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SERVICE BEGETS SALES: AN INVESTIGATION INTO THE RELATIONSHIP OF AUTOMOTIVE DEALERSHIP CUSTOMER SERVICE SATISFACTION WITH SALES SUCCESS

by

Ivyl L. Gilbert

A Dissertation
Submitted to the
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SERVICE BEGETS SALES: AN INVESTIGATION INTO THE RELATIONSHIP OF AUTOMOTIVE DEALERSHIP CUSTOMER SERVICE SATISFACTION WITH SALES SUCCESS

Ivyl L. Gilbert, Ed.D.

Western Michigan University, 1986

Investigated in this descriptive study was the relationship between new car dealership customer service satisfaction ratings and dealership sales success, as measured by market penetration ratings, within a major domestic automobile company. Specifically, the first step in the study was the collection of data regarding customer service and sales success ratings earned by the total of the subject company's dealers in each of 42 geographical zones in the United States. Second, an attempt was made to determine whether a relationship existed between the customer service ratings and sales success ratings for the company's zones to whom certain characteristics could be attributed.

In order to investigate the relationship between customer service satisfaction ratings and sales success ratings, hypotheses were presented which dealt with the study group of the 42 zones and with the zones' characteristics. Those characteristics included (a) passenger car market penetration, (b) overall dealer customer satisfaction, (c) warranty service customer satisfaction, (d) percentage of times customers were forced to bring their new car back to the dealer for the same service problem, (e) new car delivery condition satisfaction, (f) dealership sales staff customer satisfaction, and
(g) percentages of salesperson turnover.

A major conclusion of the study was that there exists a direct relationship between customer service satisfaction and sales success, as measured by market penetration.

Dealers are the most visible link in automobile manufacturers' marketing chain and have the potential to enhance or degrade the corporate image on a local as well as national basis. How then should the manufacturers direct their automobile dealers? Is an all out, highly expensive effort to increase customer service the answer to increased sales? The significance of this study was to provide a degree of insight into these questions.
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OF AUTOMOTIVE DEALERSHIP CUSTOMER SERVICE SATISFACTION WITH
SALES SUCCESS

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Ivyl L. Gilbert

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CHAPTER I

INTRODUCTION

Automotive industry analysts contend that a growing concern for product quality and dependability is typical of today's car buyers. According to Power (1982), dependability and trouble-free operation rank very high as important attributes in the minds of automotive consumers when purchasing a new vehicle, often leading such factors as purchase price, performance, and fuel economy. And, over time, customer loyalty is based on the in-use experience owners have with the cars they purchased. As the U.S. automobile market increasingly becomes a replacement market, loyalty becomes more important as manufacturers compete for the return customer.

A key to surviving the uncertain direction of the U.S. auto market is for domestic manufacturers to concentrate on those things over which they have the most control in achieving improvements. In the view of Gawronski (1982), it is the satisfaction, or lack of it, with the product purchased and dealer service provided them that builds or destroys the customer's desire to repurchase the same make of car. Consequently, this is one place where the marketing competition can be won or lost.

Power (1982) suggested it would appear that manufacturers must place more emphasis on product quality and the quality of after-sale service. Certainly, products can be differentiated in advertising and in showroom sales presentations, but it would seem that consumers
are relying more and more on their own experience and on the reputation of the manufacturer and dealer in their decision to purchase.

Statement of the Problem

Assuming that shoppers are looking for dependability more than ever before, their perceptions of dealer service should be a crucial differentiating factor. Clever media promotion, price discounts, or showroom appeals might reasonably be expected to fall short in overcoming a reputation of automobiles with problems that cannot be repaired quickly on the first visit back to the dealership.

An analysis of customer service and how it affects share of market, in the Sales and Marketing Executive Report ("Quality of Customer Service," 1983), states the effects in quantitative terms:

The difference between good and poor customer service can affect a company's sales volume by as much as 5% to 6% or more, according to a 1982 nationwide study by Shycon Associates, Inc., the management consulting firm headquartered in Waltham, MA. President Harvey Shycon noted that the survey of 185 companies with annual sales of from $50 million to $8 billion, showed that customer service had a definite impact on how well products are received in the marketplace. We've always known this, but now we have positive proof, said Shycon. For example, a company doing $250 million in sales could attribute $12.5 to $15 million of this to its customer service performance. That's $4 to $5 million added to or subtracted from the bottom line, he said. (p. 5)

But to what extent can this information be utilized within the strategic planning of automobile companies? The problem is, do new car dealers who rank high in providing satisfactory, after-the-sale, customer service also have higher success in terms of new car sales
and, conversely, those with low customer service satisfaction have lower sales success?

Need and Significance of the Study

Marketing enterprises have customarily been concerned with customer satisfaction. The consensus has been that consumers continue to purchase those products with which they are satisfied, and advise others about favorable products and service experiences. As pointed out by Naisbitt (1982), in Megatrends, "Consumers are to economics what voters are to politics" (p. 177).

While marketing scholars have emphasized the importance of customer satisfaction, few studies have examined, in detail, consumers' responses to dissatisfaction. According to Richins (1983), "Potential responses include (a) switching brands or refusing to re-patronize the offending store, (b) making a complaint to the seller or to a third party, and (c) telling others about the unsatisfactory product or retailer" (p. 68).

For the automobile manufacturer, the importance of retail dealers in maintaining product loyalty and attracting new prospects cannot be overlooked. Dealers are the most visible link in the marketing chain and have the potential to enhance or degrade the corporate image on a local as well as national basis. How then should the manufacturers direct their automobile dealers? Is an all out, highly expensive effort to increase product service the answer to increased sales? The significance of this study is to provide a
degree of insight into the question concerning the relationship of automotive dealership customer satisfaction to sales success.

Organization of the Study

Presented in Chapter I is an introduction to the study, the statement of the problem, the issues related to the problem, the need and significance of the study, and the organization of the study.

A review of the literature and the rationale for the research hypotheses are presented in Chapter II.

Presented in Chapter III are the methods and procedures used to conduct the study. The discussion includes the subjects chosen for the study, the type of instruments used for data collection, the research design chosen for the study, and the exact procedures of data collection.

The analysis of data and the testing of the research hypotheses are presented in Chapter IV.

Presented in Chapter V are the conclusions about the purpose of the study as well as recommendations for future research.
CHAPTER II

REVIEW OF THE SELECTED LITERATURE

The purpose of this chapter is to present a review of selected literature relative to the relationship of automotive dealership customer service satisfaction with sales success. The review of literature is divided into five sections. Discussed in the first section are the impacts that consumer satisfaction or dissatisfaction have on repurchase attitude, market performance, and managerial perspectives.

Explored in the second section are ways to measure consumer satisfaction levels. The causes and sources of dissatisfaction are investigated in the third section. Addressed in the fourth section are the theoretical bases of satisfaction. Presented in the fifth and final section are seven hypotheses and how they relate to consumer response under various dimensions of satisfaction or dissatisfaction in the automobile industry.

Impact of Consumer Satisfaction, Dissatisfaction

A review by Richins (1983) concludes that until the mid 1970s, few studies were published in marketing literature about customer satisfaction. About that same time in response to the consumer movement, interest in this subject began to increase. Some initial articles explored the appropriate ways to measure consumer satisfaction levels, such as Andreasen (1977) and Westbrook (1980). Others
investigated the causes and sources of dissatisfaction, including Day (1977) and Diamond, Ward, and Faber (1976).

Researchers, Oliver (1980) and Swan and Combs (1976), addressed the theoretical bases of satisfaction. Although investigative interest was stimulated in these areas, little attention was focused, in the marketing literature, toward consumers' reactions to satisfaction or dissatisfaction. As postulated by Richins (1983), even though there has been little research focusing on customer responses to dissatisfaction directly, suggestions appeared indirectly in some consumer behavior literature that repeat purchase attitude is influenced. One nationwide study, Technical Assistance Research Programs (1979), reported that depending on the nature of the dissatisfaction, from 30% to over 90% of dissatisfied respondents did not intend to repurchase the brand involved.

