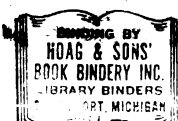
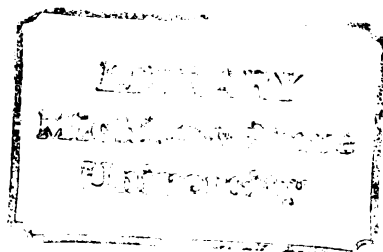


NEW AUTOMOBILE INFORMATION  
SEEKING BASED UPON SOURCES  
OF INFORMATION USED: A MARKET  
SEGMENTATION MODEL

Thesis for the Degree of M. A.  
MICHIGAN STATE UNIVERSITY  
DAVID D. DEMOROTSKI  
1974

THESIS





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## ABSTRACT

### NEW AUTOMOBILE INFORMATION SEEKING BASED UPON SOURCES OF INFORMATION USED: A MARKET SEGMENTATION MODEL

By

David D. Demorotski

#### Statement of Purpose

The general purpose of this thesis is to determine the feasibility of segmenting the new car buying market based upon the number and types of information sources the buyers consulted before their purchase.

Beyond the source segment differences, it was also expected that the developed segments could be discriminated and described by the types of information sought, automobile advertising use, and demographic characteristics.

#### Methodology

An expost facto research design was utilized in analyzing the responses of eighty purchasers of new automobiles in the state of Michigan. Inverted R factor analysis was the instrument used to develop the information source segments. Analysis of variance and chi square analysis were used to determine levels of significance



between the segments on consumer behavioral and demographic characteristics.

### Results

Three distinct consumer source segments were found. The largest was the "Dealer" segment which relied mainly on the car dealer for information about a new car. The second segment was called the "No Preference" segment. This segment considered all the sources about equally important. The third segment was the "Big Three." Three main information sources were found to be important to this group. The most popular source to this segment was friends and neighbors.

Very little significance could be found between segments for the various types of information presented, the importance of automobile advertising in the information search process, and the demographic variables of the buyers.

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SEGMENTATION MODEL

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David D. Demorotski

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Thesis Advisor

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## CHAPTER I

### INTRODUCTION

For most consumers, the purchase of a major durable, such as a refrigerator or a new automobile, is a large decision-making and planning project. It requires a fairly large investment for the average buyer, and usually results in a number of payments made over an extended period of time. This length of time generally determines the length of time the durable must last, and requires the consumer to determine before the purchase what that length of ownership ideally will be, and what he must do to make the investment last that time, and longer. The important factor in the purchase, however, is that consumers want to get the best buy possible for their money. This is true for all products and services, but it is extremely important when a large cash outlay is required from the consumer. Compounding the problem is the fact that within every product category there are numerous different brands from which to choose, and within the brands, special differences in the products themselves that differentiate one from the other in consumers' minds.

With all of these related products to choose from, marketers need to know how the consumer makes his decision on the "best buy" for his money; what type of information does he seek in making this decision; what sources do the consumers rely on to provide them with the information they need to make their decision. In short, how do consumers "learn" which brand to purchase and/or which product attributes will satisfy their individual needs?

However, knowing how individual consumers make purchase decisions is not enough for marketers. For a market to exist in the first place requires there be a similarity of needs and other behavioral characteristics which are shared by a group of consumers. Marketers in competitive environments have limited budgets to allocate for promotion, public relation activities, and maintenance of a flow of information to potential customers. Marketers cannot economically appeal to a heterogenous body of consumers individually, and it is doubtful that providing them all with the same information would move them all to purchase. There needs to be a mechanism for clustering consumers with similar characteristics together so that they can be appealed to similarly based on shared needs, requirements for product information, and favored methods of information search.

Therefore, it has become important in recent years for companies to target their marketing efforts on certain sub-markets of a total market. These sub-markets are

called "market segments." By concentrating on segments of a total market, companies can learn the specific needs and desires of that segment and either adapt their current product to that market, or create an entirely new product to fulfill the needs of the target market. By concentrating on particular groups within the market, marketers can determine what media the target market uses in general and consults for information and how often, what the group currently thinks about the product, and even what kinds of information they would require when the time came to consider the actual purchase of the product. By determining this, marketers have a real and valuable knowledge of the market and can appeal to the target market specifically and accurately with the information those particular consumers consider important in their decision-making process, thereby selling them a product that will satisfy their specific needs and wants.

There are many ways that a market can be segmented to achieve this end. Segments may be developed in terms of demographics (age, income, sex, etc.), geographic locations, product benefits, attitudes, and a number of other characteristics and responses. Each type of segmentation has its inherent advantages and disadvantages.

It is the purpose of this study to develop a segmentation model based upon the sources which consumers consult for information when considering the purchase of a new automobile. It is felt by the researcher that certain

consumers utilize different types of information to aid in their decision as to which car to buy. This information is not absorbed through day-to-day living, but is actually sought in a fairly organized and active manner. The consumer has an idea of what he needs to know when he begins his information search and which sources he should consult to receive valid and reliable information about the automobile being evaluated for purchase.

With such a working segmentation model based on the sources of information consulted by the consumer, marketers can place their major emphasis on the coordination of their target market with the information sources the market relies on for desired information about a specific product.

The purpose of this study is to determine the feasibility of segmenting the new car buying market based upon media usage. In addition to media usage as a method of segmentation, other consumer characteristics will be studied to aid in discriminating and describing the segments. The characteristics are: (1) types of information considered most relevant, (2) the importance of automobile advertising as a source of information, and (3) selected demographic characteristics. Studying these demographic and behavioral characteristics will provide background allowing insight into why consumers preferred certain media sources. Use of the additional data further

helps in prescribing a more complete profile of the consumer segments.

If such a segmentation model can be developed based on the types of information sources used by consumers in prepurchase decision making, the model may have practical applications in the marketing of many major durable goods, as well as the new car market.



## CHAPTER II

### BACKGROUND AND LITERATURE SEARCH

#### Market Segmentation

Two of the most important and basic concepts in marketing are those of a "market" and "market segmentation." A "market," according to the American Marketing Association, is the aggregate demand of the potential buyers of a product or service.<sup>1</sup> A market represents the total demands of all those who might conceivably buy a particular product or service. But an aggregate demand, or total market, also consists of the sum of the demands of different sub-markets or segments of the market, each containing a group of buyers who share characteristics or qualities that make the segment different from other segments and of significance to the marketer. Therefore, the market is not only the total potential demand for a product, but the sum of various demand subtotals, each representing the potential demand of a particular market.

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<sup>1</sup>Richard R. Still and Robert L. Smith, "Segmenting the Market," Marketing Manager's Handbook, edited by S. H. Britt (Chicago: The Dartnell Corporation, 1973), p. 253.

Diversity, not uniformity, characterizes the markets for all products. No two buyers or potential buyers of any product are alike in all respects. But groups of buyers do share certain characteristics that are meaningful to the marketer and which have implications for both the setting of market objectives and the formulation of marketing strategies. By grouping buyers sharing characteristics of marketing significance into market segments, the marketer attains some degree of homogeneity, facilitating the analysis of each market segment's unique needs, wants, and desires--and the tailoring of marketing strategies accordingly.

The concept of segmentation is based on the proposition that consumers are different. It was conceived in 1956 by Wendell R. Smith, who defined the concept thusly:

Segmentation is based upon developments on the demand side of the market and represents a rational and more precise adjustment of product and marketing effort to consumer or user requirements. In the language of the economist, segmentation is disaggregative in its effects and tends to bring about recognition of several demand schedules where only one was recognized before.<sup>2</sup>

Since Smith's formulation of segmentation, the concept has prompted much discussion and publication as to both its meaning and actual practical use in marketing. The term "market segmentation" has been used in two somewhat

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<sup>2</sup>Ronald E. Frank, William F. Massy, and Yoram Wind, Market Segmentation (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972), p. 5.

different senses. Many use the term to describe specific types of marketing strategies (or programs) designed to cultivate chosen market segments. This is the way Smith originally intended segmentation to be define, and was further described by Ferdinand Mauser. He stated that market segmentation strategy views the market as being made up of many separate little markets or varieties of consumer groups, each with somewhat different wants, and responding to different appeals. The object is to provide a specialized product to suit the specific segment. The merchandising objective is to tell the consumer "Look, I've got something practically tailor-made for you."<sup>3</sup>

The major problem with this type of viewpoint toward segmentation is that too many times it becomes uneconomical for many companies to offer specific products to the certain categories of segments.

The other use of the term is to refer to the marketer's efforts to improve his understanding of a market through analysis of its different segments. For example, Kotler comments that segmentation is the act of segmenting a market to understand it better.<sup>4</sup> David Schwartz adds to this view of segmentation by stating that

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<sup>3</sup>Ferdinand F. Mauser, Modern Marketing Management, An Integrated Approach (New York: McGraw-Hill, 1961), p. 84.

<sup>4</sup>Philip Kotler, Marketing Management, 2d. ed. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972), p. 184.

the marketing manager needs to understand factors that make heterogeneity. He needs to know, first, that the goal of market segmentation is to isolate "birds of the same feather," so to speak. Understanding how people differ is helpful in identifying what some people--a particular market segment--have in common. Secondly, a marketing manager is a practical social scientist in the broadest sense of the term. A knowledge of human differences helps him to sell his product.<sup>5</sup>

One management consultant even suggests a "principle of segmentation" that he recommends for practical marketers: Segmenting the market is the process of grouping individuals whose expected reactions to the producer's marketing efforts will be similar during a specified time period.<sup>6</sup> Thus, the aim of market segmentation is to identify groups of potential buyers who can be expected to respond similarly to given marketing moves, and to recall that the responses of buyers may change through time.

Overall, market segmentation is an analytical process that precedes both the setting of marketing objectives and the formulation of marketing strategy. It involves dividing up a product's total market into smaller,

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<sup>5</sup>David J. Schwartz, Marketing Today--A Basic Approach (New York: Harcourt, Brace, Jovanovich, Inc., 1973), p. 78.

<sup>6</sup>Steven C. Brandt, "Dissecting the Segmentation Syndrome," Journal of Marketing, 30 (October 1966):25.

more homogeneous segments--any one or more of which might be designated as market targets requiring individually tailored marketing strategies. The distinctive features of each identified market segment, in other words, may make it profitable for the marketer to adapt his product and/or marketing programs so as to meet more precisely each segment's requirements. The process of market segmentation should provide the marketer with improved insights on the market's nature, hence assisting him in selecting target markets and in designing optimal strategies.<sup>7</sup>

In any case, whatever the basis chosen for segmenting the market, the resulting market segments should be groups of prospective buyers who are more similar to each other within the group on all relevant dimensions than they are to members of other groups. Segmentation should, therefore, aim at minimizing within-segment variance and maximizing between-segment variance.

