EMERGING ENERGY MARKETS: METHODS AND STRATEGIES FOR CUSTOMER RETENTION THROUGH PRODUCTION IDENTIFICATION

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Introduction/Overview

The changing environment in the delivery of energy products and services poses both challenges and opportunities for marketing in an industry that has been unaccustomed to the dynamic forces of competition. Decisions facing utilities in the climate of deregulation are no longer confined to the traditional expectations of the customer's relationship with energy use. Rather, they are broader in nature and scope and more complex in their structure than ever before; moreover, they are significant in their implications for survival into the 21st Century.

This paper aims to assist marketers confronting this situation by addressing the methods and strategies of product identification on the premise that attention to this aspect--the first step in a marketing strategy--will lead to customer retention and consequently, long-term viability of the company. We draw from consumer marketing theory and practice as well as market evaluation experience to present and discuss the techniques that will assist utilities in assessing new options and directions at the retail level.

The Concept Underlying a Marketing Strategy

The individuals in an organization who are responsible for designing and implementing a marketing strategy must be able to relate what they do to an overall concept that guides the decisions they make and the activities they engage in--from the product idea stage to implementation and evaluation. A framework, like the corporate mission, identifies the *raison d'etre* for the contribution of each participant's function toward a common objective. It facilitates the creative and planning processes as well as effective communication in carrying out the marketing strategy.

Few marketing experts have been able to surpass the message first articulated by Theodore Levitt (1960) in capturing what he identifies as the *marketing concept* where the focus of attention is on the needs of the buyer. This concept is in direct contrast to the selling concept where the seller becomes preoccupied with the product. According to Levitt, companies that succumb to the pitfall of ignoring the needs of the buyer are guilty of "marketing myopia" in failing to recognize that without buyers, the product--no matter how well conceived--has little foundation for a market.

In the case of energy services, adopting the marketing concept is not easy to accomplish, as consumer needs typically are not expressed to suppliers in the regular course of business. As is well understood in energy service circles, the "product" is one that is taken for granted, often not perceived as a product at all until something interferes with its delivery, and usually is consumed in conjunction with another product that the buyer relates directly to the satisfaction derived.

Yet energy consumption is not unlike many other market transactions where the product purchased is seldom the product needed by the buyer. As Lancaster (1971) observed, consumers purchase a product *attribute*, not the product *per se*. For example, notwithstanding the purchase of an automobile as a status symbol by some consumers, it is not the product itself but the attribute of transportation that they are buying in most cases. This situation applies to the energy services market whether buyers represent the residential, commercial or industrial sectors. Customers do not have a need for energy alone; rather, they have a need that requires the consumption of energy to satisfy.

Understanding The Buyer's Needs

Thomas Edison was among the first to recognize that power providers need not sell energy, but can sell the service that delivers satisfaction to the customer. Edison realized that energy must satisfy a need and that few customers need electrons or hydrocarbons; instead they need what can be obtained through the use of electrons or hydrocarbons. This recognition led to utility companies becoming retail centers in many market areas for major household appliances and lighting, heating and cooling equipment, offering services to residential customers on their proper use and care. Although these retail departments were phased out largely in response to criticism that they encouraged energy consumption during the oil embargoes of the 1970's, they nonetheless maintained a customer focus that has new meaning in the restructured markets anticipated for the 21st Century. This new market is broader, building a foundation for total energy use management.

To illustrate the point that utilities face a challenge for a renewed customer focus, we present three different customer service needs that were identified during research conducted by one of the authors in 1996 for the commercial and industrial markets in the Midwest. (For confidentiality reasons the company, the strength of the findings and the response to the findings are excluded from this paper.)

Reliable, Dependable Field Work

Several customers identified a strong need for a rapid response to their requests for service connections. In several cases the customers identified situations where service was ordered but not delivered when needed. One customer identified the utility as one of the biggest obstacles in meeting a target opening date for a new facility. In this case the service needed by the customer was an on-time start up for their new production process. The utility's field staff saw the product as a new connection and the work order was queued with other work orders. In the end, the customer had to complain to get the service connected after the time the facility was scheduled to begin processing. In this case the provider of the product did not understand or act upon the needs of the customer for an on-time delivery. The product the customer wanted was not electricity, it was an on-time opening of their new production facility. What the field crews saw was another work order. During the interview the customer said he wanted to be able to pick up the phone and see the crew on-site shortly after the call.

Uninterrupted Power

An additional product of sizable demand within a segment of the customers surveyed is an uninterrupted power supply. In a great many cases customers reported equipment damage, data loss, programming costs, and unnecessary down-time due to interrupted supply. One segment reported an average loss of over $6,000 per incident with members of other segments reporting average losses from $3,000 to $35,000 per outage. These customers do not want their power interrupted at any time for any reason. One very large customer installed back-up generation capability at each of its locations to assure an uninterrupted power supply.

