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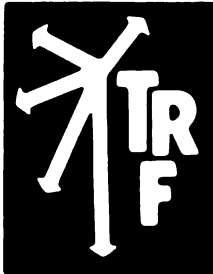
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Performance Implications of the Sales Force Strategies of LTL General Freight Carriers

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ABSTRACT

The current investigation of the sales force strategies of the LTL general freight carriers in a deregulated environment develops answers to the following set of questions: What are the distinguishing characteristics of the sales force strategies being pursued in the new environment? What are the performance outcomes associated with each sales strategy? What techniques can be used by managers within the context of existing strategy to improve their sales force performance?

The study results show that the three identified sales force strategies used by the LTL carriers had distinct performance differences. While the firms in one strategy cluster (identified as Innovative and Aggressive) had higher overall sales force turnover, they also had the most productive sales force—as measured in revenues per account and revenues per mile travelled. In contrast, firms in another cluster (identified as Focus) had the lowest overall turnover rates, but a relatively unproductive sales force.

A key contribution of this paper is its ability to use the comprehensive information about each strategy as well as direct measures of its outcome in making specific recommendations for improving sales force performance within the constraints of a given strategy.

INTRODUCTION

While researchers have demonstrated that organizational strategy has minimal effect on corporate performance in a regulated setting (Mahon and Murray, 1980), they have found that companies with definitive strategies consistently outperform firms lacking focused strategies in a deregulated environment (Smith and Grimm, 1987). Thus, the shift in the U.S. transportation industry over the last decade from a regulated to a deregulated climate highlights the importance of analyzing the link between corporate strategies and firm performance.

Specifically, Smith and Grimm (1987) established that railroads who changed their overall corporate strategies in response to deregulation were characterized by much better rates of return on investment (ROI's) than were those railroads not changing their strategies. Among motor carriers, Smith, Corsi, and Grimm (1989) validated that in the recently deregulated environment less-than-truckload (LTL) carriers with a well-developed specialized corporate strategy outperformed firms with nebulous, undefined ones.

In addition to these studies of overall corporate strategy in the transportation industry, there has been a stream of research focusing on more specialized aspects of the corporate strategy in the new competitive environment. For example, a recent study by the present authors focused on one aspect of marketing strategy, involving sales force management, and established the existence of three distinct sales force management strategies among LTL general freight carriers (Murphy and Corsi, 1988).

While the previous study found some relationship between sales force strategies and overall firm profitability, it was felt that more direct links were needed between sales force management strategies and their outcomes. Consequently, the authors conducted a follow-up study, one purpose of which was to develop better measures (such as turnover levels and revenues generated per sales force call) of the results of sales force strategies. In addition, the follow-up work developed information on additional aspects of sales force management not covered in the initial survey, including data on training techniques, level and frequency of sales force evaluation, time management of sales force employees, and the compensation of new sales employees. Combined with the information from the initial survey, the second survey provides a comprehensive view of sales force management strategy as practiced by the LTL general freight carriers.

The purpose of this research, then, is to provide a more comprehensive view of sales force management strategies employed by LTL carriers in a deregulated environment, with specific emphasis on the outcomes of those strategies. Additionally, this study will provide specific suggestions within the context of the current sales force management strategy for managerial actions to improve the performance of their sales force. It will develop evidence to answer the following questions:

- What are the primary sales force strategies being pursued by LTL general freight carriers?
- What are the distinguishing characteristics of these sales force strategies?
- What are the performance outcomes associated with each sales strategy?
- What techniques can be used by managers within the context of existing sales force strategy to improve sales force performance?

METHODOLOGY

A longitudinal data base on sales force practices among LTL general freight carriers was

TABLE 1
Expansion Factors for Revenue Groups, LTL General Freight Carriers

Revenue Group (000's)	Response Rate	Expansion Factor
404-2,011	.09	11.00
2,112-3,069	.13	7.50
3,120-4,950	.18	5.71
5,010-7,719	.23	4.38
7,848-11,582	.21	4.86
11,881-16,387	.30	3.33
16,462-24,798	.23	4.29
25,033-47,316	.20	5.00
49,865-84,765	.25	4.00
88,603-240,296	.09	11.00
260,171-660,618	.20	5.00

developed through implementation of two mail surveys. The first study, conducted in 1986 and directed to the highest ranking sales or marketing executive at 347 motor carriers, collected information on the recruitment, selection, training, compensation, motivation, and evaluation of sales personnel. Usable responses were received in this phase of the research from 134 carriers for a response rate of 39 percent.