#### Requirements for Effective Segmentation

One key problem in segmenting a market concerns the criteria that should be used in dividing the market into segments. Kotler suggests three requirements for meaningful segmentation: The first is measurability, or the degree to which information on the particular buyer

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<sup>7</sup>Still and Smith, "Segmenting the Market," p. 254.

characteristic exists or is obtainable. The second is accessibility, or the degree to which the company can effectively focus its marketing efforts on target segments. The third is substantiality, or the degree to which the segments are large and/or profitable enough to justify separate cultivation.<sup>8</sup>

Martin Bell has added an important fourth requirement for the development of segmentation: chosen segments should differ in their responsiveness to marketing efforts.<sup>9</sup> Unless market segments respond uniquely to given marketing moves, they do not justify the expenditures involved in planning and implementing individualized marketing strategies.

Kollat, Blackwell, and Robeson have introduced an additional consideration: congruity. By congruity they refer to the degree to which the members of a marketing segment fit together. Congruity is a measure of the appropriateness of the classification in explaining the behavior to the group, and thus it is crucial in predicting the nature of response to marketing programs by segments.<sup>10</sup>

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<sup>8</sup> Philip Kotler, Marketing Management, 1st. ed. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1967), p. 45.

<sup>9</sup> Still and Smith, "Segmenting and Market," p. 255.

<sup>10</sup> David T. Kollat, Roger D. Blackwell, and James F. Robeson, Strategic Marketing (New York: Holt, Rinehart, and Winston, Inc., 1972), p. 200.



### Benefits of Segmentation

Why segment markets? There are a number of reasons why marketers should seriously consider segmenting their present buyers or potential buyers. The first and one of the most obvious reasons is that not all consumers are alike. In fact, no two consumers are exactly alike in every way, and their differences can have a profound effect on market demand. The second reason is that presence of unfulfilled consumer needs provides a market opportunity. New products offer potential for growth and profit. A segmentation prospective leads to a more precise definition of the market in terms of consumer needs. Segmentation thus improves management's understanding of the customer and, more importantly, why he buys. Management, once it understands consumer needs, is in a much better position to direct marketing programs that will satisfy these needs and will parallel the demands of the market.

A continuous program of market segmentation strengthens management's capabilities in meeting changing market demands.

Management is better able to assess competitive strengths and weaknesses through segmentation. Of greatest importance, however, is the ability to identify those segments in which the competition is thoroughly entrenched. This knowledge can save company resources by foregoing a battle with locked-in competition. It is possible to assess a firm's strengths and weaknesses by identifying

market segments. Systematic planning for future markets is thus encouraged.

Segmentation leads to a more efficient allocation of marketing resources. For example, product and advertising appeals can be more easily coordinated based on this knowledge. Media plans can be developed to minimize waste through excessive exposure. This can result in a sharper brand image and one that target customers will recognize and distinguish.

Segmentation leads to a more precise setting of marketing objectives. Targets are defined operationally, and performance can later be evaluated against these standards. Segmentation analysis generates such critical questions as these: Should we add another brand? Should we drop or modify existing products, or should we attempt to reposition a faded and obsolete brand image?

It is clear that market segmentation can offer significant advantages as a competitive strategy and as a guide to market planning and analysis. For segmentation to be effective, however, the commitment of marketing management to such a policy is an absolute must. Attention to previously unrecognized market opportunities will usually require the appropriation of additional company resources. Often it will demand that the company move in a direction different from that currently being taken; and unless the approach is well understood and the modes of

segmentation appreciated and supported, application of the strategy could have only minimal results.

One major problem that may arise and needs to be mentioned is that of oversegmentation. Some companies may segment their markets to such an extent that they introduce too many products without enough consumers in each market to create a profit. To this end, a proposal was made by Frank T. Schreier. He stated that companies must consider the product in terms of its motivational power and potential market.<sup>11</sup> Will consumers be motivated easily enough to buy the product is one question. The other is whether there are enough people who want the product to make it profitable. Naturally, segmentation is optimum when motivational power and the potential market are high. But, an appeal with high potential and low motivating factors could turn out to be better than one with high motivating factors and low consumer potential.

#### Some Strategies for Market Segmentation

Historically, most firms have tended to follow a policy of "undifferentiated marketing." In this strategy, the firm may put out only one product and try to draw in

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<sup>11</sup>William H. Reynolds, "More Sense About Market Segmentation," Introduction to Marketing: Readings in the Discipline (Scranton, PA.: Chandler Publications Co., 1970), p. 71.

all potential buyers with one marketing program. Two examples of products who have used this type of policy are Coca-Cola and cigarettes.<sup>12</sup>

In these cases, the firm chooses not to recognize the different demand curves that make up the market. Instead, it treats the market as an aggregate, focusing on what is common in the needs of the people rather than on what is different. It relies on mass channels, mass advertising media, and universal themes.

The firm practicing undifferentiated marketing typically develops a product and marketing program aimed at the broadest segment of the market. When several firms in the industry do this, the result is hypercompetition for the largest segments and dissatisfaction for the smaller segments.

The second marketing strategy is the "differentiated" market.<sup>13</sup> Here a firm decides to operate in all segments of the market, but designs separate products and/or marketing programs for each. By offering product and marketing variations, it hopes to attain higher sales and a deeper position within each market segment. The net effect of differentiated marketing is to create more total sales than undifferentiated marketing. However, it also tends to be true that differentiated marketing increases

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<sup>12</sup>Kotler, Marketing Management, p. 57.

<sup>13</sup>Ibid., p. 58.

the cost of doing business; especially in terms of higher production costs due to a greater number of products being produced, higher inventory costs for the produced products, higher administrative costs because of the need for the development of more marketing plans, and greater promotion expenditures.

While both differentiated and undifferentiated marketing imply that the firm goes after the whole market, firms can go after a large share of one or more sub-markets. This strategy is called "concentrated marketing."<sup>14</sup> Through concentrated marketing, the firm achieves a strong market position in the particular segments it serves, owing to its greater knowledge of the segment's needs and the special reputation it acquires. It also enjoys many operating economies because of specialization in production, distribution, and promotion.

Concentrated marketing involves tying the company's future growth to one segment of the market, and this carries obvious risks. A major risk is that other companies will eventually recognize the opportunities in this segment and enter it.

A final strategy that will be considered here is the "variety strategy."<sup>15</sup> Instead of seeking to exploit

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<sup>14</sup>Ibid., p. 60.

<sup>15</sup>Reynolds, "More Sense About Market Segmentation," p. 68.

differences among people, the variety strategy looks on the market as relatively uniform and people as basically equal.

The marketing executive applying variety strategy does not really care whether the women buying his detergents, for example, constitute a different market segment from other women. He knows the ads are good and that both groups will switch loyalties eventually. They are continuously wanting new and better products and this is his main reason for broadening his product line. His intention is to get them to switch detergents, but not out of his product line. One problem with this strategy is the cost of continually adding new products and the fear of fading out older products before they become unprofitable.

#### Methods of Market Segmentation

Maurice E. Bale has pointed out that the oldest, most traditional, and in some ways, most primitive, method of defining the various elements of a total market is called "producer segmentation,"<sup>16</sup> or dividing a market according to product types and according to the ingredients or production techniques used in their manufacture. There is nothing wrong with such segmentation, provided that the segments developed are not regarded as ends in themselves, or made the major focus of marketing strategy. Bale cites the example of a food manufacturer who thought he enjoyed

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<sup>16</sup>Victor P. Buell, Handbook of Modern Marketing (New York: McGraw-Hill, 1970), p. 11.



an 80 percent share in his industry, but the volume of new products which were being used by consumers for the same purpose was ten times as great as the more narrowly defined production process segment. Thus the manufacturer was actually suffering a declining share instead of benefiting from the deceptively optimistic picture when he read in his marketing plans.

Another broad method of segmentation views actual use of the product by the purchaser. An individual who uses a product in its present state to satisfy his needs is called an "ultimate consumer." An individual or company who purchases a product to use in producing another product or service is called an "industrial consumer."<sup>17</sup>

Industrial consumers can be segmented in a number of ways. One of the easiest and most obvious ways is by regions. Another is by the type of industry that is using the seller's product. Third, the way the product is used or applied can be a method of segmenting the market. The final method is by the customer size. That is to say, how much of the seller's product each company buys. All of these are valid and widely used methods of segmenting industrial markets and marketing strategies can be successfully developed for each.

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<sup>17</sup>Kollat, Blackwell, and Robeson, Strategic Marketing, p. 192.

In terms of ultimate consumers, several varieties of market segmentation have been developed in recent years. Some have only been recently developed and it is not known yet how much practical use they will have in marketing planning in the future. However, at least three kinds of segmentation have achieved some degree of prominence. Historically, one of the oldest and most common approaches to market segmentation is demographic segmentation. A second is rate of usage or purchase concentration, and finally, benefit segmentation.

Demographic segmentation covers a wide variety of segmentation methods including geographic locale, family size, family income, race, ethnic origin, family composition, and individual physical characteristics such as age, sex, health status, and physical capabilities. In other words, demographic segmentation seeks to answer the question "Who is in the market?"

There are some obvious situations where demographic information is able to predict purchase patterns clearly and directly. For example, the presence of babies in a household is related to the consumption of baby food. However, scholarly controversy begins in earnest when typical consumer "profiles" are considered.<sup>18</sup> In an attempt to simply and better understand the market segments

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<sup>18</sup>Buell, Handbook of Modern Marketing, pp. 2-11.

to which they appeal, many marketers have attempted to construct lists of characteristics of "typical consumers" of their products.

Yankelovich<sup>19</sup> was one of the first serious critics of this approach with his statement,

Demography is not the only or even the best way to segment markets. Even more crucial to marketing objectives are differences in buyer attitudes, motivations, values, patterns of usage, aesthetic preferences, and degree of susceptibility.

The argument that demographic variables are poor predictors of purchase behavior has not gone unchallenged. Frank Bass and his colleagues<sup>20</sup> argue that although there is not yet a satisfactory theory to explain variations in the usage rates of individuals for specific products, this does not mean that market segmentation strategy cannot be based on demographics applied to groupings of individuals. The basic problem is to determine which method of location and appealing to specific market segments yields the best results.

Demographic variables can provide insights into important behavioral and motivational differences between segments. Income, education, and occupation are often usefully combined into an index of social class. This composition measure of social groupings can be employed as

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<sup>19</sup>Daniel Yankelovich, "New Criteria for Market Segmentation," Harvard Business Review, 42 (March-April 1964):84-90.

