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An Examination of the Relationship Between Information Content and Readership in Agricultural Advertising

Nathan J. Huso

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AN EXAMINATION OF THE RELATIONSHIP
BETWEEN INFORMATION CONTENT AND
READERSHIP IN AGRICULTURAL ADVERTISING

by

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ABSTRACT

The relationship between information content and Starch readership scores in The Farmer magazine from 1979 through 1985 was investigated. The information content of the agricultural advertisements was determined through content analysis using criteria developed to assess the amount of information that contributes to a rational buying decision. The results indicated that 99.4 percent of the advertisements contained information. There was a decrease in the average number of information cues per advertisement over time. There were no significant positive correlations between the information content and the readership score over time for any of the agricultural product categories studied. There were several significant negative correlations between the information content and the readership score. The significant correlations show that in some cases a high amount of information in an advertisement results in a lower readership score.

CHAPTER 1

Introduction

Many suppliers of farm production inputs have experienced depressed sales since 1983. Government programs have paid farmers not to produce and have taken millions of acres out of production. Also, the farm economy has been in decline for the last seven to ten years. Farm land values that were inflating throughout the 1970's have fallen in value from 1983 through 1987 (North Dakota Crop and Livestock Reporting Service, 1987). Limited farm dollars and diminishing sales have increased the competition among agri-businesses. Since 1984, there has been several major mergers of farm equipment manufacturers such as J. I. Case, International Harvester, and Steiger Tractor; Deutz and Allis Chalmers; Allied Farm Equipment, Bush Hog, Kewanee, and White Farm Equipment; Gehl, Owatonna, Hedlune Martin, Kasten, and Keith Manufacturing; Hiniker and Fox; and Ford, New Holland, and Versatile.

Farmers have been hit by large losses and have been forced to cut costs to the minimum to survive. Farmers cannot afford to make mistakes in farm purchases because one mistake could force them out of business. The current farm economy is characterized by low farm income, a more cautious farm buyer, and greater competition between agricultural supply firms.

Farmers in the United States are part of a complex

industry of steadily increasing international importance. Nearly 2.3 million farmers in the United States generated \$140 billion in gross receipts from the sale of farm products in 1984 (Farm Broadcasts, 1984). Agriculture and food-related industries employ more people than any other segment of the American economy. Technology developed by agricultural research in the United States has been adopted by countries around the world. Many of these countries have gone from food importers to major food exporters.

Rogers (1983) indicated that a significant factor in the agricultural productivity of this country has been the ability of the American agricultural system to adopt new technology rapidly and to increase efficiency. This ability to adopt new technology has been aided by the largest public agricultural research and development complex in the world. The United States Department of Agriculture, the Land Grant University system, and the Agricultural Experiment Station and Extension Service complex were designed to provide the agricultural sector of the American industrial complex with new and better methods of farming. Farmers have used the information from this system to keep abreast of new developments that will increase their efficiency and productivity.

However, information on products or services developed in the private sector, outside the public agricultural research complex, is generally supplied by the marketer of

the product or service. Agribusinesses communicate the features, advantages, and benefits of products through seminars, field demonstrations, product test literature, and advertising as well as a number of other methods. According to the Agricultural Print Media Report compiled by Agricom (Top 150, 1985) expenditures in 1984 on agricultural print advertising alone totaled \$192,042,799. The report also indicated that the total number of pages of agricultural advertising in 1984 was 73,193.

The major portion of advertising seen today is classified as consumer advertising. Consumer advertising is simply advertising for products that will be "used up" or "consumed" by the buyer. Agricultural advertising is classified as industrial or business to business advertising rather than consumer advertising. Farmers purchase agricultural products like seed or pesticides to help produce other products. When a business purchases a product from another business to produce a product, the demand for the purchased product is called "derived demand," a characteristic of an industrial market.

Brown and Brucker (Albion & Farris, 1981, p. 193) observed that although there are complex processes involved in analyzing the reaction to industrial advertising, it seems that readership is often "determined by the buyer's perception that an advertisement contains problem-solving information." Although larger businesses have entire departments for purchasing and marketing, the typical farmer

acts as both purchaser and marketer. As Dodge (1970, p. 398) explained the role of farm purchaser, ". . . the farmer must select from a bewildering array of products. . . . Each decision is critical in that it can have a significant effect on yearly earnings." Hill (1975, p. 343) indicated that in industrial advertising, purchasing decisions are frequently made on the basis of facts and logic. "Consequently, industrial advertising copy is often studded with facts--facts which are precise, documented and provable."

James M. Cornick (1981, p. S4), former editor of Successful Farming magazine indicated that there is a good reason for large expenditures on agricultural advertising. Cornick pointed out that, "Farmers are information seekers. They look for new products that will help them farm better. It means a new product can sweep the market. It also means farmers read advertising." Cornick also pointed out that a 1981 Successful Farming survey of 1,400 top producers indicated that 94 percent of the respondents said they usually or sometimes find farm magazine advertising believable, and 84 percent said they like to see advertising in farm magazines.

Although various factors affecting readership of industrial advertising have been explored in recent years (Hanssens and Weitz, 1980; Soley and Reid, 1983) research concerning information content as a factor affecting readership is lacking. Studies of how advertisements are

perceived have been conducted since the turn of the century, but very few studies of industrial advertising have assessed the information content of agricultural advertisements.

The changes in the farm economy, the importance of information in industrial/agricultural advertising, and the tendency for farmers to be information seekers, designates a need to study the information content of agricultural advertising. It is suspected that the changes in the farm economy will cause farmers to place more importance on seeking information so that their buying decisions can be more informed and rational.

The purpose of this study is: a) To analyze the content of advertisements in six issues of a regional farm magazine to determine the amount of information contained in the advertisements, and b) To discover whether a correlation exists between the information content and readership of the advertisement.

The advertisements that were analyzed were found in The Farmer, a bi-monthly publication of the Webb Company of St. Paul, Minnesota. The Farmer was chosen because of its general, agricultural content. The editorial content covers a wide variety of topics directly targeted at farmers in the three state region of North Dakota, South Dakota, and Minnesota. The broad general interest of the editorial content also encourages a wide variety of advertisements. The Farmer employs the Starch INRA Hooper company to survey readers and establish readership scores for editorial and

advertising content of the issue published the first week of February each year.

This study includes a content analysis of The Farmer magazine to determine the information content of its advertisements. It also includes Starch Readership scores taken from readers in the three state region for a sample of farmers with similar information needs. The results of this study will benefit both farm advertisers and farmers by determining the amount of information helpful in making a rational buying decision that is present in agricultural advertising.

The thesis, in analyzing the information content and its relationship to readership, will attempt to answer the following research questions:

1. How much information is contained in agricultural advertisements?
2. Has there been a change in the information content of agricultural advertisements between 1979 and 1985?
3. Does the number of information cues in an advertisement vary among product categories?
4. Is there a correlation between the number of information cues contained in an advertisement and the readership score of the advertisement?

CHAPTER 2

Review of Literature

This chapter will examine the body of literature pertinent to the study of the information content of agricultural advertisements. The review of this body of literature is divided into several sections. The first section deals with information in advertising and lays the groundwork for the importance of research in this area. It is divided into three parts: The role of information in advertising, the operational definition of information, and a review of research on the information content of advertising. This section will be followed by a review of Starch Readership scores, the important role of information in industrial marketing and advertising, an overview of the farm market, and finally, the ways in which information is processed and used by farmers will be examined by studying a body of research known as the diffusion of innovations.

Information in Advertising

The Role of Information in Advertising

Information in an open market economy is of great importance. Thorelli, Becker, and Engledow (1975) indicated that information may be the most important thing produced by affluent economies: "Without sources of information that are both available and accurate, there is little hope that the buyer will find his way through the maze of proffered products and services toward purchases which best serve his

wants and needs (1975, p. 3)."

Consumers are exposed to a wide variety of messages generated by private interests and communicated by means of several media channels. Thorelli (1975, p. 4) identified three sources of consumer information: "personal, commercial, and independent." Personal information consists of past experience, observation or examination, and word-of-mouth testimonials. Most of the information supplied by commercial sources is communicated by means of advertising and sales personnel. Independent sources of information include reports by consumer magazines and unbiased testing by other independent sources. Of these three sources, commercial information, or information generated by a source that has a direct interest in a product, is the most controversial.