The second study, conducted during 1988, targeted the 134 companies who responded to the first survey in order to develop complete data on sales force management practices by combining information from both surveys. As noted, the second survey investigated topics such as turnover levels, turnover costs, sales tasks, and the compensation and evaluation of sales personnel. The 1988 study was completed by 64 firms, representing a 48 percent response rate.

This research also uses secondary information, such as corporate revenues, from Interstate Commerce Commission tapes of motor carrier annual report data. These tapes revealed that the universe of LTL general freight carriers had decreased from 347 in 1986 to 314 in 1988. As shown in Table 1, these 314 companies were divided into eleven strata, based on operating revenues, for the purposes of developing expansion factors. The information discussed throughout this paper is based on the expansion factors presented in Table 1. Since responses were not received from the three largest LTL carriers—Yellow Freight, Roadway, and Consolidated Freightways—extrapolation of this paper's findings to the "Big Three" is not directly possible.

The sales force strategies were developed by categorizing respondents into distinct groups through application of cluster analysis, with the authors analyzing several different clustering solutions involving from three to six groups. Our analysis indicated that two clusters remained relatively unchanged through the various iterations, with partitioning occurring primarily within the smallest cluster. Consequently, a three cluster solution will be the basis for discussion in the remainder of this paper.

These clusters divided the universe of general freight carriers as follows: Cluster 1 (33.4% of the firms), Cluster 2 (19.1%), Cluster 3 (47.5%). One-

way analysis of variance was applied across clusters to assess whether there were statistically significant differences in terms of selected sales force performance variables. If differences exist, they can be used as guidelines for improving sales force performance within individual companies. However, it is not the intent of this article to determine the 'best' sales force strategy.

STRATEGY DESCRIPTIONS

The discussion of individual strategies is based on information appearing in Tables 2 and 3. Table 2 presents information on corporate demographics that help differentiate the three clusters, while Table 3 offers distinguishing characteristics of each cluster based on sales force management practices. Synthesis of the data in Tables 2 and 3 permits identification of overall sales force strategies being pursued by firms in each cluster.

Cluster 1. Based on the information in Tables 2 and 3, the carriers comprising Cluster 1 are following what can be appropriately labelled as a "traditional service orientation" strategy. One component of this strategy is a heavier reliance on competitors as a source of sales force recruits than exists among firms in the other clusters. This behavior pattern, noted in the pre-MCA environment by Taff (1975), is based on the expectation that new salespeople recruited from competitors would bring with them an established client base. The demographic profile of the new sales force hires of firms in Cluster 1 (middle-age with moderate experience—60 percent have at least six years experience) is consistent with the proclivity to recruit from competitors. Thus, carriers in Cluster 1 seek new salespeople with previous knowledge of motor carrier business and an established client base—a pattern similar to that practiced by motor carriers in the regulated environment.

A second component of this "traditional service-oriented" strategy is an emphasis in training programs on traditional subject areas (e.g. firms in this cluster devote, on average, 45 percent of training time to selling and operations). In the heavily regulated environment, one key attribute

TABLE 2
Cluster Differences Across Company Demographics

Variable	1	Cluster 2	3
Operating Revenues (000's) ^a	11,000	8,800	75,300
Revenues Per LTL Ton ^a	118	123	139
Calls Per Account ^a	29	9	10
Number of Best Accounts ^a	145	42	538
% Sales Force Increase ^a	9.9	-1.6	6.2
Sales Force as a % of Total Employees ^a	6.8	5.3	14.3
Operating Ratio	97.7	97.8	97.0
Revenues Per Salesperson (000's)	1,370	1,680	1,350
Number in the Population	105	60	149

a: Observed differences in mean cluster scores are significant at the .05 level of confidence.

of effective motor carrier salespeople was thorough knowledge of company operations (Taff, 1975).

