some of the new techniques, hedges, straddles, options—to try to leverage up the yield on essentially a guaranteed portfolio. They were the pioneer, they were the point man in the minefield, and when they began to have some success, they were soon followed by the masses. The market that the portfolio managers—the developers—conceived for this product probably should have been and maybe was hard-at-work individuals who had a predisposition for long-term investing and fixed-income investments but wanted to see if they could squeeze a little more out. Nonetheless, these were well-heeled folks who had long time horizons and a predisposition toward government securities in the first place. What they ended up with, and this may be a case of whom their distribution channel could reach fast or whom it seemed easiest to sell to, were modest investors who were in fact investing the rent money, and their biggest concern was capital preservation. The government security side of things seemed to appeal to the widows and orphans of the world, and they figured that if they could get that kind of yield expectation with government securities, that was terrific.

We're also looking back now into the early 1980s, and at that time the stock market didn't seem all that exciting as an alternative. Their distribution channel was everybody and his brother and the independent broker-dealer channels nationwide. They decided that this was the greatest thing since sliced bread, and they got some fairly aggressive wholesalers to go out and beat the bushes for them, and they typically got middle-market independent brokers who were much more transaction ticket droppers, rather than long-term investment advisor kind of relationships, and they pretty well sold it to anybody who would buy it. It was the hot product du jour, this was the thing that they had gotten to wholesaler presentations and a stack of brochures and a couple of direct mail pieces on, so let's push it.

When you look at the regulatory constraints, you may have been down this road before. Frequently, if you are the first out of the box, the regulators don't know what to make of it, and that appears to have been the case here. It was the first of its kind, and there was normal scrutiny, but there were not requests for onerous disclaimers or any restraint on investor prequalification. The brokerage firms likewise didn't spend much time trying to figure out this product. It was from a known investment advisory firm that had been around for years, they managed billions of dollars, and they'd sold some of their products before and none ever came back to bite them, so it sounds good, let's give it a shot. When they were very early out of the box, they had some pretty impressive yields. The average for the first year was in excess of 20% return on essentially government-guaranteed securities portfolio. That's pretty hot. The market apparently ate it with a spoon, because at the peak, they were taking in that new investment of over \$ 1 billion a month into a single portfolio. It was very successful. Then interest rates turned, and their back office discovered what overdemand could do to them, and while there was still new investments flowing in, they still had net redemption's outflowing of over \$1 billion a month. The problem was that they were having to explain to investors that it's a government-guaranteed portfolio, but it's the underlying securities that are guaranteed for timely payment of the principal and interest. That doesn't say anything about the yield on the front. That's not guaranteed by anybody. So they said, "Oh, I see, give me my money back," and they had a run on the bank.

As a consequence, that mutual fund complex was sold at fire-sale prices. I don't think their senior management was invited to lunch before they were shown the door. They replaced almost all the portfolio managers who had anything to do with this product. They also brought in a whole new corporate managing team. They cleaned house among the wholesalers, and they began to claw their way back. The independent broker-dealers who had, in fact, probably misrepresented the funds were mad at the manufacturer and said, You burned my book. We did a survey for them of investor attitudes of those who had invested before the debacle and those who had invested after, and every investor, whether they were in this fund or not, every investor in any of their 16 funds essentially regarded themselves as having been betrayed. Those who came after could care less, they didn't suffer, they didn't even hear about it. But the ones who were there at the time were pretty mad.

We essentially focused on marketing and service as the ways to earn their way back. There was no veneer you could put on it. You actually had to be good. Five years later, the Dow Bar Survey, which is probably the recognized surveyor of attitudes surrounding the mutual funds sector, surveyed the full industry, and this mutual fund complex was rated number one in marketing and number one in

service, and they had somehow managed to overcome that, but it took them five years to claw their way back. Since that time, they were acquired, then they got acquired again, and now they're in the premier lead, but that's since 1982. It took them 15 years to get from being one of the top mutual fund complexes in the country, going literally down to the point that their wholesalers essentially could not get appointments with brokers. Now, slowly, they've clawed their way back. This kind of success can be costly both in terms of dollars and in terms of the flexibility to enter and play in this marketplace.

**Mr. Horbatt:** Let me give you another example, an interesting case, that may be a little closer to home. It was a multinational insurer that had an operation in the U.S. back in the late 1980s. Lo and behold, senior management realized that their career agency force was not meeting their profit objectives. Basically, they were paying fixed costs on agencies throughout the U.S., and when they looked at the numbers at the end of the day, they weren't making money. What did they do? They said, Career agent, you're now part of your own managing general agency force, and the field management in a sense became the Managing General Agents (MGAs). The agents weren't happy. They felt that when they signed up with the company that there was a certain deal and that's what it was going to be, and it changed on them. So when the MGA was formed it started selling other companies' products. At that point the senior management realized they had to make more attractive products. They focused on the high-net-worth customer. How did they do that? They created high early cash value whole life and high agent commission product.

In the first year of this product, you could take the cash value, the dividend (the dividend did not require the second year's annual premium to be paid) and the commission. If you add them all up, it was something like 115% of premium.

Very attractive: attractive to the customer, attractive to the distribution system. What were the early results? New agents, people they had never seen before, started selling their products. They exceeded their annual sales target in only a few months. I would see that as being a danger signal. They were happy as pigs in mud. At the end of the first year, virtually all the policies had lapsed. Profitability, as you'd expect, negative. The results: they even closed this distribution channel.

**From the Floor:** Did they give a reason for the high first-year lapse?

**Mr. Horbatt:** Basically what had happened was that some agents of less than scrupulous nature realized they could sell this product to their brother or whomever and make like 15% on, in essence, no investment. It was just too high of a yield,

and there was a good deal of fraud that occurred. We will move on to product successes.

Mr. Ray: Is anybody familiar with the Lunar New Year tradition of giving little red envelopes? I'll weave the story into this. This was in 1975, and if you're not familiar with the structure of the economy in Hong Kong under the colonial system that ended last year, I'll tell you a story that was told to me when I first arrived in Hong Kong. First of all, I was overwhelmed, as I didn't realize how different it was going to be from anything I was familiar with. I asked someone who was reasonably well placed, who although American, had grown up there, What's the power base in Hong Kong? They said the structure is like this: it's the board of trustees of the Hong Kong Shanghai Bank, the directors of Jardi Mateson, the stewards of the Hong Kong Jockey Club, the financial secretary, and the governor, in that order. Economic power is everything, and the Hong Kong Bank drives the economic power. As a single institution out of 129 registered banks in Hong Kong, Hong Kong Shanghai Bank has 65% of the deposit base. The other 128 banks split the remaining 35%, and three of those are subsidiaries of the Hong Kong Shanghai Bank.

Almost everybody in Hong Kong must tap the inner bank market in order to close their books at the end of every day. Fortunately, the Hong Kong Shanghai Bank has itself been fairly tight with interest rates, so since they only pay about 2% for savings deposits, they can afford to lend overnight at 0.5%. Something between 0.5% and 1% is about the average overnight inner bank rate, except during Chinese New Year. During the Lunar New Year, all married adults give cash to all unmarried adults and children. That basically means that you'd take all your money out of the bank, you'd probably like to have crisp new notes, and since red is a very fortuitous color, you'd probably like to have \$100 bills, because they're printed in red ink. Not only does that put a strain on the financial system, but as a matter of honor, everybody repays all their debts before Chinese New Year. What you end up with is a market that's over 100% liquid. The Hong Kong Shanghai Bank is also the de facto central bank and the money-issuing bank, and that's where they print all their new notes.

What happens since it is married adults, the stable core of the society, giving money to unmarried adults and children, what you're basically doing is pushing money out of the banking system, because many unmarried adults and most children don't have bank accounts, so it's sitting in paper sacks or briefcases or chests of drawers, full of red envelopes. Since all the money is outside the banking system, there is no surplus deposit to end in the inner bank market, so the inner bank market drives up, and rates skyrocket. Since the Hong Kong Bank sets the prime rate, it's the only bank in town that's making money for about a month and a half. It's all the lead up

into Lunar New Year and until the money flows back into the banking system after the party's over.