<sup>20</sup>Buell, Handbook of Modern Marketing, p. 11.

a variable to separate groups of consumers to observe variations in their purchase behavior and product preferences. Also, the market planner can learn a great deal about the probable life style and behavior of a segment once he defines it; for example, young families, located in midwestern rural areas, with income under \$10,000 and occupations that fall mostly into the blue-collar category.

In general, the primary usefulness of demographic variables is in the selection of mass communication media. Mass media circulation figures are commonly maintained by the type of reader reached as well as geographic distribution. By identifying market segments in terms of the same variables which describe media reach, a more precise fit between media and segment occurs. It is obviously a more efficient allocation of company resources, resulting in less waste circulation.

The second method of segmentation is called the rate of usage. A seller often finds it useful to subdivide people into nonusers, light users, and heavy users of his product. This type of segmentaion has been related to a concept known as the "heavy half" theory proposed by Dik Twedt.<sup>21</sup> He pointed out that in most product categories, one-half of the consumers account for about 80 percent of the consumption. If this is true, the argument goes,

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<sup>21</sup>Russell I. Haley, "Benefit Segmentation: A Decision-oriented Research Tool," Journal of Marketing, 32 (July 1968):31.

should not knowledgeable marketers concentrate their efforts on these high-volume consumers. Certainly they are the most valuable consumers.

The trouble with this line of reasoning is that not all heavy consumers are usually available to the same brand because they are not all seeking the same kinds of benefits from a product. For example, heavy coffee drinkers consist of two types of consumers--those who drink chain store brands and those who drink premium brands. The chain store customers feel that all coffees are basically alike and, because they drink so much coffee, they feel it is sensible to buy a relatively inexpensive brand. The premium brand buyers, on the other hand, feel that the few added pennies for brand-name coffees are more than justified by a "fuller taste." Obviously, these two groups of people, although they are both members of this "heavy half" segment, are not equally good prospects for any one brand, nor can they be expected to respond to the same advertising claims.

Similar differences can be found for non-users, too. Therefore, the marketing analyst must be very cautious when segmenting based on usage rates because consumers in the same segment may be in that segment for entirely different reasons.

The third most common method of segmentation is "benefit" segmentation. Russell Haley<sup>22</sup> has pointed out that the major segmentation systems used in the past (demographics and rate of usage) are based on ex post facto analysis of the kinds of people who make up various segments of a market. They rely on descriptive rather than causal factors. He states, for this reason, that they are not necessarily efficient predictors of future buying behavior.

A benefit segmentation study initially obtains detailed data on consumer value systems, which is typically done by having a representative sample of consumers rate the importance of those benefits or values which they desire in the product. Their ratings are then either factor analyzed based on multi-dimensional scaling or other distance to assess which patterns of benefits are associated. It should be mentioned that all of the methods relate the ratings of each respondent to those of every other respondent and then seek clusters of individuals with similar rating patterns.

Each segment is identified by the benefits it is seeking. However, it is the total configuration of the benefits sought which differentiates one segment from another, rather than the fact that one segment is seeking one particular benefit and another quite a different benefit.

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<sup>22</sup>Haley, "Benefit Segmentation," pp. 30-35.

Haley went on to generalize one of the best reasons for using benefit segmentation: It is easier to take advantage of market segments that already exist than to attempt to create new ones.<sup>23</sup> Some time ago, the strategy of product differentiation was heavily emphasized in marketing textbooks. Under this philosophy it was believed that a manufacturer was more or less able to create new market segments at will by making his product somewhat different from those of his competitors. Now it is generally recognized that fewer costly errors will be made if money is first invested in consumer research aimed at determining the present contours of the market. Once this knowledge is available, it is usually most efficient to tailor the product's marketing strategies to existing consumer-need patterns.

However, there are two major points that must be emphasized to marketing planners. One is that benefit segmentation depends on reliable and valid research describing the benefits desired by consumers. Secondly, benefit segmentation then requires that marketers be able to tailor their products to satisfy the sought-after benefits.

While these three methods of segmentation are highly operative today, they are by no means the only forms of segments. In fact, market segments can be

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<sup>23</sup>Ibid., p. 34.

developed in a great many ways. Engel, Fioillo, and Cayley<sup>24</sup> have demonstrated this by describing two ways to isolate segments within a market environment characterized by consumer differences: (1) Analysis of consumer characteristics, and (2) analysis of consumer responses.

When one attempts to segment the market by the analysis of consumer characteristics, the usual procedure is to measure a number of consumer characteristics, such as personality, attitudes, age, income, social class, buying motives, and so on. Then determination is made of the extent to which variations in these characteristics relate to (and are thereby assumed to predict) variations in market behavior (that is: brand use, shopping patterns, media selection, and so on).

The other approach is analysis of behavioral differences. The investigator begins with observed variations in behavior or stated preferences (in terms of either the perceptual factors or usage factors). This, of course, represents the end point of the above approach. It works backwards from observed responses to variations in the consumer attributes within the segments which are formed. For example, segments may be developed based upon price sensitivity, media exposure habits, product usage,

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<sup>24</sup>James F. Engel, Henry F. Fioillo, and Murray Cayley, Market Segmentation: Concepts and Applications (New York: Holt, Rinehart and Winston, 1972), pp. 1-18.



measures of brand loyalty and so on. Once these segments have been developed, the segments are analyzed to determine if there are also differences in terms of the various consumer characteristics.

It is this latter approach which will be utilized in this study to determine the feasibility of consumer media usage as a means of segmenting the new automobile-buying market. It is hoped that various new car buyers will perceive and consider certain sources of information as credible and carrying specific information that is important to them in making their decision as to which car to buy. Some consumers will consider more sources than others, and some will vary in the type of sources consulted.

This method of segmentation is important for three reasons. First, it begins to show marketers what information sources are important to their various car buyers and what sources they consider to be trustworthy. Second, marketers can gain an insight as to what types of information are related to each source. Finally, marketing communications specialists can begin to coordinate media with messages for potential customers or special consumer groups so as to match the right type of information with the right source to reach the desired market.

Consumer Information Search as  
Segmentation Variables

While studies of media usage as a means of segmentation have been conducted, it is assumed that they have not been highly published or highly used to date.

The only study that could be found by the researcher analyzing media usage was a study conducted in 1968 by Joseph W. Newman and Richard Staelin.<sup>25</sup> They were looking mainly for sources of prepurchase information that consumers consulted before buying new cars and/or major household appliances. The outstanding feature of this study was that the authors used a multivariate analysis. Their study employed indices to measure out-of-store and in-store information seeking and combined them into an overall index. Specifically, they were trying to find how many sources of information consumers consult before they buy. Do the sources vary in number and kind, and if so, how and why? What factors are related to the differences between buyers? What parts does advertising play in the purchase decision process? Their findings were recorded only in terms of percentages.

The findings clearly demonstrated that the majority of buyers of major durables consulted more than one source

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<sup>25</sup> Joseph W. Newman and Richard Staelin, "Information Sources of Durable Goods," Journal of Advertising Research (April 1973):19-29, and "Prepurchase Information Seeking for New Cars and Major Household Appliances," Journal of Marketing Research (August 1972):249-57.

of information before buying and that advertising was seldom the only source used. The data showed, however, that a large number of buyers used no more than one source of information. The most frequently used sources of information were the retail outlet and other persons (friends and neighbors).

To find out why some buyers use no more than one source type while others use several, a specialized computer program was utilized to learn which of twenty-nine selected "explanatory factors" were most useful for dividing the sample on the basis of homogeneity of the number of information sources consulted. These explanatory factors ranged from basic demographic information to past experience with the product class to why the consumer started to think about buying the product and if he thought it was a good time to buy.

The data analysis indicated that the sample could be divided into several segments which differed substantially in the average number of sources considered and in the average incidence of the use of each type of source. Analysis also provided implications that advertising may be most important as an initiator of the purchase decision process--that is, the period the consumer is first aware of being in the market for such a product. Advertising appeared to influence the number of brands which were to be considered during the more conscious and active product information search.

However, a shortcoming of this study is that it did not really delve into what types of information people look for in different sources when making the product purchase decision. In short, if one person is using one source, such as a retail outlet in this case, what type of information is he looking for specifically? Is there any pattern, or patterns, that can be found linking certain types of information with different sources? How do people perceive the information value of advertising, especially advertising for major durables like automobiles? Answers to these questions are important and their implications for marketing communications decisions are the focus of this study.

In relation to types of information important to new car buyers, General Motors conducted a survey in 1971 to pinpoint important car buying influences,<sup>26</sup> which showed that exterior styling and favorable previous experience with a particular make of automobile are the most frequently mentioned reasons for choosing the make finally purchased. There were also twenty-four other influences mentioned in the GM study, all of which represent types of information used by car buyers in making purchase decisions. They will be the basis for the classification of information types in this study.

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<sup>26</sup>"GM Survey Pinpoints Car Buying Influences," Automobile Industry (April 1, 1972), p. 18.

It is felt that the influences that affect the amount and types of information gathered in the search process also affect the amount and types of information sources that are used in the search. The two are so strongly interrelated that it is difficult to separate them, and both make up the total information-seeking process. It is expected that the amount and types of information that are considered can be used to describe the source segments. This is the main reason they are being utilized in this study. Their use and actual purpose may be more than just pure description. There may be some stronger underlying reasons to explain why certain consumers seek more information than others. Therefore, other studies on the relationship between information search and various consumer characteristics have been considered here.

For instance, learning theory has been tested to explain various consumers levels of search. A study was done in 1969 by Peter D. Bennett and Robert M. Mandell.<sup>27</sup> They hypothesized that prepurchase information seeking for new cars was based on the amount of past experience people had with automobiles and certain brands, specifically. As experience and brand satisfaction increased, the amount of active information seeking decreased. The results

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<sup>27</sup>Peter D. Bennett and Robert M. Mandell, "Pre-purchase Information Seeking Behavior of New Car Purchases --The Learning Hypothesis," Journal of Marketing Research (November 1969):430-33.

indicated that experience alone, measured by the number of times the choice decision has been faced, appears not to affect information seeking behavior. Positively reinforced past choices, measured in aggregate or in sequence, did decrease the amount of prepurchase information seeking in which consumers engaged. Brand satisfaction, it would seem, does have a strong influence on the level of search. It may also be related to an individual's perceived risk and/or development of self-confidence in making such decisions. This was not tested within this particular study, however.

In a similar study, John E. Swan<sup>28</sup> tested the effects of learning on information seeking. The main hypotheses of his study were that information seeking declines with learning to choose by brand and that search is lower under satisfactory, compared with optimal, choice. Swan hypothesized that in brand continuity treatment, it would follow that information seeking would decline as the subjects "learned" to choose by brand. This was supported by an interaction between brand continuity and the decision objectives which had been assumed based on Berlyne's hypothesis<sup>29</sup> that search is a function of uncertainty.