According to Rosenberg, Czepiel, and Akerele (cited in Bahr, 1980) marketing is under attack from consumer advocates, government, mass media, and many consumers themselves. Bahr (1980) observed that everyone from Ralph Nader to the next door neighbor is part of this attack. As a result, the marketing community has responded by upgrading customer service departments, toning down advertising, and numerous in-house studies on consumer satisfaction have been commissioned. As stated by Lele and Karmarkar (1983), customers when making purchases often believe they are buying more than the physical item. The purchase decision is accompanied with expectations about the level of postpurchase support the product carries with it. This can include anything from the replacement of a part due to failure to
complex warranties designed to meet customer needs over the product's entire useful life. Defining these expectations of support and fulfilling them effectively can be critical to a successful marketing effort. Takeuchi and Quelch (1983) argued that the quality of customer service after the sale is often as important as the product quality itself. They concede, however, that excellent customer service can rarely compensate for weak products totally. But weak customer service can promptly nullify all the advantages associated with delivering a product of superior quality. In an effort to place the concept of consumer dissatisfaction into perspective for marketing managers Lambert (1980) recommended the following:

Modification of marketing strategies, programs, and practices in view of alienation, either to capitalize on consumerism or defend against detrimental effects, assumes that retailers can identify the things that clash with alienated consumers' sensitivities. Because the things that alienated consumers find offensive may vary with market segments, geographic areas, and types of retailing operations, each firm must examine its own situation. (pp. 22-23)

Ways to Measure Consumer Satisfaction Levels

As noted by Ross and Oliver (1984), American firms are the recipients of millions of letters and phone calls each year from consumers who have complaints, compliments, or questions and suggestions regarding products and services. Exact numbers are unknown, but it is undoubtedly certain that companies hear from more customers through this communication channel than they do through formal consumer research activities such as surveys and focus groups. These letters, phone calls, and other methods through which consumers may...
select to contact organizations, including government agencies, the Better Business Bureau, etc., are normally referred to as volunteered or consumer initiated communications. The distinction between consumer initiated and company initiated customer satisfaction information is not completely clear. However, most researchers would agree that the primary distinction is that with company initiated customer satisfaction research the firm selects a meaningful sample from a known universe of users and obtains responses from a reasonable number of these target respondents. Consumer initiated communications, on the other hand, are by definition self-selected. In the opinion of Levitt (1983), one of the strongest signs of poor customer satisfaction is the absence of complaints from customers. It is not reasonable to think that consumers can be that satisfied, especially over an extended period of time. Chances are customers are either not being candid or not being contacted.

A Technical Assistance Research Programs (1983) study found that the average business hears from only 4% of its dissatisfied customers. For every complaint received by the company, the average business has another 26 customers with problems, at least 23% of which are serious. In the opinion of Swan and Longman (1975), even though automobile companies may hear from a higher than normal percentage of dissatisfied customers, they still get complaints from only 25% of those who are not satisfied. Gilly and Gelb (1982) suggested that dissatisfied automobile customers are 3 times more likely to go to the retail level with their complaints than to the manufacturer. However, there appears to be no research studies indicating how many
customer communications at the dealership level by unhappy customers are viewed as complaint opportunities, much less how many are acted upon by the retailer.

Causes and Sources of Dissatisfaction

According to Anderson and Jolson (1973), a successful marketer must communicate with customers, not just to them. Some consumer advocates argue that too much of current marketing communication stresses persuasion and imagery at the expense of other more relevant information. It seems that the consumer movement is demanding that manufacturers and retailers provide additional information, such as product performance characteristics, safety standards, and warranties. Perhaps emphasis on this information would narrow the distance between consumer product expectations and actual performance, thus lessening an important source of dissatisfaction. Barbeau (1985) contributed further to the theory that customer expectations influence dissatisfaction by explaining that the expectation process is composed of two dimensions. One dimension is concerned with the outcomes the consumer believes will be obtained from the product purchase, and the other is concerned with the outcomes the consumer believes should be obtained from the product. The first dimension corresponds to predictive expectations. Predictive expectations are generally produced by prior experience with the product and other information about how the product will perform such as advertising, salesperson claims, and word of mouth from other persons who have used the product. The second dimension corresponds to normative
expectations. Normative expectations imply a standard against which the product will be judged. For example, a customer trying a new brand with which he or she has had little experience may judge it against prior experiences with other brands. Disconfirmation of either dimension of expectancy can result in customer dissatisfaction. Barbeau further stated that additional research is required to better understand customer expectations as important factors in dissatisfaction.

**Theoretical Bases of Satisfaction**

In the viewpoint of Westbrook (1982), it is only recently that researchers have begun to inquire into the nature of satisfaction itself. He referred to the 1977 Marketing Science Institute Conference on Customer Satisfaction as the first time that the conceptualization of satisfaction was seriously addressed. At that conference, Hunt (1977) proposed that consumer satisfaction is essentially an evaluation of emotions sustained by consumers in the course of their consumption experiences. Alternative conceptualizations were subsequently offered by Westbrook (1980, 1981) and Oliver (1980, 1981), each of whom conceived satisfaction as the emotional response which followed an evaluation of the outcomes of consumers' purchase related experiences. Levitt (1983) observed that the relationship between a seller and a buyer doesn't end when a sale is made. The sale simply consummates the courtship, at which point the marriage begins. How satisfying the marriage is depends on how well the seller manages the relationship. Westbrook (1981) categorized consumer experiences into
three broad types. The first is experiences related to the retail outlet itself, such as dealing with an automobile dealership. Second are the experiences that the customer has with the product. And third is the service obtained from the retailer. Each of these experiences receives an evaluation and an accompanying emotional reaction from the consumer. It therefore may be possible to employ a range of approaches not directly related to the product to raise levels of customer satisfaction. As such, these concepts of consumer satisfaction are of considerable value in mapping marketing strategy.

Statement of the Hypotheses

It is believed by this researcher that the preceding review of the literature has established a theoretical foundation for this study. Indeed, it was the goal of this study to examine today's automobile industry through use of this theoretical foundation. Hopefully by employing selected satisfaction, dissatisfaction, and complaining behavior theories, useful information can be generated toward a better understanding of automobile customers' needs and wants. This is of particular importance at this time as customer loyalty to domestic automobile brand names and individual dealers is at an all time low. This condition exists for a number of reasons. As explained by Power (1983), in the 1950s population growth, suburban sprawl, and increasing mobility combined to break up the personal relationship new car dealers generally had with their customers. Dealer loyalty by customers began to wane, but this was offset partially by brand name loyalty, which didn't start to break down.
until the 1970s.

The addition of new import nameplates, offering consumers a wide variety of purchase alternatives, coupled with the sheer increases in the size of individual dealerships pushed traditional customer loyalty almost out of the picture. Yet, the positive side for dealers was that there appears to be a tremendous opportunity to establish a new kind of customer loyalty based on superior service to the consumer. With this in mind, seven hypotheses were constructed which test the relationship between defined levels of specific customer service provided by dealerships and new customer loyalty, as judged by dealership overall sales success. The development of the hypotheses was based on the review of the literature and this researcher's 25 years of experience as an employee and manager in a large domestic automobile company.

Development of the first hypothesis, which probes into the relationship of overall customer satisfaction and sales success, was particularly influenced by Hunt (1977), who argued that intention to repurchase is an excellent composite measure of customer satisfaction. If an equivalent repeat purchase is intended, that indicates the first purchase was important enough to be repeated and the original choice provided satisfaction at a level in which the customer doesn't feel compelled to seek an alternative choice the second time. This is a reverse way to measure customer satisfaction but it has support in marketing literature.

In the opinion of Olshavsky (1977), it should be expected, at a minimum, that the dissatisfied consumer will discontinue use of the
unsatisfactory product, service, or brand, or conduct a personal boycott of the offending retailer. In USA Today, Grangenois (1983) reported: "In the rough and tough slugfest for profits, market share, and in some cases survival, companies across the USA are finding out that nice guys don't finish last" (p. 13). The message being that United States companies are discovering that customer satisfying attitudes, as much as high tech products, can keep them competitive. Fincher (1983), in Dun's Business Month, warned corporate planners: "Too often, in fact, the lackluster results on corporate balance sheets are matched by similarly indifferent attitudes behind the counter" (p. 89). It is not that firms are unaware of this situation. It is simply that they become so involved in managing finances, cost controls, and marketing that customer service at all levels is often neglected.

As a result of the review of related literature and in response to the widely acclaimed, but often ignored, importance of customer satisfaction in the automobile industry, the following was hypothesized:

**Hypothesis 1:** There exists a direct relationship between overall new automobile dealership customer satisfaction ratings and sales success as measured by market penetration ratings.

Examined by the second hypothesis of this study was the relationship between product warranties and sales success. Kendall and Russ (1975), defined the range of warranties as follows:

A warranty is an affirmation by the seller of the quality or performance of the goods he is trying to sell. Express warranties make such an affirmation in writing. They range
from simple statements about product attributes (e.g., "pure wool") or product performance ("satisfaction guaranteed or your money back"), to the complex documents limiting the legal responsibilities of manufacturers of automobiles and appliances. (pp. 36-37)

According to Bernacchi, Kono, and Willette (1979), the warranty promise is a reasonable way of reducing the buyer's perceived risk as he or she prepares to make a purchase, especially in the case of a high priced product. As put forth by Darden and Rao (1977), satisfaction with repairs under warranty is instrumental in encouraging, or retarding, repeat sales with present customers. Warranties are expected to increase consumer satisfaction, and to do so by providing security, peace of mind, and insurance with respect to the minimum performance characteristics of the purchased products. Glassman and Smith (1979) summed up warranty satisfaction by outlining four primary factors. The first is the comprehensiveness of the warranty coverage. Second is the ease and speed in obtaining repairs. Third is the quality of the repairs. Policy adjustment shortly after the warranty expires is the fourth factor.

The foregoing literature review and personal automobile marketing experience leads this researcher to present the following:

Hypothesis 2: There exists a direct relationship between warranty service ratings received by new automobile dealerships from their customers and sales success as measured by market penetration ratings.