A third component of this strategy is the continuing administrative paperwork responsibilities of salespeople. Once hired, salespeople in Cluster 1 firms have a greater administrative burden (characteristic of the regulated environment) than do the salespeople hired by firms in the other clusters. Indeed, salespeople in this cluster spend on average 9 percent of their time on paperwork. This represents an average burden nearly double that required of salespeople in the other clusters. This paperwork burden is consistent with Taff's (1975) pre-MCA statement that "... salesmen should recognize the value of the numerous forms they are required to fill out."

The "traditional service orientation" label for the strategy of these firms is also exemplified by the large number of calls made per account. While firms in Clusters 2 and 3 average 9 and 10, respectively, calls per account on an annual basis, those in Cluster 1 average 29. Salespeople in Cluster 1 spend a great deal of time in servicing existing accounts as well as prospecting for new ones.

Cluster 2. Tables 2 and 3 suggest that the motor carriers in this group are following what can be labelled a "focus" strategy. These companies have cultivated specific market niches and have structured their sales force practices to support them. The motor carriers in this cluster are relatively small, with average revenues of \$8.8 million in 1987. In fact, the largest carrier in Cluster 2 has revenues slightly in excess of \$22,000,000. Given that the sales force of carriers in this group declined in size on average by 2 percent during 1988, it can be postulated that firms in Cluster 2 are largely uninterested in growth. In this vein, Cluster 2's sales personnel spend only 4 percent of their time prospecting for new customers. This contrasts sharply with a comparable figure among firms in Cluster 1 of 14 percent and among firms in Cluster 3 of 9 percent.

Although the firms in this cluster shun growth opportunities, they work diligently to maintain existing traffic. The primary concern of salespeople in these companies with account maintenance provides a strong explanation for their predomi-

nant sales task being personal visits to customers. On average, salespersons in Cluster 2 devote two-thirds of their time to personal visits, while the comparable figure for salespeople in the other two clusters is less than 50 percent. This focus on account maintenance is further accentuated by training programs which emphasize operational information (27 percent of total training) as well as competitor information (14 percent of total training).

Moreover, the motivational techniques of carriers in Cluster 2 are consistent with an overall strategy of focusing on and supporting existing market niches with limited or no growth policies. Firms in this group make minimal use of sales contests, whose primary purpose is to generate additional business (Stanton and Buskirk, 1983).

The demographic profile of new sales force hires of firms in Cluster 2 is compatible with their overall strategy. Cluster 2 firms concentrate their sales hiring on older (88 percent of new employees are between 50 and 59 years old), experienced (no hires have less than 10 years industry experience) sales representatives. Certainly, younger salespeople would find a static, limited growth environment unchallenging.

Cluster 3. The information in Tables 2 and 3 suggests that the carriers in this cluster are following an "innovative and aggressive" sales force strategy. On average, firms in this cluster had \$75 million in revenues in 1987—a level significantly above the average for firms in the other clusters. Indeed, previous research supports the notion that large firms are generally more likely to exhibit innovative behavior (Kimberly and Evansko, 1981). This group recognizes the importance of sales personnel in implementing an innovative and aggressive strategy, with sales personnel accounting for 14.3 percent of total company employees, compared to 6.8 percent for Cluster 1 and 5.3 percent for Cluster 2.

The aggressive posture of the carriers in this cluster is further manifested in the demographic profile of sales hires, who are unencumbered by past expectations or experiences. For example, 83 percent of the sales force hires are under 40 years of age, while 66 percent have five or fewer years of experience. The strategy literature indicates that younger, inexperienced personnel tend

TABLE 3
Identification of Sales Force Management Strategies

Strategy Element	Clusters		
	1	2	3
Sales force demographics	Middle-age Less educated Moderate exper.	Older More educated High experience No female hires	Younger More educated Inexperienced
Recruitment	Competitors Highest recruit costs		At colleges
Selection		Rare use of psych. tests Highest select costs	Some use of psych. tests
Training	Emphasis on selling & opns	Emphasis on opns & compet.	Emphasis on selling & pricing Highest training costs
	Classroom	On-the-job	Classroom & computer
Compensation	Moderate starting pay	Low starting pay	High starting pay
Motivation		Rare use of sales contests	Opportunities for advancement
Evaluation	Company sales managers	Company sales managers	More frequent evaluations
Sales tasks	Emphasize prospecting & paperwork	Emphasize personal visits	Emphasize travelling & sales meetings
NAME	TRADITIONAL SERVICE ORIENTATION	FOCUS	INNOVATIVE AND AGGRESSIVE

Because of space limitations, the cluster means are not presented for each strategy element. This information is available from the authors upon request.

to be less resistant to change (such as that caused by the MCA) than older, more experienced employees (Grimm, Kling, and Smith, 1987).