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<sup>28</sup>John E. Swan, "Experimental Analysis of Pre-decision Information Seeking," Journal of Marketing Research (May 1969):192-97.

<sup>29</sup>D. E. Berlyne, "Uncertainty and Epistemic Curiosity," British Journal of Psychology (May 1969):192-97.

Uncertainty should have been lowest under continuity--satisfactory treatment--and highest under discontinuity--optimal treatment. Since the decision objective and brand continuity interact to determine uncertainty, the same interaction should have influenced information seeking. However, interaction was not significant. This is interesting for two reasons. One is that it suggests that the decision objective would play the same role in the search process regardless of brand continuity. Secondly, the independence of continuity and the decision objective simplifies to some degree the presumed complexity of the consumer search process in terms of interactions between variables. Swan's conclusion from this study is that in the evaluation stages, consumers can substitute their prior experience for external information seeking if they have learned that certain brands are satisfactory. Also, it was concluded that confidence was not significantly higher in the continuity over the discontinuity of brands.

In studying self-confidence, Gerald D. Bell<sup>30</sup> tested for a relationship between self-confidence and persuasability in car buying. In short, he found that there is not necessarily an association between specific self-confidence, which is defined as the level of confidence one displays in one area of decision-making (in this case

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<sup>30</sup>Gerald D. Bell, "Self Confidence and Persuasion in Car Buying," Journal of Marketing Research (February 1962):28.

car purchases) and persuasion. This counters the belief that the more complex a problem or the less confidence a person has, the more he depends upon peers, family, and friends for advice. Donald F. Cox<sup>31</sup> went on to suggest that people interested in purchasing a product primarily for psychological goals will seek information from sources that provide knowledge about the psychological aspect of the product. Similarly, they will attempt to satisfy performance goals by seeking such information from performance sources. Furthermore, as the accuracy and quantity of information obtained increases, the less risk a person sees in the purchase and, consequently, the more likely he is to buy. However, it is necessary to mention that there comes a point where the cost of obtaining more information is greater than the perceived reward. A problem for marketing researchers is finding this point among many different types of people and many diversified products.

These information search studies provide a basic foundation for understanding differences in various consumers' extent of information search and may prove to be beneficial in explaining why the segments found in this study developed in the manner they did. With this basic literature background, specific research questions will be developed and research study executed to determine the

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<sup>31</sup>Donald F. Cox, Risk Taking and Information Handling in Consumer Behavior (Boston: Harvard University, 1967), pp. 80-81.



potential benefits of segmenting new automobile buyers based upon the amount and types of information sources used.

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## CHAPTER III

### RESEARCH QUESTIONS, DESIGN AND EXECUTION

#### Purpose of This Study

Using the results of the Newman and Staelin study and the General Motors survey as a foundation, it is the broad goal of this study to determine the feasibility of segmenting buyer markets of major shopping goods (automobiles in this case) based upon the number and types of information sources the buyers consulted before their purchase. It is hoped that the use of such a segmentation model would be beneficial to marketers through improvement of marketing communication and thereby facilitation of consumer decision-making by providing the necessary or required information through the most expedient source.

Therefore, it is important to determine if there is a relationship between the source segments that will be developed and certain types of information regarding automobiles. Perhaps certain types of information will provide insight into why the consumers used certain types of information sources. If it can be shown that there is a significant relationship, it will be extremely beneficial

to the marketing communicator because he will then have a more efficient means of coordinating his message with the media that the consumer perceives as most important to him in seeking information about future purchases. This is the second goal of this study.

A third goal is to try to determine if there are specific differences in the search processes and demographic characteristics of consumers between the segments. It is important to know whether the segments vary in length of time in search, the number of automobile dealers consulted, the actual numbers of sources consulted, and certain demographic factors of the consumers that comprise each segment that are unique to that segment. This information will provide insight into why the segments developed as they did, and also strengthen the use of such a segmentation model in practical application in other purchasing and information seeking situations.

In relation to the search process, the final purpose of this study is to investigate the particular role advertising played in the purchase decision process for each segment. It is especially important here to discover how each segment perceives the informative value of automobile advertising and why. It is expected that no segment will perceive automobile advertising as highly informative and consider it a major source of information. However, the use hopefully will vary between segments and an

explanation of what kind of consumers like and use automobile advertising can be determined.

In short, the latter three goals are characteristics that may explain why the developed source segments differ. Most of these characteristics must demonstrate significant differences across the segments if such a model is to have any validity and practical application in real world communication situations.

With these goals in mind, specific questions for research will now be developed.

#### Research Questions

1. How many types of information sources do consumers consult before they buy a new automobile?

It is important to answer this question because marketers would begin to determine how complex the search process is for certain consumers. It would seem natural that those who consult fewer sources have had more experience in looking for information, know basically what information they need and where to find it. Related to this is the belief that the sources most frequently used are the ones perceived by the consumer as most credible and reliable for information.

2. Is there a relationship between the number of different types of sources considered important and the sources actually consulted?

This question can provide insight into a number of things. For one, it can provide a means of evaluating a segment's confidence in various sources used. If persons consider a number of sources important, but only use one or two, they may feel confident that these two sources will provide enough valuable information to make a good judgment. On the other hand, based on experience, the new car buyers in a segment may now consider only a few sources important, even though he actually used more in his search process. This question might also begin to shed light on the other research projects which must be done to provide definite answers to this question.

3. Is there a relationship between the number of different types of sources considered important and the importance of different categories of new car information?

It is important to answer this question because marketers need to know whether specific sources are used by consumers for certain types of information; and if so, what is the type of information they are looking for. For example, there is probably an information need basic to all the segments that will be found. However, will there be information categories that are more important to one segment than the others? This is what will be answered by this question.

4. Is there a relationship between the number of different types of sources considered important and the extensiveness of the search effort leading to the new car purchase?

Time is the answer here. If people spend more time in information gathering, do they necessarily consult more sources of information? It would seem logical that if persons spend more time in the search process, they would use more sources to validate information gathered from other sources and thereby support their decision. Or do consumers consult a number of sources within the same category; for example, car dealers? It is important to find out why it may take one segment longer to reach a decision than another. Those segments that use several sources should take longer than those that use only one or two.

5. Is there a relationship between the number of different types of sources considered important and certain demographic characteristics of new car buyers?

The answer to this question is important because this is how we get a profile of the consumers who comprise each segment. It provides a "picture" of the segment and offers the researcher a means by which he can begin to explain why the people in the segment act as they do, or did. Demographics are the basis for all analysis and provide a lever by which analysts can correlate and interrelate all similar research to explain in a broader picture the

behavior of the consumer at a point in time in similar situations.

6. Is there a relationship between the number of different sources considered important and the perceived informational value of advertising?

It is important to determine what role advertising played in each segment. It is expected that advertising will be perceived as providing little informational value by most segments. It is also expected that advertising will carry importance by those segments that use a number of sources in their information gathering process and will have little importance, if any, to those segments that used only one or two sources. It is also expected that only one or two advertising media will be considered by the segments as having informational value.

These are the specific questions that this research will attempt to answer; or at least, begin to answer. By beginning to answer them, it is hoped that a better means of marketing communications can be initiated by improving areas that are yet inefficient and, by educated use of "credible" media, facilitating the information seeking process of our target market.

### Research Design

Because the behavior being studied here is behavior that has already occurred and cannot be changed, the program of research that will be utilized is ex post facto

research.<sup>32</sup> In ex post facto research, one cannot manipulate or assign subjects or treatments because the independent variables have already occurred.<sup>33</sup> By proper definition, ex post facto research is systematic empirical inquiry in which the scientist does not have direct control of the independent variables because their manifestations have already occurred or because they are inherently not manipulable. Inferences about relations among variables are made without direct intervention, from concomitant variation of independent and dependent variables.<sup>34</sup>

For example, a dependent variable is observed, and an independent variable or several independent variables are observed, either before, after, or concomitant to the observation of the dependent variable.

In ex post facto, direct control of the independent variable is not possible.<sup>35</sup> Therefore, the researcher cannot assign groups at random. A "self-selection" process occurs where the members of the groups being studied are in the groups, in part, because they differentially possess traits or characteristics that are more unique to one group than the other.<sup>36</sup>

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<sup>32</sup>Fred N. Kerlinger, Foundation of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1973), pp. 378-94.

<sup>33</sup>Ibid., p. 315.

<sup>34</sup>Ibid., p. 379.

<sup>35</sup>Ibid., p. 380.

<sup>36</sup>Ibid., p. 382.



In this manner, the first portion of this research is to develop the market segments based upon the importance of various sources of information. The segments will be developed by using inverted R factor analysis of car buyers in their comparative ratings of defined sources of information. The segments will be developed from the factor findings. Factor analysis is a method for determining the number and nature of the underlying variables among larger numbers of measures. More succinctly, it is a method for determining  $k$  underlying variables (factors) from  $n$  sets of measures,  $k$  being less than  $n$ . It may also be called a method for extracting common factor variances from sets.<sup>37</sup> One function of this type of analysis is to show in quantitative terms the pattern of linkage among certain variables.<sup>38</sup> To this end, the source segment will be developed. The other major purpose of factor analysis is to test hypotheses.<sup>39</sup> Thus, hypotheses to determine the statistical difference between the segments can be tested.

Using the important of sources as the independent variable, analysis of variance will be utilized to determine the statistical differences of the segments based on types

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<sup>37</sup>Ibid., p. 659.

<sup>38</sup>C. J. Adcock, Factorial Analysis for Non-Mathematicians (New Victoria: Melbourne University Press, 1954), p. 9.

<sup>39</sup>Kerlinger, Foundation of Behavioral Research, p. 687.

of information considered important; importance of automobile advertising, time spent in information search, number of dealers visited and certain demographic characteristics.

These are the dependent variables and will explain the differences, if any, between these source segments. They form the basis of the hypotheses that will be tested; and based upon the research questions presented earlier, the defined hypotheses are as follows:

1. New car buyers segmented on the basis of the rated importance of new car information sources are different on the total number of sources actually consulted.

It is expected that those sources which are segmented based on one source will actually use only that source. However, those segmented on many sources will actually use fewer sources.

2. These new car buyer segments are different in the total amount of time spent in the new car search process.

Those that consider only one or two sources spent significantly less time in the search process than those who refer to a number of sources. They seem to be more organized, know what information they need and where to get it.

3. These new car buyer segments are also different in the number of dealers visited leading to the new car purchase.

This hypothesis is related to the second in that the few source segments know what they are looking for and do not have to spend as much time and effort in the search process.

4. These new car buyer segments are different in their ratings of importance of categories of new car information.

It is expected that those people who consider a number of segments also considered more categories of new car information necessary to make a decision than do the fewer source segments. They perceive the decision as more complex and more information is therefore required to make the final decision.