Dealership service departments and how they influence new car sales success was inquired into in the third hypothesis. Bohon (1985) stated that long before market researchers started utilizing
customer satisfaction surveys, successful new car dealers recognized that one of the most rewarding ways to retain customers and promote repeat business was through a confidence inspiring service department. Reporting his findings from a study which included 50,000 interviews with owners of automobiles, Braden (1977) concluded that a high degree of relationship was discovered to exist between repurchase intentions and repair experience. Power (1982) added that recurring repair problems do more to sabotage the chances for repeat buyers than any other single factor: "Owners who experience mechanical difficulties with their new car that are not fixed with dispatch, and stay fixed, are quick to broadcast their woes to anyone who will listen" (p. 4). According to Bearden, Crockett, and Graham (1979), service problems may be due to any combination of dishonesty, incompetence, error, difference of opinions, lack of consumer knowledge, and/or poor communications between car owners and service departments. Poor service departments at new car dealerships may have a specific source, in the viewpoint of Turnbull (1982):

Car dealerships are generally owned by salesmen, not by mechanics, and the salesmen may not know or care much about the mechanical end of things. But if the boss man in the dealership doesn't care much about mechanical things he does know that his customers want a show of service, so he still may have a good looking service shop. Good looking, but maybe not so good. (p. 18)

Drawing upon this researcher's automotive experience, the fault is more likely in the "salesman" owner's lack of leadership skills that allows a significant investment in a "good looking" service shop to be just show. Bennis (1983) said, "While most managers concern themselves with doing things right, leaders focus on doing the right
Based upon their surveyed sample of 2,330 new car owners, Bernacchi et al. (1979) reported:

The most frequently mentioned reason for service dissatisfaction was repeat service visits for the same problem, either not getting it fixed correctly or not getting it fixed at all the first time. Of the 289 service dissatisfied, 87% checked repeat service visits as one source of dissatisfaction (respondents were invited to check as many as applied). In addition, repeat visits was most mentioned as the most irritating service problem. (p. 141)

Bohon (1985) echoed these findings and advised that people can understand coming in once to a new dealership's service department for a problem, but not having to come back again for the same problem.

Therefore, since service department comebacks are representative of service dissatisfaction, this hypothesis is presented:

**Hypothesis 3**: There exists an inverse relationship between the number of times customers must bring back their automobile to a new car dealership service department to satisfactorily solve the same problem with the automobile and the dealership's sales success as measured by market penetration ratings.

Involved in the fourth hypothesis was the condition of the new car as delivered to the purchaser, his or her degree of satisfaction, and how this related to dealership sales success. Power (1984) reported that in February 1984, J. D. Power and Associates conducted a New Car Delivery Condition Test Survey (NCDC). Some 39,500 respondents were requested to indicate if there was anything wrong with their new cars when they were delivered. Results of the NCDC test indicated that 40% of the total respondents experienced problems with
their new cars upon delivery. Included in the list of problems were squeaks and rattles, electronic failures, interior finish, paint and moldings, noise problems, and even engine stalls.

It appears reasonable to expect that the customer's satisfaction with his or her new car at delivery sets the tone for the entire ownership experience. This led this researcher to present the following:

**Hypothesis 4:** There exists a direct relationship between new car delivery condition, customer satisfaction ratings, and sales success as measured by market penetration ratings.

Explored within the fifth hypothesis of this study was the role of salespeople, how they can satisfy customers, and consequently how the various levels of satisfaction relate to dealership sales success. Unfortunately many consumers feel that car buying is a frustrating, unpleasant experience, and that bartering is designed to confuse customers, that salesperson practices are unethical and lack professionalism. Swan and Oliver (1985) believed that there was an exchange of equity between a customer and a salesperson. In brief, the equity theory suggests that a customer will compare his or her inputs, such as shopping effort, to outcomes received from the salesperson and form a perception of net gain. The customer is also believed to estimate what the salesperson invested in the way of inputs, to serve the customer, and the outcomes that the salesperson received, such as a profitable sale. The final step is the comparison of customer to salesperson net gain. If the net gain favors the salesperson then customer dissatisfaction is the result. Peters and
Waterman (1984) provided a simple message to salespeople derived from their studies of many excellent companies:

All business success rests on something labeled a sale, which at least momentarily weds company and customer. A simple summary of what our research uncovered on the customer attribute is this: the excellent companies really are close to their customers. That's it. Other companies talk about it; the excellent companies do it. (p. 156)

Hopefully, the image of the fast talking, bright plaid double-knit suit, car salesperson is giving way to a higher level of professionalism. The fastest way to convince dealers to remove the cartoon salesperson is to show them the detrimental effect these employees have on customer satisfaction with their sales staffs and sales. In that regard the following was hypothesized:

**Hypothesis 5**: There exists a direct relationship between new car dealership sales staff customer satisfaction ratings and sales success as measured by market penetration ratings.

Examined in the sixth hypothesis were new car dealership salesperson turnover rates and the impact this phenomenon has on dealership customer satisfaction. It is a commonly believed marketing principle that it is desirable to select a satisfactory sales staff and to retain those individuals who are selected because, in general, the longer the salesperson remains with a firm the more valuable he or she is to the firm. The nature of costs of salesperson turnover, implied by Heneman, Schwab, Fossum, and Dyer (1980), included the cost of placing the new salesperson in the firm, such as training, and the indirect loss due to the ineffectiveness of the new salesperson. They also viewed a turnover rate of 40% as excessive. Vogel
(1984) viewed the costs of salesperson turnover in a slightly different manner: "Turnover gets to be very costly, not only the hiring, but the open territories, general disruption, and a bad image as far as the customers are concerned" (p. 20).

The automobile industry has a salesperson average turnover rate in excess of 40%, which raised the following hypothesis:

**Hypothesis 6**: There exists an inverse relationship between new car dealerships' percentage of salesperson turnover and overall new automobile dealership customer satisfaction ratings.

Pursued in the seventh and final hypothesis was the relationship between salesperson turnover and sales staff customer satisfaction. The two previous hypotheses examined the relationship of the sales staff and salesperson turnover to other variables, respectively. The close association of these two variables led this researcher to hypothesize the following:

**Hypothesis 7**: There exists an inverse relationship between new car dealerships' percentage of salesperson turnover and sales staff customer satisfaction ratings.

**Summary**

In summary, the preceding review of literature was divided into five sections. In the first section the impact that customer satisfaction or dissatisfaction has on repurchase attitude, market performance, and managerial perspectives was dealt with. In the second section selected ways to measure consumer satisfaction levels were provided. There followed in the third section a review of causes and
sources of dissatisfaction. In the fourth section the theoretical bases of satisfaction were addressed. Seven hypotheses based on the review of literature as well as this researcher's experiences in the automobile industry were offered in the fifth section.
CHAPTER III

DESIGN AND METHODOLOGY

In this chapter are presented the research design and methodology used in this study. Contained within is a discussion of the population of interest to this study as well as of the subpopulation that was studied. This is followed by a description of the data gathering instruments with attention focused on the development, the purpose, the content, and the administration of the instruments. A discussion of the procedures used in this study completes the chapter.

Population of the Study

The population of interest in this study was 5,250 new passenger car dealerships franchised by a major automobile company. To protect the anonymity of the company a pseudonym, Universal Motor Company, has been substituted for the actual commercial name. Total annual passenger car sales by Universal’s dealer network for the period of this study was approximately 2 million units. Universal is a multiple carline manufacturer and has franchised dealerships in every state. The sales department of Universal Motor Company appoints new dealers, administers the franchise agreement, and provides business management council to all of Universal’s dealerships. To accomplish these responsibilities, the organizational structure of the sales department had four levels (see Figure 1).
The top level of the organizational structure of the sales department was Universal's central office located in a major metropolitan city. Within the second level, at the time of this study, the United States was divided into six geographic areas labeled as regions (see Figure 2). Each region was in turn divided into seven zone areas, as the third level (see Figure 3). To make up the fourth level, zones were divided into an average of 12 districts, and each district had an average of 10 dealerships within its boundaries.
Figure 2. Universal Motor Company's Six Regions.

Figure 3. Universal Motor Company's 42 Zones.
Subpopulation of the Study

The subpopulation investigated in this study was the 42 zones of Universal Motor Company. Available from each zone was composite business information reflecting the approximately 125 dealerships in each zone. This subpopulation was chosen for the study because of the availability of pertinent data deemed to be representative of the dealer network as a whole.

Instrument Development

The data from which this study was drawn originated from three instruments which were used extensively by Universal's Marketing Information and Research departments. The first instrument, the Customer Satisfaction Index (CSI), provided customer satisfaction data through use of a mail questionnaire sent directly to a large sample of Universal's new car purchasers. The second instrument, entitled the R. L. Polk Community Registration Report, provided new car purchaser registration data by dealer area. The third instrument, the Sales Personnel Productivity Report, provided sales productivity and employment status data for each salesperson in Universal's dealerships.

Instrument Purpose

The purpose of Universal's CSI program was to measure customer satisfaction on a continuous basis with regard to Universal new cars and the service provided by Universal dealers. These data were used
in the study to rate total zone customer satisfaction levels through the combined CSI ratings of each zone's dealers.

The purpose of the R. L. Polk Community Report, for Universal's use, was that of monthly measurement of market penetration versus competition for each of Universal's dealership areas. In the study, the registration data were used to rate total zone sales success through the combined registrations of each zone's dealers.

