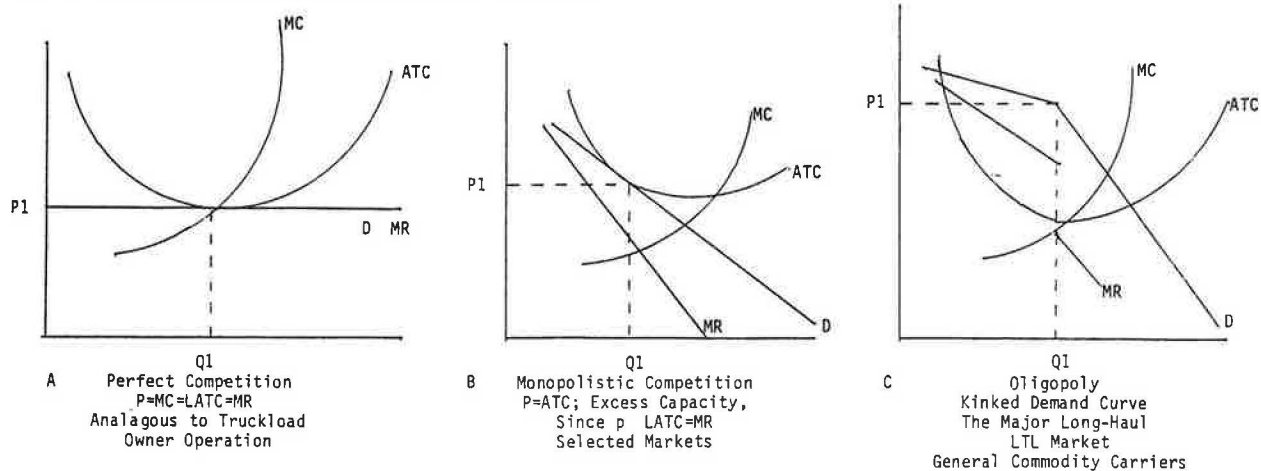


Figure 1. Market conduct: pricing in different deregulated environments.



time, assures shippers a standard or constant cost for the transport element of their production function.

Shippers will also be offered a number of new or differentiated (real or perceived) products. To evaluate these products, shippers will have to develop their own in-house staff of technical expertise (that calculates the value of these products). It should be noted that some major shippers have already assembled individuals with these kinds of skills. The result is that both carriers and shippers will be developing new expertise to meet the changing transport market structure.

The ability of the for-hire motor carrier industry to grow depends on its ability to integrate itself into shippers' distribution systems. In many instances, this integration will be limited by the shippers' willingness (or unwillingness) to allow carriers to perform more of the distribution functions (e.g., assembly, distribution, and warehousing). In essence, the for-hire industry will evolve into a much smaller industry (number of firms) with a greater degree of specialization. The survival of

any one firm will be a function of its ability to adapt—to be a distribution generalist or transport specialist.

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Implications of Motor Carrier Regulatory Reform for Carrier Planning and Marketing

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Some important developments in the structure of the motor carrier industry that are likely to arise from regulatory reform are reviewed and likely changes in the marketing and corporate planning functions for motor carriers are examined. Motor carriers have traditionally been operation-oriented rather than marketing-oriented. However, many past formulas for success are not likely to prove successful in the future. In particular, corporate planning and marketing are likely to be far more prominent tools in future carrier management. A number of issues in competitive philosophy for motor carriers are examined and likely future trends are suggested. The role of maximization of market share as a competitive weapon, changes in corporate communication and responsibility, service and rate trade-offs, and the benefits of a distinctive service concept versus the benefits of a full line of service alternatives to the shipper are considered. Some specific suggestions for motor carrier management to help ease the transition to the new environment, such as a marketing audit, are also examined.