5. These new car buyer segments are different in their ratings of the information value of various forms of advertising media (radio, television, magazines, newspapers, dealer brochures, posters, and window displays).

Those segments that consider a number of information sources will consider more advertising media as being of informative value and "believable" than those segments using fewer sources.

6. These new car buyer segments are different in their rating of the informative value of automobile advertising in general.

It is expected that those segments using only one or two sources will not value advertising as a source

because it contains superfluous information or information that they have already acquired and do not need.

7. These new car buyer segments are different in their following demographic characteristics: age, education, occupation, sex, marital status, number of children living at home.

In reference to the Bennett<sup>40</sup> and Newman and Staelin<sup>41</sup> studies, the extensiveness of search is in part based upon past experience in purchasing automobiles, satisfaction, and self-confidence in making decisions. These can all be related to certain demographic characteristics. The older the individual is, the higher the probability of more experience in purchasing automobiles. Therefore, fewer sources are used. The higher the education, and with occupation related to that, the more confidence an individual has in making his own decisions, and the fewer the sources consulted.

Women will tend to search for information in a larger number of sources, mainly to see if it is consistent and reinforces the information found in other sources. Married individuals and those with larger families require more information to make a decision as to the major

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<sup>40</sup>Bennett and Mandell, "Prepurchase Information Seeking," p. 432.

<sup>41</sup>Newman and Staelin, "Information Sources of Durable Goods, pp. 22-25.

investment outlay involved and the necessity of making the best decision possible.

8. These new car buyer segments are different in the models of automobiles ultimately purchased.

Because of the various number of models and brands within each size classification, the number of sources will vary. There are a great variety of similar vehicles available; therefore, more information is required to make a decision than with the few luxury car classes. Also, those who purchase large cars mainly seek status styling and make their decision more by reputation than other forms of information.

In testing these alternate hypotheses, the null hypothesis will be rejected at the alpha level of .05. The first six will be tested using analysis of variance and F-test for the difference between all means. If the mean responses of the test objects are different among treatments, then the variance among groups will exceed the (independently computed) means within group variance.<sup>42</sup>

Because the last two hypothetical tests utilized nominal classification, the non-parametric Chi square statistic system as described by Sidney Siegal<sup>43</sup> was used

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<sup>42</sup>Harper W. Boyd, Jr., and Ralph Westfall, Marketing Research (Homewood, Ill.: Richard D. Irwin, Inc., 1972), p. 552.

<sup>43</sup>Sidney Siegal, Non-parametric Statistics for the Behavioral Sciences (New York: McGraw-Hill, 1956), pp. 174-79.

to test for significance of differences. He stated that when a frequency in such a discreet category constitutes the data research, the  $\chi^2$  test is used to determine the significance of the difference among k independent groups. The Chi square test for k independent samples is a straightforward extension of the  $\chi^2$  test for two independent samples.

### Execution of Study

#### Sample

A sample of twenty-five new car purchasers in Michigan was drawn from license plate registrations provided by the State of Michigan Bureau of Motor Vehicles. The major reason for using Michigan as the sample population for this study was the ease of receiving names and addresses from the central office in Lansing, Michigan.

The sample was selected in the following manner: All vehicle registrations are placed on microfilm by the Bureau of Motor Vehicles and are contained on reels of microfilm tape. The method used for compiling the list is called systematic sampling, and strictly speaking, is not the same as random sampling. However, in many cases it is treated as equivalent to random selection.

The first reel was selected at random by reaching into the file drawer and pulling one out. From that point on, every fifth reel was selected.

Five new car registrations were selected from almost each reel. The projector was placed in the forward speed for eight seconds, then stopped. The reel was then advanced slowly until a 1973 vehicle registration appeared. The name and address of the owner was taken down and he was made a member of the sample population. If by the end of the reel less than five 1973 car owners were "selected," the researcher simply moved to the next reel in the sequence. Reels were selected until the sample of 205 addresses was acquired.

#### The Data Gathering Procedure

The data gathering instrument for this study was a three-part mail questionnaire. Because of budgeting and manpower limitations, and since the sample covered the entire state of Michigan, it was decided that a mail questionnaire would be the most efficient and economical means of gathering the desired information.

However, one of the many limitations of such a means of gathering information is that the rate of response to a mailed questionnaire may not be very high. The researcher considers the average rate of response to a questionnaire mailing to be 40 percent to 50 percent.

#### The Questionnaire

The major emphasis of the first section of the questionnaire was the sources of information each new car owner considered important. There were eight sources

provided. Advertising was separated into four media categories: magazines, newspapers, radio and television advertising. The other sources listed were dealers, friends, and neighbors, books, pamphlets, and magazines, articles about new cars, and "other" sources.

In order to simplify the questionnaire as much as possible, therefore making it easier for the respondent to answer, an 11 point Likert scale was utilized under each source. The source was simply stated in a word or two and the individual recorded on the scale what importance the source had for him in making his purchase decision about a new car.

An example is provided:

Dealer

Not  
Important

Very  
Important

-5   -4   -3   -2   -1   0   +1   +2   +3   +4   +5

-5 represents no importance

+5 represents great importance

0 represents no opinion about the source

For coding and analysis purposes, each representative on the scale was assigned an ascending number from one to eleven.



DealerNot  
ImportantVery  
Important

$\frac{(1)}{-5}$	$\frac{(2)}{-4}$	$\frac{(3)}{-3}$	$\frac{(4)}{-2}$	$\frac{(5)}{-1}$	$\frac{(6)}{0}$	$\frac{(7)}{+1}$	$\frac{(8)}{+2}$	$\frac{(9)}{+3}$	$\frac{(10)}{+4}$	$\frac{(11)}{+5}$
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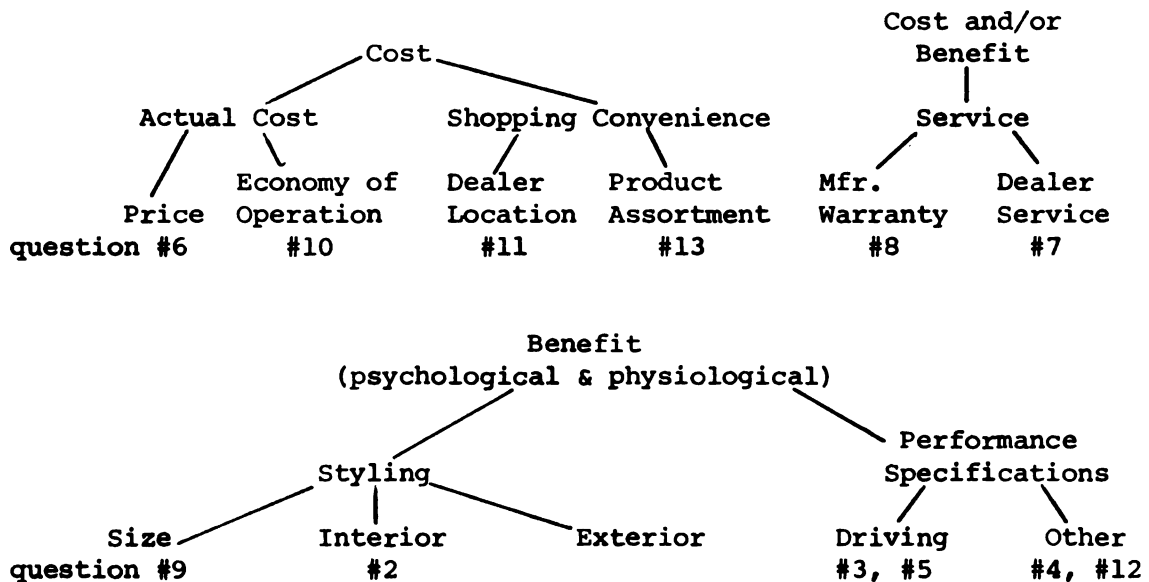
Therefore, an individual who checks +3 on the scale is assigned a 9 on his rating on the importance of that source. A -3 is coded as 3 and so on. All the scores for each source for the entire sample are then compiled and a sample mean score is determined for each source. Segment or factor means are also determined and compared with one another to establish the source segments. This will be discussed in more detail in a later section.

There are also some simple fill-in questions within this first section of the questionnaire that will be used to compare and contrast the segments that are developed. One question deals with how long it took the purchaser to make his decision and another is how many car dealers he visited before he decided. A third question dealt with the make and model of the car purchased and the last was a check question as how many actual sources of information the respondent used in looking for information about a new automobile.

The second part of the questionnaire contained types of information the individual considered important in buying a new car. Again, Likert scales were used like those in the first section of the questionnaire. However, the

difference between the first section and second section is that the mean scores of the first section utilized factor analysis to develop the segments for study. An analysis of variance was used on the second section to determine if there is any difference between the types of information the various segments sought through the sources.

The types of information were viewed and organized on a cost/benefit basis and are shown on the following chart:



Clustering types of information into categories such as costs and benefits may simplify the analysis of the kinds of information consumers in a particular segment look for in deciding which automobile to buy. For example, in one segment the benefit information may be of utmost importance, whereas in another segment economy and the cost type information type may be of more importance.

This analysis may provide insight into why certain sources of media were considered more important than others. In short, the cost information refers to an expenditure on the car buyers part, either in terms of time or money. The benefit type of information is something he wants in the automobile itself, regardless of price. It is probably his main reason for purchasing a car. The cost/benefit information refers to the benefits the buyer will need after he gets the car and that will be at some financial cost to him.

Again, it is expected that certain types of information will be sought from certain sources. The differing feature is that just as different sources are considered important for individuals, so are different types of information. The purpose here is to try to describe the difference in information across various source segments and to explain why these differences occur, based on a cost/benefit situation.

The final part of the questionnaire evaluates the various forms of automobile advertising and the perceived information value it provided to the consumer. Both positive and negative statements about automobile advertising were presented and the respondent had to indicate his degree of agreement with the statement. Each statement represented an opinion on the informative value of various media such as TV, radio, magazines, newspapers, and dealer displays and brochures. One statement contained a rating

value of the information value of automobile advertising in general.

The responses were coded in much the same way as the Likert scales, except on a one to five range with "strongly agree" receiving a one and "agree" a two and so on. (The range included "strongly agree," "agree," "no opinion," "disagree," and "strongly agree.")

The third part contained demographic information about the respondent. Age, sex, occupation, educational achievement, and marital status were asked. It was expected that some or all of these characteristics can be used to describe the various source segments to be found, how each is significantly different from the next, and offer some inferences as to why.

### Assumptions and Limitations

The first assumption of this study is that the sample represents a normal population of automobile buyers throughout the United States. It is assumed that car buyers in Michigan are not any different in their search for information processes than citizens of any other state or the country as a whole. Therefore, it is assumed that the sample used represents a true random sample.