There are several types of consumer information generated by commercial sources. Albion and Farris (1981) indicated that the most highly visible form is advertising. They said that advertising is controversial because it is unclear whether advertising serves a useful function. Marquez (1977) stated that the most difficult issue to resolve in advertising is whether advertising is persuasive or informative. Marquez (1977, p. 482) said, "the issue implies that if advertising is persuasion, it is unnecessary; if it is information, then it is useful." The implication that information is "socially good" and persuasion is "socially bad" is supported from an economic

perspective by Preston (1967). Preston also pointed out that completely rational decision making requires full information on alternatives.

Researchers in many disciplines have attempted to distinguish a dichotomy in the verbal content of advertising. Shimp (1981) indicated that the verbal content of advertising has been categorized as being representational versus emotive, symbolic versus evocative, denotative versus connotative, inherent versus arbitrary, valid versus invalid, data claims versus puffery (meaningless claims), factual versus evaluative, informative versus persuasive, and objective versus subjective. The dichotomies imply that one category is positive and the other is a negative aspect of advertising.

Marquez (1977) indicated that the definitions of information and persuasion are controversial. According to Marquez (1977, p. 482), "regardless of how vague these definitions are, they leave the impression that persuasion in advertising is empty and says nothing about the product, while information is specific, definite, and tangible."

Albion and Farris (1981) traced the attempt to categorize advertising as informative or persuasive back to Alfred Marshall in 1919. Marshall attempted to categorize advertising into constructive and combative advertising. Albion and Farris also cited the work of Lever in 1947 as an early attempt to establish an empirical basis for the information content of advertising. Since that time several

researchers have attempted to deal with the information content of advertising (Bucklin, 1965; Stern, 1967; Backman, 1968; Scanlon, 1970; Marquez, 1977) with various results.

There have been several attempts to establish a clear definition of what constitutes information. Marquez (1977, p. 485) adopted a dictionary definition and defined information as "something told or facts learned; news or knowledge."

Albion and Farris (1981) identified two broad areas from which definitions of information have been emerging. The information theorists relate information to uncertainty. Verbal or visual stimuli is informative only if it tends to reduce uncertainty. However, consumer researchers define information more broadly. They view information as anything that contributes to the decision to buy or use a product. Preston (1967) pointed out that advertising informs people but goes beyond information. He said two similar products can be valued differently because advertising changes the way people perceive the product. Objective facts in an advertisement may influence the buying decision of a rational decision-maker. However, consumers attach various subjective meanings to the facts which may lead to a decision based on irrational perceptions.

As Aaker and Norris (1982 p. 61) noted: "The paucity of reported research on the informativeness of advertisements is remarkable." Content analysis procedures have been used by several researchers in an attempt to establish an

objective measure of advertising informativeness. The problem that researchers have identified is the lack of a generally accepted method of measuring the informativeness of advertisements. It is presumed that all advertisements contain some information since they contain visual or verbal stimuli that are meaningful to some portion of the audience. Establishing an operational definition of information will help researchers evaluate the role of information in advertising.

Operational Definition of Information

Resnik and Stern (1977) noted that no known attempt had been made to empirically investigate the informational content of advertising because there were so many value judgments involved in constructing a definition. Their research resulted in the first operational definition of verbal information contained in advertising copy. The definition was based on a comprehensive list of fourteen informational cues. The cues were selected from an application of evaluative criteria that could be audibly and visually transmitted (via radio, television, print, etc.) and enable judges to consistently arrive at similar conclusions regarding the information content of advertisements. The list of information cues was not developed as an infallible instrument for the measurement of information content. However, it did incorporate all the objective, factual and evaluative cues regarded as beneficial for rational decision making in the buying

process.

The fourteen information cues developed by Resnik and Stern (1977 p. 51) were:

1. price or value
2. quality
3. components or contents
4. availability
5. special offers
6. taste
7. packaging or shape
8. guarantees or warranties
9. safety
10. nutrition
11. independent research
12. company-sponsored research
13. new ideas
14. performance

Resnick and Stern considered a commercial to be informative when one or more of the information cues were present. Of the 378 television commercials analyzed, 49.2 percent contained one of the information cues, 16 percent contained two information cues and 1 percent contained three information cues.

Resnik and Stern concluded that the study reflected negatively on consumer advertising. Less than half the commercials contained information cues. The implicit conclusion they drew from this was "the product so described

fails to fulfill any unique or relevant needs of the customer [such as] taste, value, etc. (p. 52)."

Resnik and Stern noted that advertising, in the best interest of the consumer, should express information about the product to help the consumer make a more informed buying decision. The increasingly sophisticated consumer of today is seeking relevant product information to aid in choosing the best alternative.

Research on Information Content of Advertising

Laczniak (1979) evaluated the informational cues developed by Resnik and Stern (1977) by comparing a study using the informational cues with a study by Marquez (1977) of the information content of print advertisements. Marquez used dictionary definitions of information and persuasion to classify print advertisements into four categories: a) basic persuasion, b) basic information, c) high persuasion/low information, d) low persuasion/high information.

Laczniak (1979) analyzed a sample that was similar to the Marquez (1977) study using the Resnik and Stern information cues. Laczniak found 92 percent of 380 total ads sampled contained 1 information cue, 59 percent contained 2 information cues, and 49 percent contained 3 or more information cues. The Marquez (1977) study found only 33 percent of the ads informative and 43 percent as virtually non-informative while the other 24 percent were found to be mostly intimidation.

Laczniak (1979) indicated that the abstract dictionary definitions of information and persuasion used by Marquez tended to discount some of the information useful to consumers subsequently identified by the informational cues. He noted that the use of the Resnik and Stern informational cues did not eliminate subjectivity entirely from the evaluation process but served to reduce a subjective judgment (i.e. Marquez's dictionary definitions) to a series of more limited, more defensible judgments that increase reliability.

Although the Laczniak (1979) study provided useful information concerning the information content of print advertising, Stern, Krugman and Resnik (1981) felt its limited sampling was a weakness of the study. They sought to provide a broader sampling of 1500 advertisements from 100 consumer magazines and analyzed the information content using the Resnik and Stern (1977) information criteria. They also analyzed the information content by magazine type, product category, ad size, and in addition, investigated the effect of government regulation.

Stern, Krugman, and Resnik (1981 p. 40) acknowledged that advertising information could not be viewed with complete objectivity, however, they indicated that the informational cues previously defined by Resnik and Stern (1977) were "a highly objective scheme for evaluating overt information content and a useful tool for analysis. Its terms are easily understandable and uniformly recognizable;

as evidenced by a high level (99.4 percent) of interjudge agreement."

The analysis by Stern, Krugman, and Resnik (1981) indicated that 86 percent of the print advertisements contained one information cue, 52 percent contained two cues, 26 percent contained three cues, 9 percent contained four cues, and 1 percent contained 5 cues. There were a total of 2577 cues in 1491 advertisements for an average of 1.7 cues per ad. The consumer magazine advertisements contained information on components or contents in 43 percent of the ads, price or value in 37 percent, availability in 36 percent, special offers in 26 percent, performance in 15 percent, guarantees or warranties in 11 percent. The remaining information cues occurred in less than 1 percent of the ads. Science magazines contained the highest percentage (97) of informative ads (i.e. at least one information cue) while in-flight (airline) magazines contained the lowest percentage (77) of informative ads. When analyzed by product type 97 percent of the furniture, home furnishing/appliance advertisements contained at least one information cue while only 66 percent of the personal care advertisements were considered informative. It did not appear that ad size had any effect on the information content of ads. Larger ads did not contain more information and smaller ads did not contain less information.

The results of the Laczniak (1979) study and the Stern, Krugman, and Resnik (1981) study of print advertising

seem to indicate that print advertising is generally more informative than television advertising (Resnik and Stern, 1977). Resnik and Stern (1977) found 49 percent of the television commercials to be informative, Laczniak (1979) found 92 per cent of the print ads to be informative and Stern, Krugman and Resnik (1981) found 86 percent of the print ads to be informative.

One aspect of the general informativeness of an advertisement that some researchers felt could have influenced the amount of information in an advertisement was comparative advertising. Harmon, Razzouk and Stern (1983) noted that the Federal Trade Commission had encouraged comparative advertising to enable consumers to make a more informed buying decision. Therefore, it was important to analyze the information content of comparative advertising to determine if it was more informative than non-comparative advertising. They pointed out that previous studies of comparative advertising had focused on communication effectiveness and were inconclusive and conflicting.

Harmon, Razzouk and Stern (1983), using the informational cues developed by Resnik and Stern (1977), found that 90.7 percent of the comparative ads contained at least one information cue while 59.7 percent of the non-comparative ads contained one information cue. They concluded that their results strongly supported the position that comparative advertising contained more informational cues and therefore offered more information than non-

comparative advertisements. They also pointed out that the Resnik and Stern (1977) classification system provided judges with a reliable and objective means of evaluating each advertisement against a uniform set of criteria. They noted the information cues use criteria related to rational decision making and do not address the more subjective area of emotional appeals. In some instances emotional appeals could be considered informative depending on product type and how the consumer perceives the product.