The motor carrier industry, particularly the regular-route sector, suffered a double blow during 1980. Motor carrier traffic was dropping drastically during the recession and, at the same time, the Interstate Commerce Commission (ICC) was holding down rate bureau requests and individual carriers were breaking ranks to get a jump on regulatory reform by announcing independent actions that were undermining the less-than-truckload (LTL) rate structure. Meanwhile, President Jimmy Carter signed the Motor Carrier Act of 1980 that promised to pave the way toward elimination of many of the economic regulatory restraints imposed on motor carriers by the ICC. The ICC is currently implementing that

legislation through a series of rulemakings and administrative actions.

The trucking industry is clearly facing its most serious challenge during the 1980s. What is the structure of the industry that faces this challenge? In truth, there is no industry as such, but hundreds of markets segmented by type of firm, nature of service, and geographic territory. Decades of economic regulation had certainly not prevented a considerable evolution of the industry. But one feature was prominent: Regulation highly constrained carriers' strategic and management options in ways not found in the unregulated sector of the economy. As a result, corporate strategic planning was often relatively backward, salespersonship tended to prevail over modern marketing (as it is known in other industries), and management energies tended to be focused on maintaining labor discipline, economizing on costs, and selectively soliciting the most lucrative traffic.

In short, much of the industry at present is, from a management perspective, ill-equipped to meet the challenge of rapid change. This weakness is especially apparent at the level of the medium-sized carrier, in the \$100-\$200 million revenue category. This carrier often found the transition from a smaller to a larger carrier very difficult, especially the development of formal management programs to make the transition from the small, powerful entrepreneurial style of the founder or founders (1). Many do not have the depth of management or experience to adjust to a rapidly changing market environment. The traits that had won the carrier success, such as perfection of routines for performing highly repetitive tasks in a highly labor-intensive industry, now threaten to be its undoing. The old environment called for finding a way of defining efficient, routine, dependable tasks--but the new environment now calls for flexibility and opportunism.

In this paper some major changes in the motor carrier operating environment that are likely to occur as regulatory change occurs are identified and related to (a) changes at the level of the firm, such as carrier management styles, marketing, and corporate planning and (b) changes in industry structure, such as firm specialization or diversification. Although definitive statements about developments in carrier management and marketing are not warranted at this time, the overall direction of change is already apparent.

These changes are not only of interest to carrier management wondering how to make money in the new environment. Changes in attitudes and management decision making are the litmus test of whether legislative and regulatory actions are accomplishing their objectives. Changes in industry structure, corporate organization, and decision making are important considerations for all concerned.

The motor carrier industry is diverse and any generalizations about the industry are likely to be contradicted. In particular, many of the changes predicted here amount to diffusion of approaches already adopted by the innovative managements of industrial leaders. The comments in this paper primarily concern the regular-route general-commodity carrier but they also extend to other sectors of the common motor carrier industry.

POSSIBLE DEVELOPMENTS IN INDUSTRY STRUCTURE

Motor carriers must be prepared for possible dramatic changes in industry structure. Among the general-commodity carriers, the pattern for the LTL, truckload, and small package carrier will differ. Except for unique market segments, the prospect is

for increased decentralization of the truckload business with increased reliance on owner-operators. There will be a role for the well-managed irregular-route carrier who will continue to provide a brokerage role by providing informational and contractual services (similar to household movers and other special-commodity carriers today), but many truckload carriers will have difficulty surviving. The low barriers to entry and the lack of economies of scale (a single owner-operator can often effectively compete with a railroad) mean that this sector will remain unconcentrated.

The LTL sector of the industry may well shrink to a few dozen large carriers, with market share increasingly concentrated in the large, transcontinental group. The big question is whether these carriers will concentrate on the long-haul portion of the business or whether they will undercut the regional carriers with aggregate discounts and other means of underpricing their more specialized competitors.

Regionally specialized carriers will come under increased pressure. Mergers will become more popular as a means of expanding territorial coverage to match the larger carriers. Smaller carriers will exist at the fringes, seeking market segments with special geographic or service needs. Both the smaller specialized carriers and the regional carriers will be required to quickly find a niche in the marketplace or go under.