The second assumption is that each respondent answered the questionnaire truthfully and accurately to the best of his knowledge of his actual information seeking procedure.

One major limitation of this research is the factor that consumers cannot be randomly assigned to cells (in this case, segments) for analysis. The researcher has started ex post facto research with an event or process that has already occurred. He does not have real control over the possible causes of behavior and cannot manipulate the independent variable(s). One problem that may arise from this is that another variable related to the independent variable(s) being studied may be the actual cause of the relationship with the dependent variables. This may lead to a misinterpretation of the results. Another problem is that by reducing the randomness, the researcher loses some control of other extraneous variables and may thereby increase error variance. Therefore, it is imperative that the researcher be aware of these problems in the analysis of his research findings to reduce the chance of error in the execution and analysis of the research being done.

Another major limitation of this study is the method of collecting the data. Because the sample covered the state of Michigan, a mail questionnaire had to be used. To facilitate answering and increase chances that potential respondents would complete and return the questionnaire, the data gathering procedure had to be short and simple. The categories of source information and types of information were broad and general. This prevented the researcher from determining exactly what sources and types

of information carried the most importance. For example, under "books, pamphlets, and magazines" are certain magazines that could have more importance, such as Consumer Reports or Motor Trend, to the potential car buyer. Also, the respondents were not asked to rank which type of information was actually most important and exactly what source they consulted for that information.

Finally, this study was considered by the researcher to be an explanatory study. Even though statistical significance does exist, the researcher is the one who subjectively decides what the level of significance will be. The interpretations of the factors in a factor analysis are also subjective, as well as the statements and categories used.

A duplication of the study may produce very different results. Therefore, it is imperative to realize that this exploratory study can be helpful in making marketing communications decisions, but that it does not provide us with all the possible answers.

## CHAPTER IV

### RESULTS OF STUDY

#### Segments Developed

Inverted R factor analysis was used to develop the **segments**. Each factor represents a group of people who **basically** considered the same sources of information **important**, or unimportant, when buying an automobile. In **this** study, three strong factors or segments were developed. **Factors** with less than ten members were deleted.

Factor I was by far the largest with twenty-six **respondents**, or 33 percent of the sample (N=80) falling **into** this category. Factor II contained eighteen respondents (24% of the sample) and Factor III had fourteen people (18% **of** the sample). In all, fifty-eight respondents had fallen **into** one of the three factor segments without loading **significantly** on one of the other two.

To avoid complication in statistical analysis, it **was** decided to make each factor the same size. Since **Factor** III was the smallest with fourteen respondents, **the** top fourteen respondents in terms of factor loading **of** both factors I and II were selected for analysis.

The developed mean scores for the factors and the entire sample can be seen in table 1.

As can be seen, the strongest source of information in Factor I, as compared to the other factors and the total sample, is the dealer. It is by far the strongest within the factor itself with the next highest source being books, magazine articles, etc. The difference between this next highest mean score and the dealer score 2.6, which, when compared with other mean scores differences across and among all factors, represents a relatively wide margin--so the dealer source can be considered the major influential source to this segment.

This first factor will be called the "Dealer Segment." Within this segment can also be found some importance given to advertising in the information seeking process. The four information source categories of advertising fall just below the "no opinion" (6.0) point of the Likert scale on the "not important" side. However, these scores are comparable to the means of the total sample, so advertising does have some importance as a source of information to this dealer segment.

The second factors shows that all the information means are clustered together without any one source becoming dominant. Only 2.2 "points" separate the highest mean score (books, etc.) from the lowest ("other" category). This will be called the "No Preference Segment"



Table 1.--Means of the Segments.

Information Source	Dealer Factor 1	No Preference Factor 2	Big Three Factor 3	Statistical Significance of Difference Between All Three Factors
Dealer	9.9	4.7	7.6	.0005
Friends and Neighbors	1.7	5.0	9.1	.0005
Books, Brochures and Pamphlets	7.3	5.9	6.4	.562
Newspaper Advertising	4.0	4.7	2.4	.05
Magazine Advertising	4.3	4.8	1.8	.005
Television Commerical	5.7	5.4	1.8	.0005
Radio Commercials	4.3	4.8	1.8	.006
Other	0.0	3.7	0.0	.002

Sample size: N=80.

Level of Significance equals .05.

because all the sources of information are considered or used about evenly.

It is necessary to define the "other" category here, because all the people in this study who used this category fell within this segment. There were a total of seven respondents in the "other" category. These people work for various automobile manufacturers and receive substantial discounts on purchasing cars through the manufacturer for whom they work. Besides that, however, they stated that by working on these automobiles they learn a great deal about them and how to evaluate other automobiles.

The final factor is called the "Big Three" segment. This segment considers the advice of friends and neighbors to be very important; dealers, books and pamphlets of relative importance. All three of these sources are ranked fairly close together with the range of the mean scores between the highest and lowest being fairly small.

However, after these three, the other information sources are hardly even considered. Advertising carries very little importance to this group. The highest rated advertising medium was in the form of newspaper advertising. This may be because a great many local dealers advertise within their local newspapers and the people in this segment may use the ads to learn about sales or to find their local dealer addresses.

These three segments make up the foundation of this research. Hypotheses were tested to determine how different (or similar) these segments were in their related information seeking processes, and to try to explain why different sources were considered more important than others.

### Results of the Hypotheses Tested

#### Hypothesis #1

Looking at table 2, it can be seen that the average number of sources actually consulted for each segment is on line two. Using analysis of variance, and having 0.05 as the determinant level of significance, it can be seen that there is no significant difference between any of the segments. Hence, the first null hypothesis cannot be rejected.

It can be inferred from this finding that while some segments consider a larger number of sources important for information, in their actual decision-making process they use very few. This might mean the people who consider relatively few sources to begin with already know how much and what kind of information they need, what type of information they are looking for, and from which sources to get this information. On the other hand, those consumers who are inexperienced in buying automobiles may not have defined informational goals necessary to help them make their decision. In their initial thought about

purchasing a new car, they may consult a large number of sources and absorb all kinds of information. After sorting through all the information, they may then know what type of information is needed for them to reach a decision, and at this point their actual decision-making and search process begins. Therefore, the information needs have been refined and certain sources eliminated to a few that will fulfill those needs.

### Hypothesis #2

Line one of table 2 provides the average number of weeks spent in the information seeking process for each segment. While there is a wide variation between the averages, there is also a wide degree of difference between the variances. Hence, when using analysis of variance, there is no significant difference. The null hypothesis cannot be rejected.

It is interpreted from these findings that a great deal of time and effort is required when trying to obtain information from friends and neighbors. This is probably because just as each person's needs are different, so are his opinions about a particular product fulfilling those needs. It may take the information seeker a longer time to sort out the varying opinions to determine which are valid evaluations and which are not.

On the other hand, it was expected that those who considered a lot of information sources important would

Table 2.--Means of Various Search Types Between Segments.

	Factor 1	Factor 2	Factor 3	Statistical Significance of Difference Between All Three Segments
Time	5.92	3.71	12.64	.313
Number of Sources	1.50	1.86	2.00	.387
Number of Dealers	3.14	3.21	3.50	.930
Ad Information Value	3.14	3.36	3.00	.678

Sample size: N = 42.

Level of significance equals .05 using analysis of variance.

spend more time in the information seeking process than those using one or two sources. In the findings, factor 2 spent only 3.71 weeks in the search process; whereas, factor 1 spent almost six weeks. It may be that those who use many sources become frustrated in a short time with all the information that is available. Much of it may be perceived as conflicting. The individual may then decide to use only one or two types of information to make a decision and go from there. This may be why he can reach a decision a shorter period of time.

### Hypothesis #3

Line three of table 2 represents the average number of dealers visited. As can be seen, the difference is only fractional. Therefore, the null hypothesis is accepted.

It is not known what kind of dealers were consulted by the three segments. They may have been dealers of different manufacturers, or many representing one manufacturer. It may have been just one or two manufacturers. In any case, the segments consult several dealers for information, either price related for one manufacturer or for several reasons, which might be the case for segment two.

#### Hypothesis #4

Of the fourteen statements of the types of information sought, only four were significantly different between the source segments. These four can be referred to as "dealer related" types of information because they refer to the dealer's operation. The segment that considered these most important was composed of the people who considered the dealer most important (segment 1). Those who thought it was irrelevant in their search process are those who rely mainly on the opinions of friends and neighbors. Therefore, only on these few statements can the null hypothesis be rejected.

A t test was done between each segment with regard to the four statements to determine which segments were statistically different from the others. It was assumed that segments one and three were different in all cases because they had the biggest differences between mean

Table 3.--Means of Various Search Types Between Segments--Types of Information.

	Factor 1	Factor 2	Factor 3	Statistical Significance of Difference Between All Three Segments
Exterior Styling	9.43	9.14	7.86	.207
Interior Styling	9.86	9.29	8.21	.251
Engine Performance	10.50	9.79	8.79	.073
Car Ride	9.93	9.64	8.71	.337
Handling	10.00	9.64	9.64	.881
Final Cost	10.64	10.07	9.64	.382
Dealer Service	10.86	9.14	7.28	.009 Significant
Mfr.'s Warranty	10.29	9.07	7.43	.034 Significant
Car Size	9.57	8.07	8.71	.160
Economy of Operation	9.36	9.93	8.86	.393
Dealer Location	9.50	7.21	6.43	.018 Significant
Dependability	10.57	10.21	10.57	.459
Dealer's Assortment	8.86	6.36	4.43	.001 Significant
Reputation of Car	10.14	8.86	9.43	.384

Sample size: N=42.

Level of significance equals .05 using analysis of variance.

Table 4.--Means of Various Search Types Between Segments--Advertising Use and Believability.

	Factor 1	Factor 2	Factor 3	Statistical Significance of Difference Between All Three Segments
Television + <sup>1</sup>	2.79	2.79	3.71	.019 Significant
Radio - <sup>2</sup>	2.64	2.86	2.64	.841
Magazine +	3.50	3.71	3.86	.673
Newspaper -	2.86	2.64	2.86	.379
Brochures +	1.64	2.86	2.64	.044 Significant
Posters	2.71	3.00	2.36	.334

Sample size: N = 42.

Level of significance equals .05 using analysis of variance.

<sup>1</sup>+ indicates positive statement about subject.

<sup>2</sup>- indicates negative statement about subject.



scores, but what about the differences between segments one and two, and between two and three?

Table 5 shows the results of this analysis. The dealer segment is more concerned with dealer service, location and assortment than either segments two or three. It is an important part of this segment's decision-making process. On these same questions, segments two and three were not significantly different. This again demonstrates the unique importance of dealer information to segment one.

On the other hand, the warranty does have related importance to all three segments with the only statistical difference appearing between segments one and three.