The firms in Cluster 3 also follow innovative recruitment and training practices. With respect to the former, Cluster 3's companies are most likely to recruit salespeople from colleges, a departure from previous industry practice of depending more heavily on competitors as a source of new sales representatives. This group recognizes the importance of well-trained sales personnel in the deregulated motor carrier industry; training costs per sales representative average \$11,600, compared to \$6,800 for Cluster 1 and \$4,500 for Cluster 2.

This group's adaptation to the contemporary motor carrier industry is also seen in their emphasis on pricing as a key component of sales training programs. The pricing freedoms permitted by the MCA have increased the necessity of salespeople being knowledgeable about their carrier's rate structure and levels. The companies of Cluster 3 also make the heaviest use of computer training, an illustration that these carriers recognize that the relevant skills for successful sales performance have been changing since passage of the MCA.

In total, firms in Cluster 3 exhibit an innovative and aggressive sales force strategy. They seek young, well-educated employees who have an open mind to change and innovation. They focus in their training on the new competitive environment and on providing their salespeople with modern analysis tools—i.e. the computer. They recognize the need to continually update and retrain salespeople once they are hired. Indeed, the overall sales force management strategy employed by firms in Cluster 3 contrasts most sharply with the strategy of firms in the other clusters.

PERFORMANCE OUTCOMES OF SALES FORCE STRATEGIES

Previous research by the present authors examined the link between specific sales force strategies and performance. While the performance indicators in the initial study were overall measures of firm profitability, a definite objective of the follow-up work was to develop direct indicators of the effectiveness of a firm's sales force strategy. The direct indicators selected fall into two major categories: sales force turnover and sales force productivity. These indicators provide

TABLE 4
Performance Outcomes of Sales Force Strategies

Variable	Cluster		
	1	2	3
<i>Turnover:</i>			
Turnover due to quits (%) ^a	8.1	0.0	8.3
Turnover due to dismissal (%) ^a	6.0	2.1	7.5
Overall turnover (%) ^a	14.1	2.1	15.8
<i>Productivity:</i>			
Revenues per account ^a	135,696	58,149	290,877
Revenues per mile travelled ^a	560	1,152	2,934
Salesperson revenue per dollar of 1st year compensation ^a	4,734	6,671	4,499

a: Observed differences in mean cluster scores are significant at the .05 level of confidence.

the information needed to assess the effectiveness of each the three comprehensive sales force management strategies identified in the cluster analysis.

Specifically, oneway analysis of variance is used to investigate whether the three distinctive strategy clusters show differences across the direct performance indicators: sales force turnover and productivity. The oneway results are presented in Table 4 and indicate that mean scores are significantly different (at the .05 level or better) across clusters for each of the performance indicators examined.

Sales force turnover has two components: (1) turnover due to quits and (2) turnover due to dismissal. The decision by a sales force worker to quit is an employee-initiated one, perhaps because they have an attractive job opportunity or are dissatisfied with their current level of compensation or with specific company policies. By contrast, a dismissal is an employer-initiated decision reflecting a conclusion by management that retaining an employee is no longer in the best interests of the firm. The objective of the follow-up study is to assess differences among the strategy groups in their turnover rate (both quit and dismissal rate) under the belief that certain sales force management approaches would be associated with low turnover levels and other approaches might have the opposite impact.

For example, while there is virtually no difference in the turnover quit percentage of Cluster 1 (8.1) and Cluster 3 (8.3), the quit percentage for Cluster 2 firms is zero—i.e., none of the firms in Cluster 2 reported sales force quits during 1988. As mentioned earlier, the Cluster 2 motor carriers hire older, more experienced sales personnel, significant because these employees are characterized by lower levels of turnover (Newton, 1973). However, the lower turnover of older sales personnel is often offset by the fact that they are less productive than their younger counterparts (Newton, 1973). Indeed, Cluster 2 firms report the lowest revenues per account \$58,149, which is about one-fifth the revenues of a typical Cluster 3 account.