The changing market environment will clearly enhance the role of marketing in motor carrier operations. Trucking companies will find the competitive environment more complex and will find it more difficult to maintain established market positions. They must stay ahead of their competitors in offering new rate and service concepts. The reactive, defensive approach will mean defeat. Capital turnover (the ratio of revenues to assets) is high in the trucking industry and many carriers are not strongly capitalized. The reaction time to competitive threats is short and inflexible carriers will go under in an amazingly short time. Only by putting marketing at the forefront of the management process will motor carriers develop the flexibility to survive in this environment. Carriers who fall back on standard practices will be disappointed in the marketplace. If they do not adapt their corporate planning and marketing programs to this new environment, they will not make the transition.

Carriers will find that service offerings and rate-making concepts that once served them well may no longer do so. Commonly accepted maxims of corporate strategy, marketing, and planning must be reexamined in the light of the new environment. Carriers need to reevaluate every assumption underlying their corporate programs and reassess the validity of these assumptions. To see the new decisions likely for carrier management, it is useful to examine some of the competitive approaches historically used by motor carriers.

MANAGEMENT ISSUES, FIRM BEHAVIOR, AND INDUSTRY STRUCTURE

My approach to identifying likely developments in the motor carrier industry is to view the issues of marketing and corporate planning from the perspective of carrier management. To determine how the industry will respond to its new freedoms, we must identify how management was constrained by regulation, what new options for corporate decision making will arise, and what new decisions are likely to occur.

Past Successful Programs May Not Work in the Future

As a background to the evaluation of future alterna-

tives for strategic planning, it is useful to review the various ways that motor carriers have historically succeeded. Some have succeeded by focusing on labor discipline, avoiding unionization, or other means of keeping costs under control. This type of carrier often succeeded even when it was in an adverse operating environment from the standpoint of rates. At the opposite end of the spectrum was the carrier that succeeded by focusing its marketing on highly lucrative traffic that could be carried at a profit even if the carrier was at a cost disadvantage. The third model is the entrepreneur that had an idea that fortuitously matched the requirements of his market niche and succeeded through a process of trial and error.

Each of these carrier types needs to review whether its formula for success is transferable to a new, more rate-competitive environment, or whether major changes are required. The motor carrier industry has had a poor record of transferring a successful formula from one environment to another, as the low success rate for mergers and acquisitions amply demonstrates. Merger failures can be explained by (a) a lack of depth in management necessary to increase the scope of operations and (b) the fact that one of the merger partners was usually failing and suffering worse problems than anticipated. But an ill-advised attempt to transfer a successful formula in one operating environment to a totally alien one no doubt explains a fair share of the failures as well. The lesson of these failures should not be learned the hard way. Motor carrier management has often rigidly attempted to transplant success formulas to a hostile environment, too often with little success.

These concerns point to the fact that today's winners may not be tomorrow's winners. A good illustration of this point may be seen with regard to objectives in competitive marketing strategies.

Competitive Marketing Strategy

Carrier management must reconsider the roles of firm size and market share as competitive factors (2,3). In the motor carrier industry, the LTL rate structure created a market environment where maximization of market share was not necessarily a desirable corporate competitive strategy as it often is in other industries. Since all freight was not profitable, carriers with strong market positions tempered the objective of enlarging market share with the goal of profit maximization through solicitation of high-rated traffic and balancing market flows.

Motor carrier marketing strategy must now recognize that traditional marketing plans may no longer be viable. The trend in motor carrier rate making will undoubtedly be toward an LTL rate structure more attuned to individual carrier costs. Thus, seeking greater market share may become a more viable marketing strategy. If rates are based on company costs, it makes sense to go after as much freight as possible.