A study by Healey and Kassarian (1983) attempted to analyze how advertisers responded to another FTC program requiring advertisers to substantiate all advertising claims. The intention of the program was to get more useful information to consumers and to prevent exaggerated and deceptive advertising claims. However, the possibility existed that the program could reduce the amount of information in advertising because advertisers would rather use uninformative advertising than incur the expense of documenting advertising claims. Healy and Kassarian hypothesized that there would be an increase in the informativeness of advertising after the FTC program was initiated in 1971.

Healey and Kassarian (1983) tested the information cues and found a 97 percent interjudge agreement. The major finding of their research was a significant change in the way product attributes were expressed. After the program was introduced the advertising claims were either more

ambiguous or accompanied by verification. Consumers were provided with less information on the average, but the information that was provided was more verifiable and less misleading.

The studies that have used the Resnik and Stern (1977) information cues show that they measure the occurrence of objective cues determined to be important in rational decision making but do not measure subjective content directly or individual perceptions of the advertisement. Aaker and Norris (1982) studied how prime time television commercials were perceived. They found them to be perceived as much more informative than expected. They also found that commercials perceived to be informative were also perceived to be convincing, effective, and interesting.

As the studies cited indicate, the information content of consumer advertising is an important research area. The major problem confronting researchers has been the difficulty in defining information. Buying a consumer product is a decision making process that is often not dependent on the amount of information the buyer has received because consumer products are often purchased on impulse. The Resnik and Stern (1977) information cues are designed to identify the information that would lead to a fully informed, rational buying decision that characterize the industrial market, the subject of this study.

Starch Readership Scores

Research concerning how advertisements were perceived began as early as the turn of the century. Daniel Starch (1966) indicated that Walter Dill Scott first tried to measure "impressions made by advertisements" in 1903 at Northwestern University. Starch first became interested in measuring the readership of advertisements in 1909 and developed his widely used Starch Recognition Procedure in 1922. Since the technique's development, it has become the most widely used method of measuring advertising recognition. A review of the purpose and validity of Starch Readership Scoring procedures and their use as a criterion variable in modern advertising research is necessary to establish its use in this study.

Starch (1966, p. 11) pointed out that, "the purpose of the technique is to ascertain to what extent specific advertisements are seen and read." It has been used to learn how an advertising message can be communicated to potential buyers so that it will be read and remembered. The three major uses of readership measurements are: 1) for comparison of current and previous advertisements, 2) for comparison of advertisements of competitors, and 3) for ascertaining the characteristics of advertisements that are effective in attracting readers.

Advertisers and advertising media hire the Starch company (part of Starch INRA Hooper) to prepare reports on more than 75,000 advertisements in over 1000 issues of 140

different publications each year (Zinkham and Gelb, 1986).

Starch (1966) said the reports consist of three measurements of advertising readership:

- a) Noted is the percentage of issue readers who remember, when interviewed, that they previously saw the advertisement in the particular issue under study.
- b) Seen-Associated is the percentage of issue readers who saw or read any part of the advertisement which clearly indicates the product or name of the advertiser.
- c) Read Most is the percentage of issue readers who read 50 percent or more of the written material of the advertisement (1966, p. 14).

The highest percentage is the "noted" score because an ad must be noted before it can be associated and read.

"Seen-Associated" is the next highest percentage and is usually only a few percentage points lower than the "Noted" percentage. However, in certain cases the "Seen-Associated" percentage is much lower than the "Noted" percentage. Starch (1966) indicated this is usually the result of an advertisement that has a dominant attention getting feature that is irrelevant to the product or company. However, as a rule, high readership scores are significant indicators of an advertisement's ability to reach potential buyers.

The validity of Starch scores has been debated since the inception of the technique. According to Zinkham and

Gelb (1986) Starch Scores are criticized as being invalid because several research studies have found that Starch respondents will claim to have seen advertisements that were not in the publication. They indicate that the research of Appel and Blum (1961), Wells (1964) and Clancy et al., (1979) all question whether Starch scores actually measure recognition. Krugman (1985) concluded that the score measures the "attention getting quality" of an advertisement. Wells (1964) reasoned that what the Starch recognition scores actually measure are which ads are the kind that the respondents believe they should have remembered, rather than the ads they actually did remember.

Despite the controversy over what the Starch procedure actually measures, Starch scores continue to be widely used in academic research. Krugman (1966) studied advertising involvement using Starch scores as a measure. VandenBergh and Reid (1980) and VandenBergh and Bartlett (1982) examined the use of puffery in magazine ads and the effect of puffery on Starch scores. Rossiter (1981) studied the ability of visual and psycholinguistic mechanical variables to predict Starch scores. Holbrook and Lehmann (1980) used a system of twenty-six mechanical variables, eighteen product class variables and twenty-one message-content variables, to predict Starch scores. Hanssens and Weitz (1980) studied industrial print advertisements and the effect of mechanical and print variables on Starch scores.

In an effort to test what Starch scores predict Zinkham

and Gelb (1986, p.49) tested the use of Starch scores as a predictor of attitudes and concluded that "researchers who use Starch scores as a criterion variable were measuring the effect of various predictors on a measure that is of legitimate interest." This study as well as many others indicate that the Starch score is a valid measure of advertising effectiveness.

Characteristics of Industrial Advertising

The information content of consumer advertising is considered by researchers to be an important area of study. However, the information content of agricultural advertisements is the object of this study, so the differences between marketing to consumers and marketing to farmers will need to be identified. Although some results obtained by studying consumer advertising may be applicable to industrial advertising, broad generalizations cannot be made because of the many differences between consumer marketing and industrial marketing.

Agricultural advertising is a component of agricultural marketing and exhibits the characteristics of an industrial market. Haas (1982) identified six important areas of difference between consumer marketing and industrial marketing: (a) market characteristics; (b) type of buyer; (c) type of products; (d) distribution channels; (e) promotional characteristics; and (f) pricing characteristics. The three areas of difference that are pertinent to this study are: (a) market characteristics; (b) type of

buyer; and (c) promotional characteristics.

The most important difference in the market characteristics of industrial versus consumer markets is the type of demand for the products. There is a direct demand for consumer goods resulting in the final consumption of goods by consumers. There is a derived demand for industrial goods resulting in the consumption of goods to produce more goods. This characteristic of agricultural marketing distinguishes it as an industrial market. As Dodge pointed out:

. . . industrial marketing is the performance of business activities that direct the flow from producer to user of goods and services which produce or become part of other goods and services, or facilitate the operation of an enterprise, either business, public, or nonprofit (1970, p. 5).

According to Dodge (1970), the purpose of the industrial market is production of products that will ultimately be consumed. Webster (1984) indicated that the main difference between consumer markets and industrial markets is that the demand for industrial products is derived from the demand for consumer products. Risley (1972) pointed out that industrial demand is a function of anticipated demand at the consumer level. Risley pointed out:

Industrial goods are bought to fill anticipated need. In the case of capital goods, [i.e. equipment, real

estate, installations] they are purchased not only to fill current requirements, but also in the anticipation of a net profit from an expected future usage (1972, p. 38).

Demand for industrial goods and services depends on ultimate consumer and government purchasing. Dodge (1970) explained that a manufacturer of consumer products will buy industrial goods only if there is a demand for his own products. Approximately 80 percent of farm products need further processing before they are sold to the consumer.

Another pertinent area of difference between consumer marketing and industrial marketing is the type of buyer. The major component of industrial buying is that of rational decision making. Dodge (1970 p. 29) pointed out that, "a careful and frequently exhaustive study of all the objective factors is the basis for buying a product from a particular vendor." Webster (1979) said that buying decisions represent a complex series of activities that becomes a decision making process of an organization seeking to solve a buying problem.

Haas (1982) identified several differences between industrial buyers and consumers. Haas (1982) believed that industrial buyers are usually more technically qualified and professional, their motives for buying are more rational and less impulsive or emotional, their decisions to buy are usually made after discussions with others involved in the purchase, and industrial purchasers often select more than one supplier to insure a constant supply in case one

supplier runs out of stock.

Still another pertinent area of difference between consumer marketing and industrial marketing is promotional characteristics. Haas (1982) indicated that industrial promotion relies more on personal selling. Advertising is used to help personal selling, advertising themes emphasize factual and technical data, and the majority of advertising is placed in trade journals and direct mail. Advertising is of secondary importance to personal selling as indicated by the relatively small amount expended for industrial advertising compared to company expenditures for personal selling.