What is surprising about this case is that the customer first approached the utility for the back-up power, but was told it was not a service they could obtain; the utility cited regulations as the inhibiting factor. In this case, in the eyes of the utility, the regulatory structure interfered with customer satisfaction. The public service commission did not fully agree with this perspective. In the end, the customer purchased diesel powered back-up systems from an independent power provider allowing the independent provider to fill the customer's need.

High Quality Power

A number of customers identified low-quality or "off-spec" power as problem for sensitive equipment. In these cases the product desired is not electricity, but reliable equipment performance that can only be filled by high-quality power.

Implications for Product Identification

The marketing concept has implications that are of special importance to energy services entering the era of retail competition where product identification is concerned. In this section we discuss the approach to product identification and its integration with buyers' market behavior.

Approaching Product Identification

Unprofitable products and services can severely harm a business, especially when substantial product development or start-up costs are involved or when there are substantial risks associated with the collapse of trade ally relationships and contracts. For these reasons companies must approach the product selection process methodically and with care. Almost without exception the product selection process should be well grounded in information that is both current and accurate, and specific with regard to the product selection and market assessment process. Although good product ideas can come from many different sources, all product ideas must be researched and tested prior to placing the product in the market.

As utilities fend for themselves in a more competitive market, all products become fair game just as energy services become fair game for other firms. This has the effect of dissolving energy products and services into the product mix of potentially hundreds of companies that elect to enter this market. The tendency for generation facilities to become organizationally separated from the customer opens the door for companies to provide a wide range of products by bundling product offerings to fill a host of customer needs, one or more of which can be energy supply.

The fact that utilities have very poor name recognition outside their service territory provides a market advantage to firms that enjoy national name recognition. This is the reason why at least one large energy provider is advertising nation-wide, even before they can sell a single kilowatt hour in many of the locations targeted in their campaign. It is also the reason why at least two control equipment manufacturers are now working on whole house/business control systems to include communication services and energy controls at the end-use appliance level. Just as Microsoft is considering products that eliminate telephone and cable lines while providing complete communications services world-wide, utility companies can begin to look at bundling more than energy supply services to meet customer needs.

For example, one market researcher is projecting there will be no need for homeowners to purchase, own or maintain their heating and cooling systems, or their other major appliances. The customer will subscribe to a mix of equipment and operational and maintenance conditions to meet their individual needs. In this scenario the service provider installs, maintains and manages all systems associated with the contract. What this researcher is projecting is that instead of purchasing power and independently supplying and managing their own appliances, the customer will subscribe to a group of services and the company will install the appropriate appliance mix, provide power and maintenance services as a single priced package.

Buyers' Market Behavior

Competitive markets are characterized by firms that are informed about not only the buyer's needs but also the market price of their products. This means being able to translate different consumer needs into product demand--identifying consumers' willingness and ability to pay a certain price--and targeting the market for products accordingly. With the "market" no longer defined by the geographical boundaries of specified service areas, traditional assumptions about consumers' market behavior are unreliable. The situation opens up a "new world" of potential for incorporating functions in the company that are devoted exclusively to understanding not only what motivates consumers' energy and energy-related purchases but also how consumers alter their consumption in response to external influences such as price and changes in preferences.

Accordingly, energy service providers are challenged to think through ways of identifying market behavior of the buyers of their products at every opportunity. While this can be accomplished through a snapshot approach by conducting market research (discussed later in this paper), mechanisms that are ongoing in nature also can be exploited for this purpose, enabling continual monitoring for the identification of buyers' needs.

For example, in advertising or other information made available to prospective customers, energy service companies can devise approaches that encourage direct contact with company representatives who are trained to be keyed to the buyer. Engaging in sophisticated conversation, avoiding standard sales dialogue is a technique successfully employed in the financial services arena to gain insights into how customers perceive the value of various types of products being offered. Designing a marketing strategy that encourages occasions for point-of-purchase interaction with customers is another mechanism for enhancing the company's ability to relate to customer needs.

The key to adding products or services to the market is to understand customers' needs and wants, and to develop products or bundles of products that are in demand, or for which demand can be created, and offer those services in a profitable way. These product or service bundles can then be offered to the customer in ways that attract and keep customers.