Since they are the prime driver of inner bank rates, what they also do is try to compensate for the fact that their vaults are empty too, and they lend in the inner bank rate on probably two to three times prime basis. So if the inner bank rate is 0.75%, the deposit rate is 2%, the prime is 7%, the inner bank rate is 22%, and everybody else is lending at prime, so they're 2,000 basis points underwater, which is not fun. The problem is there is no statutory provision in Hong Kong for a uniform gift to minors. That money really is outside the whole system, and it's very slow to recycle.

There was a major U.S. bank that was looking over its shoulder and made a very lucky, but probably not strategic, decision in 1992 to buy the International Banking Corporation. In acquiring it, they had become the de facto oldest and largest foreign bank in dozens of Chinese communities. They had a prime role, and they in fact knew their customers reasonably well, so they did something that most others never thought to do, they went to their customers and asked, How could we change your behavior? What are the things that you value? How can we change this behavior pattern? They researched the market, and they discovered the mechanism for reducing the bank's vulnerability to the Lunar New Year's drain on liquidity and at the same time capture the youth market. Not bad for just asking their customers what they want and need.

The secret turned out to be those little red envelopes. Symbolism is important in many things, but in this case it's ridiculously important. Those little red envelopes are essentially a symbol of honor: it's an honor for tradition, an honor for family, and it's very important that you not be caught empty-handed. What goes along with that? If there's guilt by association, there's also honor by association. If you get ten brownie points for being a customer of the Hong Kong Shanghai Bank, the biggest bank in town, you get 100 points for being a customer of a very prestigious foreign bank, because it means you've gone beyond the local scene. They looked very carefully and discovered some of the symbolism behind Chinese New Year. They took the kumquat tree and symbolized the kumquat tree in two dimensions in gold leaves on these little red envelopes. Instead of kumquats they put ancient Chinese coins. Suddenly this became a cultural thing. Everybody else had the profile of a mandarin or some other cliché, like putting Santa Claus instead of the manger scene on a Christmas card. This one was almost sacred and captured all the symbolism.

What they did was they said, For every \$10,000 (U.S. \$1,500) you have, we'll give you 100 of these beautiful symbolic envelopes. And when they handed them out,

they handed them out together with account-opening forms and a stack of deposit slips so that they could open accounts at this prestigious foreign bank for their children or the children of their friends. This 100 free for every \$10,000 on deposit may sound like not very much, but you have to remember what the distribution of income is. Hong Kong, like many developing, is the land of the filthy rich and the filthy poor, so that you have 96% of the wealth controlled by 0.5% of the population.

During one of these liquidity crunches in a prior year, I had called a client and said, we're underwater again, Hong Kong Shanghai Bank is squeezing us, we'll pay double the going rate for any deposits you can lodge with us. He said, I locked up all the company excess cash the first weekend of the month, but I'll see what I can do on a personal basis. At 8:30 that night, a Rolls Royce pulled up on the sidewalk in front of the bank, and four maids got out carrying shopping bags, \$783 million in cash on a Tuesday afternoon in uncommitted personal funds. So 100 envelopes for every \$10,000 in the bank meant you had to give cases to some people. That was 20 years ago. What happened was that in order to get more envelopes, they kept their average balances higher. So going into Chinese New Year, instead of a liquidity drain, they had an inflow, and instead of the money staying outside the system, they filled out the deposit slip and put it right back in again and got the benefit of that money and got some more envelopes and gave it to somebody else's kids.

They are the major depository for both resident-in-Asia and overseas Chinese and Europe and North America and Australia for their deposits. Sometimes listening to the market place can really pay off in spades.

Mr. Horbatt: This is a happier story. This is back in the 1950s, and it's a story related to Prudential. If you think back to what was happening at that time, we were dealing with the post-World War II baby boom. All these men who had come out of the service were getting educations under the GI bill; people who never had an expectation of going on to college now had an expectation of being middle class. The products that were available to this group were just the same old ordinary life policies for the higher-income people and debit life for the lower-income people—not much choice. The agents maintained their focus. The higher-net-worth agents were selling large ordinary life policies, and there was the debit agent selling the weekly or monthly premium debit policy.

So what did Prudential do? They figured out this was the time to make a new policy, a policy fitted just to this demographic tidal wave. It was a family policy. The policy had a face amount, permanent insurance face amount for the husband,

and let's say it was \$10,000 face. There would be a spousal benefit, which would also be permanent or term, and that might be for half or one-quarter of the face amount, and a nominal children's benefit, simply a burial amount. What happened to this policy? This policy propelled them into the lead in the middle-class market. What were the elements of this product that made it such a success? It was simply a package solution. Agents could have generated the same product by taking different policies from their carrier, but this was simple. This was something the agent could understand. There was no true new element in it, but it focused on the emerging market. In this case, what happened was the company recognized demographic trends, it introduced it to distribution channels, and then it maintained its sales success in the early stages of the product before it could be copied, gaining tremendous market share. The agent faces many choices. They simply find one product or one company for each of the types of products they need to sell. Anything more than that would just unduly complicate their life. Being the first gives you all the benefits.

**Mr. Ray:** What we're going to try to do next is give you something to use in evaluating both some of the things that we present and some of the things in the second half of the program that we're going to involve you in.

Stumbling blocks, in our perception, in most organizations center on people and companies who are encumbered by their own history. That's another way of saying we've always done it that way or we don't do that. The other encumbrance is that most organizations return to shareholders. Somehow returning to shareholders is equated with. If I don't ask for a raise and I don't spend any money and I don't charge anything to my expense account, I'm acting in the interest of the shareholders. That's not necessarily true. I'll try to give you an alternative you can take back home.

There's another mantra that in marketing circles has become sort of a credo. Step one, know your market and their needs. Step two, know your products and their benefits. Step three, know how your products key benefits meet your market's key needs. Then the last one is where the marketing function kicks in: overcome the boredom barrier. In other words, get the attention of the right folks. Of those four steps, the toughest is the first, and that's trying to really understand your markets and their real needs, because sometimes they don't understand their real needs. You need to identify what those target markets are, segment them into meaningful categories, and prioritize those wants and needs.

When we try to map a product development process, it's really a reflection of which end of the telescope to look through. It's probably a circle, a complete cycle in

many ways, it depends on where you begin that process. See if this sounds familiar. You formulate a strategy and set some goals, you begin to design a product, and so you have to assess the capabilities of your design and manufacturing infrastructure. You establish the financial hurdle rates and corporate guidelines, then you go out to the marketplace and check regulatory constraints and provide those. You look at the marketplace and evaluate where you have strength and where you have a niche to call your own. You determine what your distribution likes and what their priorities are, you cross-check that against your customers' concerns and their criteria, and at the end of the day, you compare your results against your goals.

We would suggest getting on the cycle at a slightly different point. There needs to be a concept, a direction, and a vision in the management consulting vernacular: some concept of where we, as an institution, have a right to be, where we have permission to be, where we want to be, where our skills and capabilities and resources will allow us to be. We'll start at that point, but we'll turn the rest of it upside down and say, First step, research your customer concerns and criteria. Don't ask the sales manager to ask the regional director to ask the sales director to ask the general agent to ask the agent. Ask the customer. Compare what the customer says against what your distribution system says that customer wants. Also, get to know what drives your distribution system, not what your sales manager says drives the distribution system, but what the distribution says really makes them perform. Then look at where that distribution system or the company's name or image has a real presence in the marketplace, what sort of thing you are able to do in terms of regulatory constraints. Now that you're distilling this process down, look at how that compares against your own corporate hurdle rates and performance standards. Then move into design and manufacture of a product, and after you put it out to the system, evaluate your results against your projection.

That product development process is what we will ask you a bit later to use as a checklist for following through. Our wish to turn that funnel upside down, is to encourage you and your organizations to review your strategic priorities in order to enable you to short list potential opportunities for the greatest enhancement of incremental growth and profitability. Look introspectively at the assumptions that drive the vision of the organization and your sales and marketing objectives and work backwards. Research and prioritize your best customers. We'll get into a little bit more on how you identify a best customer.