Moriarty and Spekman (1984) indicated that the majority of research on the industrial buying process has focused on the importance of personal sources of information, such as salesmen rather than impersonal commercial sources of information such as advertising. However, they noted several studies that indicated industrial buyers consider information generated by personal commercial sources (i.e. salesmen) is considered to be biased and can cause distrust.

The important differences between consumer marketing and industrial marketing include several variations in the way the products are promoted and advertised. Industrial advertising primarily supports personal sales while consumer advertising is most often responsible for the complete selling process. Also, industrial advertising targets industrial buyers who are attempting to make a rational

decision while consumer advertising targets consumers who are less rational in their decision making.

According to Hanssens and Weitz (1980), results obtained from studying consumer advertisements should not be compared to industrial product advertisements because of the different marketing functions they perform. They indicated that several studies consider the relationship between consumer advertisement characteristics and advertising effectiveness, but only two studies (Assael, Korfon, and Burgi 1967; Twedt 1952) researched trade journal advertisements.

Hanssens and Weitz (1980) studied advertisements appearing in ten issues of a trade journal published between January 5 and September 13, 1976. The researchers used Starch readership scores to test the ads ability to generate recall (identified by the Starch category "seen") and readership (identified by the Starch category "read most").

Hanssens and Weitz (1980) identified six categories that were determined to be important in industrial advertisements. The categories were 1) cost factors (size, color, etc.), 2) position in magazine (page number, number of pages before ad, etc.), 3) layout (photos, illustrations etc.), 4) content (product specifications), 5) headline characteristics, and 6) attention getting techniques.

The results of the Hanssens and Weitz study (1980) indicated that the recall and readership of industrial ads were strongly related to mechanical and format

characteristics of the ad. The study also measured the level of inquiries generated by each ad and found a rather weak relationship to ad characteristics. Hanssens and Weitz recommended further exploration of the effect of information content, organization, and readability.

In order to develop the work of Hanssens and Weitz (1980) more completely, Soley and Reid (1983) studied the visual and psycho-linguistic elements of industrial ads and their relationship to Starch scores. Soley and Reid tested the ability of two visual and eleven psycholinguistic factors to predict industrial ad readership. They wanted to see if the visual-psycholinguistic factors were an effective tool for industrial advertising strategists. They also noted that there was limited research evidence concerning industrial advertising effectiveness.

The visual-psycholinguistic model used by Soley and Reid (1983) was developed by Rossiter (1981) to simplify a model originated by Holbrook and Lehmann (1980). Holbrook and Lehmann used an elaborate set of twenty-six mechanical variables, eighteen product class variables, and twenty-one message content variables to evaluate consumer advertisements. Rossiter (1981) selected two visual and eleven psycholinguistic factors related to ad readership and found them as effective at predicting consumer advertisements as Holbrook and Lehmann's (1980) more complex model.

Soley and Reid (1983) found Rossiter's (1981) visual-psycholinguistic model a more effective tool for predicting

industrial ad readership than it was for predicting consumer ad readership. They believed that the nature of the industrial audience was more involved in information processing than the consumer audience. However, their results indicated that industrial ads with larger pictures and less copy scored higher "noticed" scores than ads with much copy and smaller pictures. This was similar to results obtained by Hannsens and Weitz (1980). Soley and Reid (1983) also found that picture size and the number of phrase units in the headline significantly predicted industrial advertisement readership.

In addition to large pictures and multiple phrase units in the headline, Soley and Reid (1983) discovered that the number of adjectives in the headline was only slightly less significant in predicting readership. They concluded that the significance of the number of adjectives in the headline was related to the number of phrase units in the headline because more phrase units would increase the number of adjectives that could be used. Mentioning the product in the headline had a negative effect on readership unless the product was the subject of the headline.

The research on industrial advertising effectiveness is limited. As Hanssens and Weitz (1980) pointed out, even though advertising is increasing in importance in the industrial marketing mix, it has received very little research attention. Most of the research concerning industrial advertising has focused on objectives and budgets

while the content and format have not been examined.

The literature reviewed mentioned no attempts to assess the importance of rational decision-making information in industrial advertisements. Considering the basic function of industrial advertising and the objectives of the industrial buyer, there seems to be little understanding of how the information content of industrial advertising meets the needs of the industrial buyer.

The Farm Economy

With this background information concerning advertising and industrial marketing, there is a need to explain the characteristics of the farm economy. Still a significant part of the industrial complex in the United States the agricultural sector's unique structure and characteristics present some unusual problems to marketers.

The first characteristic of the agricultural sector is American farmers' unique role in American history. Fite (1981) indicated that they are the only major socio-economic group in American history to hold majority status and gradually shrink to a minority. Fite found that in 1940 there were 30.5 million farmers, about thirty percent of the population of the United States, living on 6.5 million farms. In 1981 less than three percent of the population lived on farms.

Part of the reason for the decline of farm population can be attributed to an insufficient farm income and a low standard of living. Fite indicated that farm income was 33

percent less than non-farm income in 1948, 46 percent less in 1960, and 26 percent less in 1970. Fite identified three important reasons for problems faced by farmers over the years: 1) independent attitudes, 2) differing and conflicting interests and 3) lack of political power.

The second characteristic of the agricultural sector are the buying and selling habits of farmers. Dodge (1970) noted six factors that contribute to the unique structure of agriculture. First, agriculture is in a constant state of internal change: increasing farm size, government programs, dwindling farm population, volatile commodity markets, and unpredictable weather all contribute.

A second factor noted by Dodge (1970) is the inferior bargaining position of the farm buyer. Individual farmers purchase most industrial goods from large suppliers. Vogeler (1981) indicated that in 1970, four leading farm supply firms controlled 67 percent of petroleum products, 71 percent of tires, 74 percent of chemicals and 80 percent of rail transport. Vogeler found that in 1973, the four largest tractor manufacturers controlled 83 percent of the market, the eight largest producers of anhydrous ammonia controlled 41 percent of the market in 1977, and that same year over 50 percent of the 68 million acres of corn in the United States. was planted with varieties purchased from only two companies.

Dodge (1970) said the third unique factor is the tendency to shift responsibility for technical knowledge to

the seller of the product. Dodge indicated that most farmers are unable to keep up with the vast amount of agricultural technology developed in the public and private sectors. As a result, suppliers often hire specialists to educate farmers on new product use and new uses for old products.

Fourth, Dodge (1970) indicated that there has been a trend from the extreme diversification at the turn of the century to specialization. He said agricultural production has specialized both geographically and individually. Certain small areas produce large percentages of certain crops: i.e. tomatoes and grapes in California. Also, more farmers are raising such single products as hogs, eggs, cattle, or broilers.

Fifth, Dodge noted the decline in the farmer's status as a decision maker. Because of inferior bargaining positions, specialization, cooperative marketing groups, and government programs, many farmers have sacrificed their prerogative to choose what to plant, buy, and sell.

The sixth factor is the farmer's increasing dependence on credit. This is closely related to the decline in the farmer's decision making status. Dodge (1970) indicated that farm mortgage debt increased by 75 percent between 1960 and 1966. Vogeler (1981) indicated that between 1960 and 1975 the debt on real estate increased 425 percent, debt on equipment rose 380 percent, debt on operating expenses increased 300 percent while total farm income increased by

only 150 percent. Vogeler pointed out that in 1974, one of the most profitable years for farmers, farm debts were 3.5 times greater than farm incomes. Total farm debt in 1978 was 120 billion dollars. According to the United States Department of Agriculture, this doubled to an estimated 240 billion by 1985.

Vogeler (1981) noted an additional factor that affects the farmer as an industrial consumer. While Dodge (1970) said that farmers hold an inferior bargaining position with agricultural suppliers, Vogeler (1981) indicated that the same condition exists when farmers sell the products they produce. Farmers are unable to set prices for their products and are price takers. Vogeler pointed out that during most of the seventies six grain companies bought 90 percent of the grain in the United States, two corporations handled 50 percent of the world's grain shipments and 24 food manufacturers accounted for 57 percent of food sales. Farmers are positioned between two very large, very concentrated business concerns where very little price competition exists: the agricultural supply business and the agricultural product business. Farmers pay retail prices for industrial products to produce agricultural commodities which are sold at wholesale prices.