#### Hypothesis #5

The results of this hypothesis can be seen in table 4. Two significant differences are demonstrated. One is that the positive statement made about television advertising was disagreed with by the third factor. The other is that the dealer factor strongly agreed with the value of brochures found in the dealers' showrooms. On these two statements the null hypothesis can be rejected. On the whole, all the segments displayed a neutral to negative attitude toward the informational value of most kinds of automobile advertising.

Segment one had the most positive attitude toward automobile advertising with segment three being the least positive. This may be interpreted as a distrust of

**Table 5.--Statistical Significance Between Each Segment--  
Types of Information.**

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Using t Test Analysis  
to Determine Differences Between the Means

**7. Dealer Service After Purchase**

Factors 1 (10.86)\* and 2 (9.14),  $t=2.09$  Significant  
 Factors 1 (10.86) and 3 (7.28),  $t=3.15$  Significant  
 Factors 2 (9.14) and 3 (7.28),  $t=1.38$  Not  
 Significant

**8. The Manufacturer's Warranty**

Factors 1 (10.29) and 2 (9.07),  $t=1.35$  Not  
 Significant  
 Factors 1 (10.29) and 3 (7.43),  $t=2.65$  Significant  
 Factors 2 (9.07) and 3 (7.43),  $t=1.26$  Not  
 Significant

**11. Location of Dealer**

Factors 1 (9.50) and 2 (7.21),  $t=2.31$  Significant  
 Factors 1 (9.50) and 3 (6.43),  $t=2.82$  Significant  
 Factors 2 (7.21) and 3 (6.43),  $t=0.63$  Not  
 Significant

**13. Dealer's Assortment of Models to See and Compare**

Factors 1 (8.86) and 2 (6.36),  $t=2.38$  Significant  
 Factors 1 (8.86) and 3 (4.43),  $t=3.99$  Significant  
 Factors 2 (6.36) and 3 (4.43),  $t=1.82$  Significant

---

Level of Rejection for all tests is 1.706.  
 (Level of significance .05 at 26 degrees of  
 freedom.)

\*Figure represents actual mean score for that  
 segment.

**Table 6.--Statistical Significance Between Each Segment--  
Advertising Use and Believability.**

---

Using t Test Analysis  
to Determine Differences Between the Means

1. I feel automobile advertisements on TV provide useful information which helps me to make my buying decision easier.

Factors 1 (2.79)\* and 2 (2.79),  $t=0$  Not Significant  
 Factors 1 (2.79) and 3 (3.71),  $t=2.33$  Significant  
 Factors 2 (2.79) and 3 (3.71),  $t=2.88$  Significant

5. In terms of my information needs, I always use brochures on new cars that I find in the dealer's showroom.

Factors 1 (1.64) and 2 (2.86),  $t=1.97$  Significant  
 Factors 1 (1.64) and 3 (2.64),  $t=2.44$  Significant  
 Factors 2 (2.86) and 3 (2.64),  $t=0.74$  Not  
Significant

---

Level of Rejection for all tests is 1.706.

(Level of significance .05 at 26 degrees of freedom).

\*Figure represents actual mean score for that segment.

advertising on the whole by segment three because it is presented by the manufacturer. Segment two had a more neutral attitude toward advertising and seemed to be more open to it as a part of an overall information gathering process.

#### Hypothesis #6

Line four of table 2 contains the general information value of advertising in the search process. The null hypothesis cannot be rejected.

While the null hypothesis could not be rejected, an interesting factor that appears is that the second segment disagreed more with the negative statement about automobile advertising than the other two segments. This again may give an indication that, on the whole, consumers who consult a number of sources of information are more open and receptive to all forms of advertising than those groups that consider only a few sources.

#### Hypothesis #7

Table 7 contains the results of the Chi square test analysis on the relationships of certain demographic characteristics and the three segments. The only demographic variable of significance to the three groups was age. Table 8 gives an indication of age breakdowns for each factor group. As can be seen, older people (age 40 and over) concentrate heavily in segment one while younger people tend to concentrate in the third segment.

Table 7.--Chi Square Analysis Between Segments.

	$\chi^2$ Value	Actual Value
Age	14.07	15.13*
Sex	7.82	2.43
Marital Status	7.82	2.89
Number of Children	14.07	6.27
Education	14.07	8.79
Occupation	19.68	16.04
Car Model	18.31	12.86
Car Size	18.31	13.25

\*Significantly above .95  
Accept alternate hypothesis

Table 8.--Segment Differences by Age.

Null Hypothesis Rejected							
	Below 20	20-29	30-39	40-49	50-59	60 & Up	Total
Factor 1	0	2	1	5	4	2	14
Factor 2	1	5	0	4	1	3	14
Factor 3	0	8	3	0	2	1	14
Total	1	15	4	9	7	6	42

Chi square analysis level of rejection is 14.07  
determined by using significance level of .05 at 7 degrees  
of freedom.

This result may indicate that an older person may have more experience and self-confidence in purchasing automobiles. While he considers a lot of information important, he knows how and where to find it. He has knowledge of what has happened in the past and what new information he needs now to make a decision on which car to buy.

On the other hand, the younger buyer probably lacks the experience, knowledge, and confidence to make a decision quickly. Hence, he relies on the experiences and opinions of others to make his decision.

#### Hypothesis #8

Table 7 also indicates that there was no significant difference between the brands of new cars or the size of the vehicle purchased. Therefore, the null hypothesis is also true in this case.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

The methods of segmentation used were, for the most part, good and yielded some very important findings. The use of inverted R factor analysis demonstrated that new car buyers can be segmented based on media usage in the information gathering process. In this study, factor analysis helped develop three well-defined segments; each with certain characteristics which separated it from the other two segments.

However, beyond the establishment of the basic segments, very few differences between the segments could be discerned. Originally it was believed that as car buyers considered more sources of information important, they would also consider more types of information important, visit more dealers, spend more time in the search process, and consider automobile advertising more important. It was also thought that the younger consumers, or less educated and lower occupational level consumers, would

also consider more sources important in making their purchase decision. Such was not the case.

All three segments were not statistically different in the time spent in search, the number of dealers visited, the information value rating of advertising, and the actual number of sources consulted. One reason for the lack of difference may be that the research was dependent on a mailed questionnaire and the questions were too broad and generalized for a "well interpreted" response. For example, one consumer may be very involved in information gathering for three weeks, whereas another sought information for one week but did not make his final decision until two weeks later. They both used three weeks, but in highly different manners. However, this again is one of the problems of a mail questionnaire and must be realized.

In terms of types of information, very few differences could be found. Of the fourteen types of information statements, only four were statistically different between segments. For the most part, these four information statements were more important to the Dealer segment and were not significantly different between the other two segments.

The same could also be said for the opinion statements about automobile advertising. Only two of the seven statements were statistically significant. This is quite a difference considering that in terms of media usage, the Big Three segment did not consider advertising very useful



in the search process. One reason for this may be that all consumers may not perceive automobile advertising as having very much informative value in the actual search process, but may use it to some extent when first thinking about buying an automobile. Advertising may operate more as an initiator to buy in general rather than a brand discriminator.

Age was the only significant demographic difference between the segments. The older consumers considered one source of major importance--the dealer. The younger consumers valued others for information. This may provide an indication that experience is related to the number and types of sources consumers consult. However, in this study it was only an inference and was not determined conclusively.

Overall, except for a few basic and sometimes contradictory patterns, it can be concluded that segmenting markets based upon consumers' usage of media in gathering information has no practical application at the present time. Perhaps a more in-depth system of gathering data may be required before such an approach can be applied. A different method of analyzing the data might produce different results also.

One interesting finding of this study may be of use in future research. It was strongly felt that the number and types of sources of information considered important would be related to the number and types of information that were considered important. The more

information that was needed, the more sources that would be consulted. In fact, however, the opposite developed. The Dealer segment, which actually rated only one source very important, also rated thirteen of the fourteen types of information important. On the other hand, the No Preference segment, which considered all the sources about equally in value, rated only ten type statements relatively important. The three source segment considered only four information type statements to be important.

This raises a very important question which may show why this approach to segmentation is not entirely practical. Do consumers first have an idea of a certain amount and type of information they need and then go to specific sources in hopes of finding this information; or do consumers first consult certain sources for some reason and see what information it contains? This study assumed the latter instance, and it did not result as first hypothesized. Perhaps consumers first need to fulfill their information needs as proposed in the first statement. If this is the case, then it may be better to segment new car buyers based upon the types of information considered important. By segmenting in this way, very distinct differences may be found in the variables that were used to differentiate the segments in this study, and therefore have a more applicable means of segmentation in the future.

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APPENDIX A

THE QUESTIONNAIRE



APPENDIX A  
THE QUESTIONNAIRE

MICHIGAN STATE UNIVERSITY EAST LANSING • MICHIGAN 48823

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DEPARTMENT OF ADVERTISING • JOURNALISM BUILDING

August 3, 1973

Dear New Car Purchaser;

I am a graduate student at Michigan State University and am currently working on my thesis so that I can graduate within the near future. My thesis project is to investigate the sources and types of information new car buyers use when deciding which car to buy.

I selected the 1973 car buyer for this study because your information gathering activities should be relatively fresh in your mind since you have purchased your automobile in the last nine or ten months. Your name, specifically, was chosen at random from all the purchasers of 1973 automobiles in Michigan. The total sample includes 200 buyers of new automobiles.

Your help is greatly needed and will be appreciated. I have spent a great deal of time and money on this project thus far, and each response is vital to its success. You are an important factor in the completion of my degree requirement. The questionnaire is straight-forward and takes approximately 15 minutes to fill out. All responses will be strictly confidential. Please do not sign your questionnaire. Your cooperation is deeply appreciated. Thank you very much.

Sincerely,

A handwritten signature in dark ink, appearing to read "David D. Demorotski", with a large, stylized initial "D" and a flourish at the end.

David D. Demorotski

## QUESTIONNAIRE

## A Survey of New Car Purchasers

## Section I

1. What make and model is your 1973 automobile? \_\_\_\_\_  
\_\_\_\_\_.
2. How many weeks (or months) would you estimate that you were actively seeking information leading up to the purchase of your 1973 automobile? \_\_\_\_\_

Please rate the following potential sources for new car information on the basis of how important each was for you personally when searching for information leading to your recent 1973 car purchase.

A rating of -5 indicates this source was not important to you; zero indicates no opinion; and +5 indicates this source was very important to you.