Research and prioritize your best customer's most important concerns. Often we meet only part of what people said: "I'd like to have a red Ferrari with black leather upholstery." Here is a red tricycle with a black seat? Is that what you wanted. No. The Ferrari was the important word. It could be green with no upholstery, I'd still like the Ferrari. Look at their most important concerns, their criteria for selecting

among the products that are available to them in order to address those concerns. Research and prioritize the features and benefits that represent preferences and priorities. These will be both your customers concerns and their checklist. Know how their decision process works. One of the things that we spend a great deal of time on is trying to map the customers decision process, so that you know not only about what they're trying to decide, but also how they're making that decision. What's their checklist?

Consider the regulatory constraints that maybe would modify the product you're developing, examine the financial assumptions with respect to things like market size and maturity—what's the projected growth rate of your market place, how much is it worth investing in that market, the ability of your current distribution channel to succeed in those niches. Make sure your distribution channel is a channel that can get you to the goal you wanted, and then look at the linkage to other priority products that you may already have out there, so that you don't underinvest in a product that is an essential complement to your major market presence. In other words, you have to play in that market if you're going to play in the ones where you've identified the priority, so that if you don't swim, you have to get wet. So both a bathing suit and a towel are necessary. If they're complementary products so that you have to be in both to be in either one, consider that as you weigh what you invest in the development of the product.

Look at your design and manufacturing capabilities, the expertise that you have at the various places in the organization. If it takes a large administrative back office, do you have one? If it takes a major call center in order to respond to it, do you have an 800 line and capable people to handle that, or can you rent one? Look at market presence. I've had a number of clients who had very clear product development objectives, a very clearly targeted market, but they said, I don't know whether I want to buy aspirin from 3M; 3M's not in the aspirin business; they don't make cough syrup, they don't make sleeping pills. They're asking, Is this an area where the market has an expectation that your organization and the product presence you have out there will allow you to do this new venture?

We're going to spend some time on the role of market research. We have coined a term called "progressive definition research," and what we're essentially saying is that we recognize that organizations don't want to fund a perpetual research institute. What you're looking for is decision support information that is outside your normal information-gathering capabilities. What we're saying is that we need first to mobilize all the resident wisdom within the organization, get all the intuitive and experiential benefits of an outside advisor to construct a research design that is focused very clearly on what you need to know to make decisions on moving that product down the development channel, and then test it. Don't test it to death

before you try it. Sometimes it's worth going to market before you have 100% certainty. The important question here is to use research as a decision support tool and not as a substitute for decision making. We're not advocating years of research. The time-to-market cycle is just too short.

I want to leave you with two thoughts. I started out by saying that being mindful of your fiduciary responsibilities to shareholders is a very noble thought, but that's not the only constituency out there. When you're trying to be a steward of shareholder's funds, you're essentially saying, Let's do today what we have the ability to do today. Let's sell today's capabilities and do that as effectively and as economically as possible. You have other constituencies also. You have strategic objectives to fulfill, and the stewardship of the shareholders funds depends on management having the capability to achieve its objectives. You have a distribution force who have their personal and production levels. You have to enable them to succeed in order to succeed in achieving the major goals, and you have a customer base. If they don't get what they want, none of the other players are going to succeed either. If your customer is not happy, your distribution force is not going to be happy, your sales and management team is not going to be happy, the corporate hierarchy is not going to be happy, and the shareholders are going to be mad. What we're saying is, "Let's look at what drives what, and look for balanced value, return to shareholders, return to management and its strategic goals, return to the distribution force, and return to the customer base." Balanced value.

We are also saying balanced growth. If you look at traditional versus nontraditional products, you can imagine four cauldrons here. You essentially have traditional products and nontraditional products, or traditional markets and nontraditional markets. You have new and existing clients. In terms of how you ring growth out of this matrix: for the traditional market, you want to maintain where you are and enhance it. For the nontraditional markets and products, you want to diversify. For your existing clients, you want to deepen your share of clients, deepen your penetration. For new clients, you're looking to broaden your client base and broaden your share of the marketplace.

Essentially what we're saying is you start with traditional products for existing clients, and the objective is to move on the diagonal. You may take traditional products and look at your existing client base and say, The most logical thing for me to do here is look for more new clients for that traditional product. Or it may be to say I have this existing client base, and they'd buy anything I sell. What we want to do is move beyond the traditional products into nontraditional. Now, which course makes the most sense for your organization or for you at a given time is essentially for you and your management team to decide. I will say it's hard to go in both directions at once, and if you decide you want to move into a deepening

relationship with the existing client base, there are product development paths that make sense along that course. If you say, I want to look at new horizons and products, there's a logic that goes along with it; they're corollaries. Whether you take the market path or the product path, there are some related decisions. You may want to create a map for yourselves, so that when this piece of the organization says, "What we really need is a blue widget, can you build one of those for me," or "What we really need to do is to lower the price of this," or "What we really need to do is to go into new territory," or "We really want to be international," or "We really ought to concentrate on the Southeast," or whatever it is—make sure that somewhere in your mind you're able to get the vector on that. Are we going down this path or that path?

Consistent product development and corporate growth have to be along shared paths, and when they're not, you will find that either the organization is not going to put the support behind your product, or the organization is going to go away and leave that in the dust. One of the big factors in the success or failure of a product is how congruent it is with the strategy of the organization when the rubber meets the road. Where are they putting my resources?

**Mr. Horbatt:** John Parsons is going to continue here with some in-depth discussion of marketing research techniques.

**Mr. John Parsons:** The reason for the discussion so far has been really to explain the place of market research, when an organization thinks about doing market research, and that's very often within the product development cycle. I'm going to touch on another kind of research that is often done, which is the customer satisfaction research. That's research into your customers, that isn't research into the market. They overlap a bit, but essentially market research is most often related to the product development cycle.

Take a behavioral model of how an individual consumer behaves. In the world of marketing, we're dealing in the world of information, and that information is fed through to consumers in many ways; easy to conceive advertising and promotion, education (particularly that oriented within your relationship to a client) feedback is a crucial one, and financial grasp. Public relations is another. All kinds of information are coming in, and that comes into, in effect, a communications filter that we each have in our heads. We're hit by thousands of messages every day. Which messages get through, which messages are those that start to accumulate in your mind to form an image of a particular product or a particular brand. That image will then predispose you to using or buying that particular product or not. Now we're dealing here in the image section, which is that accumulation of those messages to form an image that predisposes that customer to purchase.

Now we get into the next stage, the choice stage. The customer comes to the point of purchase, and at that point, there is often a lot of additional information that is given to the customer. Specifically, this is very much the case in the insurance-agency-type situation, in which the agent then gives the majority of the information that the consumer receives. It's transmitted at that point-of-sale influence. That is attempting, in effect, to change the mind of the consumer from that previous position to whatever product you want or the agent wants that consumer to purchase. Assuming the sum of the previous position and whatever influences have motivated that consumer to purchase your product at that point of choice, you now move into the point of experience, the point of ownership of a product, and this is the level at which customer satisfaction begins to apply.

Basically, customer satisfaction is expectation versus experience. If you set the expectations too high, and the experience isn't good, you're not going to have a satisfied consumer. If you have that equation in balance—in other words, the expectations were sufficient to motivate the purchase and the experience follows through in accordance with that—you get the satisfied customer. If that works really well, you start to build into the lovalty loop, which is your favorite brand, your loval customer, and in many industries, that really is the key to success, because that is your franchise. You don't have to spend incremental marketing dollars every time to lure a new consumer into your web or the distribution or whatever it is. He's already there, he circulates, he likes your product, he buys them, and the loop of a strong franchise will keep looping through, instead of bringing new consumers in. However, the additional benefit of doing all these things right is the most powerful of all marketing, which is word of mouth, peer recommendation. That is directly related to doing things right here, and that feeds back through into the information loop and down. Conceptually, that is a marketing model of an individual consumer's choice.

Several types of marketing research are done now at different points. In the image formation stage there are two main kinds of market research models. One is the attribute model, and the second is the brand model. What's an attribute model? It's looking for the different components that are important to that consumer and that your product may or may not have, or all the products in the market may or may not have to some degree. Brand is really a giant attribute. What's a brand? A brand is shorthand for a good deal of information about that product, particularly about the trustworthiness about the supplier, your company, in supplying that product. That's where that fits, and the other components that fit into those briefly are awareness, esteem for the brand. Those are the kinds of things that are going on in the information-formation stage.