There is an expression in the motor carrier industry to the effect that there is no such thing as bad freight, only bad rates. There will always be classes of traffic that individual carriers will consider bad freight, because the rates will be based on the costs of a carrier with a competitive advantage in serving that traffic. What is expected to diminish in a more competitive rate-making environment is the cross-subsidization that made the "cream-skimming" strategy of selective freight solicitation so successful. In this new environment, carriers will not be offering tariffs to serve at rates they know to be unremunerative (i.e., the losses to be made up by the solicitation of as much

freight as possible that is above average in profitability).

The emergence of this new strategy, in turn, raises the issue of whether high market share provides a competitive marketing weapon to the carrier. In other transportation markets, for example, many managements believe strongly in the S-shaped curve. The curve is a relation between share of capacity (or, perhaps more correctly, service offerings) and share of market. The theory says that a carrier with a low share of capacity will have an adverse share gap because its share of the market will be even less. This carrier will suffer a lower-than-average load factor (the share of capacity occupied by revenue traffic) and, consequently, unprofitable operations. Carriers believing in the S-shaped curve put their resources into high-share markets and either withdraw from low-share markets, or wage a capacity war to overcome their share disadvantage.

The share gap theory is controversial in the transportation industry and in any case would not translate directly to all motor carrier markets. Perhaps more relevant is the concept that high market share confers the benefits of experience and presence. According to this view, large market share allows a cost advantage (experience) because the carrier is able to take advantage of the learning curve. The learning curve relates the cost of production (or service) to volume and time in a way that is very hard for a new entrant or low-share firm to replicate. Presence may imply many things, such as the marketing advantages that are derived from the inertia of a satisfied group of customers.

Carrier planning for the motor carrier industry must determine where the firm can compete successfully and where it should withdraw in favor of stronger competitors. In doing so, both marketing and cost advantages stemming from high market share must be considered.

Marketing factors that would go into this assessment include possible shipper preference for minimizing the number of carriers used and preference for the faster, more direct, and ubiquitous service that a carrier with high market share might offer. On the other hand, shippers may prefer to deal with a number of carriers offering a variety of service and rate concepts, each tailored to a specific market segment.

Cost factors are also relevant. Carriers with a larger market share may be able to offer substantial rate cuts for volume shippers through aggregate rates or multiple tender rates. They might justify these rate cuts by lower unit pickup-and-delivery costs and more efficient traffic flows over the system (4). A carrier with greater volume might achieve better service, less circuitry, and better load factors because of the greater routing and scheduling flexibility afforded by greater volume.

Implications for Industry Structure

An enlarged scope of management options can significantly change firm behavior and have implications for industry structure. Competitive developments point to the possible vulnerability of the medium-sized carrier that has traditionally not possessed strong corporate planning capabilities. Indeed, until the advent of changes in the regulatory climate, few carriers perceived that they possessed definitive strategic options. Yet it is this carrier that faces the greatest threat in today's marketplace. It will be competing head-to-head in many cases with large transcontinental carriers, some either owned by conglomerates or possessing a great deal of capital for the "shake-out period".

The challenge will be for these medium-sized carriers to develop a corporate strategy to compete against the well-managed larger competitor with a strong planning staff and financial staying power.

Consider some of the possible developments that can affect the specialized, smaller carrier. This smaller carrier must plan how it will respond to a strategy of volume discounts by a major transcontinental carrier. These larger carriers have the potential of undercutting the regional or specialized carrier by offering discounts at the national level. The smaller carrier could easily find its marketing program undercut by shipper decision making at the national level, far away from its geographic base of operations.

Corporate Communications and Responsibility

Job definitions will rapidly shift with changes in the regulatory environment. The new competitive environment in trucking will call for a change in the concept of delegation of authority or at least for more responsive decision making. When competitors can make rate or service decisions with virtually no notice and major accounts can be lost in a matter of days, management will either have to delegate certain decisions or provide a channel of communication and decision making that can respond decisively on short notice.