The purpose of the Sales Personnel Productivity Report was to collect and prepare salesperson sales data for various comparisons, as well as to provide individual salesperson qualifications for Universal's sales honor societies. For purposes of the study, the Sales Personnel Productivity Report was used to determine total zone salesperson turnover percentages through the combined data of all salespeople within each zone.

Instrument Content

Page 1 of the 4-page CSI questionnaire (see Appendix A) is computer imprinted with the owner's name, the model and series of vehicle owned, the name and location of the selling dealer, and the month and year of purchase. The complete questionnaire contains 17 questions which refer to the selling dealer and to the automobile listed on page 1. The data obtained from four of the questions were selected for use in the study. A discussion of each of the four selected questions follows.

Question 3 (see Figure 4) asked the customer about the selling dealership's sales staff. Did they have a good attitude, know their
product, explain the features of the car and the warranty, and treat customers right?

ABOUT YOUR DEALER'S SALES STAFF

3. How satisfied have you been with the SALES STAFF at your selling dealership? Consider the following items? (By sales staff we mean the salesperson, the sales manager or the owner).

<table>
<thead>
<tr>
<th>THE SALES STAFF:</th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Neither Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has A Good Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is Well Informed About The Product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explained The Features Of The Car</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explained The New Vehicle Warranty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVERALL SATISFACTION WITH SALES STAFF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4. Question 3 of CSI Questionnaire.

The customer respondent provided answers by marking boxes under any one of five predetermined, consistent throughout the questionnaire, response ratings (see Figure 4). Only the data collected from the "overall satisfaction with sales staff" part of Question 3 were used in the study.

Question 4 (see Figure 5) dealt with the delivery condition of the new car. Customers were asked to respond to items such as cleanliness and mechanical operation. Only the data collected from the "overall satisfaction at time of delivery" part of Question 4 were used in the study.

Question 5 (see Figure 6) asked customers for responses on what, if any, warranty services they had sought from the selling dealership and the number of trips needed to correct the same problem. Only the data regarding the "number of trips needed to correct the same problem" part of this question were used in the study.
### AT THE TIME OF DELIVERY

4. How satisfied were you with the condition of your 1985 product AT THE TIME OF DELIVERY considering the following items? (By delivery we mean when you first received it from the dealer.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Somewhat Satisfied</th>
<th>Neither Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleanliness of Car</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Mechanical Operation (engine, transmission, etc.)</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Electrical Operation (lights, radio, power windows, etc.)</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Body Fits (doors, hood, trunk lid, moldings, etc.)</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Paint Finish</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>OVERALL SATISFACTION AT TIME OF DELIVERY</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Figure 5. Question 4 of CSI Questionnaire.

8. Thinking about your 1985 product, have you had WARRANTY SERVICE from your selling dealer on any of the items listed below? If "YES," please check the number of trips needed to correct the SAME problem.

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>1</th>
<th>2</th>
<th>3 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Conditioning</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Body Fits (doors, hood, trunk lid, etc.)</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Body Water Leaks, Wind Noise</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Brakes</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Steering</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Electrical (lights, gauges, instruments, etc.)</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Engine Hard to Start, Won't Start</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Engine Noise, Knock</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Engine Rough Idle, Misfiring</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Oil Leaks</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Paint</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Radio</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Speedometer</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Squeaks and Rattles</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Transmission</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Trim, Hardware, Moldings</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Wheels, Tires, Vibration</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

(Please write in)

Figure 6. Question 8 of CSI Questionnaire.
Question 9 (see Figure 7) asked customers to rate the selling dealership's warranty service. Considerations included were attitude of service personnel, promptness of attention, and convenience of hours. Only the data collected from the "overall satisfaction with the warranty service" part of Question 9 were used in the study.

9. How satisfied have you been with the WARRANTY SERVICE from your selling dealer considering the following items?

<table>
<thead>
<tr>
<th>Service People Have A Good Attitude</th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Neither Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service People Wait on Me Promptly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service People Understand My Problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repair Order Is Easy to Understand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job is Done When Promised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job is Done Right The First Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Hours Are Convenient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needed Parts Are in Stock</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVERALL SATISFACTION WITH WARRANTY SERVICE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 7. Question 9 of CSI Questionnaire.

Question 10 (see Figure 8) was designed to obtain the customer's overall satisfaction with the selling dealer, including sales staff, the delivery condition, and any service on the car received at the selling dealership. The data collected from this question were used in the study.

TOTAL SATISFACTION WITH SELLING DEALER

10. Overall, how satisfied have you been with your selling dealer? (Including the sales staff, the delivery condition of your 1985 product, and any service you may have received at your selling dealer on this car.)

<table>
<thead>
<tr>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Neither Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 8. Question 10 of CSI Questionnaire.
The five rating responses that customer respondents could choose within each question category were applied to a rating scale structure (see Figure 9). The indexes of customer satisfaction shown in the dealer and zone reports were based on this rating scale.

<table>
<thead>
<tr>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Neither Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>(100)</td>
<td>(75)</td>
<td>(50)</td>
<td>(25)</td>
<td>(0)</td>
</tr>
</tbody>
</table>

Figure 9. CSI Rating Scale.

The numbers in parentheses on the scale in Figure 9 were the weights used to calculate the indexes. They ranged from 100 for a very satisfied response to 0 for a very dissatisfied response. These weights were not shown on the mail questionnaire. From the customer responses to the satisfaction scale, a 2-digit average rating or index was calculated (see Figure 10). The customer satisfaction indexes were calculated for each question in the CSI questionnaire for all the customer respondents for each Universal dealer. Thus, dealership indexes were provided. Through use of the dealer CSI rating, Universal could counsel with dealers as to their individual customer satisfaction indexes and where improvements in customer satisfaction needed to be made in their operation. For comparison purposes, Universal calculated and communicated within the company CSI ratings for each zone (see Appendix D), by combining the total responses from all questionnaires returned for all CSI dealers in
each zone. Zone CSI ratings for the selected questions were utilized in the study.

<table>
<thead>
<tr>
<th>Rating scale description</th>
<th>Rating scale value</th>
<th>Number of respondents rating each category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very dissatisfied</td>
<td>0</td>
<td>8 = 0</td>
</tr>
<tr>
<td>Somewhat dissatisfied</td>
<td>25</td>
<td>9 = 225</td>
</tr>
<tr>
<td>Neither satisfied nor dissatisfied</td>
<td>50</td>
<td>9 = 450</td>
</tr>
<tr>
<td>Somewhat satisfied</td>
<td>75</td>
<td>45 = 3,375</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>100</td>
<td>93 = 9,300</td>
</tr>
</tbody>
</table>

13,350/164 = 81 mean value or index

Figure 10. Calculation of Customer Satisfaction Index.

The R. L. Polk Community Report was based upon new vehicle registrations at the time of purchase. This was possible because registration of motor vehicles was required by law in every state. The two principal elements used to compile the Community Registration Report were the postal communities in the dealer's Area of Primary Responsibility (APR), and the new unit registrations within those communities. The postal communities which constitute Universal dealers' APR were determined by Universal through studies which included such items as number of new unit registrations in each community, the road network, natural barriers, stability of the community (permanent

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or temporary, such as military posts or resort areas), and population trends. The registration data for the APR are purchased through R. L. Polk & Company and are derived from official state documents. Universal dealers are provided copies of their individual monthly Community Registration Reports (see Appendix B). The term market penetration refers to the percentage of dealer Registrations of Universal automobiles, over a given period of time, by the franchised dealer in his or her APR versus the industry market. A simple calculation (see Figure 11) of dividing registrations by total industry results in market share.

<table>
<thead>
<tr>
<th>Dealer registrations</th>
<th>Total industry</th>
<th>Market penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>2,000</td>
<td>20%</td>
</tr>
</tbody>
</table>

Figure 11. Calculation of Dealer Market Penetration.

For comparison purposes Universal calculates and communicates within the company market penetration percentages for each zone (see Appendix D) by combining the total registrations from all Universal dealers in each zone and dividing the sum by the zone's industry total. Zone market penetration percentages are utilized in the study.

The Sales Personnel Productivity Report information is collected through the completion of report forms by Universal dealers (see Appendix C). The data provide detailed information concerning each dealer's sales force such as salesperson average sales, sales honor club points, and salesperson turnover percentage. For comparison
purposes Universal calculated, and communicated within the company, salesperson turnover percentages for each zone (see Appendix D) by combining the total salesperson data from all Universal dealers in each zone. Zone salesperson turnover percentages were utilized in the study.

Instrument Administration

The data required for this study were obtained from three separate instruments used by Universal's Research and Information departments at the time of this study, and each drew from completely diverse sources and required dissimilar collection techniques.

The CSI program included approximately 1,800 Universal dealers, or about 80% of Universal's total yearly sales. Customers who received questionnaires were selected based on a stratified random sample. Customers were mailed their questionnaires at the 6-month point of ownership. This timing gave the customer long enough to have returned to the dealership yet provided relatively recent information on the sales experience and delivery condition of the car. To maximize questionnaire returns, a follow-up card was mailed to each customer 4 days after the original mailing. Approximately 600,000 questionnaires and follow-up cards were mailed for the year of the study, 1983, with a response rate of slightly over 50%. Some Universal dealers expressed a concern that the replies would be heavily biased on the negative side because owners with complaints are more likely to reply than satisfied customers. A Universal telephone survey of 9,000 nonrespondents to the CSI questionnaire was used to
check the possibility of a nonresponse bias. The customers telephoned answered the questions from the questionnaire in the same general manner as the customers who returned the questionnaire. When asked why they hadn't responded, the majority answered that they were "too busy."