In the choice stage, what we have is, in effect, trying to model the decision-making process of the consumer through tradeoff models, and then the use stage is where you get customer satisfaction models. You're going to see market research at various times, but it is useful for you to see: where in the stage was that research done, and therefore what are valid conclusions from that research. From the attribute model, you cannot get market share or pricing. You can get indications of what people prefer. It's only in the tradeoff models that you really get that, and that is the rarest kind of research. As market research is fed to you, what this is trying to be is a template so that you can see what was done here, and therefore what conclusions are valid from the information I have. That's really the purpose of this session, as well as helping you help your organizations design better market research.

Let's go into attribute models. What we're talking about is what attributes are important, what are the features and so on, that are important to the consumer. This is the other major piece in this model, which is the segmentation of the market in all kinds of different ways, and what is the current groundscape, what is the current perception of all the products that are out there. The first stage is really absolutely keen. Like many things, the better you do the first stage, the better the result that's going to come out in the other end. And the first piece in this is identification of attributes. This is often where qualitative research comes in. Qualitative research is not numerically based; at the simplest level, it's an interview, and at the most complex level, it's a focus group, where you're getting people together and you're just having them talk about that product, that situation, whatever that is, so that you're looking for all the attributes, because your next stage is going to be to construct a giant list of attributes.

Attributes are also hierarchical. For example, when you ask a mutual fund investor what are the attributes? Oh, yeah, performance. You dig down a little deeper and you have excellent financial performance over one year, over multiple years, performance in a bear market, tax effective performance, and so on. The first task in this is to build a comprehensive attribute list without being stingy and without trying to do too much hierarchical thinking. The only reason for hierarchy here is to organize your thoughts and to probe deeper into looking for attributes.

Now, we're going to talk about how do I know what is important to me, to a consumer or not. There are three different basic ways that we can look at that. One is a scale of measurement, how important is this to you, on a scale of one to ten. The second is a ranking mechanism: which is your most important, your second most, and third most. And your third is a classification: is there something that you think everyone should have. It's the barrier-type thinking. You have to have performance.

I'm also going to mention that attributes are also a key ingredient to the tradeoff model, and often you don't do an attribute model and a tradeoff model simultaneously. They have different objectives and different purposes. The attribute model will give us segmentation, which we'll go into in a little bit, whereas the tradeoff model will do a much poorer job on this.

Take as an example real data from Dow Bar. What's most important in the product? Number one, consistency of performance. On a scale from 53 to 46, there are nine factors. All this information tells me that performance is important and a good deal of other things. That's it. I can make nothing out of it. The margins for error within those percentages are enough to switch places between them. What you have here is an idea of what comes to the top, but you really don't have a way of saying, This is important; here are the three critical things that I need to focus on. This now is a ranking mechanism.

With ranking you say which is your most important, second most important, and third most important. What you get is a much higher differentiation in terms of the way that that information will be displayed. That is a factor. Most market research is done on the rating system. It's so much easier to do, but the results really are tough to interpret in terms of really getting meaningful to which three factors I have to act on.

I said before not to be stingy in terms of the number of attributes that you identify. Here is the reason. What you can then do having got your research back on attributes, is what's called factor analysis. Factor analysis is the clustering of attributes in the way that the consumer is thinking about them. We know our industry; we are very logical about how we think about our products and what is this hierarchy and what is that hierarchy. In the mind of the consumer, that may not be the way it's going on. In a clustering of a series of attributes into much simpler factors—and that is why you're not stingy with attributes—this clustering is really telling you about what's going on in the head of the investor. The correlation is when somebody wants one thing, they also want another, and that's basically what you're looking for. Therefore, this is a mechanism to simplify that analysis, and we'll come across the various factors at different points. In other words, you don't have to do the consumer's thinking for them in terms of the hierarchy and all that; the market research can do that for you.

Classification of attributes is another way of thinking about them. Sometimes this is applicable, and sometimes this is not. A given factor in a product is good if, in the case of an insurance company, it has a broad swathe of products. Is that important or not? What kind of an attribute is that? Very much an attribute present in the

consumer. It depends on what kind of consumer, and it depends how they rank it. Yes, I want somebody who is going to have the broad swathe of products. Another consumer is a niche-type buyer; that's not important to them. This gives you an additional component of information in terms of how that consumer is using that attribute in the decision process.

Now we're going to turn to, basically, segmentation methods, and this comes directly off the attribute-ranking-type data. We may have had 60 attributes, but we can't think in 60-dimensional states. I'm just going to give you the very simple example of years of education, the one-dimensional. These are real data to say how people have completed so many years of education; nine years, 12 years, and so on. The data swirls at the various points. In the cluster segmentation model, each stage it takes one more break, and it adds the distance between points and comes to the maximum reduction of that, so that it picks the optimum point. Every point and the distance between it is summed to a given number. In the next stage, the computer will calculate where, if you put a discreet break in there, the greatest reduction in that total distance measurement is achieved. Basically, the ultimate point is when each dot is a segment, the distance between everything is zero. When there's no segmentation is the maximum. Now it's a question of one break, two breaks, three breaks, four breaks, five breaks, and after five breaks of that kind of data, you're getting into what we naturally think is the segmentation. Some high school, high school completed. It's not coincidental that the clusters are the way they are. Some college, completed college, postgraduate. If you now take this technique and apply it across 60 attributes on the ranking of all of your population, that is how your natural market segmentation occurs. What that is mirroring is the similarity of the decision-making process in the various segments of the market, and that is true market segmentation.

Most industries are dealing with these things by demographics, age, income, and geographic location. Those are the really simple ones. From a marketing perspective, in terms of trying to understand how that consumer's mind is working, that is a very limited use for marketing purposes. What I wanted to do is show you the cluster segmentation technique and how that applies across attributes to do that. Are there any questions?

**From the Floor:** Are you saying that use of this application is the best way to determine the decision-making process in the markets?

**Mr. Parsons:** No. This is just a very simple example, because we can only think in one-dimensional space, as to how cluster segmentation through a mathematical perspective works. Now, I want you to take that, and you can see that it really does work. These are actual results.

From the Floor: Earlier you looked at the difference between theory and practice: theory tries to simplify and practice makes exclusive definitions, requiring multivariate analysis, and although we don't have a section on database marketing, and essentially what we're saying is that a simple, quick and dirty cut is based on debtors, cardholders over 27: it's just too quick and dirty, and if you really want to use this not just to drive a mailing list, but to drive product development, you need to look at multivariate analysis, and cluster analysis is probably the most useful thing to use. I guess I just want to make the differentiation between questions that you ask people versus attributes; attributes would be demographic variables.

**Mr. Parsons:** The attributes are the descriptor of your product in this case: does it have high performance, and so on.

**From the Floor:** You made a comment about demographics and I'm just trying to ask, If I was trying to come up with an idea of what's in the mind of my customers, are you saying that I'm going to have to ask those questions?

**Mr. Parsons:** Yes. You'll also want to know what their demographics are, because that helps you to understand your customers as well. Are these highly educated people who are thinking this way, or is it the fact that they live in California?

A very simple depiction back through factor analysis can show the kinds of results that you get. Factor one is basically where they are. That's an 88.3% coincidence in that dimension, whereas in factor two, it may be spread across three different dimensions. In segment three, for example, you may have 55%, but 85% of them have a low rating on factor two. What you're getting out of that is that different decision-making process: which factors are important to which segment is what this is telling you.