The example of other highly competitive transportation markets is instructive. Independent owners of tankers or dry cargo bulk shipping have often found it easy to prosper at the expense of larger entities such as the oil companies because they could act quickly to take advantage of targets of opportunity. By the time the decision had passed through the oil company's corporate bureaucracy, the opportunity had vanished because an independent owner had taken it. Analysis of oil company chartering decisions has shown that they consistently make wrong and costly decisions.

The requirement for the development of a mechanism for coordinated companywide decision making existed in a tightly regulated environment as well as in the present one. But this achievement must occur in an environment that will become increasingly intolerant of failure to coordinate company policy. If top management fails to develop an effective mechanism for gathering information relevant to a decision, carefully defining the options, and implementing a coordinated response, the company will have difficulty surviving.

These comments suggest that there is often a direct relation between delegation of authority and corporate rate-making philosophy. Authority has already shifted to some degree from carrier rate bureaus and the ICC to carrier management. Further developments in rate making may well require further delegation down the carrier organization to decision makers closer to the marketplace. To evaluate possible organizational developments, it is useful to review possible developments in rate making.

Service and Rate Trade-Offs

An example of a creative rate-making possibility for the motor carrier industry is alternative service and rate concepts now employed by other transportation carriers. Although not all shippers receive the same service under the regulated common carrier system, regulatory restrictions have historically precluded or discouraged many service distinctions, such as guaranteed or reserved service or space-available service. Motor carriers should consider instituting rate surcharges or discounts comparable to the new fare concepts that emerged in air travel

as a means of improving capacity use, such as the following:

1. Advanced purchase excursion fare (APEX)--The shipper reserves space in advance for a nonrefundable deposit, helping the carrier forecast demand more accurately, position equipment more effectively, and increase load factor.

2. Budget--The shipper reserves space in advance and is guaranteed service but the carrier decides when the shipment will move during a guaranteed service window.

3. Standby--No service is guaranteed but the shipment moves on the next available movement in consideration of a discount (variations could occur depending on who holds the freight).

Need for Distinctive Service

The following options suggest even further alternatives for innovative motor carriers. The secret of success for any motor carrier will be to solidify its market position by occupying a distinctive position in the service and rate space. A carrier providing an indistinctive service in a field crowded with competitors will always be at the edge of extinction with very little warning of developments that could erode market position.

To accomplish the development of a distinctive image, carriers must acquire a far better understanding of the shipper and consignee decision-making process by using traditional market research questions, such as the following [see also the literature on shipper decision making (5-8)]:

1. What is the consumer buying?
2. Why is he or she buying it?
3. Who is making the decision?
4. How is the decision made?

These questions may seem simple but the insights of market research often uncover a complex decision-making process. For example, it may be thought that the shipper is buying space on a truck, but this definition defines service from the perspective of the carrier, not the shipper.

Possible Changes

Dramatic changes in the operating environment will mean that past success formulas may no longer work. Changes are expected in carrier competitive strategies, corporate communications and responsibility, rate-making philosophy and rate structures, and carrier specialization. These changes are likely to be implemented by major changes in corporate planning capabilities.

ISSUES IN MOTOR CARRIER CORPORATE PLANNING

The corporate strategic plan addresses the question, What kind of company do we want to be three to five years from now? Fundamental questions of target markets, product and service development, and changes in company capabilities are addressed. The plan should go beyond the corporate options in the short run that are necessarily constrained by existing markets, services, and capabilities. The ability of carriers to plan transition by means of strategic planning will be a key factor for success in the coming decade. Carriers who fail to develop this capability will be reacting to their environment, which will consist mainly of the opportunities their competitors have not chosen to pursue (9,10).

The following examples illustrate corporate development issues that might be considered in the strategic plan:

1. Merger, acquisitions, divestiture, and diversification;
2. Investments;
3. Lines of business;
4. Rate and service philosophy, marketing strategies, and competitive policy;
5. Personnel development;
6. Finance;
7. Organizational structure;
8. Competitive environment of the industry;
9. Environmental trends, such as the economy, regulation, and technology; and
10. Corporate goals, such as growth.