Furthermore, the zero quit rate of firms in Cluster 2 may indicate that their current sales

representatives are unattractive to other companies, since a common reason for quitting one's present job is to accept a more attractive position with another company. For instance, the literature suggests that quitting is more prevalent among young, well-educated salespeople—the demographic profile of Cluster 3 sales hires—because they are more mobile and more marketable (Parasuraman and Futrell, 1983). Even though the sales force hires of Cluster 2 are well-educated, younger personnel with similar education (i.e., Cluster 3's sales hires) are attractive job candidates because of their exposure to contemporary thinking and practices.

Table 4 also indicates that Cluster 2 motor carriers have a low dismissal rate, 2.1 percent, compared to Cluster 1 (6.0 percent) and Cluster 3 (7.5 percent). One explanation for these findings is that the nature of Cluster 2 firms—sales positions with minimal selling and low starting pay—may be unattractive to prospective employees, which increases the difficulty of hiring sales representatives. This situation can be avoided if there is no need to hire salespeople, i.e., terminations are kept to a minimum. Such a policy suggests that sales force evaluation measures are lenient. In fact, Cluster 2 firms report the least frequent evaluations of their sales representatives.

The 6.0 percent dismissal rate for Cluster 1 carriers might be attributable to this group's heavy recruitment from competitors. Although these salespeople come with a 'following', they may be unable to meet higher performance standards resulting from their followings, and are therefore dismissed. Moreover, the large size of Cluster 3 companies may provide an explanation for their 7.5 percent dismissal rate. That is, these companies have the resources to establish comprehensive sales force programs that efficiently monitor sales force performance. As previously mentioned, nearly 50 percent of Cluster 3's firms evaluate salesperson performance at least once a month. More frequent evaluations provide increased documentation of individual performance, which should decrease possible allegations of unfounded or indiscriminant dismissal.

With respect to overall sales force turnover levels, Cluster 1 reports a 14.1 percent rate, while

Cluster 3 has a 15.8 percent rate, both of which are much larger than Cluster 2's 2.1 percent rate. Although Cluster 2's low overall turnover seems quite impressive, such a low rate may have some measurable adverse qualities. Indeed, the literature suggests that some amount of turnover can be beneficial to a company in that new ideas and technologies can be integrated via new hires (Mobley, 1982). In addition, turnover can enhance internal mobility opportunities for company employees, which in turn fosters improved morale (Mobley, 1982).

Survey results provide information needed to compute the following three separate sales force productivity measures: average revenues generated (on an annual basis) per account served; average annual revenues generated per mile salespeople traveled; and average annual revenues generated per dollar of 1st year compensation. All three measures provide an analysis of how well the salespeople are performing.

The firms in Cluster 3 report an average revenue per account of nearly \$291,000, compared to \$136,000 for Cluster 1 and \$58,000 for Cluster 2. Cluster 3's high revenues per account may be partially attributable to their large size, which creates potential advantages—wider geographic coverage, precise shipment monitoring—that are especially attractive to larger shippers.

An intriguing finding in Table 4 involves the revenues per account of Cluster 1 vis-a-vis those of Cluster 2. Although the average size of Cluster 1 motor carriers (\$11 million) is slightly greater than those of Cluster 2 (\$8.8 million), Cluster 1's revenues per account are nearly 2.5 times as great as are Cluster 2's. This may be indicative of the type of niche being pursued by Cluster 2 carriers, namely, shippers with a limited amount of traffic; such customers might be unprofitable for other carriers. Alternatively, Cluster 1 sales personnel may be more adept at developing account penetration; this group devotes 26% of their sales training to selling information, compared to 18% for Cluster 2 companies.

Table 4 also shows that the motor carriers of Cluster 3 generate revenues of \$2,934 per mile travelled, a figure far superior to the \$1,152 of Cluster 2 and the \$560 of Cluster 1. On the one hand, it is not surprising that Cluster 3 has high revenues per mile travelled because this group's average accounts generate high revenues.

