

# Expanding the Customer Service Toolkit: Mixing Electrotechnologies with Strategic Conservation

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In the evolving electric utility industry, where today one generally finds integrated utilities, in the near future it is expected that there will be gencos, transcos, distcos, and retailcos. With the structure of this new environment still undefined, and operating with an uncertain timetable, determining the priorities and focus for an effective marketing effort is difficult. The future retailcos do not know how much margin will be in the business of retailing electrons, and anticipate that the ancillary services may well prove to be more profitable than retailing electricity. As the search for profitable products and services goes on (we have yet to find a “call waiting” in this industry) flexible interim approaches are required.

Recent electric utilities’ marketing efforts have tended to operate in one of three utility-needs oriented marketing paradigms. These have involved strategic conservation, load management for operating cost minimization, and load growth for revenue maximization. Utilities have tended to operate in only one paradigm at a time. This single paradigm approach has been somewhat functional in the regulated environment, but as competitive pressures advance, a new paradigm is needed, where the utility or retailco focuses on its customers’ needs instead of just its own. By focusing on customer needs, the current integrated utility goal of customer retention will be effectively addressed. This paper deals with the issues of paradigms, discusses issues relating to the delivery of objectives through the sales representatives, and outlines a sales and accounting framework. The challenge of shifting paradigms will stretch the marketing skills of most utilities, but it will pave the road to the competitive future.

## INTRODUCTION

What most industries have called sales, the utility industry has referred to as “load.” In the last decade there has come a clear recognition that this “load” is actually sales to a large array of customers. These customers have differing needs, and if the utilities do not include the customers’ needs in their planning, in the new world of competition, the customers may exercise their choice of where to buy, and buy elsewhere.

Utilities have invested huge amounts of financial and human resources in what has been generally referred to as demand-side management (DSM) (Hirst 1995). These efforts, which focussed most often on strategic conservation, have provided and continue to provide excellent opportunities for utility representatives to make contact with utility customers—in positive situations. This paper focuses on the first steps in the evolution from marketing approaches (which were “just conservation” or “just load growth”) to customer contact initiatives which focus on customer needs. This will be a significant paradigm shift. “And when a paradigm (1) shifts, everyone goes back to zero” (Barker 1989).

We have seen tremendous change in the electric utility industry in the last few years. Future energy costs are plummeting as cheap natural gas combines with new generation techno-

logies to re-write the economies of scale in our industry. We are emerging from an integrated resource planning (IRP) approach that evolved when the marginal costs of production were expected to be higher than electricity marginal rates, thus providing incorrect market signals; into a period when future costs will be low enough to “strand” imbedded assets. This structural shift in our industry has provided momentum for changes of many kinds.

Electric utilities’ marketing efforts have tended to operate in one of three utility-needs oriented marketing paradigms. These have involved:

- (1) strategic conservation where indicated by the IRP process,
- (2) load management for operating cost minimization,
- (3) and load growth for revenue maximization.

Utilities have tended to operate in only one paradigm at a time. This single paradigm approach has been functional in the regulated environment, but it may not be comprehensive enough to meet the needs of a competitive environment.

People have difficulty noticing and recognising activities which are not a part of their current paradigm (Barker 1989). As a marketer, the author has spent five years with a large

public utility, and has invested much of that time trying to understand how marketing should benefit the utility. At B.C.Hydro, the third largest hydro-electric generator in North America, the IRP process led to a planning approach which clearly supported a strategic conservation paradigm, the first of the recent utility needs paradigms.

Other utilities in “cooling” climates have worked primarily in a load shifting paradigm, our second paradigm. Our Florida compatriots would only do load shifting if it didn’t save too much energy. The advantage with load shifting is that the utility gets to share the cost savings of avoiding the use of expensive thermal peaking energy with their customer. If the energy savings at non-peak times was not too large, a good business situation resulted where the utility could avoid very expensive peaking power costs (which were not recovered fully through rates), and the customer could reduce their demand charges, and often benefit from a reduced annual rate for energy.

The third paradigm involves the group of thirty to forty major utilities which did not get involved with what has been called DSM, but who focused on electrotechnologies and other types of load growth to increase the optimization of their assets, and to support ongoing increases in the generation asset base.

What is wrong with this picture of three separate marketing paradigms?

## **BRINGING STRATEGIES INTO FOCUS**

In all three of the above business or marketing approaches, the utilities were focused exclusively on their company needs, not the needs of customers. In many situations the utilities’ needs were passed on to them by regulators, and were to some extent social needs of the time, but the focus was primarily on the needs of the utility. This focus by utilities on almost always just one of the three paradigms, all of which ignored the customers, has led to challenges for many organizations as they face into the impending evolution into a competitive environment. As competitive pressures advance, a new paradigm is needed, where the integrated utility focuses on its customers’ needs instead of just its own. By focusing on customer needs, the utility goal of customer retention will be effectively addressed, and the first step towards positioning for a retailco will have been taken.