An explicit strategic plan is a systematic attempt to define alternative corporate actions, future states of the world, and outcomes, together with an explicit evaluation approach designed to optimize decision making for the future. The plan organizes systematically the efforts needed to achieve desired results and measures the results of decisions. It is clear from this description that corporate planning is not widely practiced in the motor carrier industry (11). The new operating environment will require carriers to develop an improved capability for corporate planning. Furthermore, carriers will be required to recruit a new type of manager to implement the planning capability.

A key factor for success for motor carrier management in the 1980s will be the quality of the management in developing entrepreneurial skills and organizational flexibility. While it may be hard to quantify this ingredient of openness to change, excellent managers know it when they see it.

Closely related to this spirit of entrepreneurship and flexibility will be skills in marketing and corporate planning. Today's environment calls for developing a staff capable of planning corporate development. For many carriers, this implies a substantial change in management philosophy.

MOTOR CARRIER MARKETING

The motor carrier industry will experience substantial changes in marketing as a result of regulatory changes. These changes will result from the carrier management and market structure forces mentioned earlier.

Marketing serves as an important cutting edge of carrier competitive behavior. In this paper marketing is defined broadly as an assessment of the needs of the marketplace, capabilities and strengths of the company and its competition, and the carrier's ability to implement a plan to structure the rates and services of the company to meet the challenges of the marketplace.

Any effective marketing plan must start with the customer. The first task is not to sell the customer on what the carrier is providing, but to market what the customer wants by structuring the company to respond to the marketplace (10,12-14). Although effective selling is part of a marketing program, marketing includes assessments of the needs of the marketplace, the capabilities and strengths of the company, the design and pricing of the service, and the implementation of a plan to structure the company to compete in the marketplace.

To implement the concepts of marketing, therefore, top management must start with the following:

1. An appreciation for the changing regulatory and economic climate of the industry and its implications for the company's future;
2. A clear understanding of the company's corporate goals and the strategic plan for accomplishing those goals;

3. An appreciation for what marketing is and how it relates to gathering data, defining competitive alternatives, and corporate decision making; and

4. A commitment on the part of the entire company to make the customer's preferences the starting point for corporate decision making and a recognition of the key role of marketing in today's trucking environment.

It is clear from this discussion that marketing concepts are not as widely practiced in the motor carrier industry as in other unregulated sectors of the economy. An important measure of change in the motor carrier industry will be change in this essential function. One means of monitoring these developments is to review how an individual carrier would perform a marketing audit of the firm's marketing capabilities.

It is not possible to itemize the ingredients of a marketing audit in this short article. Regardless of the format used, the marketing audit should accomplish the following:

1. Identify marketing objectives;
2. Itemize existing marketing organizations, programs, locations of authority, and methods of decision making;
3. Inventory tactics and procedures for implementing marketing decisions; and
4. Diagnose marketing problems and existing methods for corrective action.

A checklist of effective marketing programs and practices should examine the most critical flows of data and market information that should be evaluated to determine the effectiveness of the carrier's current program. The marketing audit should examine each of the flows of information to determine how the carrier collects data about its operations, its customers, and its competition; how marketing decisions are made; and what decisions are made.

Examination of this structure of authority and decision making in individual carriers points to a number of examples of expected changes in marketing practices, some of which have already been noted. These changes in industry attitudes and practices could serve as useful indicators of the changing role of marketing in the motor carrier industry.

The first expected change involves carrier perceptions of shipper preferences. Carriers should be highly skeptical of extrapolating the results of past studies of shipper preferences and decision making in a highly regulated environment to the environment of greater rate competition. For example, surveys of importance rankings of carrier attributes (price, reliability, speed, etc.) in the carrier selection process are highly dependent on the particular observed variation of the service and rate attributes. If an attribute, such as price, has not varied greatly among carriers offering the same or differing service, then shippers will rate service as more important than price in the decision process. A house buyer, for example, who chooses between two identically priced houses with identical attributes except for a fireplace will rate the fireplace as the most important attribute in the choice. But this does not mean that price is unimportant in a more general sense. As the range of service and rate alternatives increases, it can be expected that some market segments will emerge that are far more sensitive to price than past research might suggest.