The Community Registration Report, purchased from R. L. Polk & Company, was used by all domestic automobile companies. The reports were compiled only from official state documents, that is, registrations made with and accepted by the motor vehicle bureau of each state. R. L. Polk & Company maintained a field force of trained representatives who not only obtained the registration information but also maintained close contacts in every state. These contacts reached from top state officials through the motor vehicle groups to dealer associations and others interested in vehicle registration procedures. In this way, Polk field representatives were alerted to any unusual situation within the states which might require special study or attention. The credibility of the R. L. Polk Community Registration Report in the automobile industry was rarely questioned.

The Sales Personnel Productivity Report was completed monthly by Universal dealers and was computed and printed by a branch division of Universal Motor Company. Dealers with salespeople were required by the Universal franchise to participate in the reporting program.

Design and Procedure

This study was designed to answer research questions concerning the relationship which was hypothesized to exist between automotive
dealership customer service satisfaction with sales success. In order to test the hypothesis, this researcher relied upon three research instruments utilized by a major automobile company. The resultant data were deemed to represent the total dealer network of 5,250 dealerships; however, it was reported in terms of 42 geographic zones (see Appendix D). These data were used because they were accessible to the researcher and thought to be representative of the larger population.

A hypothesis regarding the relationship of overall new automobile dealership customer satisfaction ratings and sales success was developed as were hypotheses regarding warranty service, comebacks for the same service problem, new car delivery condition, dealership sales staffs, and salesperson turnover. In order to investigate each of the hypotheses developed and utilizing the data extracted from the three instruments discussed previously, geographic zone totals were compared for each variable. In an endeavor to determine whether or not relationships existed between the variables referenced in each hypothesis, the Wayne State University Computing Services Center, Detroit, Michigan, was utilized to plot a scattergram and compute a Pearson product-moment correlation for each hypothesis.

Comments relating to the analysis of data are included in Chapter IV ("Results") following the discussion of each hypothesis.

Summary

Presented in this chapter was a description of the population of interest and subpopulation studied, type of instruments utilized in
the study to collect data, and discussion of the research design and procedures. Addressed in the next chapter are the results of the data interpretation procedures.
CHAPTER IV

RESULTS

Reported in this chapter are the findings of the study. The problem investigated by the study posed the question, do new car dealers who rank high in providing satisfactory customer service also have higher success in new car sales? The significance of the study was to provide a degree of insight into this question and thus determine to what extent the results can be utilized within the strategic planning of automobile companies. Reported in the first section of this chapter is general information regarding the data collected; reported in the second section are the results of the seven previously offered hypotheses.

Review of Information Regarding Data

The population of interest consisted of 5,250 franchised new car dealerships of a major domestic automobile company. The subpopulation studied consisted of 42 geographical zones of the company. The data which are presented as zone totals reflect the combined totals of data of all dealerships within each zone. The zone data were extracted from three instruments utilized by the automobile company focused upon in the study. The three instruments were: (a) Customer Satisfaction Index Program (CSI), (b) R. L. Polk Community Registration Report, and (c) Sales Personnel Productivity Report. The data collected by the three instruments utilized in the study represent

36
the calendar year of 1983. The following provides a brief description of the zone characteristics of interest examined by the instruments which are basic to the findings to be presented:

1. Zone passenger car market penetrations in 1983.
4. Zone percentages of times customers were forced to bring their new car back more than once to the selling dealer for the same service problem in 1983.
7. Zone percentages of salesperson turnover in 1983.

Test of Hypotheses

An analysis of variables which are of interest to this researcher when comparing new car dealership customer satisfaction with dealership sales success are offered in the following hypotheses. The hypotheses resulted from the review of the literature as well as the experiences of this researcher who has worked both as a non-management and management level employee for the subject company during the past 25 years. Rationale for the stated hypotheses was offered in the review of literature.

For the sake of clarity, each of the seven hypotheses are presented and a review of the results of testing follow.
Hypothesis 1: There exists a direct relationship between overall new automobile dealership customer satisfaction ratings and sales success as measured by market penetration ratings.

A review of the scatter of the points in the scattergram (see Figure 12) suggests a positive and linear relationship between customer satisfaction ratings and market penetration ratings.

A Pearson product-moment correlation coefficient for these data is .64 (see Figure 12). Therefore, using an alpha of .05 it is possible to reject the null hypothesis that the (Pearson product-moment correlation coefficient) parameter ρ is equal to zero, against the alternate hypothesis that it is greater than zero.

The scattergram suggests and the correlation coefficient confirms the presence of a direct relationship between customer satisfaction ratings and market penetration ratings. Therefore, these data support the hypothesis that a direct relationship exists between dealership customer satisfaction ratings and sales success as measured by market penetration ratings.

Hypothesis 2: There exists a direct relationship between warranty service ratings received by new automobile dealerships from their customers and sales success as measured by market penetration ratings.

A review of the scatter of the points in the scattergram (see Figure 13) once again presents a lower-left-to-right pattern, suggesting a positive relationship between the variables of interest.

The Pearson product-moment correlation calculation produced a result of .54 (see Figure 13). Using an alpha level of .05, it is
Figure 12. Relationship of Zone 1983 Overall Dealership CSI Ratings to Zone 1983 Passenger Car Percentage of Market Penetra-tions.
Figure 13. Relationship of Zone 1983 Warranty Service CSI Ratings to Zone 1983 Passenger Car Percentage of Market Penetra-
tions.
possible to reject the null hypothesis that the parameter rho is equal to zero against the alternate hypothesis that the parameter rho is greater than zero.

A direct relationship between warranty service ratings and market penetration ratings for new car dealerships is, therefore, suggested by the scattergram and confirmed by the correlation coefficient. The hypothesis that a direct relationship exists between dealership warranty service ratings and sales success as measured by market penetration ratings is, therefore, supported.

**Hypothesis 3**: There exists an inverse relationship between the number of times customers must bring back their automobile to a new car dealership service department to satisfactorily solve the same problem with the automobile and the dealership's sales success as measured by market penetration ratings.

A review of the scatter of the points in the scattergram (see Figure 14) presents a lower-right-to-left pattern, suggesting a negative relationship between forced service comeback for same problem and market penetration.

The Pearson product-moment correlation calculation produced a result of -.54 (see Figure 14). This correlation is significant at the .05 alpha level and the hypothesized inverse relationship between dealership percentage of times customers must bring back their automobile for service on the same problem and dealership sales success as measured by market penetration ratings is, therefore, supported.

**Hypothesis 4**: There exists a direct relationship between new car delivery condition, customer satisfaction ratings, and sales
Figure 14. Relationship of Zone 1983 Service Comeback for Same Problem CSI Percentages to Zone 1983 Passenger Percentage Market Penetrations.
success as measured by market penetration ratings.

A review of the scatter of the points in the scattergram (see Figure 15) suggests a positive and linear relationship between delivery condition and market penetration.

The Pearson product-moment correlation coefficient for these data is .64 (see Figure 15). Therefore, using an alpha of .05, it is possible to reject the null hypothesis that the parameter rho is equal to zero, against the alternate hypothesis that it is greater than zero.

The scattergram suggests and the correlation coefficient confirms the presence of a direct relationship between delivery condition and market penetration. Therefore, these data support the hypothesis that a direct relationship exists between dealership new car delivery condition and sales success as measured by market penetration.

**Hypothesis 5:** There exists a direct relationship between new car dealership sales staff customer satisfaction ratings and sales success as measured by market penetration ratings.

The calculation of a .68 correlation (see Figure 16) produced by utilizing the Pearson product-moment method confirms the presence of a positive relationship between sales staff customer satisfaction ratings and sales success as measured by market penetration ratings. The alternate hypothesis is, therefore, supported at the .05 level.

**Hypothesis 6:** There exists an inverse relationship between new car dealerships' percentage of salesperson turnover and overall new automobile dealership customer satisfaction ratings.
Figure 15. Relationship of Zone 1983 Delivery Condition CSI Ratings to Zone 1983 Passenger Car Percentage of Market Penetrations.
Figure 16. Relationship of Zone 1983 Sales Staff CSI Ratings to Zone 1983 Passenger Car Percentage of Market Penetration.
A review of the scatter of the points in the scattergram (see Figure 17) presents a lower-right-to-left pattern, suggesting a negative relationship between salesperson turnover and overall new automobile dealership customer satisfaction ratings.

The Pearson product-moment correlation calculation produced a result of -.57 (see Figure 17). This correlation is significant at the .05 alpha level and the hypothesized inverse relationship between dealerships' percentage of salesperson turnover and overall new automobile dealership customer satisfaction ratings is supported.

**Hypothesis 7**: There exists an inverse relationship between new car dealerships' percentage of salesperson turnover and sales staff customer satisfaction ratings.