The third characteristic of the agricultural sector is how farmers view agricultural advertising. Sandage (1959) sent questionnaires to over a thousand farmers in Illinois in 1958 and analyzed 985 responses to ascertain what farmers

think about advertising. Sandage found that farmers have a general high regard for the helpfulness of advertising. Of those responding, 93 percent thought advertising was necessary for a good business, 84 percent that that advertising was not a waste of money, 94 percent thought that advertising helped keep them informed on new products and services, 74 percent thought advertising was generally truthful, 84 percent thought that they were better off with advertising than without it, and 68 percent tended to believe advertisements more than they believed salesmen.

Farmers want advertising to include the price of the product and although they didn't believe testimonials from actual users or tests of a consumer products like soap, they tended to believe the testimonials for an agricultural product (i.e. tractors, seed, fertilizer, etc.). Almost half of the farmers responding thought the advertisements in farm magazines were as important as the editorial copy. Also, 88 percent said that advertisements in farm magazines provided them with information helpful in buying a specific product and 87 percent thought they could believe the information given in the advertisements.

The study was repeated 16 years later with responses from over 700 Illinois farmers using the identical Sandage questionnaire (1959). The second study by Sandage (1974) found that although advertising was viewed less favorably than in 1958, farmers still viewed advertising quite favorably. The farmers' responses indicate that although

they felt advertising was necessary for business, not a waste of money, and helped to keep them informed, the number of positive responses compared to 1958, dropped from two to six percentage points. However, the areas of greatest change in response dealt with the truthfulness and dependability of advertising. In 1958, 74 percent agreed advertising was generally truthful but in 1974 only 62 percent agreed. Also, in 1958, 68 percent agreed they could depend on statements made in advertisements more than those of salesmen, but by 1974 only 42 percent agreed; a decline of 26 percent.

Sandage (1974) concluded from the comparison of the two studies that farmers, unlike general consumers, are a fairly homogenous group concerning their feelings about advertising. Farmers have maintained a strong positive feeling toward advertising that has lessened very little over the years. Sandage indicated that farmers' change in views of advertising was more a reflection of the times rather than the beginning of a long term trend.

The Diffusion of Innovations

Although marketing efforts produce information that is important to buyers, there are other information sources that affect the farm buying decision. Farmers operate in several different social systems. Local communities, political districts, and crop production regions, all influence farmers' attitudes and opinions. The interaction of farmers within a social system has been the object of

much study in recent years. An emerging body of research known as "diffusion of innovations" has identified many important effects of information and how information is communicated in the agricultural sector. In this section the role of information and advertising in the process of adopting a new product or service (an innovation) will be identified. The basic framework for the diffusion and adoption of innovations will be developed followed by the role of information and the importance of marketing in the adoption process.

The basic framework of what is known as "the diffusion of innovations" was constructed by Ryan and Gross (1943). They determined the patterns of adoption of hybrid seed corn (the innovation) in two Iowa communities over a 13 year period. Hybrid seed corn was an important new technology that dramatically improved corn yields. There were 259 farmers who answered questions concerning the decision to adopt hybrid corn; the communication channels used at each stage of the adoption process; the acres planted to hybrid corn each year; and the farmers age, education, farm size, income, travel to Des Moines, readership of farm magazines, and other variables. The most important result of the study was the plotting of an S-shaped curve that demonstrated distinct phases of the adoption process. The rate of adoption increased very slowly during the first five years but increased exponentially as forty percent adopted hybrid corn over the next three years. The curve leveled

off in the last five years as the number of farmers remaining to adopt approached zero.

Ryan and Gross (1943) identified five steps through which farmers progressed as they passed from first knowledge to the decision to adopt or reject hybrid corn: a) knowledge, b) persuasion, c) decision, d) implementation, and e) confirmation. They found that information was a significant factor at each stage of the process but it was most important during the early stages of knowledge and persuasion. At the knowledge stage the individual obtained information on the technological aspects of the innovation. At the persuasion and decision stages the individual sought information that was evaluative in nature to reduce uncertainty on the effects of adoption of the innovation (in this case hybrid corn).

Rogers (1976) identified the main elements of what is known as the "classical model" of the diffusion of new ideas, products, or services as: a) an innovation; something perceived as new by an individual; b) communicated through certain channels; c) over time; d) throughout a social system. He said that the adoption of most innovations involved the sale of a product by a commercial firm.

The basic framework of the diffusion process indicates that information plays a crucial role in successful adoption. Midgely (1977) noted that most research indicated that awareness generated by mass media channels was received more quickly by a larger portion of the population than

interpersonally generated awareness but the latter was generally more important in persuasion. He indicated that some channels of communication were more important at different points in the cognitive process. The time of adoption of an innovation depended on receiving a required level or magnitude of communicated information. In Midgely's view, adoption is dependent on receiving the right combination of messages at the right time in the proper situation. The amount of information necessary to trigger adoption increased over time. Those who adopt early require less information than individuals who adopt later.

Brown (1981) said that traditional diffusion and adoption research indicated that adoption is the result of a learning or communication process. Brown called this approach to studying diffusion and adoption as the "adoption perspective." The diffusion and adoption process is studied by identifying factors relating to the effective flow of information, characteristics of information flows, information reception, and resistances to adoption.

Brown (1981) developed a diffusion-adoption perspective that considered the actions of government and private institutions more completely than the traditional view. Brown indicated that it is the action of an organization with an innovation (something new) to diffuse (to spread through a group of people) that has the greatest impact on adoption characteristics. The traditional view studies characteristics of the adopter (or buyer) to explain

adoption characteristics. It is Brown's view that institutional behavior, not individual behavior accounts for a great deal of the variance in adoption patterns. It is the institution that has something new for people to use or buy that controls the supply of information and, therefore, the spread of its adoption. Brown's perspective highlights the importance of marketing in the diffusion-adoption process.

Finally, the importance of marketing in the diffusion-adoption process is well documented. Rogers (1983) pointed out that a large proportion of the research reports on diffusion are conducted by commercial interests and are unavailable for study. However, there are several studies that have dealt with the role of marketing in the diffusion process.

Robertson (1971) said that marketing and competitive strategies have had a considerable effect on the diffusion process of a product. He identified specific promotional activities that occur during a product's life cycle. Robertson said that when a product is introduced, promotion is designed to create knowledge among consumers and distributors. As the product distribution grows, the promotion attempts to create brand preference which turns to the creation of a distinct image as the product levels off and reaches the "mature" stage. He pointed out that while diffusion occurs in a social system, adoption or the decision to buy, occurs in the mind of the adopter. Sources

of information are not equally effective at all stages of the adoption process. During the earlier stages of awareness and knowledge, advertising generally had the greatest impact. In the later stages, the adopter looked for more objective sources of information and personal influence had the greatest impact.

Rogers (1983) agreed with Robertson's (1971) generalization by pointing out that mass media channels have been found to be relatively more important during the knowledge stage than other channels of communication. Also, mass media channels are usually more important than interpersonal channels for early adopters than for late adopters. Rogers indicated that mass media reaches a large audience quickly, creates knowledge and spreads information, and leads to changes in weakly held attitudes.

Gatinon and Robertson (1985) pointed out several important contributions to diffusion research from the marketing perspective. The available research indicated that marketing expenditures can affect the rate of diffusion but not the pattern. Marketing variables (i.e., advertising, price, distribution, and personal communication) have long-term, cumulative effects on diffusion. Marketing programs that exhibit sensitivity to the changing characteristics of audience segments at different stages of adoption tend to speed adoption and penetration level. The speed of diffusion in a social system increases with the average time of active information dissemination and is

magnified by mass media communication expenditures. Competition affects the diffusion process both positively and negatively. When there are many similar products competing on the market, the rate of diffusion is increased. However, when there are several different competing technologies involved, the rate of diffusion is decreased.

It can be concluded from the large number of studies over the last forty years (over 3000 according to Rogers in 1983) that the study of innovation diffusion has become a science in itself. The study of the diffusion process has yielded the following information: a) information has been found to be an important factor in the adoption of new products and technologies, b) the basic framework or research paradigm in the study of innovation diffusion and adoption is based on the flow of information to create awareness and knowledge and to aid in persuasion, and c) marketing activities such as advertising have been shown to influence the diffusion and adoption process.

Summary of Literature Reviewed

The review of literature examined research concerning information in advertising from four different perspectives: a) studies of information content in consumer advertising, b) studies of information content in industrial advertising, c) the role of marketing information in the farm market, and d) the role of marketing information in the adoption of innovations.

Information was defined broadly and subjectively in

most of the research. However, several studies used an operational definition of information developed by Resnik and Stern (1977) that was more objective. The operational definition identified information that was helpful in making a rational buying decision.

There are more studies published concerning the information content of consumer advertising than the information content of industrial advertising. Only two studies were found that analyzed the information content of industrial advertising and there were no studies found on the information content of agricultural advertising.