Another thing we can do from the attributes is to look at profiling a brand, the next stage that you can do. In other words, here are all the factors that you told me are important. Now, what do you think of those brands across all of those factors? A brand profile chart is one of the core pieces of market information that is really important for your company to have. Where? Against all the factors that are arranged are the opinions of your brand. This is a good deal of data, and consequently, one of the things we always look to do is to try and simplify the depiction of that. In order to explain how we simplify the depiction is a complex process, and it is the perceptual map. Conceptually here what we're doing is as follows. If we had two attributes, attribute one and attribute two, and you have four products, you may have one product that is high on attributes one and two: that would be one segment. One position, say, high. Another one would be high on

this dimension and on that one. Low, low, low, high. So you begin to get a perceptual map. You now take that to N dimensions, the number of attributes, and you end up with a perceptual map. The attributes or factors are arrayed around the outside according to how they coincide with one another. Somebody who wants this, doesn't want that. All those dimensions as explained, basically you start to position your products, and this information tells you on a very simple basis, what the attributes are that your product is most associated with compared to other products' associations. This is a visual depiction of the positioning of a product. You can actually go to a cluster with this. Now you really have a picture of your competitive set, which products are appealing to other people for other reasons. Assuming you don't change your product top to bottom, you're now working with your top data in terms of which attributes are most likely to increase my market share, because they're most important to the largest number of people, against in particular top data.

I just happen to know what this segmentation did from the next stage of looking at it. You can't tell visually. You have to go through an indication. You can begin to see the pieces. For example, in mutual funds today, most of them are perceived as having competent investment management and nothing else. Vanguard is about the only mutual fund today that has solidly positioned itself on a particular dimension. It stands for something. It stands for reasonable pricing from an investor's point of view. There's a whole bunch of brands out there, the Oppenheimer's, the J. P. Morgan's, and so on, who stand for vague exclusivity. What is the equivalent in insurance? Are you the everyman's insurance company? Are you the company that does the really high-end product? Are you the ones that meet the specific needs, but only go to your priorities? What is it about your whole gestalt in the market that stops to resonate with a particular consumer set? How are they thinking about you, and what is it?

**Mr. Parsons:** Anyone who begins to occupy a space has the right of ownership of it until they're knocked off, and in the world of mutual funds, it's the world of evolution of marketing. That's where mutual funds are. Insurance companies: frankly there's not much space conceptually in people's minds that is owned by any individual brand at the moment. Part of the reason for that is because there are so many brands. Another reason is because, back in our model to begin with, insurance companies have traditionally focused on influencing the agency force as opposed to influencing the consumer coming in with a previous position. If you put all of your marketing energies into that point of contact, and you ignore it, with the exception of a few large ones, anything to do with predisposition. There are good reasons for that. I'm not advocating coming away from that, but what I'm trying to do is show you the recognition of where the factors are, why the energies have

been there, and consequently the recognition of that pattern will help you in terms of developing new products and what to do about those.

Small word on the halo effect. The halo effect is a very important market concept. I don't know anything about Fidelity's services, but because Fidelity is big and I guess they must do things right, I will attribute to them a high service component. That's called the halo effect. I know nothing about it, it may be good, bad, or indifferent. What you have to do is screen out that aspect in order to get an effective position.

Next a word on brand models. We're still in the same image-formation stage, and as we said, brands are really the giant attribute that surrounds things. Here are the dimensions for brand equity. One is, what is the awareness, who knows about your product? That comes in various levels of depth. Second, what esteem do they hold your brand in? Third, how differentiated is your brand? And fourth, in terms of a franchise-type company such as insurance, what you're really looking for is loyalty. You're looking for people who continue to purchase from you, and therefore that becomes a major measure of brand equity. There is a fifth one, which is more or less applicable, which is relevance, that is. Lamborghini is a great product, and I think very highly of it, unfortunately with my current bonus structure, it's totally irrelevant to my existence.

Brand equity pervades the model. At every step that you go, the stronger your brand, the stronger the esteem, it will influence that set of interactions positively in general, to get you through the marketing cycle and get the correct results. Basically brand equity includes the effectiveness of your entire marketing efforts.

Awareness is basically at several levels. The toughest one is top of mind, recall. Is yours the brand that appears? When you talk insurance, what is that brand? Between aided and unaided recall, unaided is more powerful. That means when you don't have to remind them. Aided is they know about it. And most frequent use is the other piece here, which feeds into the awareness equation. Awareness is a very simple concept. Obviously you need to measure it.

Next, esteem. How would you rate the overall quality of take a cosmetic brand, and you will begin to see that it's extremely difficult. This is a market-intense industry, so they are pushing their messages every day at these consumers. It's extremely difficult to really shift brand equity up and down. It is really the asset of a marketing-intense company, that brand equity: very tough to gain, very easy to lose if you mess up. What lies underneath that is the attributes. You often would do a brand study, and you do the attributes as well. They think highly of me: what is it about me that they think highly about? You go to the attributes.

**Mr. Horbatt:** Cosmetics is a good area to compare to life insurance, because this product is a product in which virtually all the cost is unrelated to the product itself. Manufacturing might be 10% of the ultimate product cost. If you look at the retail outlets, where margins on other products might be 10% or 20%, margins on this product at the retail level are 50% to 60%. If we think our distribution costs are high, this is a product where they're even higher.

**Mr. Parsons:** One of the factors that leads to that is that marketing becomes very important, because you don't want to be dependent on that distribution channel. You don't want them to have that vulnerability. You want people to come in with sufficient predisposition's so that they are telling the distribution channel what to do. That's what predisposition does for you strategically: it is your only lever against an extremely powerful distribution system.

Differentiation takes us back to the perceptual map. This shows you how to look across one axis. In other words, how differentiated are you, and in this case, the axis of call on a regular basis. You can see that immediately. From an overall perspective, you take it from the center dot and see what the vector of differentiation is.

Loyalty is really a very major factor in franchise oriented firms, and the big mistake that is usually made is they've had an account for five years, they must be a loyal customer. That really isn't it. You have to look at the factors that feed into it. You have to look at loyalty from a much broader prospective. Persistence is really the most trivial. From this microbehavioral model perspective, the information you immediately get out is what is the satisfaction of that customer on the key attributes, that is, the attributes that they have rated most highly, because that is where you're going to begin to really see whether you are delivering what that customer wants, and that will lead to loyalty.

Value resonance is the ultimate level of value of a brand loyalty, when you can in fact project the values from that. This is why the brands such as Mercedes are so unbelievably strong, because what they are projecting in terms of imagery is what I want, and therefore that begins to come. The way you look for that is obviously you've taken a cut across what people think of that brand, and now you have to look at what are my attitudes toward a particular thing and get a correlation. In the case of financial services, you look at risk orientation, you look at whether people are looking for longevity in relations, those kinds of factors, their attitude toward relationships with financial services companies.

The franchise segment behavior is at an aggregate level. What kinds of loyalty do you see in certain segments? Some segments have greater inherent loyalty typically than others. Those typically are also the segments that are most difficult initially to penetrate. Why? Because you have to knock them off the loyalty barrier in order to get to them. Knowing what those segments are and their loyalty behavior and how much of those kinds of people are in your franchise is important information really from the point of view of the overall value of your company.

Why do we look at brand equities? The higher you can predispose people toward your brand, the greater the sales at work. In the case of a company that has a very strong dependence on an agency force, that doesn't excuse you from doing everything mechanically right to get the product in the hands of the agent so that when the investor reaches that point of decision, that product is available. What is the multiplier effect. Once you have it right in terms of your distribution, it is your predisposition, your brand equity that drives through and gets you to the higher sales level.

If you think poorly of something, the chances are you have much more work to do in terms of getting sales. If you have a segment that doesn't think very highly of your product, your company, now you have to decide whether it's worth getting them to a point where they'll hit the steep part of the sales curve. That's the issue that you face on a practical basis, and that takes you really to segment marketing, because you're looking at each segment, saying where are they in terms of the esteem for my brand, and where do I have to get them to in order that they'll buy. I can do that as normal through the agency force, rely on that communication at that point of sale to do it, or I can give them a little bit of a head start by marketing direct and getting my name and my image out there. In terms of standing for something, then there's the question of differentiation, as to which segment you choose to go to in that respect.

**From the Floor:** Does the shape of the curve—the slope perhaps—suggest how much value there is to enhancing brand equity? If it is very flat, then there's not much return for enhancing that brand equity.

**Mr. Parsons:** If you look at dominant brands such as Campbell's Soup, for example, you will see among many people who don't think very highly of Campbell's Soup that's still their most frequent product usage. Why? Because there's not much out there by way of choice. That constitutes a vulnerability if the Progresso's of the world can identify the segment with whom they can improve their brand equity sufficiently to hit the curve, and it happens to be one that's low for Campbell's. That's the whole marketing equation of segmentation, and which one do I go after. This information feeds directly into that kind of thinking.