The Pearson product-moment correlation coefficient for this final test is -.54 (see Figure 18), which is indicative of a negative relationship between new car dealerships' percentage of salesperson turnover and sales staff customer satisfaction ratings.

Using an alpha level of .05, it is therefore possible to reject the null hypothesis that the (Pearson product-moment correlation coefficient) parameter rho is zero, against the alternative hypothesis that it is greater than zero.

**Summary**

Results have been offered which support the purpose of the study. In the first section of this chapter was described the need to investigate the problem of whether or not automobile companies should include in their marketing strategies the hypothesized
Figure 17. Relationship of Zone 1983 Salesperson Turnover Percentages to Zone 1983 Overall Dealership CSI Ratings.
Figure 18. Relationship of Zone 1983 Salesperson Turnover Percentages to Zone 1983 Sales Staff CSI Ratings.
relationship between satisfactory customer service and sales success. Described in this section also were the general background characteristics of the automobile company's zones. Characteristics of interest were market penetration, overall customer satisfaction, warranty service, comeback problems, delivery condition, sales staffs, and salesperson turnover.

In the second section of this chapter were presented the results of the testing of the seven hypotheses. All seven hypotheses were accepted.

Offered in Chapter V is a discussion concerning the conclusions that can be drawn from the data analysis presented in this chapter. In addition, recommendations are made for future research and use of this study.
CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

As detailed earlier, this study was conducted for the purpose of determining whether or not there exists a relationship between new car dealership customer service satisfaction ratings and dealership sales success as measured by market penetration ratings. The population of the study was 42 geographic zone clusters of dealerships in the United States for a major domestic automobile company. Ratings for the total dealers in each zone were obtained, representing certain characteristics. Conclusions relative to each of those items are discussed in this chapter. The conclusions regarding the relationship between overall customer service satisfaction and sales success are presented in the first section of the chapter and are followed by conclusions regarding the relationship of other characteristics of interest. In the second section of the chapter recommendations for future research are offered. The chapter concludes with a summary of this researcher's opinions and thoughts regarding the study.

Dealership Overall Customer Satisfaction

In Chapter IV ("Results") the data collected from the study population of all 42 geographic zones of the subject automobile company were presented. The data were collected by three company utilized instruments detailed in Chapter III ("Design and
Methodology). The data were then processed with the aid of a computer. It is believed by this researcher that these data are representative of the 5,250 franchised dealerships of the major automobile company focused upon. A number of observations can be drawn as a result of the statistical support of the hypothesized direct relationship between overall customer satisfaction ratings for these dealers and sales success. Dealerships who consistently demonstrate either high or low overall customer satisfaction can normally be expected to produce similar levels of results in sales success. It would appear then that automobile companies should indeed attempt to educate, support, and lead their dealers in becoming customer satisfaction oriented. Thus, the monitoring of customer satisfaction is an important management tool at both the local dealership and national company levels. Population growth, suburban sprawl, and increasing mobility of the consumer have combined to break up the personal relationship new car dealers generally have with their customers. Therefore, consistent policies that create service satisfaction for all customers is more important than ever before.

Dealership Warranty Satisfaction

The results of the study indicate that there exists a direct relationship between dealership warranty service ratings and dealership sales success. The data collected suggest that a positive opportunity exists for marketing management to utilize warranty policies as customer satisfaction tools. This brings into question the thought that the major role of warranties is to limit the
responsibility of automobile companies. It also challenges the attitude that complaint-handling departments are established merely to exemplify good automobile company citizenship, and that a complaining customer is an adversary. It is recommended that complaints handled by warranty be viewed as having promotional value. Also that complaints in general provide useful feedback on how to improve warranty coverage. Consumer complaints and warranty expenses are not just something to be endured. They can serve as valuable guides to necessary product improvements and just as importantly they can, when well-handled, promote customer satisfaction with the warranty service received.

**Dealership Comebacks for the Same Service Problem**

It was not surprising that the results of the study supported the hypothesis that there exists an inverse relationship between the number of times customers must bring back their car to solve the same service problem and dealership sales success. The frustration of an owner who returns to the dealership time and time again to repair the same service problem was anticipated by the researcher to be expressed in no less terms than loss of sales. It is suspected also by the researcher that owners returning to the same dealer for unsatisfactory service, while not likely to purchase again from the same dealer, are also not likely to repurchase the same make of automobile. It is recommended that dealerships review the communication channels between the customer in for service and the mechanic who will perform the service. Very often the customer tells a service
counselor the nature of his or her problem, the repair order is then written by the counselor, which goes on to the work area and is assigned to a mechanic who has not directly spoken to the customer. The nontechnical customer's request may be lost en route. The result is that the car is not properly or completely repaired the first time. In many dealerships, the only contact the dealers may have with their service department is when a customer telephones and threatens to sue. Since not fixing the car right the first time is the most frequent complaint voiced by customers, the frequency of this problem is a good indicator of a dealership's service department image. The direct relationship of this variable to sales success suggests that everyone on the dealership service staff must be inspired to do the job right the first time, not out of idealism, but because their paycheck depends on it.

**Dealership Car Delivery Condition**

Customers rightfully question why their brand-new, expensive cars have so many bugs to be worked out. This researcher, an automobile company manager, has explained to many dealers that it is their responsibility to fine tune and prepare our mass produced product before delivery to our customers. The cliché used in this situation has been "if all that is necessary from the dealership is to wash the car before customer delivery then the company could simply sell the products out of a catalog with direct delivery to the customers." In reality mass produced automobiles require more than a wash job before delivery and that is part of the franchised dealer's
responsibilities. The importance of this process is born out by the finding in the study that there exists a direct relationship between new car delivery condition, customer satisfaction ratings, and dealership sales success as measured by market penetration ratings. It appears clear that the customer's satisfaction with his or her new car at delivery sets the tone for the entire ownership experience. The extent to which customers are satisfied or dissatisfied with the delivery condition of their vehicle creates a lasting impression toward repurchase intentions at the same dealership.

**Dealership Sales Staff Satisfaction**

This researcher's suspicions were confirmed when the highest relationship in the study was found to exist between new car dealership sales staff customer satisfaction ratings and dealership success as measured by market penetration ratings. In the automotive world, the dealerships that succeed in attracting customers and garnering repeat business appear most often to be those noted for their informed and helpful sales people. To develop this spirit in their sales staffs, dealers must be willing to devote the time and funds necessary to a training program that instills the knowledge; confidence; and friendly, caring attitude indispensable to good customer service by salespeople. A recommendation is that salesperson incentives and rewards can be a means of demonstrating the dealer's commitment to excellence of service and it is recognition of the salesperson's important role in creating the dealership's image to customers. This study supports the researcher's opinion, prior to the
study, that this kind of dealer leadership can effect the total sales of the dealership.

Dealership Salesperson Turnover

One would expect that dealerships with high salesperson turnover would also suffer with a poor image in the eyes of the customers. Therefore, it is not surprising to find support in the study that there exists an inverse relationship between new car dealerships' percentage of salesperson turnover and overall new automobile dealership customer satisfaction ratings. A sad, but too often, actuality is that some new automobile salespeople maintain their position only as long as it takes to sell cars to all their family prospects. They simply do not have the skills or receive the training to become professionals in their new occupation. The other condition contributing to salesperson turnover occurs when the professional salesperson feels he or she should transfer their skills to another dealership to achieve a better opportunity for success. An increase in communication between dealers and salespeople is recommended to decrease turnover. For many years, high salesperson turnover in automobile dealerships has been an accepted fact of life. The results of this study suggest the lack of dealer efforts to strengthen the bond between the sales staff and the dealership can potentially be costly in lost overall customer satisfaction.
Dealership Turnover Compared to Sales Staff Image

As with dealership overall customer satisfaction, it was presupposed by this researcher that salesperson turnover would have an inverse relationship with customer satisfaction ratings of dealership sales staffs. Indeed the results of the data collected for these variables did indicate an inverse relationship and the hypothesis was supported. As in many business firms, the salespeople in an automobile dealership are expected to work together as a team. It is the combined contributions of customer satisfaction from each salesperson team member which builds the total dealership’s sales staff image. Membership pride in belonging to a professional sales staff team may increase occupational satisfaction and reduce turnover. However, high turnover when left unchecked, can create a workgroup atmosphere of strangers with very little team pride, which may promote further turnover. The importance of dealer management understanding and active control of salesperson turnover was reinforced by the results of this study.

Conclusions

Prior to initiating the study, this researcher had the strong suspicion that there existed a direct relationship between the type of dealership operation that was required to obtain high ratings in customer service satisfaction and the dealership that enjoys sales success. For this reason, the hypotheses regarding the relationship between customer satisfaction and sales success were presented and
investigated. The results of the study were, therefore, not surpris-

In summary, conclusions have been stated regarding each of the hypotheses considered in this study. The conclusions were based on the data analysis and on the results of the statistical tests of significance. The review of literature as well as the data investigated supported each of the hypotheses. This researcher demonstrated the likelihood that a sufficient number of new car dealership operations provided customer service and sold their products with similar degrees of effectiveness as to result in a direct relationship between ratings measuring these two areas of performance. The stated significance of the study was to determine to what extent the results could be utilized within the strategic planning of the subject automobile company. This researcher's conclusion is that the results demonstrate a high enough degree of significance to be used with caution.