Several authors indicated the farm economy has been in a depressed state for the last seven to ten years. In fact, except for 1973 and 1974, the farm economy has been depressed since 1950. The depressed farm economy has had an affect on the buying habits of farmers and has caused greater competition among agricultural supply firms. Two studies indicated that advertising makes an important contribution to the farm buying decision. Several studies of rural social patterns indicated that information was an important factor in the early stages of the decision to buy.

No study was found which identified a change in the information content of agricultural advertisements over the last six years. No study was found which compared the information content of agricultural advertising and consumer advertising, and no study was found that compared the information content of an advertisement and the readership score of the advertisement.

CHAPTER 3
Methodology

The purpose of this study was to measure the information content of agricultural advertisements and examine the relationship to Starch Readership scores of the advertisements in seven issues of The Farmer magazine over a 6-year period. This chapter discusses the methods used in the study including the content analysis, the Starch Readership scoring procedure, and the procedure for analyzing the data in order to answer the following research questions:

1. How much information is contained in agricultural advertisements?
2. Has there been a change in the information content of agricultural advertisements between 1979 and 1985?
3. Does the number of information cues in an advertisement vary among product categories?
4. Is there a correlation between the number of information cues and the readership score of agricultural advertisements?

Content Analysis Procedure

The Resnik and Stern advertising information classification system was chosen for this study. Studies cited in Chapter II have shown this system to be a useful method for operationally defining what is informative in an advertisement. The system utilizes 14 criteria that are

considered informative and helpful in reaching a rational buying decision.

The 14 criteria of evaluation were further developed by Harmon, Razzouk and Stern (1983) into 24 questions. The Harmon, Razzouk and Stern adaptation of the Resnik and Stern (1977) system (see Appendix A) was chosen because it was more complete in the definition of each of the 14 information cues. It was also more comprehensive in identifying factors perceived to be informative in an advertisement. Each information cue (i.e. price, quality, performance) was phrased in question form to aid in the content analysis. Some cues were expanded to include more than one question (i.e. components: What is the product composed of? What ingredients does it contain? What ancillary items are included with the product?).

Seven issues of The Farmer (1979 to 1980) were the subject of the study for a total of 483 advertisements. The issues selected were from the first week in February of each year. The first issue in February is the issue the Starch Readership Company conducts a readership survey for The Farmer. The data from each advertisement were recorded on a content analysis form (see Appendix A). The analysis was performed by two judges with experience in several different phases of advertising. There was a 90.1 percent agreement between judges on the content of the advertisements. The advertisements of one complete issue were judged with the order randomized to reduce bias from one issue to the next.

The information in each advertisement was evaluated on the basis of the Resnik and Stern information cues. The information was evaluated at face value meaning that issues of credibility, soundness of evidence, or deceptiveness were not examined. Additional information such as page number, company, type of product, size of advertisement, and color was collected from each advertisement. .

Starch Readership Procedure

The Starch INRA Hooper readership scores (referred to as Starch scores) are based on a ballot study. The ballot study consisted of a random sample of 300 subscribers of The Farmer magazine. The random sampling technique was utilized to assure that each group of ballots mailed was representative of The Farmer's circulation universe within known and acceptable tolerance levels.

Every ballot study followed a two-phase mail design that utilized two separate mailings. Phase I was the respondent alert phase. An alert postcard was mailed to every sample respondent three days prior to phase II, the ballot mail out. The alert postcard outlined the scope of the study, summarized the importance of cooperation, and alerted sample respondents to the next phase. Phase II consisted of a magazine with ballots attached to each advertisement, a cover letter, definitions of terms, and an index sheet of balloted advertisements and editorials plus a postage-paid return envelope.

Subscribers were asked to evaluate the advertising

content of the publication by checking one of the following definitions of their perceptions:

1. Did not see before
2. Looked at (glanced at the ad)
3. Read partially (saw the ad and read some parts, but less than half of the copy)
4. Read thoroughly (read half or more of the copy)

Two readership indexes were calculated from the percentages recorded on the ballot survey. The first index is called the Recognition Index and is computed by dividing the sum of the percentages in numbers 2, 3, and 4 (above) by the median percentage. This score is recognized as being a broad measurement of the advertisement's impact on the audience. High recognition scores indicate an advertisement that is memorable. The second index, called the Partial and Thorough Index, is computed by dividing the sum of numbers 3 and 4 (above) by the median. This score indicates the ability of an advertisement to hold a reader for more than a few seconds. High partial/thorough scores suggest that the advertisement created enough interest to hold the reader while he read most or all of the copy.

Procedure for Analysis of Data

The first three research questions were answered by tabulation of the collected content analysis data. Means and standard deviations were calculated and t-tests were calculated to determine the statistical significance of the

tabulated data. The fourth question was analyzed using the Pearson Product-Moment Correlation in the "Statistical Package for the Social Sciences" (SPSSx) computer program. The correlation determined the extent of the relationship between the information cues and the two readership indexes. The correlations were tested using a one-tailed test for significance. It was assumed that the variables exhibited a normal distribution throughout. The level of significance was set at 0.05 or five percent level of significance meaning that there were five chances in a hundred of rejecting a correlation as insignificant when it should be accepted.

The next chapter will present the data. It will be followed by a discussion of the results of the analysis as it related to the research questions.

CHAPTER 4

Analysis of Data

The data presented in this chapter are the result of the content analysis of 483 agriculturally-related advertisements found in seven issues of The Farmer magazine from 1979 through 1985. The analysis includes the following: number of advertisements per year; information content of advertisements; average information cues per advertisement sorted by year and product type; and correlations between the number of information cues and readership scores. Conclusions, reservations, and recommendations drawn from the analysis of the data will be presented in the following chapter.

Number of Advertisements Per Year

Figure 1 summarizes the number of advertisements in The Farmer in each year of the study. There was an average of 69 advertisements per issue with a high of 80 advertisements in 1979 and 1982 and a low of 52 advertisements in 1985. As stated in Chapter I, fundamental changes in the farm economy began in 1984 and are reflected in Figure 1. The number of advertisements per issue in 1984 was 17 percent below average and in 1985 was 25 percent below the average of the seven issues analyzed. The average number of advertisements per issue for 1984 through 1985 was 54.5, twenty-seven percent less than the 1979 through 1983 average of 74.8 advertisements per issue.

Figure 1. Number of advertisements per issue
1979 through 1985 in The Farmer.

No. of Ads							
	80			80			
80	X			X			
	X			X			
75	X		73	X	72		
	X		X	X	X		
70	X	69	X	X	X		
	X	X	X	X	X		
65	X	X	X	X	X		
	X	X	X	X	X		
60	X	X	X	X	X	57	
	X	X	X	X	X	X	
55	X	X	X	X	X	X	52
	X	X	X	X	X	X	X
50	X	X	X	X	X	X	X
	X	X	X	X	X	X	X
Year	1979	1980	1981	1982	1983	1984	1985

Table 1 represents the number of advertisements appearing in each product type over the six year period. Herbicides were the product type with the most consistent number of advertisements per year and had the highest total number of advertisements. The herbicide product type showed very little reduction in the number advertisements placed in 1984 and 1985 compared to other product types. This consistency in herbicide advertising placement may be due to the development and introduction of several new herbicides in the time period studied.

The number of advertisements placed for field crop seeds peaked in 1981 and declined steadily through 1985. Much of the decline in advertising for field crop seeds can be attributed to the government programs instituted in 1983 that took a large portion of farmland out of production. Also, there was a sharp decrease in sunflower acreage in the area and a corresponding decrease in advertising by sunflower seed companies through 1985.

Product types such as tractors, fertilizer, and lubricants and fuels remained steady but there were relatively few advertisements placed each year in these product categories. This is due in part to the industries they represent which are characterized by relatively few competitors.

It must be remembered that the placement of advertising in The Farmer is also a function of the effectiveness of their advertising sales force. The persuasiveness of the

individuals selling advertisements for The Farmer as well as their knowledge of the various product types will have an effect on the number of advertisements.