Here is the other incredibly powerful reason why brand equity works. The higher the brand equity, the more chance it has of sustaining its market share despite the price increases. This is basically common sense. The more you value that brand, the more you forgive it for whatever defects that particular product may have, be it performance, be it delivery, be it service, and so on. The less that you esteem a brand, the more that those things are going to drive you into disloyalty. Brand equity is a fundamental component in marketing.

Let's go to trade-off models, because this ties into the theme of our session, The Price Is Right, this is the only place that really you can get directly into the price measurement. What tradeoff analysis is going to do is stimulate the decision process. These methodologies began in the 1950s as something called Conjunct Analysis. Conjunct Analysis was an experimental model, typically of 16 cards, and what you did was rank them in order of your preference, and there were mathematical models behind it, but according to the attributes modeled on those cards, it's trying to stimulate the whole decision, so you're presenting unique cards.

Discreet choice is the next generation of Conjunct Analysis. It basically now offers you the choice of really modeling the market. There is a choice of models. You have a complete market model. You do have the choice of not doing any of these models. What are considered the important attributes? Price; the actual brand name is included. Back in the attribute model per se, the brand was not included as an attribute. The brand and the price were not attributes. The brand model took care of that. This is the first place where you really get to include price as a factor in the consumer decision making. If you put price in the other models, it just doesn't. You just distort the data way over. You get the buyers who are looking for X price on predisposition, and they'll just mess up your analysis. This is the first place you can really use price.

Basically, you can't take a respondent down a path that is illogical. You can't ask him what's important and then present him with a construct of what is important to you. You would have to do that attribute research beforehand, and then it's your judgment as to whether you stop at qualitative or whether you go to quantitative to determine what is important. If you're going into an existing market, very often there is existing research on what's important, and therefore, you can shortcut the process and get a pretty good list of attributes without much effort. If you're going into a market in which there's tremendous change, or a number of new consumers, then going through the attributes is essential.

**From the Floor:** Is there some kind of mechanism in place to certify that these are the attributes for the market?

**Mr. Parsons:** You can hook on to consumer satisfaction research. Many companies do anyway. Those are, however, your existing clients, so therefore you always have to take that with a pinch of salt, because they've already made their decision. Often, though, in a big market, there is syndicated data or market research companies out there already doing that research that you can buy at a very reasonable rate as opposed to having to do that yourselves.

Technology is one of those things that can change behavior, because it can change the actual way that a product looks and feels, and you're right, recertifying those at a reasonable frequency is a very good idea. Technology is one of the major ones in that respect.

That is the first output. There is direct market share data, and you're measuring it directly. I get 100 people to respond to my cards, they're telling me that they choose my product in this orientation, X% of them choose it and X% don't. Absolutely direct measure of market share, and when I change the attributes, this is the difference in their choice behavior.

Price elasticity is part of the full discreet choice analysis, or you can do that as a very simple module. Basically you're doing two factors, price and brand, where brand is then prescribed in the initial materials as a given configuration of a product. What you're looking at here is what is my market share sensitivity as my price moves, but also what is my market share sensitivity as my competitor's prices move. What you get is the classic price elasticity curves, which come out of this kind of analysis. You'll notice that each brand typically has a different tolerance because they have a different valued perception in the market place. This is the mechanism to do that. It is sophisticated research because you have to present an array of choices to a consumer in a way that they can appreciate the totality of the product, and let them choose. There are two basic ways of doing that. You can have what's called central location. In other words, you bring consumers in, and you have materials there to show them on a one-by-one basis and then they make their selections, or you can do it by sending the materials—they have to be very well designed so you are not biasing the choice but presenting the information. It gets you where you need to go: price and market share.

Most market research you will see will not have this, and consequently, when people move to project price and market share or other research techniques, you should have a big question mark as to how valid that is, what the assumptions are, what's going on there. This is the only market research technique that will do it for you.

Let's go into the customer satisfaction. Overall satisfaction measures: you can ask directly. What is customer satisfaction? How satisfied are you with X? Another way of doing that, getting more imaginative is, "Would you recommend another one?" If you're now a user, either establish a satisfaction measure, as well as the brand equity measure. The other way we can do this is back into the microbehavioral side, which really gets much more detailed. Now what we're interested in is I want it, it's important to me, and I got it; or the negative to that is I didn't want it and I didn't get it. You can have negative attributes as well as positive attributes. If you're researching, you have to keep those attributes separately, because the ways you ask the questions are slightly different and you'll confuse the respondent if you mix them in there. The dissatisfied obviously is I wanted it and I didn't get it.

The way to look at that conceptually is, here are my expectations, my ranking of importance of this. I want it, here is my range, and here is the delivery. I got it or not. What we're looking at is the weak delivery against the important factors. As we go back into the attributes now, you begin to see how many people wanted it and got it, that is, they're satisfied; how many people didn't care—we exclude them from the sample. They're indifferent. They don't care about this attribute, fine. Percent dissatisfied are those who were not happy with your delivery. That then feeds back into your company. You can look at this in all different ways, and sometimes it's really difficult to get the conclusion out of it. This is an attempt at doing that. This feeds back obviously into your operational areas in particular, and it may feed back also into your pricing formulas and your strategic-type conclusions as well.

In summary, those are the four basic types of market research models. The attribute models: describing the market, what's important, the product positioning and the segmentation. The brand model is where you get what is a crucial component, a crucial key attribute if you like, and that has to be treated differently, what is it saying, who knows about it, what are the predispositions toward that brand. The tradeoff models, which are really the key to the kinds of quantitative research that ultimately can give you the guidelines for market share and price, and customer satisfaction, which is are you delivering what your customer wants, and that is an operational measure, which you have in many companies. As you measure brand, you may be measuring some customer satisfaction, because you are measuring those who are users and those who are nonusers. What you do is you look, according to the problem, for the optimum setup of these models that you need for your decision support. What I'm trying to do here for you is to give you the models to view as you look at market research.

Which kind was given, what kinds of conclusions are most valid from those types of models?

There are a couple of other small points. First, way back, we talked about communications filter. There is another kind of model, which is the advertising testing model, which deals with that. That really isn't the concern I think that we have here as product developers. The next set of concerns, and you'll come across it in the case, is whom am I going to ask these questions of. That is a crucial decision in any piece of market research. Do I ask them for the population as a whole, in this case I'd need a demographic sample, and then I need to come down to the appropriate size of sample in order to be able to do that, or am I only interested, for example, in people who have bought life insurance within the last year, in which case I need to screen for that sample, because I want to understand how they made that particular decision, and I don't want the decision to be too stale; I want to see what that is. There's a major set of decisions in any market research as to whom I want to ask the questions of. The next set of decisions: methodology. How am I going to ask the questions? You have a complete range of technologies here in terms of how to do this. You have mall intercept all the way through telephone interviewing. You can go to a mail questionnaire straight, that is, you can get your demographic sample and mail out right away. That's cheap, however, you have a self-selection in terms of the people who are coming back at you, so you have greater distortion of data versus the direct contact.

Each of these methodologies has prices, advantages, and disadvantages in terms of the way you conduct the research. Time is too short to go into all of those today. I hope we can illustrate in the case why you might make a specific set of selections for a particular kind of research.

**Mr. Parsons:** A problem with the Internet is that you don't control the sample. Basically, the sample is self-selecting. They are the people who are technology oriented, and that's the way they're doing things. One of the pieces of research we're doing right now is a telephone screener. I have a demographic sample, I have the telephone, and I will qualify bands of people. It happens to be in mutual funds. I will qualify 50 people who own Fidelity, and I will then ask them would you prefer to receive your questionnaire by the mail, or would you prefer to receive it via the Internet. You have many decisions there in terms of how to do those aspects.

**Mr. Horbatt:** We have a very short time frame to do the case study, which we think is a lot of fun. We'd like to move into the case study as quickly as possible. Sam has a section which he's promised that he can bring to you in nanoseconds.