The integrated utility does not have to follow either strategic conservation, load management, or load growth—if it focuses on the customer. With a customer focus the utility marketing staff will do what makes sense, and deal with the

accounting later. Customer retention is the key today in an industry with low variable costs and high fixed costs. The estimate of extra sales through electrotechnologies, or the concern over some revenue loss with a large industrial customer as a result of energy efficiency work, are of minor significance compared to the devastating impact of losing a major customer from the grid. The investment in energy efficiency which some utilities have viewed as a burden, may now become a key strategic element in their plans for near term customer retention.

Many companies debate whether they should focus their marketing strategy on operational excellence, product leadership or customer intimacy. It is often suggested that one of these strategies should be dominant if a firm wants differentiation from its competitors. In a market where understanding of how the buyers will buy, and how the sellers will sell is not clear—operational excellence is hard to set as a current retailco strategy. With most utilities searching for viable, relevant products—product leadership is difficult to sell as a primary strategy. In these times of market change, customer intimacy is generally selected as the utilities’ strategy of choice—and they aim to become the customer’s preferred supplier or partner. Relationships are cultivated for loyalty over time. The interim strategy described in this paper focuses on customer information/support as a part of this intimacy strategy.

So the marketing focus shifts from being purely on utility needs to being on customer needs. The new paradigm positions the customer as the marketing function’s prime asset. Now while this may not sound particularly revolutionary, the communication and execution of this strategy needs to be carefully planned.

## **MARKETING REPRESENTATIVE ISSUES**

Marketing strategies have no chance to be successful if the implementors are not committed. One of the ongoing concerns held by utilities who had marketing representatives delivering conservation programs was that the representatives and some customers thought that it was rather strange for a company to be encouraging and often paying its customers to use less of its primary product. Due to the limited business backgrounds of many utility marketing staff, they were unable to point out that other industries operate with similar initiatives. This seriously affected the perceived credibility of the utility reps, and sometimes resulted in their being less effective than they could have been.

Other industries generally don’t finance the improvements, but many industries work with their customers to use their products more efficiently. Why would these companies want

to sell less? In the steel industry a significant amount of effort goes into helping the automotive companies find ways to use less steel. This is certainly not due to any concepts of “future avoided cost.” This approach is considered good customer relations, and a good strategy for keeping their firm as the number one steel supplier, and steel competitively positioned versus plastic and aluminum. And in the telecommunications industry, showing the customer that your telco can help them reduce operating costs is the major marketing strategy.

If the electric utility can put the customer first in its customer service activities, then the sales representatives can have understandable objectives. They should work with the customer to help them be more effective in how they use energy, both electric energy and fossil fuel sources. Obviously one gains more credibility with the customer by first recommending electrical energy efficiency improvements, and then later making recommendations relating to fuel switching. The key objective is to be working with the customers, to achieve their goals of reducing their operating or production costs.

Those utilities which have regulatory mandates to conserve electric energy will potentially have a significant advantage in that they have a regulated source of funding for customer retention initiatives. Whether this is funded via the future local distribution company (LDC) or through the current integrated utility structure, the customer service operation should not miss the opportunity to professionally deliver this type of initiative, with customer retention as the primary objective. For many utilities the funding for DSM programs may dwarf the funds available for discretionary investments in customer service and customer retention. However, if the first goal of a DSM program is customer retention, and it meets the cost effectiveness targets, then it will be a valuable program for the utility to offer.

## A MARKETING FRAMEWORK

Within the realm of ongoing, but evolving regulation, how does the integrated utility justify investment in both electro-technology promotion and traditional energy-efficiency efforts simultaneously. There are two basic approaches to this puzzling circumstance.

The first approach is to gain an understanding with the regulator that energy-efficiency investments are appropriate so long as they pass the agreed upon cost effectiveness tests. For many utilities this is a requirement of the IRP process. For example, the Chair of the British Columbia Utilities Commission suggested at the 3rd International DSM Conference in 1994 that there should be three basic requirements for an electrotechnology investment to be accepted as an appropriate, regulated business practice. First the customer

has to save money, second there has to be an environmental benefit, and third the utility as a whole must benefit (i.e. rates must be beneficially affected). The remaining caveat was that it would not be an appropriate investment of ratepayer resources if the product was already on a solid market footing. This last condition is really not different from the standard approach to energy-efficiency and market transformation.

DSM as it has been carried out over recent years is really only a justified expense if certain market barriers were in existence. Otherwise there was no need to have utilities invest ratepayer funds in market interference. Electrotechnology support is really no different. Similar barriers exist, but the utility will certainly set significantly lower investment limits, relevant to the changing focus. Table 1 below provides a comprehensive list of market barriers which can be addressed through customer service programs.

The investments in affecting markets through customer service marketing programs can be assessed within the following framework (Nelson, 1994). Removal of market barriers is a worthwhile objective (Chamberlin & Herman 1995) and clear understanding of the market barriers is required to design the appropriate initiative, to accurately estimate the take-up rate and load impact, to evaluate the initiative, and to justify the effort to regulatory or management groups. Within a customer services paradigm, with the customer first, the above framework is equally appropriate for conservation, load management or for growth.