Table 1
Number of advertisements sorted by product type and year

Product Type	Number of ads per year							Total
	1979	1980	1981	1982	1983	1984	1985	
Herbicides	19	18	21	22	24	21	17	142
Field Crop Seeds	9	12	22	20	16	13	7	99
Crop Machinery	11	8	4	13	8	9	13	66
Dairy, Poultry, Livstk								
Feed and Equipment	12	6	3	5	4	3	2	35
Building Materials	8	7	7	4	5	3	1	35
Tractors	5	3	5	3	4	1	2	23
Fertilizer	0	2	1	2	1	1	1	8
Commercial Trucks	4	3	3	4	0	0	0	14
Lubricants and Fuels	2	1	3	1	3	1	2	14
Crop Storage/Drying	2	3	0	0	0	0	0	5
Auto Accessories	0	0	0	0	5	0	0	5
Irrigation Systems	0	3	0	0	0	0	0	3
Farming Services	7	3	2	6	3	4	7	32
Total	80	69	73	80	72	57	52	483

Information Content

The content analysis of the 483 advertisements using the Resnik and Stern information cues found that 99.4 percent of the advertisements contained at least one information cue and were therefore considered informative as shown in Table 2. If the standard was raised to two information cues per advertisement, 88.4 percent of the advertisements were considered informative. Less than half the advertisements contained at least 3 information cues in 1982 about 20 percentage points less than the average.

In 1982 and 1984 nearly 25 percent of the advertisements contained one information cue or less. These two years also had the lowest average information cues per ad (Table 3).

Table 3 shows that a total of 1,653 informational cues were communicated in the 483 advertisements for an average of 3.42 cues per advertisement. Results of t-tests showed the means from 1980 ($t=2.369$, $df=68$, $p<.05$) and 1984 ($t=2.279$, $df=56$, $p<.05$) varied significantly. The mean from 1980 was the highest average information cue per advertisement and the mean from 1984 was the lowest average information cue per advertisement. The average number of cues per advertisement from 1979 through 1981 was 3.92, above the total sample average (3.42 cues), and the average from 1982 through 1985 was 3.00 cues per advertisement, below the total sample average.

Table 3 shows that there was no increase in the information content of the advertisements during the time period studied. It indicates that advertisers may have responded to the changes in the agricultural economy by putting less information in the advertisements.

Table 3
Information cues per advertisement sorted by year

Information cues per ad	Number of ads per cue by year							Total
	1979	1980	1981	1982	1983	1984	1985	
0	0	0	0	2	0	1	0	3
1	3	5	4	16	9	14	2	53
2	14	4	12	24	15	10	18	97
3	14	14	20	12	12	12	13	97
4	24	19	12	17	23	14	5	114
5	14	15	12	3	11	5	10	70
6	10	8	8	5	2	0	4	37
7	1	3	3	1	0	1	0	9
8	0	1	1	0	0	0	0	2
9	0	0	1	0	0	0	0	1
Total Ads	80	69	73	80	72	57	52	483
Total Cues	306	283	282	220	234	157	171	1653
Cues per Ad	3.83	4.10	3.86	2.75	3.25	2.75	3.28	3.42
Stan. Dev.	1.41	1.55	1.73	1.55	1.36	1.50	1.42	1.53

The average number of information cues per advertisement in each product type varied from year to year and as Table 4 indicates, generally decreased from 1979 to 1985. One exception was that of farming services which averaged very high in 1979 and 1980 then dropped to its lowest level in 1981 after which there was a steady increase through 1985.

Herbicides had the largest sample size in the study and averaged from 3.0 to 3.8 advertisements from 1979 to 1983 then dropped to 2.1 cues per advertisement in 1985. Field crop seeds, the second largest sample size in the study, was steady from 1982 through 1984 then increased an average of one information cue per advertisement in 1985.

Table 4 shows that there was a lack of consistency in the number of information cues per ad over time. However, there was a general decrease in the number of information cues per advertisement in most of the product categories.

Table 4
Average number of information cues sorted by year and product type

Product type	Average No. cues per year							Avg.
	1979	1980	1981	1982	1983	1984	1985	
Herbicides	3.2	3.8	3.7	3.0	3.3	2.6	2.1	3.26
Field Crop Seeds	3.9	3.0	3.2	2.4	2.4	2.5	3.5	2.81
Crop Machinery	4.6	4.2	5.0	3.3	3.6	2.8	3.5	3.76
Dairy, Poultry, Livestk Feed and Equipment	4.3	4.3	5.7	2.2	4.2	4.0	1.5	3.91
Building Materials	3.9	4.0	5.3	4.5	3.4	3.7	*5.0	4.29
Tractors	4.4	6.3	4.8	2.7	3.2	*4.0	3.5	4.22
Fertilizer	-	4.5	*1.0	1.5	*3.0	*1.0	*3.0	-
Commercial Trucks	4.2	4.0	3.0	3.3	-	-	-	3.64
Lubricants and Fuels	3.0	*7.0	5.7	*4.0	2.7	*2.0	3.0	3.79
Crop Storage/Drying	4.5	4.3	-	-	-	-	-	
Auto Accessories	-	-	-	-	4.6	-	-	
Irrigation Systems	-	4.3	-	-	-	-	-	
Farming Services	3.2	5.5	1.0	1.7	2.7	3.2	3.9	2.97
Average per year	3.8	4.1	3.9	2.8	3.2	2.8	3.3	3.42

(* signifies only one number averaged)

Table 5 illustrates the average number of information cues per advertisement in each product category. Nine of the product categories contained enough advertisements (>10) for comparison purposes. Results of t-tests showed that two product categories varied significantly from the mean. Advertisements for building materials averaged 4.29 information cues ($t=3.53$, $df=34$, $p<.05$) and advertisements for field crop seeds averaged 2.81 cues per advertisement ($t=4.10$, $df=98$, $p<.05$). Advertisements for building materials averaged 1.48 more information cues per advertisement than advertisements for field crop seeds.

Tractors averaged 4.22 cues per advertisement, 19 percent above the mean. Farming services was the second lowest product type with 2.97 cues per advertisement, 13 percent below the mean.

Table 5 shows that there is a significant variation in information content between product categories. Most of the variations can be explained by comparing the attributes of the products. Products that average a high number of information cues per advertisement are products that are more complex and have attributes that fill the requirements of the various types of information cues. So, in most cases, the amount of information in an advertisement seems to vary directly with the degree of complexity of the product.

Table 5
 Information cues per advertisement sorted by product type

Product Type	Number of Information Cues										Cues per ad	Stan. dev.
	0	1	2	3	4	5	6	7	8	9		
Herbicides	0	19	30	29	33	23	7	0	1	0	3.26	1.48
Field Crop Seeds	1	14	29	24	24	5	1	1	0	0	2.81	1.28
Crop Machinery	1	3	13	10	19	10	7	3	0	0	3.76	1.60
Dairy-Poul.-Lvstck.												
Fds. & Hlth. Prod.	0	4	3	7	9	4	7	0	1	0	3.91	1.74
Building Materials	0	0	2	8	10	9	5	1	0	0	4.29	1.23
Tractors	0	1	4	2	5	6	3	2	0	0	4.22	1.68
Trucks	0	0	1	6	5	1	1	0	0	1	3.64	1.00
Lubricants & Fuels	0	0	5	3	3	0	1	1	0	0	3.79	2.15
Farming Services	1	6	11	2	3	6	2	1	0	0	2.97	1.84

Note. Sample size of product type must be >10

Correlation between information and Readership Indexes

Table 6 indicates that Pearson correlation coefficients sorted by year showed no positive correlations of significance ($<.05$) between the number of information cues and the Recognition Index or the Partial/Thorough Index in any of the years studied.

However, there was a significant negative correlation for both Indexes in 1979. This indicates that advertisements with a high amount of information scored lower in readership than advertisements with a low amount of information. This is an anomaly since all other years showed positive correlations although they were not significant. It may be that information did become more important to farmers after 1979 but more research would be necessary on the years 1974 to 1979 to see if the negative correlation is part of a larger trend.

All of the correlation coefficients were less than plus or minus .21 at all levels of significance. This indicates rather weak correlations between information content and readership for the sample. It also means that information content is only one of many factors that influence readership.

Table 6
Correlations between Readership Indexes and information cues sorted by year

	Correlations by Year						
Starch Indexes	1979	1980	1981	1982	1983	1984	1985
<hr/>							
Readership Index							
Coefficient	-.20	.05	.10	.07	.10	.10	.10
Samples	79	68	72	80	72	57	52
Significance	.04	.35	.19	.28	.19	.22	.23
<hr/>							
Partial/thorough Index							
Coefficient	-.21	.05	.17	.07	.06	.17	.00
Samples	79	68	72	80	72	57	52
Significance	.03	.33	.08	.26	.32	.10	.50

In Table 7, Pearson correlation coefficients sorted by product type showed no positive correlations of significance ($<.05$) between information content and the Readership Indexes for any of the product categories.

However, there were several significant negative correlations for both Indexes. The negative correlations suggest that when advertisements are compared within product categories, the advertisements that score high in readership are more likely to have fewer information cues. Conversely, the advertisements with a high amount of information score lower in readership.