The researcher devoted considerable time in the study indicating why the subpopulation of zones was representative of the dealership population of interest. Because of that representativeness, it is again concluded that the results and recommendations reached can be extended to the entire population of dealerships by marketing management of the company.

It is recognized by this researcher that this study has limitations which must be addressed. It is for this reason that future research is recommended.
Recommendations for Future Research

It is hoped that this descriptive study will result in additional analysis and research concerning the relationship between customer service satisfaction and sales success.

If additional research is done, it is recommended that data be collected concerning customer pricing sensitivity of services provided at dealerships and how this variable relates to customer satisfaction.

It is also recommended that future study be devoted to the relationship of consumer expectations and customer satisfaction at new car dealerships. It might be hypothesized that rising expectations of new car dealership customers are a main cause of their dissatisfaction, and exaggerated promotional information such as advertising contributes to these rising expectations.

Finally, it is recommended that salesperson training programs be tested by collecting sales staff customer satisfaction ratings from those dealerships employing company provided training, and those not utilizing the training offered.

Summary

This researcher studied new car dealership characteristics as they relate to customer satisfaction and customer purchases. The group studied was deemed representative of the entire population of franchised dealers within the retail network of a major domestic automobile manufacturer. Every effort was made to protect the
confidentiality of the company and the individual dealerships.

It is believed that this research can and will serve as a catalyst to initiate additional research into the relationship between customer service satisfaction and sales success.
Appendix A

Customer Satisfaction Index Program (CSI) Instrument
CUSTOMER SATISFACTION STUDY

DEAR OWNER:
The experiences that our customers have with their products and their Dealers' service are of great interest to us. The purpose of this survey is to keep us informed regarding those experiences. The questions should be answered by the person most familiar with the car shown below and its service record. Your help in filling out this form will be most appreciated.

OUR RECORDS SHOW THAT YOU PURCHASED A 1985

FROM
IN:

ABOUT THIS CAR

1. Do you still have this 1985 product? □ Yes □ No (Please fill out this form, even if you no longer have this car.)

2. How satisfied have you been with your 1985 product considering the following items?

Styling, Appearance ...................................................... □ □ □ □ □
Product Quality .................................................................. □ □ □ □ □
Pickup, Acceleration ......................................................... □ □ □ □ □
Ride and Handling ............................................................. □ □ □ □ □
Interior Comfort ............................................................... □ □ □ □ □
Freedom From Noise .......................................................... □ □ □ □ □
Fuel Economy .................................................................. □ □ □ □ □
Freedom from Repairs ....................................................... □ □ □ □ □
Value for the Money ........................................................... □ □ □ □ □
OVERALL SATISFACTION WITH YOUR CAR .................... □ □ □ □ □

ABOUT YOUR DEALER'S SALES STAFF

3. How satisfied have you been with the SALES STAFF at your selling dealer shown above considering the following items? (By sales staff we mean the salesperson, the sales manager or the owner).

THE SALES STAFF:

Has A Good Attitude ......................................................... □ □ □ □ □
Is Well Informed About The Product ............................... □ □ □ □ □
Explained The Features Of The Car ................................. □ □ □ □ □
Explained The New Vehicle Warranty .............................. □ □ □ □ □
OVERALL SATISFACTION WITH SALES STAFF .......... □ □ □ □ □
AT THE TIME OF DELIVERY

4. How satisfied were you with the condition of your 1985 product AT THE TIME OF DELIVERY considering the following items? (By delivery we mean when you first received it from the dealer.)

- Cleanliness of Car
- Mechanical Operation (engine, transmission, etc.)
- Electrical Operation (lights, radio, power windows, etc.)
- Body Fits (doors, hood, trunk lid, moldings, etc.)
- Paint Finish

OVERALL SATISFACTION AT TIME OF DELIVERY

WARRANTY SERVICE

5. Have you taken your 1985 product to your selling dealer for new car WARRANTY SERVICE? (That is, the service offered at no cost to you under the terms of your New Vehicle Warranty.)

- No (Please skip to Question 10)
- Yes, I returned to my selling dealer

6. How many trips have you made to your selling dealer for WARRANTY SERVICE in the past 6 months?

Number of Trips (Please Write-In)

7. How many months has it been since you last went to your selling dealer for WARRANTY SERVICE?

- One
- Two
- Three
- Four
- Five
- Six

8. Thinking about your 1985 product, have you had WARRANTY SERVICE from your selling dealer on any of the items listed below? If "YES," please check the number of trips needed to correct the SAME problem.

- Air Conditioning
- Body Fits (doors, hood, trunk lid, etc.)
- Body Water Leaks, Wind Noise
- Brakes
- Steering
- Electrical (lights, gauges, instruments, etc.)
- Engine Hard to Start, Won't Start
- Engine Noise, Knock
- Engine Rough Idle, Misfiring
- Oil Leaks
- Paint
- Radio
- Speedometer
- Squeaks and Rattles
- Transmission
- Trim, Hardware, Moldings
- Wheels, Tires, Vibration

Other (Please write in)

<table>
<thead>
<tr>
<th>Had Service?</th>
<th>Number of Trips Needed to Correct SAME Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

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9. How satisfied have you been with the WARRANTY SERVICE from your selling dealer considering the following items?

<table>
<thead>
<tr>
<th>Item</th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Neither Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service People Have A Good Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service People Wait on Me Promptly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Service People Understand My Problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repair Order Is Easy to Understand</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Job is Done When Promised</td>
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<td></td>
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<tr>
<td>Job is Done Right The First Time</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Service Hours Are Convenient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needed Parts Are in Stock</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVERALL SATISFACTION WITH WARRANTY SERVICE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL SATISFACTION WITH SELLING DEALER

10. Overall, how satisfied have you been with your selling dealer? (Including the sales staff, the delivery condition of your 1985 product, and any service you may have received at your selling dealer on this car.)

<table>
<thead>
<tr>
<th>Service Improvement</th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Neither Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SERVICE IMPROVEMENT

11. What is the most important thing that you would suggest TO IMPROVE SERVICE at your selling dealer?

<table>
<thead>
<tr>
<th>SERVICE IMPROVEMENT</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

TOTAL OWNERSHIP EXPERIENCE

12. All things considered, how satisfied have you been with your TOTAL OWNERSHIP EXPERIENCE? (Please consider: Your 1985 product... your dealer’s sales staff... the delivery condition of your car... and your service experience.)

<table>
<thead>
<tr>
<th>Total Ownership Experience</th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Neither Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
RECOMMENDATIONS

13. Would you recommend a product to a friend? □ Yes □ No

14. Would you recommend a product to a friend? □ Yes □ No

15. Would you recommend your selling dealer to a friend as a place to buy a car:
   ... based on your new car BUYING experience? □ Yes □ No
   ... based on your SERVICE experience? □ Yes □ No

16. May we send this form to your selling dealer? □ Yes □ No

MORE ABOUT YOUR 1985 CAR

17. About how many miles do you have on it? (If you no longer have this car, please estimate the mileage it had when you sold or traded it.) __________________________ Miles.

PLEASE TELL US ABOUT YOURSELF (To help us analyze the study)

Are you ... ? □ Male □ Female

Are you ... ? □ Married □ Single

What is your age? □ Under 25 □ 25-34 □ 35-44 □ 45-54 □ 55-64 □ 65 or Over

THANK YOU FOR YOUR COOPERATION

PLEASE RETURN THIS QUESTIONNAIRE IN THE ENCLOSED STAMP-AFFIXED ENVELOPE.

***************
Appendix B

R. L. Polk Community Registration Report Instrument
R. L. POLK PASSENGER CAR

SECTION

1. Section one indicates the Region, Zone, District, Date and Dealer Community for which this report is compiled.

2. Analysis by Group - the passenger car section is divided into five market segments: Sub Compact, Compact, Midsize, Regular and High. This grouping is not uniform throughout the industry and each manufacturer develops the groups and report he wishes to see. You will note that the upper right-hand corner indicates that this report was compiled by R. L. Polk for Reports for other manufacturers such as Ford, Toyota, etc. may be similar.

3. The column represents an abbreviation of the manufacturer, i.e., CH - Chevrolet; BU - Buick; OL - Oldsmobile; etc.

4. The year column represents the number of units registered year to date for each model.

5. The "%" column represents the percent of market penetration that model obtains in its group based on the year-to-date registrations. For example, the 264 Chevette registrations represent 10.51% of the total Sub Compact group's 2512 registrations.

6. "S.W. Memo" - Station Wagon Memo indicates the number of Station Wagons included in the total model registrations.