As noted earlier, the second possible indicator of change lies in the development of new rate and service concepts. In the future, carrier management will give increased attention to the development of

more sophisticated procedures for developing new rate and service concepts, identifying their market potential, testing them, and promoting them on a companywide basis. The life-cycle of new concepts should be identified and procedures should be developed for gathering data and making decisions on innovative rates and services. Evidence in other industries suggests that success rates for new products are low and the cost of marketing failures is very high. Successful motor carriers must address this issue and develop means of coping with the problem.

One of the more interesting marketing debates that will emerge will be between differentiated and undifferentiated service and rate concepts. Motor carriers have generally succeeded by specializing in a very narrow range of service concepts or even a single distinctive service concept. Carrier operations are simplified because the operations department does not have to contend with the complexities of managing flows of traffic classes with substantially different service priorities. (Much of the service failure of certain carriers has resulted from their inability to manage a highly sophisticated hierarchy of service standards.) Further, the shipping public clearly associates the carrier with a unique service concept, rate making is simplified, marketing messages are simplified, and the customer knows what to expect and is less likely to be disappointed. Even a carrier who offers several service concepts might therefore decide to segment the operations and the related marketing appeal. Marketing research suggests that tinkering with the single-service concept is exceedingly risky.

In any event, motor carrier marketing plans will, in the future, consider a far greater range of options than were available under traditional regulatory restraints. Carriers will be increasing their role in services, such as

1. Contract carriage,
2. Distribution and consolidation services,
3. Unconventional interlining or joint marketing efforts,
4. Pooling agreements,
5. Greater worksharing with shippers,
6. Intermodal operations, and
7. Warehousing and physical distribution services.

The likely change in corporate decision making and authority was noted earlier. A third indicator of interest, therefore, is the authority of the motor carrier sales and marketing department within the corporate structure.

As rate making in the trucking industry looks more like an "oriental bazaar", much of the decision making now occurring at the higher corporate level will necessarily be made routinely or in the field, and responsibility must shift among and within carrier departments. In particular, the sales and marketing department will find that a changing marketing environment and the resulting changes in corporate policy will require changes in the role of the motor carrier salesperson. This changed role also implies significant changes in the type of person who is recruited for corporate training programs.

For example, the ethics of collective rate making called for the salesperson not to talk rates. Anticipated changes in the rate-making environment may well call for the sales representative increasingly to participate in a negotiation and contracting procedure with the customer. The sales representative will have to become much better trained in tariffs, rate-making policy, and service options available to the customer.

Carriers may now find that the existing carrier corporate structure combined with a rate-making environment will place inordinate strains on the relation between the sales and marketing department and the traffic department. Demands for rate work to consider customer requests for rate reductions in consideration for their special circumstances (such as customer worksharing) are flooding traffic departments. Effective marketing requires a quick turnaround on a customer request, yet the sheer magnitude of these requests may be overwhelming.

Motor carriers facing this problem have certain short-run solutions available to them. They could hire more staff in the traffic department or make these requests more routinely by developing procedures for computerized handling of computations or develop general policies that will avoid treating each request as unique.

But the carriers must step back and diagnose the real problem. The heart of the problem originates in the role of the motor carrier salesperson and the economics of the rate structure. The historical evolution of these two institutions is simply not responsive to today's marketing environment. The complexity of the rate structure often makes it impossible for the salesperson to communicate company rate policy to the customer without complicated interaction with the traffic department. The requirement for individual consideration of rate requests is caused by the lack of a strong relation between the rate structure and costs. The lack of training of the sales representative and the requirement to coordinate these decisions results in a system with two very bad features--a slow, costly turnaround of decision making and a system in which the customer is negotiating with someone who does not have the authority to make a decision. If the principal direction of motor carrier rate making is toward rates that are more responsive to cost factors, as is already happening, the present system is clearly an anachronism.