Market and Product Assessment Strategies

In general, there are two ways to increase sales: to sell more product(s) (new or current) or find new markets in which to offer products. However, they are not mutually exclusive. A market assessment can reveal both product needs and new markets in which to place products. In a publication soon to be released by the Association of Energy Service Professionals we revealed the results of a market study that identified the existence of a new market and, at the same time, identified the need for products within that market. In this example customers can be attracted through both new markets and new products.

The Tools to Pick and Choose

Identifying which products to offer and under what conditions to market them is a task that market researchers and market/product analysts have accomplished for years. These include customer surveys, interviews, focus groups, Delhi studies, trialability studies, customer research panels, product use examinations, product demonstrations, and other common market research methods. Many utilities are strengthening their in-house expertise in these areas in an effort to meet the challenges of a competitive market. Others are placing additional reliance on firms that specialize in market and product research. Regardless of how an organization elects to have the research conducted, it requires an integrated approach. It makes little sense to conduct a product demand study without including a price and market conditions analysis under which the demand will occur.

However, the study can also include an assessment of the strength of the firm(s) offering the product in the eyes of the targeted customer segments. For example, in one study we concluded a company wanting to offer a new service to their commercial customers could not successfully enter that market without first building customer support. Years of negative publicity, rate increases and the perception of poor service provided a substantial barrier for marketing additional services. At the same time the customers of a different company, in a similar part of the country, rated their power provider as a strong service provider who could immediately place a new product in the market if they elected to do so. Both utilities served similar customer types, and customer demand for the product was similar across both territories. However, in one location the average customer would purchase the product from the utility while in the other the customer would not. A product demand analysis alone would not have caught the difference between the two utilities regarding the perception barrier. That is, while similar numbers of customers wanted the product, the reputation of the suppliers significantly influenced the customer's interest.

An integrated approach to product selection is important and permits a reduction in the risks associated with selecting a specific product or product mix that will attract and keep customers. An example of the numerous issues that can be examined in a market assessment project include:

- Demographics, firmographics, and/or lifestyle issues,
- Product-specific segmentation identifiers,
- Short-term and long-term product demand,
- Product performance needs and expectations,
- Competitive providers and their share of the market,
- Satisfaction or expected satisfaction with the product and the potential providers,
- On-going or follow-up support or service needs,

- Customer product and purchase decision making,
- Price sensitivity,
- Product diffusion or transformation of the market,
- Brand or supplier loyalty, and
- Service or product switching factors and their importance.

An example of the research questions upon which a company might focus their attention include:

- What are the characteristics of customers who will purchase this product and how are these expected to change in the future?
- What are the current and projected product penetration rates?
- How will price affect the purchase rate?
- When and how do customers decide to obtain this product? Who do they obtain the product from now?
- What does the customer want or need from this product and what service is it providing?
- How are customers meeting the needs for this service now?
- Are there other products or services that affect the need for this product and how do they affect product demand?
- What will it take to get the customer to buy from a specific supplier?
- How intensively and extensively will we need to market this product?
- What are the important customer expectations to target in product marketing?
- What methods should we consider to successfully market the product?
- Which customers should we approach first, second, third? How will market networks react to our product and how will the reaction impact product diffusion?
- How should we structure product price and what changes or conditions will affect price in the future?
- What are the benefits and barriers to buying from us versus their current or potential supplier?

An example of the type of management, product support and logistical questions the service provider will want to examine prior to product selection and introduction include:

- What will it cost us to provide this product?
- What are our profit targets for this product in view of market conditions?
- What systems will need to be set up to handle this product and what will they cost?
- What expertise do we need, how much will it cost, how will we get it?
- How will product acquisition and distribution be handled? How will acquisition and distribution be linked to marketing?
- What customer, supply, or technology problems can we expect and what will they cost us to resolve?
- Who are the trade allies?
- What are the their respective roles?
- Where can we strengthen their business lines?
- Who are our trade foes?
- How will we handle supply problems?
- How will current providers react to our entry into this market?
- What can we expect them to do?
- How will we know what they are doing and how can we track this?
- What price flexibility do our competitors have?

These sets of questions represent a sample of the issues that can be addressed through an integrated product selection process. They also demonstrate the types of considerations that might go into the process. As one can guess, a challenge to the research process is to balance the product selection process with the available research dollars to support a product decision. For this reason firms often integrate their product research into customer segments or technology categories so that a product selection process will examine several product ideas at the same time. This grouping of product research acts to maximize the cost-effectiveness of the research by providing decision making information on several products at the same time.

Product Research Tools

Market researchers can use several tools to identify and select products to offer as part of their product mix, examining both the demand and supply sides of the market.