7. "% Eff." - The percent of Efficiency section of the R. L. Polk report seems to be the most confusing of all when in reality it is a very simple concept. Simply stated, we are comparing how well the dealer performs in a market segment to the Zone's performance. For example, let's say Chevette registrations equal 15% of the Sub Compact group in a dealer's "Area of Primary Responsibility." During the same time period, however, the Zone's Chevette registrations are 20% of the same group. The dealer's percent of efficiency would be 15% + 20% or 75% efficiency. Although the Zone's market penetration figures do not appear for each car line on the dealer's sheet, they are calculated and used in the development of the percent of efficiency calculations. The approximate zone average penetration for any car line can be calculated by dividing the percent of efficiency by the dealer's percent of market penetration. Looking at the year-to-date Chevette penetrations, we find that Chevette has 10.91% of the Sub Compact group. If we divide that figure by the percent of efficiency of 72.20%, we find the approximate zone average penetration for Chevette is 14.56%. Assuming the zone average penetration of 14.56 is a reasonable goal, registrations should be approximately 366 units (2512 x 14.56) instead of 264. The difference of 102 units obviously represents lost sales and profit opportunities for the dealer.

8. The percent of efficiency is indicated for all manufacturers. This calculation is developed by taking the market penetration of each manufacturer within the Chevrolet Zone's "Area of Primary Responsibility" and dividing it into each individual dealer's "Area of Primary Responsibility" market penetration.

9. "Total Area Fleet" - This column is a memo to column #4 and indicates how many of the units were registered to fleets. For example, of the 284 Chevettes registered year to date, 15 were registered to fleet buyers. Units registered to Fleet Certificate Holders are automatically included in the fleet memo section. In addition, when registrations to one individual or company exceed ten or more in a single year, R. L. Polk lists the total registrations in the fleet memo section.

10. "Ossao Co., MI" - This is the county in which the dealer is located. Additional towns located in the same county are listed subsequently by columns in alphabetical order. If a dealer operates in more than one county, then additional counties will be listed and the towns therein listed in alphabetical order.

11. "Benton" - This is the town where the dealer is located which is normally the largest town in the "Area of Primary Responsibility." The figure below represents the number of units registered in "Benton" and is a memo to the total under "year" column #4.

12. Adams, Gaines, Redford, Stanton - These towns represent the remaining towns in the dealer's "Area of Primary Responsibility" and are listed in alphabetical order. Registrations for each community are listed below. The towns listed on the R. L. Polk report are the same ones listed on the Notice of Area of Primary Responsibility addendum to the Dealer Sales and Service Agreement. The towns selected are those that have Post Offices providing First Class service. Other communities may be located within the geographical boundaries but not listed on the Notice of Area of Primary Responsibility or the R. L. Polk sheet. Registrations for these areas are given to the town that provides postal service.
"Memo" - This section is provided as an easy means to see Chevrolet, Ford and the import penetration. This is the only area of the report that provides the total percent of import registrations.

Total Car Trend Summary - This section provides the current and prior three year registration and market penetration figures for manufacturers in the dealer's Area of Primary Responsibility. The current "year-to-date" column of this section provides information as to how many units and what percent of the market each manufacturer has in this dealer's Area of Primary Responsibility.

The next column, Zone % of Industry, represents the total market penetration for all manufacturers within the Chevrolet Zone's Area of Primary Responsibility. The following two columns "Memo Station Wagon" and "Memo Fleet" represent the total of all Station Wagon and Fleet Registrations for each Division. The next six columns represent the prior three year's registrations and percent of industry for all within the dealer's Area of Primary Responsibility.

Chevrolet Cars in Operation - The first row of this column represents the number of Chevrolet cars in operation in the dealer's Area of Primary Responsibility that are up to six years old. The second shows the number of units that are seven years old or older. "Total Chevrolet" is merely the addition of the two (8370 + 8488 = 16,858). "Total Industry" represents the total number of automobiles of all makes that are still in operation. The 23.75 percent represents the total number of Chevrolets compared to all makes currently in operation in the dealer's area. This figure is important to the dealer since it represents the current Chevrolet owner base and, when compared to the current year-to-date market penetration, enables the dealer to determine if he is gaining or losing customers.

This section provides the dealer the means to track his progress on a month-to-month basis. Each figure in this section is for the current month only. Since the other figures on the report are for year to date, a comparison can be made to see the direction the dealer is heading. In our example, the Chevrolet dealer's 114 registrations represent 16.91% of the total registrations for the month. The year-to-date market penetration for this dealer found in both the memo and Total Car Trend Summary section is 16.70%. This indicates that Chevrolet has made a small increase in market share of approximately .21% for the month of October.

This section shows the year-to-date sales reported by this dealer based on the 10 Day Sales Reports. Up to now, we have dealt only with registrations and this is the first and only place sales are shown on the R. L. Polk report. Using these figures, we are able to develop the concept of "earned" market share. This simply means that a dealer sells enough passenger cars to equal or exceed his registrations. Although Chevrolet has the capability of matching each sale to the registration, a process which is costly and time consuming, it is really unnecessary. The results are merely netted. That is, if Chevrolet passenger car registrations
Appendix C

Sales Personnel Productivity Report Instrument
<table>
<thead>
<tr>
<th>Social Security Number</th>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
<th>Total Sales</th>
<th>New</th>
<th>Used</th>
<th>Total Dates</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>71-34-6521</td>
<td>John Doe</td>
<td>1234 Main St</td>
<td>555-1234</td>
<td>1000</td>
<td>500</td>
<td>500</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>67-89-0123</td>
<td>Jane Smith</td>
<td>5678 Oak Ave</td>
<td>666-4567</td>
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**Manager Comments:**
- [Manager's signature]
- [Date]
Appendix D

Zone Total Reports for Each Variable
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#### SOUTHEAST REGION

| JACKSONVILLE | 77.4 | 77.4 | 68.0 | 68.0 | 64.0 | 64.0 |
| FORT LAUDERDALE | 72.3 | 72.4 | 62.0 | 62.0 | 61.0 | 61.0 |
| ATLANTA | 76.0 | 76.1 | 60.2 | 60.2 | 62.0 | 62.0 |
| CHARLOTTE | 70.8 | 70.8 | 58.2 | 58.2 | 57.0 | 57.0 |
| RICHMOND | 71.3 | 71.3 | 54.4 | 54.4 | 57.0 | 57.0 |
| LAUSYVILL | 80.9 | 80.9 | 69.6 | 69.6 | 65.0 | 65.0 |
| CHARLESTON | 79.1 | 79.1 | 58.0 | 58.0 | 58.0 | 58.0 |

#### NORTH CENTRAL REGION

| DETROIT | 79.1 | 79.1 | 69.7 | 69.7 | 63.2 | 63.2 |
| FLINT | 76.4 | 76.5 | 60.8 | 60.8 | 61.4 | 61.4 |
| INDIANAPOLIS | 78.8 | 78.8 | 67.0 | 67.0 | 63.0 | 63.0 |
| CINCINNATI | 70.9 | 70.9 | 58.1 | 58.1 | 57.0 | 57.0 |
| CLEVELAND | 75.3 | 75.3 | 57.1 | 57.1 | 55.0 | 55.0 |
| BUFFALO | 80.3 | 80.3 | 59.0 | 59.0 | 56.0 | 56.0 |
| PITTSBURGH | 81.0 | 81.0 | 58.0 | 58.0 | 57.2 | 57.2 |

#### WESTERN AREA

| GREAT LAKES REGION | | | | | | |
| CHICAGO | 77.2 | 77.2 | 67.8 | 67.8 | 64.3 | 64.3 |
| KANSAS CITY | 76.2 | 76.2 | 66.1 | 66.1 | 63.0 | 63.0 |
| COLUMBUS | 73.9 | 73.9 | 65.4 | 65.4 | 61.0 | 61.0 |
| ST. LOUIS | 75.8 | 75.8 | 67.6 | 67.6 | 60.1 | 60.1 |

#### SOUTHWEST REGION

| DALLAS | 72.2 | 72.2 | 69.0 | 69.0 | 64.0 | 64.0 |
| HOUSTON | 77.6 | 77.6 | 64.0 | 64.0 | 63.0 | 63.0 |
| OKLAHOMA CITY | 71.5 | 71.5 | 57.3 | 57.3 | 54.0 | 54.0 |
| AUSTIN | 72.3 | 72.3 | 58.0 | 58.0 | 56.0 | 56.0 |
| KANSAS CITY | 76.0 | 76.0 | 62.0 | 62.0 | 60.0 | 60.0 |

#### PACIFIC COAST REGION

| SEATTLE | 72.5 | 72.5 | 63.5 | 63.5 | 61.0 | 61.0 |
| PORTLAND | 78.8 | 78.9 | 68.0 | 68.0 | 64.0 | 64.0 |
| OAKLAND | 73.2 | 73.2 | 65.0 | 65.0 | 62.0 | 62.0 |
| SAN DIEGO | 72.0 | 72.0 | 59.7 | 59.7 | 58.0 | 58.0 |
| LOS ANGELES | 72.5 | 72.5 | 59.7 | 59.7 | 58.0 | 58.0 |
| PHOENIX | 75.4 | 75.4 | 59.0 | 59.0 | 58.0 | 58.0 |
| SALT LAKE | 78.1 | 78.1 | 58.0 | 58.0 | 57.0 | 57.0 |

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### PASSENGER CAR MARKET PENETRATION CALCULATED ON A MONTHLY BASIS

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(1) This Year End 1982 penetration results will be used on each subsequent report.
(2) These are net month market penetration results.
(3) This column will always represent the current to-date market penetration accomplishments.
(4) These penetration goals are Zone Manager commitments made to Mr. R. E. Cook - January 1983.

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