Place an X in the appropriate space:

3. Dealer

Not  
Important

Very  
Important

-5   -4   -3   -2   -1   0   +1   +2   +3   +4   +5

4. Friends and Neighbors

Not  
Important

Very  
Important

-5   -4   -3   -2   -1   0   +1   +2   +3   +4   +5

5. Books, Pamphlets, and Magazine Articles about New Cars

Not  
Important

Very  
Important

-5   -4   -3   -2   -1   0   +1   +2   +3   +4   +5

6. Newspaper AdvertisementNot  
ImportantVery  
Important

$\overline{-5}$	$\overline{-4}$	$\overline{-3}$	$\overline{-2}$	$\overline{-1}$	$\overline{0}$	$\overline{+1}$	$\overline{+2}$	$\overline{+3}$	$\overline{+4}$	$\overline{+5}$
-----------------	-----------------	-----------------	-----------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------

7. Magazine AdvertisementsNot  
ImportantVery  
Important

$\overline{-5}$	$\overline{-4}$	$\overline{-3}$	$\overline{-2}$	$\overline{-1}$	$\overline{0}$	$\overline{+1}$	$\overline{+2}$	$\overline{+3}$	$\overline{+4}$	$\overline{+5}$
-----------------	-----------------	-----------------	-----------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------

8. TV CommercialsNot  
ImportantVery  
Important

$\overline{-5}$	$\overline{-4}$	$\overline{-3}$	$\overline{-2}$	$\overline{-1}$	$\overline{0}$	$\overline{+1}$	$\overline{+2}$	$\overline{+3}$	$\overline{+4}$	$\overline{+5}$
-----------------	-----------------	-----------------	-----------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------

9. Radio CommercialsNot  
ImportantVery  
Important

$\overline{-5}$	$\overline{-4}$	$\overline{-3}$	$\overline{-2}$	$\overline{-1}$	$\overline{0}$	$\overline{+1}$	$\overline{+2}$	$\overline{+3}$	$\overline{+4}$	$\overline{+5}$
-----------------	-----------------	-----------------	-----------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------

10. Other \_\_\_\_\_  
(Please specify)Not  
ImportantVery  
Important

$\overline{-5}$	$\overline{-4}$	$\overline{-3}$	$\overline{-2}$	$\overline{-1}$	$\overline{0}$	$\overline{+1}$	$\overline{+2}$	$\overline{+3}$	$\overline{+4}$	$\overline{+5}$
-----------------	-----------------	-----------------	-----------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------

11. Please check which of the following sources of new car information you recall that you actually used in coming to a decision on your recent car purchase.

☐ TV commercials  
☐ friends and neighbors  
☐ newspaper ads  
☐ books, pamphlets, and articles

☐ dealers  
☐ radio commercials  
☐ magazine ads  
☐ other (specify) \_\_\_\_\_

6. Newspaper AdvertisementNot  
ImportantVery  
Important

<u>-5</u>	<u>-4</u>	<u>-3</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>+3</u>	<u>+4</u>	<u>+5</u>
-----------	-----------	-----------	-----------	-----------	----------	-----------	-----------	-----------	-----------	-----------

7. Magazine AdvertisementsNot  
ImportantVery  
Important

<u>-5</u>	<u>-4</u>	<u>-3</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>+3</u>	<u>+4</u>	<u>+5</u>
-----------	-----------	-----------	-----------	-----------	----------	-----------	-----------	-----------	-----------	-----------

8. TV CommercialsNot  
ImportantVery  
Important

<u>-5</u>	<u>-4</u>	<u>-3</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>+3</u>	<u>+4</u>	<u>+5</u>
-----------	-----------	-----------	-----------	-----------	----------	-----------	-----------	-----------	-----------	-----------

9. Radio CommercialsNot  
ImportantVery  
Important

<u>-5</u>	<u>-4</u>	<u>-3</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>+3</u>	<u>+4</u>	<u>+5</u>
-----------	-----------	-----------	-----------	-----------	----------	-----------	-----------	-----------	-----------	-----------

10. Other \_\_\_\_\_  
(Please specify)Not  
ImportantVery  
Important

<u>-5</u>	<u>-4</u>	<u>-3</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>+3</u>	<u>+4</u>	<u>+5</u>
-----------	-----------	-----------	-----------	-----------	----------	-----------	-----------	-----------	-----------	-----------

11. Please check which of the following sources of new car information you recall that you actually used in coming to a decision on your recent car purchase.

☐ TV commercials  
☐ friends and neighbors  
☐ newspaper ads  
☐ books, pamphlets, and  
           articles

☐ dealers  
☐ radio commercials  
☐ magazine ads  
☐ other (specify) \_\_\_\_\_

12. How many dealers would you estimate you visited in looking for your new car? \_\_\_\_\_

### Section II

Please rate the following on the basis of how important each was to you as a reason for making your recent 1973 car purchase.

1. Exterior Styling--how the car looks from the outside.

Not											Very
Important											Important

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
----	----	----	----	----	---	----	----	----	----	----

2. Interior Styling and Roominess.

Not											Very
Important											Important

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
----	----	----	----	----	---	----	----	----	----	----

3. Engine Performance and Response.

Not											Very
Important											Important

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
----	----	----	----	----	---	----	----	----	----	----

4. How Smoothly the Car Rides and Quiet It is.

Not											Very
Important											Important

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
----	----	----	----	----	---	----	----	----	----	----

5. Ease of Handling.

Not											Very
Important											Important

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
----	----	----	----	----	---	----	----	----	----	----

## 6. Final Cost--Deal Offered.

Not  
ImportantVery  
Important

$\overline{-5}$	$\overline{-4}$	$\overline{-3}$	$\overline{-2}$	$\overline{-1}$	$\overline{0}$	$\overline{+1}$	$\overline{+2}$	$\overline{+3}$	$\overline{+4}$	$\overline{+5}$
-----------------	-----------------	-----------------	-----------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------

## 7. Dealer Service After the Purchase.

Not  
ImportantVery  
Important

$\overline{-5}$	$\overline{-4}$	$\overline{-3}$	$\overline{-2}$	$\overline{-1}$	$\overline{0}$	$\overline{+1}$	$\overline{+2}$	$\overline{+3}$	$\overline{+4}$	$\overline{+5}$
-----------------	-----------------	-----------------	-----------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------

## 8. The Manufacturer's Warranty.

Not  
ImportantVery  
Important

$\overline{-5}$	$\overline{-4}$	$\overline{-3}$	$\overline{-2}$	$\overline{-1}$	$\overline{0}$	$\overline{+1}$	$\overline{+2}$	$\overline{+3}$	$\overline{+4}$	$\overline{+5}$
-----------------	-----------------	-----------------	-----------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------

## 9. Car Size.

Not  
ImportantVery  
Important

$\overline{-5}$	$\overline{-4}$	$\overline{-3}$	$\overline{-2}$	$\overline{-1}$	$\overline{0}$	$\overline{+1}$	$\overline{+2}$	$\overline{+3}$	$\overline{+4}$	$\overline{+5}$
-----------------	-----------------	-----------------	-----------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------

## 10. Economy of Operation.

Not  
ImportantVery  
Important

$\overline{-5}$	$\overline{-4}$	$\overline{-3}$	$\overline{-2}$	$\overline{-1}$	$\overline{0}$	$\overline{+1}$	$\overline{+2}$	$\overline{+3}$	$\overline{+4}$	$\overline{+5}$
-----------------	-----------------	-----------------	-----------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------

## 11. Location of the Dealer.

Not  
ImportantVery  
Important

$\overline{-5}$	$\overline{-4}$	$\overline{-3}$	$\overline{-2}$	$\overline{-1}$	$\overline{0}$	$\overline{+1}$	$\overline{+2}$	$\overline{+3}$	$\overline{+4}$	$\overline{+5}$
-----------------	-----------------	-----------------	-----------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------

## 12. Dependability of Operation.

Not  
ImportantVery  
Important

$\overline{-5}$     $\overline{-4}$     $\overline{-3}$     $\overline{-2}$     $\overline{-1}$     $\overline{0}$     $\overline{+1}$     $\overline{+2}$     $\overline{+3}$     $\overline{+4}$     $\overline{+5}$

## 13. Dealer's Assortment of Models Available to See and Compare.

Not  
ImportantVery  
Important

$\overline{-5}$     $\overline{-4}$     $\overline{-3}$     $\overline{-2}$     $\overline{-1}$     $\overline{0}$     $\overline{+1}$     $\overline{+2}$     $\overline{+3}$     $\overline{+4}$     $\overline{+5}$

## 14. Reputation of the Manufacturer and/or that Particular Make of Car.

Not  
ImportantVery  
Important

$\overline{-5}$     $\overline{-4}$     $\overline{-3}$     $\overline{-2}$     $\overline{-1}$     $\overline{0}$     $\overline{+1}$     $\overline{+2}$     $\overline{+3}$     $\overline{+4}$     $\overline{+5}$

## Section III

The following are statements of opinion about automobile advertising. Please read each statement and indicate how much you agree or disagree with it. (Note abbreviations.)

SA--Strongly   A--Agree   N--No   D--Disagree   SD--Strongly  
Agree   Opinion   Disagree

1. I feel automobile advertisements on TV provide useful information which help to make my buying decision easier.

\_\_\_ SA   \_\_\_ A   \_\_\_ N   \_\_\_ D   \_\_\_ SD

2. Automobile commercials on the radio are not very useful because they never tell me anything I don't already know.

\_\_\_ SA   \_\_\_ A   \_\_\_ N   \_\_\_ D   \_\_\_ SD

3. For information on new cars, I always refer to car ads in magazines.

\_\_\_ SA   \_\_\_ A   \_\_\_ N   \_\_\_ D   \_\_\_ SD

4. Car advertisements that appear in newspapers are of little information value.

☐ SA    ☐ A    ☐ N    ☐ D    ☐ SD

5. In terms of my information needs, I always use brochures on new cars that I find in the dealer's showroom.

☐ SA    ☐ A    ☐ N    ☐ D    ☐ SD

6. I believe the posters and window displays at a dealer's showroom are of little informative quality and didn't help me in making my decision about a new car.

☐ SA    ☐ A    ☐ N    ☐ D    ☐ SD

7. I did not use any information from advertising in making a new car purchase decision because it didn't supply much useful information.

☐ SA    ☐ A    ☐ N    ☐ D    ☐ SD

Thank you very much for your cooperation in filling out this questionnaire. I have just a few more questions about some vital characteristics.

1. Age: \_\_\_\_\_ Years Old      2. Sex: M\_\_\_ F\_\_\_
3. Marital Status: Married\_\_\_ If married, how many children are  
Single\_\_\_ living at home? \_\_\_\_\_
4. What was the last year in school you completed? (Please circle.)

			High School				College	___	or Technical	___			
8	9	10	11	12	1	2	3	4	5	6	7	8	

5. What is the occupation of the head of the household?
- \_\_\_\_\_

Please fold and place in the enclosed self-addressed envelope. Again, thank you for your time and effort.



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