Mr. Ray: We decided to skip this section in the interest of time, but also because it is reasonably well documented in your materials. Essentially what I hope we can convey as an overall message is that database marketing is a piece of the puzzle, but it's not the whole puzzle. What we've tried to do in the section that John outlined was to say there is a reciprocal relationship between some of the contributions that database marketing can make to segmenting and targeting to whom you ask questions. The elements of what you ask and how you ask it and what do you do with the results are really some of the things that John had focused on. With database marketing the rage, the question is where are our competitors today. You're essentially saying you have a base line, you're getting a database that you can begin to access. You're getting to the point where you understand what you have well enough to gain some insight from it, and then you have the branding elements that John was talking about, where you're really able to drive the direction of the organization and the focus of your products on the segments of your market.

What we're saying is the various segments of the financial services sector are different places. Insurance is a sector where on the surface of it we know more about our clients than any other sector, and we do less with it than any of the other sectors in financial services. We're very strong proponents of database marketing, but not just as a quick and dirty way to get decision-support information. It's a piece of the puzzle, not the whole thing, and what we're saying is that database marketing, in conjunction with other forms of research, is intended to drive action, the actual marketing efforts of the firm, not just to be information that helps you decide. It's supposed to be a strategic tool.

**Mr. Horbatt:** Now what I'd like to do is put you into a hypothetical situation. The folks sitting out there are the actuaries of a life insurance company, which we have called U.S. South Life Insurance Company. Your CEO has just come back from a visit to the U.K., where he has seen an interesting product that combines a mortgage and an annuity. We'll let these people talk about the product.

Mr. Parsons: Basically, this is a description of the U.K. mortgage market in the early 1970s. In terms of the mortgage markets, the U.S. market is way ahead of the international mortgage market. Typically in the 1970s, the amount was about 50% to 60%, so you therefore had to have a down payment of 40% to 50% on your home—pretty hefty. The maturity was long, so the capital markets were good in that respect. Fixed-rate mortgages were often with credit life, particularly if the borrower was going to reach 65 before the 30 years was up, which obviously was most often, because of the large down payment, so typically credit life was a major feature also, and the distribution was through the commercial banks, which in England are

relatively few. There's about a half dozen major commercial banks and a number of minor ones. And the building societies and thrifts.

Mr. Ray: One of the aggressive new kids on the block in terms of the manufacture of annuities realized that there was a potential for growth in the sale of annuities by linking them to mortgages, but they realized also that they didn't have a distribution force, but in fact the thrifts were the distribution arm that was most likely to reach their target audience, and they were the people to whom the cash-flow element of home purchase was critical. They didn't have 30% or 40% of inflated real estate prices to plunk down, and, consequently, they were either doomed to live with inlaws or in rental properties a fair way into maturity before they could accumulate the capital. They asked, What can we do to improve the cash flow? And that was to raise the percentage of the appraised value that the institution was willing to lend to keep the high period of time, but to create a product that would be essentially a mortgage that was liquidated in a bullet maturity by annuity that had the same term as the mortgage. What you had was a tax advantaged product in which you had a fixed interest rate on a fixed principal. It was all tax relief. You also had an annuity with death benefits. You addressed the concerns of how can I afford the cash-flow implications? How can I get maximum tax benefits in a high tax environment? And, finally, what if I walk in front of a bus before I pay it off? The question of roof over the head was well addressed.

They went to one of the largest building societies in the U.K. and pioneered a product that subsequently took the market by storm, but they maintained the leader's advantage and to this day it's still regarded as the product invented by this pair of companies; the insurer and the thrift.

**Mr. Parsons:** So the situation is, very simply, your CEO, who has visited the U.K. gets back and asks, Why can't we do that? The situation is that you're the actuary in this company, it's a midsized life company in the South that has a conventional array of life products but has developed a set of annuity products, particularly through the bank channel, and has a couple of relationships with some of the stronger regional and state players in its approximately five-state core area. The questions are should we pursue this opportunity? and if so, What is the development plan? How would you set about looking at this opportunity?

In terms of the workshop instructions, we're suggesting that you walk through the product development process to guide your discussions, and in particular, in tune with the theme, what kind of market research would you think about doing here? Let's look at a design as to how you would conceive of doing the market research to answer this. If you say this is not something you want to pursue, that's a valid

conclusion also. This is purely in the realms of the hypothetical. Finally, bring your answers in the format of an answer to the CEO's question.

**Mr. Horbatt:** You have a fair amount of material. If you can come up with some ideas on methodology, that would be fine, but each table should try to identify what their objectives are, samples, and then who are you going to research. Finally, if you have the time, specify the methodologies that you would want to apply based upon John's lecture and Sam's lecture, and then let's talk about it.

**From the Floor:** I know I've heard this concept before, but I'm not sure I quite understand how the annuity works with this arrangement.

**Mr. Horbatt:** You want to buy a house for \$100,000. What you do is you buy an annuity for \$5,000. The house and the annuity secure, say, a \$100,000 mortgage. For 30 years, you have just \$100,000 debt. You're paying interest on it every year, not principal. You wanted your annuity. In lieu of mortgage principal payments, you're making a payment to the insurance company that includes a premium for life insurance, level term life, and a contribution to a flexible premium-deferred annuity (FPDA).

You could leverage the contributions to the FPDA. You could let the individual invest in the stock market, perhaps even the Hong Kong stock market, but at the end of the 30 years, basically the intention is that the mortgage money would be there to repay the principal.

**Mr. Ray:** You're essentially paying tax-relieved fixed interest payments on a nondefining principal sum, and you have a declining death benefit, which is the gap between the accrued value of the annuity and the outstanding principal advanced, and you would have the annuity premium which in the original case was a fixed annuity that matured simultaneously with the due date on the mortgage to pay out the principal sum. Those annuity payments are with after-tax dollars.

Mr. Horbatt: Yes.

Mr. Ray: They're after-tax dollars, but the accumulation to maturity is tax-deferred.

**Mr. Horbatt:** Mind you, in the U.K. when this product was developed, they had, 95% marginal tax rates.

**Mr. Parsons:** The tax climate in the U.K. was extremely favorable to this.

**Mr. Horbatt:** For purposes of this discussion, let's assume that tax wise the product works. Let's assume that the mechanics work, and focus on trying to decide whether our consumers would buy it.

**Mr. Ray:** Part of what we're proposing here is a template that is known to be successful but has worked in another environment. The important thing in the exercise is, we hope, to lead you through a process of adapting that product to the U.S. market and looking at what I would need to know to make those decisions in my adaptation of it.

The research that supported the original problem said if you have a roof over your heads, death benefit, and a savings plan all rolled in together, you have the three biggest drivers of peoples economic activity.

**Mr. Horbatt:** Look at typical U.S. default experience. It's very low in the period immediately following the origination of the mortgage. After two years or so, it starts going up, it peaks at some point thereafter, maybe five years, and then starts declining.

**Mr. Ray:** If you look at the period during which the product has been offered, the U.K. has had much more volatile cyclical real estate movement than the U.S. market.

**Mr. Horbatt:** Going back to that example, during the first 10 years of a mortgage, the principal balance hasn't substantially changed. Whether it's fixed a traditional U.S. mortgage, the net amount at risk for the financial institution is about the same.

Mr. Parsons: Some of the questions, some of the issues coming out were interesting inasmuch as culturally organizations tend to focus in on questions such as Is it profitable, etc. Let's look at the basic pieces here. Let's make some assumptions that we could make it work financially. The core issue really becomes will consumers buy this? Are they going to take it? This is bundling of a savings product, a retirement-savings-oriented product, along with one of the most fundamental pieces, the mortgage component, with a little bit of credit life thrown in as well. And really consumer acceptance is going to be the key component to this.

We started by making some very major assumptions. We're in the same situation as you are. This is uncharted territory. Our first assumption is that we're dealing with a first mortgage product, because there are many other mortgage products too. In other words, we're dealing with the core of the market, the first mortgage. Second, the point that we wanted to look at is the three kinds of mortgage buyers. There's your first-time buyer, the first home, there's your trade-up buyer and there's your

refinance three different sets are briefly represented. I don't know where this product falls yet, but I want to put an assumption there that since I don't know, I'm going to look at all three. Third, the distribution is obviously key, and because at U.S. South I already have some relationships with the bank channels, I'm going to make an assumption at this point that I'm going to distribute it through the banks so that I can investigate this. This is step one, stand back. What do I want to look at? Consumer acceptance. Let's make some assumptions.