The information in Table 4 also indicates that Cluster 2 is twice as productive as Cluster 1 in terms of revenues per miles travelled, an intriguing finding given that Cluster 1 has more lucrative accounts than does Cluster 2. One explanation for Cluster 1's low revenues per miles travelled is that this group spends, by far, the most time (14 percent of a salesperson's time) prospecting for new customers. In some cases, this prospecting involves going door-to-door to solicit new accounts, with no guarantee of success. If these prospecting efforts are frequently unsuccessful, then revenues per miles travelled will be negatively affected.

A final measure of sales force performance that is presented in Table 4 offers a type of sales-to-expense ratio by reporting on average annual salesperson revenues per dollar of average first

year compensation. This value is approximately equal for Clusters 1 (\$4,734) and Cluster 3 (\$4,499), while it is \$6,671 for the motor carriers in Cluster 2. One explanation for the superior performance of Cluster 2 is that this group has low first year compensation and high revenues per salesperson. In addition, it can be hypothesized that Cluster 2 firms create revenue/expense efficiency by being highly focused in their sales programs. As shown in Table 2, Cluster 2 motor carriers report a small number (42) of 'best', or major, accounts relative to the other clusters.

Thus, on an overall basis firms in Cluster 3 have the highest average turnover rate, but the most productive sales force (on two of the three measures). The objective of the next section is to discuss the various outcomes of each sales force strategy with the attempt to identify specific aspects of each that might be changed to improve the situation.

SUGGESTIONS FOR IMPROVING SALES FORCE PERFORMANCE

Cluster 1. With the sum of recruiting, selection, and training averaging \$35,517 per employee for firms in Cluster 1, it would seem advantageous for them to take definite steps to reduce their overall sales force turnover rate of 14.1 percent. Firms in Cluster 1 might improve their 8.1 percent quit rate for salespeople if they devote less time to both prospecting and paperwork, which together account for nearly 25 percent of a salesperson's time. Both of these tasks can be relatively unproductive from the salesperson's perspective. Additionally, unsuccessful prospecting efforts can be demoralizing and thus act as a strong impetus to voluntarily leave sales positions. A reduction in prospecting and paperwork should not jeopardize this group's traditional service orientation strategy.

Regarding the 6.1 percent dismissal rate experienced by these firms, it is recommended that when sales force personnel are hired from competitors (as is common among Cluster 1 firms) a thorough examination be made of each potential employee, since recent work has found a higher level of dismissals to be associated with firms that recruit from competitors (Murphy and Corsi, 1989). In addition, Cluster 1's service orientation requires a high level of personal contact with customers, as demonstrated by the average of 29 calls per account. However, only 43 percent (compared to a 63 percent average among firms in Cluster 2) of a salesperson's time involves personal contact with the customer, indicating that these visits are brief. This is an important finding given that dismissal rates are inversely related to the amount of personal contact; i.e., as personal contact increases, dismissal rates decrease (Murphy and Corsi, 1989).

With regard to the sales force productivity measures in Table 4, Cluster 1 motor carriers generate low revenues per mile travelled relative to the other two clusters, with one explanation being the numerous brief customer visits discussed in the previous paragraph. As a result, Cluster 1 firms could adopt account classification

techniques so as to emphasize their major accounts. This account classification could lead to reductions in the size of sales force territories as well as territorial realignments.

At a minimum, the rationalization and realignment of sales territories should produce improvements in the revenues per mile travelled. In addition, sales personnel would be able to have increased personal contact with key customers, thereby aiding the service orientation of these carriers. Improved customer relations should have a positive effect on the other productivity measures in Table 4, by generating additional revenues per accounts and additional revenues per salesperson. This, in turn, increases the ratio of salesperson revenues per dollar of first year compensation.

Cluster 2. In contrast to the situation among Cluster 1 firms where turnover is at high enough levels to be an important cost consideration, it is low enough (2.1 percent) among firms in Cluster 2 to raise concerns about sales force stagnation. Indeed, this group of motor carriers is faced with the intriguing challenge of increasing their sales force turnover, because existing turnover rates are too low. With this in mind, one suggestion for modifying turnover levels involves the implementation of more stringent performance evaluation standards. Voluntary resignations should increase, in part because underperforming sales representatives will choose to quit rather than be fired as a consequence of poor evaluations. More stringent performance standards will also likely result in more dismissals in that fewer sales personnel will be able to achieve the more demanding standards.