The solution obviously must come in two areas--rate structure complexity and sales representative training. As legal restrictions on collective rate making require carriers to set their rates independently, aggressive motor carriers would do well to examine the simplified motor carrier rate structure being used by deregulated carriers in Great Britain (as suggested by D. Daryl Wyckoff). There the major cost factors are used to derive a cost formula that is the basis of a list price. Individual percentage discounts may be offered from this pricing formula. The elements of the formula provide the basis for an amazingly simplified rate structure.

The benefits to the carrier and the shipper are obvious. Rating errors and the requirement for hiring highly specialized individuals in the traffic department would be reduced. The salesperson's job would be vastly simplified because there would only be good freight. The salesperson's training requirements in tariffs would be vastly reduced. However, regardless of the decision of the rate structure, carriers should devote more efforts to upgrading the sales representative's skills, especially in the area of traffic management.

The resistance to these proposals will be great, but the trend is inevitable. As carriers look about them, the evidence from other marketing programs on the value of simplified rate structures is instructive. The largest motor carrier in the country, United Parcel Service, has a rate structure that fits on one piece of paper and can be used by someone with no training whatever. The costing of general commodity traffic is more complex, but the principle is nevertheless valid.

Modern marketing calls for the carrier to rate its strengths and weaknesses relative to its competition by market segment. The essence of the market-segmentation scheme is to recognize that not all decision makers face the same choices or have the same preferences. Organizing this heterogeneous mass into meaningful groups for determining rate and service decisions is the essence of the market-segmentation task.

The motor carrier rate structure is obvious evidence that market segmentation is no stranger to the motor carrier industry, but the advent of regulatory change suggests that traditional market-segmentation concepts must also change. Given the variety of lines of business now served by motor carriers, at this point one can only suggest guidelines for the market segmentation scheme rather than prescribe a format.

Segmentation in transportation marketing differs from segmentation in other markets in a very important way (15). Unlike many other markets, transportation markets must be segmented according to the choices available to the decision maker and the attributes of those choices, as well as the preferences of the decision maker. Other relevant traits for segmentation are profitability, past shipping decisions, geography, shipment size, equipment needs, value of time and reliability, single line versus interline, worksharing, claims record, special handling requirements, and stowage factors (density) (16,17).

Carriers frequently use the traffic lane as a means of market segmentation. Although this approach is helpful in guiding marketing efforts directed at achieving traffic balance, further disaggregation by shipper characteristics is also needed.

Last, but most important, carrier marketing plans must become far more flexible. Successful motor carriers in the past achieved their success usually by either one of two strategies--cost efficiencies or targeting the most desirable freight (with special attention to balancing traffic flows). Rate regulation caused a stable rate structure and discrepancies between rates and costs did not respond immediately to competitive forces. In the future, rate cutting by carriers attempting to gain market share in the most attractive traffic and competitive entry into these more attractive markets can be expected to erode the pockets of profitability in the rate structure. Carriers can no longer depend on highly profitable market segments over a long period of time as the foundation of a marketing program. Rather, armed with good information on their costs, they must constantly evolve their marketing strategy to make quick-response decisions on service and price to maintain a favorable traffic mix.

CONCLUSION

Never has motor carrier management faced a more demanding, yet potentially more rewarding, future. The industry will have new opportunities with which to enhance various aspects of carrier growth and development. Yet, the greater the range of these opportunities, the greater will be the variations in performance. This of course implies even further uncertainty and instability. Nevertheless, it is recognized that innovation and entrepreneurship are the driving forces of the nation's economic system. Motor carrier management will be the place to be in the 1980s for innovative corporate planners and marketing specialists.

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