Step one of the research approach, was going through some of the things that perhaps you were going to do in detail here, which is let's get a set of product specifications that are representative, so that we have a core product to start to work at to investigate here. Step two, because this is a new product, I'm going to have to go and throw it at consumers and see how they react. I don't know which attributes they're going to think are most important, least important, where they're going to focus. One of my major concerns here is ease of understanding this product, and consequently I want to see how that plays. Step one from a market research point of view in our view is to look at some consumer qualitative research, putting the product in front of consumers and seeing what they say about it.

Distribution channel—and this also relates to some of the questions to do with your distribution—is very important in this product also. Because this is a complex product, this isn't something you can buy over the phone or through QVC on the TV, the interaction between the rep and the consumer is important. I'm going to do a little bit of mortgage rep qualitative research as well. There I'm looking for two things: one, a confirmation from the consumer of the stuff that I've got from the consumer, but I'm also going to get some hints as to how it plays within the distribution channel, and then I'm going to go to some consumer quantitative research to see whether there really is a big enough market out there.

Here are the preparation steps that we saw. First, not dealing with pricing now, dealing with cost base of the mortgage, the annuity, and the credit life components. How does that set of components form a cost basis, how can I push them together? One of the hypotheses in the back of my mind at this point is the basis of comparison of the product will be on the interest rate of the mortgage component. As a bundled product, I get to play that game in different ways than other people are playing it, because I can load my pricing on to something else. I may have a major advantage in terms of competing against the key parameters that people see. What I want to do first is look at my cost basis. Then I want to look at how I could price this thing, how I could move those components around so that I get some pricing structures that are not so far out but potentially favor me, particularly on that parameter. Third, I want to look at some desk research in consumer preferences. My bank partner probably has some things, others I can get out of the bank counsel

and so forth. I want to look at what the behaviors are, how are people buying these products, what are their preferences, how much has gone to variable, how much is fixed rate. All the components I can easily find out through desk research and through talking to my bank partner.

There are some other very major ones here. Looking at the personal tax implications, one of the aspects we have here is a tax-based product. One of the components is the fact that the typical mortgage actually is repaid after seven years, so we need to look at all the tax consequences. We can get imaginative on how to deal with that. That doesn't rule out the product. It may actually be a loyalty hook, because then they'll get their next mortgage from us too. There's a whole set of tax consequences to look at. We want to look at ancillary products, because one of the things that's really increased in the mortgage market is the home equity loan. How can we build in a home equity component to this product in the grand scheme of things that may also be an advantage? We may be able to build a product line here, not just a single product, which answers a variety of needs and has even stronger appeal. Third, we want to look at some aspects of flexibility, particularly back into the annuity product. If we look at annuities, variable annuities have come on very strong. Are there things we can do to hook into those existing trends of what's going on in annuities, so that we bridge in the packaging, manage to get those hooks set in there as well. That would be a powerful product. Let's give ourselves X thousand. Most of these costs are internal costs at this point, and let's give ourselves approximately six weeks.

Next, is consumer qualitative research viable, are these guys buying it, and what are the key differentiating points that they see between this new product and the conventional set. The way we'll do that is to recruit some focus groups, so we want to make sure to recruit urban, suburban, small town, we want to get some first mortgage, we want to get the variety of those consumer types, then lock them in a room. What we want to do next is bring a script up. The other major screener that we're suggesting here would be that these are people who have bought mortgages in the last 3–12 months, not too close, because otherwise they're still right on top of their decision: give them a little time, but recent enough that they remember the whole decision process. We're going to have them talk about how they made the decision to buy the mortgage that they did buy. That's going to be good information for us, because that's basically the set of decision making that we're going to go up against.

The second thing we're going to do is to prepare a marketing piece for this new product so that it's fairly easy to explain. Our challenge here is to fully explain as a rep would over the desk, this product within five minutes. Second, leave them with a key-point card in front of them. Third, we're going to have them discuss why they

might or might not go for this product, how that fits into their decision. And we're just going to observe. We're asking as many open questions as possible, probing for our attributes. The cost on that approximately for a typical focus group of a dozen participants is about \$12,000: the room, the recruiting, and everything else.

Now, the mortgage rep confirms all that stuff about the consumer, and gets to the requirements for distribution effectiveness. In other words, what does this product do to the way the rep is going to interact now on the complete product range that they're going to offer? Again, this is purely exploratory. All I'm looking for is if it is feasible at this point, because my key point is Does the consumer accept it? We can figure out a way that we can get it into that channel properly if we know that that consumer is going to accept it. It's a focus group, I want a mix of institutions here, I don't want just my bank partner in there, and I want them to talk about how they represent today, show them the product, and ask them how they would interact: What would the consumer think about it?, What could they think about improving? and What would be the aspects that would be key to them about how to represent this product?

We've spent about six weeks or so just learning, letting that information flow in and letting it flow in directly from the people who are ultimately going to use this product. Then into consumer quantitative research. Now we're specifying our sample once again, and the key piece that we want to see is the discreet choice, the tradeoff analysis. Will you buy this one, or would you buy that one, the conventional product? That's the key module in this particular piece of research. What are the key variables? Our suggestion would be these: the mortgage interest rate—that's the most visible—fees, the amount advanced, because our hypothesis on the first-time market may be there, but alternatively maybe it's a refinance product. I want to look at the conventional side as well. The whole structure of the annuity may play a major difference. One is what is the initial premium, so in other words, that affects my total cash down. There are various options that I could have here, and particularly if I looked at variable, I may be hooking into that megatrend of the market of the variable annuities.

I also want to look at brand. This goes back to the concept that we had before of market permission. Does a bank have permission to offer this product to the marketplace? Is this a credible product coming from a bank? Does this have to be a co-branded product between the bank and the insurance company? Is this an insurance company product? Who is entitled to offer this product to the market? That's something you have to look at very closely, because the credibility of this product and introduction has to tie in with that set of perameters. That's the key concept of the design of the discreet choice.

**Mr. Parsons:** All those would be valid concerns. But you have a more attractive product. It's a question of looking at those various factors. Sometimes you have more credit risk. What I'm primarily concerned about today is what the consumer wants, what he or she are most likely to accept. In some ways the fix is more easily conceived, and in other ways the megatrend of the annuity and the disposition of the assets of the annuity is such a large trend, that if they see this as their primary vehicle to savings, you bought yourself a really great customer in the process.

Once again, our overall piece is consumer acceptance as opposed to the fine aspects of design at this point. You can start to investigate those by having one or two varieties in there. In discreet choice, the more complex you make it, the larger the sample size and sometimes the worse the results. You have to keep it to a manageable number where people can really make a choice, which is what they're offered in the market place every day. They're offered five or six choices on a mortgage.

When you're doing the discreet choice, let's get some other information. Let's get the information on brand esteem, let's get the satisfaction with their current mortgage and investment products in particular, and let's get a bank of respondent data, their inventory—that is, what they have today in all these various categories—the basic demographics, the distribution preferences, where would they rather buy their mortgage products, and their attitudes toward financial products in general, their risk orientation, and so on. When you're doing complex research of this type, together with those additional fields there's very little incremental cost. Sample size is approximately three to five hundred respondents. The reason for that is you have a critical cell size at about 40 to 50. Below that, you lose your ability to really rely on the results. Phone would be the cheapest method here. Good screening and questionnaire: approximately \$90,000. The process takes a long time on questionnaires, approximately 12 weeks.

The response basically is Yes, we think this is a good idea, assuming the calculations work out, but we have no reason to suppose today that they won't. What we'll do in preparation is to make sure it works out on a cost basis, to make sure there's no immediate visible hurdle. We'll then go into that research because that's really the key, and then at that point we'll sit down and prepare a launch plan, but not until then. That's the thing, and overall it would come to somewhere around four to five months of investigation, and it would be manageable across the plan fairly easily. That's our sample response to this issue.