Demand Side

Focusing on the customer, these tools include the use of concept or product test panels, Delphi processes, focus groups, customer surveys and interviews, and the other tools mentioned earlier in this paper. These systems center around one of two general research methodologies and include the following:

- The placement of products or product ideas into a research setting to test the receptiveness of the customer to the product

- Conducting research to identify product or service wants, needs or expectations from which to design or offer a product or product package.

If the product under consideration is a new product the research can include a product diffusion model that examines the expected rate of penetration through the market. If market transformation goals play a role in the research, the diffusion model can be coupled with production-side research to both determine a market transformation baseline and to measure market transformation gains.

Supply Side

If we are focusing on the supply side research, analytical tools include supply and distribution studies, comparative product supply investigations, competitive product structures and resistance studies, corporate linkage and financial ability analysis, and competition and technology trends studies, among others.

Saturated, Unsaturated, and Declining Markets

In choosing products to offer, it is important to examine the product markets being considered. Offering a product in a unsaturated market has much more potential for success than breaking into a saturated or declining market. Identifying products for placement in a saturated market will be viewed by many firms in the market as a declaration of war against their survival in that market. The identification of products for an unsaturated or growth market will be met with reviews of positioning and product choice options to obtain room to successfully move and prosper in the market.

A saturated market is a market in which sales of a product or service are flat or change at a relatively slow pace. Sales in saturated or semi-saturated markets typically experience growth rates from 0 to 7 percent per year and are usually serviced by multiple suppliers of multiple products targeting the same customers. In general, entering a saturated market means you must take sales away from someone else. This poses significant challenges to a firm wanting to enter a product into a saturated market because of brand recognition and established product production and distribution systems. In saturated markets customers are usually aware of who supplies products, what they should pay for the product and where they can obtain the product. A company wanting to enter a saturated market must be ready to overcome these market barriers.

Unsaturated markets are often characterized as growth markets where sales increase each year and there is room for new suppliers of products, with each supplier capable of achieving a profit. The personal computer industry experienced an unsaturated or growth market from 1975 to 1990. The cellular telephone market is another example. In an unsaturated market growth can be strong enough that many suppliers entering the market experience growth. Likewise, unsaturated markets are easier to enter because of the opportunity for growth, because unsaturated markets are less protected and production and distribution systems are less entrenched.

A declining market is one in which sales decrease each year. Firms should not offer products for a declining market unless the product can rapidly be recognized in the market, can take over a large portion of existing sales, gain rapid profits, and can move out of the market without lingering risks.

Developing New Products

Another consideration for selecting products is to identify those that are new to the market, or will shortly be coming to the market. The marketing objective is to be among the first to offer them, entering the market before there is significant competition. This can be accomplished through different approaches, including original product development, or as a joint venture with private or public partners or both, recognizing that risks are associated with any new product endeavor.

Original product development entails staffing an in-house unit for this purpose or contracting product development responsibilities leading ultimately to a patent for the product. New product ideas can originate from internal or external response, feedback, or technology development systems, focusing on specific customer needs to supplement existing product lines, and capitalizing on a base of consumer loyalty.

Joint ventures involve entering into product development agreements with other firm(s) or individual(s) that are either developing their own products or engaged in technology development or technology investment that have and maintain strong links to product developers and developing markets. Energy service companies can gain entry into new technology markets through such relationships.

Global markets represent another avenue for joint ventures. Many foreign producers are anxious to enter U.S. markets with new products, but see establishing distribution and marketing structures as a barrier, or are hampered by not having established product support systems appropriate for their product line. These businesses need marketing partners with established customer contacts to gain a foothold in the US marketplace.

Public and private partnerships may be formed to implement new product lines and services. The U.S. Department of Energy's Energy Related Inventions Program (ERIP) is one such example. This program assists small businesses and individuals by conducting market assessments of energy related products that survive a rigorous technology assessment. The ERIP program can put an energy service company in contact with inventors who design and develop new products for energy markets. Companies that exclude these programs and service organizations from their product selection analysis miss the opportunity to develop and market new products with significant market potential and little product development costs.

Associated Risks

The development and marketing of new technologies does not come without risks, not the least of which is the uncertainty of product development time frames. It is not unusual for a product to take years to be developed, refined, tested, and made ready for a customer. In other cases the product may not survive to a commercial stage because of technical problems associated with product manufacturing, or it might not survive past the prototype stage because product manufacturing costs exceed the market value of the product. Investors in new technologies will want to carefully assess the individual technology being examined, the resource requirements needed to bring the technology to market and the value of the product in the market. The economic risks involved with product development and marketing are often substantial and may not produce profits for years, if at all. These must be weighed against the profit potential associated with marketing a product without substantial competition.