The second approach is to understand the drivers of future costs. This approach to simultaneously investing in both

**Table 1. Market Barriers Framework**

Market barriers which can be addressed by customer service programs are:

1. Customer awareness of energy efficiency options.
2. Customers' technical ability to assess the options.
3. Existence of a viable infrastructure of trade allies.
4. Vendor or trade ally awareness of the efficiency options and their understanding of the technical issues.
5. Local or national product availability.
6. Customer transaction costs to assess/implement energy efficiency options.
7. The incremental capital cost of the efficient technology.

electrotechnologies and strategic conservation is quite relevant for integrated utilities who have the primary objective of minimizing rates, and is somewhat less relevant to all others. The concept here is that all customers and sales are different through time and space. With most of the integrated utility capital investment in the medium term in the T&D area, efforts to minimize long term rates for competitive purposes will focus on T&D investments rather than generation investments. To apply marketing to T&D issues is quite a challenge, but can be rationalized. In certain areas of one's service territory there is significant excess capacity available, allowing for incremental sales with little or no near-term infrastructure investment. In other areas, where substation/feeder expansion is needed in the near future, additional sales are not a good idea, and reduction of sales (targeted DSM) may lead to a beneficial change in investment cost or timing. The analogy of a trucking firm valuing additional sales into a region can be applied. If a half full truck is making deliveries in a region, it costs virtually nothing to ship in another 1/3 of a truckload. If however one wanted to ship an additional 2/3 of a truckload, the incremental cost would be that of an additional whole truck. If we had a trucking firm that had to service all customers in a region, but couldn't affect prices in the short term, then you'd have something resembling the distribution side of the current electric utility industry.

In certain areas at a given time, the integrated utility would gain by selling more product if market demand permitted. In other areas, if by selling less it could affect the timing of capital investment in infrastructure, then selling less may be the best approach if total cost minimization was the goal. The more interesting issue is that not only do you have different priorities in different areas, but over time your priorities for each area will change as the customer base and the infrastructure change. This marketing framework focuses on only some of the issues, but should provide a solid logic for regulatory review of the important area of customer retention efforts.

## SALES AND ACCOUNTING FRAMEWORK

When it becomes apparent that a customer service focus is a realistic basis for the company's operating paradigm, the accountants will likely raise some concerns. In some jurisdictions investments for revenue increases can be capitalized with a short write-off period, in others they are expensed, and possibly in some they are an expense outside of the regulatory area. Investments for strategic conservation and load management may be viewed as a capital investment and depreciated over terms up to ten years, and in other areas these investments may be expensed. The same objectives that are developed with the marketing team can be used to bring

order to the harried accountants and sales representatives. At B.C.Hydro a simple, measurable approach was developed, which is referred to as the fertilizer formula.

## 200–100–10

The above notation looks like a ratio of effective chemicals which you would see on a bag of lawn fertilizer, but it can really be the central feature of implementing a marketing strategy. In the case of a utility which has operated in an energy conservation paradigm, the formula would represent several key objectives:

- 200 GW.h of incremental energy conservation in the next fiscal year.
- 100% customer retention in the next fiscal year.
- \$10,000,000 of contribution margin from new products or services in the next fiscal year.

In practice, by satisfying the first and third objectives, the utility should be a good ways towards satisfying the second. The formula can be adjusted to handle MW reductions for capacity constrained utilities, and can be further adjusted for utilities which need to build load by having the first objective stand for load growth. The value of the fertilizer formula is that it provides a key to operationalizing and accounting for a strategy which aims at customer service and customer retention, and yet is simple enough to be remembered. It also clarifies that there are various competing objectives, and that a single approach would not be as effective. And finally, in a world where it is difficult both to estimate the cash value of retaining a customer, and to measure the linkage between energy efficiency investments and customer retention, the fertilizer formula approach provides an easily understood and operational paradigm.

## CONCLUSION

The shift in the industry groundrules requires a shift in utility marketing paradigms. Use of this customer service approach should help, in the medium term, those utilities which are struggling with objectives, directions, and strategies. It can provide a framework for using a mixture of appropriate approaches simultaneously but with a minimum of confusion. These challenges will stretch the marketing skills of most utilities, but it will pave the road to the competitive future.

## ACKNOWLEDGMENTS

Thanks to R.A. (Bob) Crockett for providing the fertilizer approach to corporate objectives, and thanks to Kenneth H. Tiedemann for ongoing technical and editorial advice.

## ENDNOTES

1. A paradigm is a mindset or a perspective one takes on a process or subject. As Joel Barker defines it:

Paradigms are sets of rules and regulations that do two things; first they establish boundaries. In a sense that's what a pattern does; it gives us the edges, the borders. Second, these rules and regulations then go on to tell you how to be successful by solving problems within these boundaries.' (Barker 1989).

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