One concern of firms in Cluster 2 might be that higher turnover levels will intensify what they already perceive as difficulties in replacing departed personnel. As a result, customers will experience service declines and cause firms in Cluster 2 to lose part of their competitive edge. However, in order to facilitate the replacement of salespeople lost to turnover, Cluster 2 motor carriers might consider offering starting compensation more attractive than the current average of \$22,145.

Cluster 2's weakest area of sales force productivity involves their average revenues per account. One suggestion for improving average account revenues is for these carriers to secure additional major accounts, which by definition have high revenues (Churchill, Ford and Walker, 1985). This could be aided through information in the training programs which deals with methods for securing and maintaining major accounts. Judicious solicitation of such accounts would complement the limited corporate growth preferred by many carriers in this group.

Cluster 3. Of the three sales force strategies discussed in this paper, Cluster 3 appears to have best recognized changing industry patterns. As a result, many carriers in this group have designed their sales programs to be in line with the contemporary motor carrier industry. For example, this group's high relative expenditures for training programs should produce a well-prepared, professional sales force. Nevertheless, Cluster 3's overall sales force turnover of nearly 16 percent is the highest of the three clusters. Indeed, with

firms in this cluster averaging almost \$43,000 in recruitment, selection, and training costs, it behooves them to investigate ways to reduce their turnover levels.

The 8.3 percent quit rate might be reduced by realigning the sales territories to decrease the amount of time devoted to travelling, which currently stands at nearly 14 percent of a salesperson's time. This group of motor carriers also reports the highest amount of time spent in sales meetings, which averages 5 percent, but runs as high as 13 percent in some companies. The time devoted to sales meetings could be reduced by using alternative methods, such as computer messages, to transmit information that would normally be covered in sales meetings.

Cluster 3 motor carriers also exhibit a 7.5 percent dismissal rate, which could be the result of performance standards that are too demanding. For instance, this group reports the highest number of major accounts (an average of 538), which require special attention because of their lucrative sales potential. The servicing of such accounts is a priority and can become quite time consuming, so much so that less lucrative accounts are neglected. Such a scenario could result in poor performance evaluations and eventual dismissal. Therefore, Cluster 3 firms need to trim the number of best accounts to better focus on developing customer loyalty through more personal contact to individual accounts. As mentioned previously, increased customer contact is associated with lower dismissal levels.

The least impressive productivity measure for Cluster 3 motor carriers is their salesperson revenues per dollar of first year compensation, which currently averages \$4,500. Although an obvious suggestion for improving this ratio involves reducing the level of first year sales force compensation, such a policy would make it more difficult to pursue the young, well-educated salespeople favored by Cluster 3 firms. However, if Cluster 3 companies could reduce the time devoted to travelling and sales meetings, there would be more time for personal contacts with customers. As mentioned above, this contact should be translated into higher levels of customer loyalty, resulting in both increased revenues per account as well as improved salesperson revenues per dollar of first year compensation.

CONCLUSIONS

Building upon the previous investigation of sales force management practices among LTL general freight carriers, this analysis focused on more direct measures of evaluating the identified policies. Specifically, while the initial study examined whether there were significant differences among the identified policy clusters in terms of general profitability measures, this analysis directly linked the identified policies with direct measures of their outcome—i.e. sales force turnover and sales force productivity.

The analysis revealed that each of the identified policies had distinct differentiating characteristics. While firms in Cluster 3 had the highest overall turnover rate, they also had the most

productive sales force. In contrast, firms in Cluster 2 had the lowest overall turnover rate, but a relatively unproductive sales force.

The use of these direct measures of the outcome of sales force strategy, in contrast to indirect measures such as firm profitability, is a much more effective way to evaluate the strengths and weaknesses of each particular strategy. A key contribution of this paper is its ability to use the comprehensive information about each strategy as well as direct measures of its outcome in making specific recommendations for improving sales force performance within the constraints of a given strategy. Specifically, firms pursuing an aggressive, innovative sales force strategy can make some of the recommended modifications in approach and achieve the same goals but reduce turnover costs in the process.

The research effort presented here demonstrates the continuing benefit of analyzing and grouping management strategies with respect to sales force management. The results demonstrate convincingly that among the LTL general freight carriers there are distinctly different management approaches with dramatically different outcomes.

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