Profits

The profit associated with any given product is the goal of product development and should always be a key factor for determining the appropriateness of that product. Fundamental profit focused questions include:

- Will the product provide profits or support the profits of the company through another mechanism?
- If so, how, and when will profits be achieved, and what will be the level of profit compared to all other investment potentials?

Identifying products to offer in a competitive world, in the end, is a financial decision that must provide health to the company. This can be a long-term profit strategy or, more likely, a short term strategy to satisfy stockholders. However, because the introduction of most products into the marketplace require an up-front investment, it is often necessary to establish both short and long-term profit goals.

Confidentiality

Product and market research are typically conducted in a confidential environment where the introduction of the product to the market is the first official public exposure of the product offering. Unfortunately, competitors are often made aware of product development activities long before the product is officially introduced. This is because the very process of investigating the market structure and function, conducting the product demand analysis, and arranging for the production, distribution and maintenance of the product exposes the product plans to the competition long before the product actually reaches the market.

Firms that are quick on their feet can take advantage of this situation by offering counter competitive products, bolstering their marketing activities, or building barriers to the introduction of the product making it harder for a competitor to enter a market or survive in that market once in. In one case in 1996 we saw this competitive spirit displayed on the legislative floor through requests for a law to bar a utility from entering a specific market. Competitors saw the utility's relationship with their customers and were fearful of their ability to rapidly enter the already competitive market. For these reasons, among others, there is a significant need for confidentiality in the market research and product development activities.

Customer Retention Strategies

While much of this paper has focused on customer needs and product and market assessment considerations, we return to the point that customer retention will result if the marketing concept is adhered to throughout the process. In the field of market and product research it is generally recognized that the best opportunities for future sales is to the satisfied customer. The strategies for retaining a customer base embrace the follow-through research, monitoring, and customer relations activities that are necessary once a product has been identified as appropriate for a particular market. They include examining the delivery, servicing, and feedback techniques that enable the company to continue as the customer's source for the product, thereby achieving repeat business and sustained profits. The specific, in-place mechanisms that must be operational and effective for various types of products and services are

- Competent personnel
- Accurate, reliable information in advertising and other communication channels
- A responsive customer feedback system that is integrated with the product refinement/ development processes

For utility companies that previously had or continue to implement demand-side management (DSM) programs, some in-house or contracted expertise in conducting these activities may already be in place. The major difference between DSM programs and actual product marketing in a competitive environment is that DSM objectives addressed what its name implies--a focus on efficient end-use of the product (energy)--whereas consumer marketing objectives address achieving customer satisfaction which may include efficiency along with other desired product attributes. This distinction requires a re-thinking of the types of activities that supported DSM with a focus on longer term institutionalization of marketing roles and responsibilities.

For other activities such as consumer relations that functioned in a regulated environment with attention to specific matters dealing with new connections, complaints, billing inquiries, and the like, a major reorientation may be in order. Adopting a broader consumer affairs/in-house consumer "advocacy" function with linkages to product development, marketing, and indeed, upper management, makes the company better positioned in a proactive (vs. reactive) stance. The ability to respond quickly to consumer needs articulated through the ubiquitous toll-free telephone line, for example, can forestall the threat of creeping re-regulation that often accompanies the initial shakedown period in deregulated industries.

Contemporary marketing literature contains as much insight into customer retention as it does into customer identification. Journals such as *Customer Relationship Management,* and *Customer Services Management* focus on techniques for operationalizing effective consumer relations strategies. Attention to changing demographics makes this area of a company's function one that is an important resource for pre-market planning as well as post-market assessment.

Conclusion

Investors and investment analysts are responding rapidly to the changing energy markets with stock value corrections occurring before the conditions for the correction become a reality in the market place. In addition, it appears that state regulatory environments are becoming more influenced by Congress as the pace of national deregulation picks up both speed and support. Utilities will find their territories disappearing around them as Congress synchronizes the pace of state controlled deregulation.

Meeting deregulation with a strong product line and a strategically targeted marketing plans will provide an advantage to firms intending to compete in what appears to be not only a competitive market but also a combative market. Suppliers of product portfolios that meet the customer's needs will hold an advantage over firms looking to continue to sell power and associated products and services to their customers. We hope this paper has stimulated thinking about the importance of an integrated approach to identifying products for a competitive market and the research that needs to be conducted to help assure the success of product introductions. In the end, the best method for obtaining and keeping customers is to offer products and services customers want at a competitive but profitable price. Product and market research provides the best foundation for achieving these goals.

References

Lancaster, Kelvin. 1971. *Consumer Demand: A New Approach.* New York: Columbia University Press.

Levitt, Theodore. 1960 (July-August). "Marketing Myopia," *Harvard Business Review,* pp. 45-56.