Table 7 indicates that when advertisements are grouped and compared by product type a more frequent occurrence of negative correlation is observed. One possible explanation is that within each product type there are established market leaders with well known product lines. Market leaders usually tend to score higher in readership because people are familiar with the company and will think they have read the advertisement even if they have not (Starch 1966).

Often, the role of advertising for a market leader is much different than for the rest of the companies within the product type. Market leaders tend to focus on building awareness and acceptance of their company rather than individual products. This is called "image advertising" and it usually contains very little product information. Image advertising seeks to create a good feeling about a company

rather than focusing on selling a product.

When sorted by product type the correlations were much stronger than when sorted by year. As noted in Table 6, plus or minus .21 was the strongest correlation at all levels of significance when sorted by year. However, in Table 7 there were correlations greater than plus or minus .21 in 9 of the 12 product types for both Indexes at all levels of significance. Apparently grouping advertisements from different product types together by year "masks" the strong negative correlations between information content and readership.

Table 7

Correlations between information cues and Readership Indexes sorted by product type

Starch Index	Product Type*												
	1	2	3	4	5	7	8	9	10	11	14	18	
Recognition													
coefficient	-.18	-.36	-.36	-.40	-.21	-.50	-.48	-.22	-.49	-.13	.31	.00	
cases	142	99	66	35	35	23	8	14	14	5	5	32	
significance	.02	.00	.00	.01	.11	.01	.12	.22	.04	.42	.31	.43	
Partial/thorough													
coefficient	-.23	-.35	-.33	-.45	-.15	-.47	-.51	-.24	-.39	.24	.62	-.01	
cases	142	99	66	35	35	23	8	14	14	5	5	32	
significance	.00	.00	.00	.00	.20	.01	.10	.20	.09	.35	.14	.48	

* 1= Herbicides 2= Field Crop Seeds 3= Crop Machinery 4= Dairy-Poultry-Livestock
 Feeds & Health Products 5= Building Materials 7= Tractors 8= Fertilizer 9= Trucks
 10= Lubricants & Fuels 11= Crop Storage and Drying 14= Auto Accessories 18= Farming
 Services

As noted in Table 6 and 7, there was a difference in the strength of correlations when sorted by year (Table 6) and product type (Table 7). When correlations were sorted by year and product type in Table 8 and 9, several interesting differences were noted but no clear trends.

Table 8 shows the relationship between the Recognition Index and information cues when sorted by year and product type. The Recognition Index is an indicator of the ability of an advertisement to catch the readers attention. There were four significant correlations; two were negative and two were positive.

There was a correlation coefficient of $-.38$ for herbicides in 1982, and $-.69$ for crop machinery in 1979. It is difficult to understand why such strong negative correlations are present in these two instances. However, the negative correlation for crop machinery does fit in with the significant negative correlation observed for all ads in 1979 in Table 6 and for all crop machinery in Table 7.

There were significant positive correlations for building materials of $.63$ in 1979 and 1.00 in 1984. This is contrary to the significant negative correlations for advertisements in 1979 and for all building material advertisements. It appears that Information content plays a much more significant role in readership of advertisements for building materials than for any other product type.

Another unusual result of the correlations showed that all correlation coefficients for building materials were

positive when sorted by year but the total sample for building materials in Table 7 was negative. This is a result of changes in the amount of information and readership of the advertisements that occur over time which tend to "mask" the overall negative correlation.

Table 8

Correlation coefficients for relationship between information cues and Recognition Index sorted by product type and year

Product type	Correlation by year							
	1979	1980	1981	1982	1983	1984	1985	
Herbicides	corr.	-.21	.01	.04	-.38	.02	.02	.22
	cases	19	18	21	22	24	21	17
	sig.*	.19	.48	.44	.04	.47	.46	.20
Field Crop Seeds		-.12	.20	-.25	-.25	-.09	.42	.20
		9	12	22	20	16	13	7
		.38	.27	.14	.14	.37	.08	.34
Crop Machinery		-.69	-.30	-.48	.41	-.09	.14	.32
		11	8	4	13	8	9	13
		.01	.23	.26	.08	.42	.36	.15
Dairy-Poul.-Lvstck.		.13	.06	.11	.23	-.31	.93	-
		12	6	3	5	4	3	0
		.34	.45	.46	.35	.35	.12	-
Building Materials		.63	.58	.22	.53	.71	1.00	-
		8	7	7	4	5	3	0
		.05	.09	.32	.24	.09	.00	-
Tractors		.64	-.90	-.04	-.50	-.33	-	-
		5	3	5	3	3	0	0
		.12	.14	.48	.33	.39	-	-
Farming Services		-.40	-.01	-	-.59	.11	.80	.05
		7	3	0	6	3	4	7
		.19	.50	-	.11	.47	.10	.46

*p < .05

Table 9 shows the relationship between the Partial/thorough Index and the information cues when sorted by product type and year. The Partial/thorough Index is an indicator of the time spent with the advertisement. Although the indexes are similar, Table 9 shows some interesting differences. There were six correlation coefficients of significance at the .05 level; two were negative and four were positive. Sorting the data by year and product type did yield some very low (<3) sample sizes which must be taken into consideration in evaluating the statistics.

There were negative correlations for herbicides of $-.40$ in 1983 and $-.42$ in 1985. Again, this corresponds to the negative correlation for all herbicide advertisements in Table 7.

There were positive correlations for dairy-poultry & livestock of $.98$ in 1984, and for building materials of $.74$ in 1979, $.93$ in 1982 and 1.00 in 1984.

The higher number of significant positive correlation coefficients may mean that the readers were spending more time with the advertisements because of the amount of information they contained. Building materials had the highest average number of information cues per advertisement (4.29 cues per ad) and the most significant positive correlations between readership and information. The amount of information in an advertisement will affect readership differently depending on product type.

Table 9
Correlation coefficients for relationship between information cues
and Partial/thorough Index sorted by product type and year

Product type	Correlations by year							
	1979	1980	1981	1982	1983	1984	1985	
Herbicides	corr.	-.19	-.04	.04	-.31	-.40	.14	-.42
	cases	19	18	21	22	24	21	17
	sig.*	.22	.43	.42	.08	.03	.28	.05
Field Crops Seeds		-.45	.27	-.08	-.33	-.09	.42	-.12
		9	12	22	20	16	13	7
		.11	.20	.37	.08	.36	.08	.36
Crop Machinery		-.50	-.39	-.18	.14	.01	.06	.25
		11	8	4	13	8	9	13
		.06	.17	.41	.32	.49	.44	.20
Dairy-Poul.-Lvstck.		-.11	.25	-.11	-.40	-.68	.98	-
		12	6	3	5	4	3	0
		.37	.31	.46	.25	.16	.05	-
Building Materials		.74	.00	-.13	.93	.32	1.00	-
		8	7	7	4	5	3	0
		.02	.50	.39	.04	.30	.00	-
Tractors		.22	.46	-.19	-.15	.50	-	-
		5	3	5	3	3	0	0
		.36	.35	.38	.45	.33	-	-
Farming Services		-.62	-.98	-	-.32	-.19	.66	-.17
		7	3	0	6	3	4	7
		.07	.06	-	.27	.44	.17	.36

*p> .05

The data presented in this chapter indicates that information content does have a significant effect on readership in certain years and in certain product types. Information content generally decreased over time. However, there does not seem to be any identifiable trend in the correlations between information content and readership over time. Information content and readership is more highly correlated and shows a greater number of significant correlations when grouped by product type. A high amount of information seems to result in lower readership scores in the majority of cases. Conclusions based on the data analyzed in this chapter follow.

CHAPTER 5

Summary and Discussion

Conclusions

The purpose of this study was to measure the information content of agricultural advertising and examine the relationship between information content and Starch Readership scores. A review of literature included reports of information content in advertising, an operational definition of information, the use of Resnik and Stern information cues in other studies, Starch Readership scores, industrial advertising, the agricultural economy, and the diffusion of innovations. The literature reviewed indicated that information was an important factor to farm buyers, advertising was an important source of information for farmers, and the farm economy had focused more importance on farm-buying decisions.

This study concentrated on discovering the information content of 483 advertisements appearing in The Farmer magazine from 1979 through 1985 and the relationship between information content and Starch Readership scores for the advertisements. The study attempted to answer four main research questions: (a) How much information is contained in agricultural advertisements?, (b) Has there been a change in agricultural advertisements between 1979 and 1985?, (c) Does the number of information cues in an advertisement vary among product categories?, and (d) Is there a correlation

between the number of information cues in an advertisement and the Starch Readership score of the advertisement? Several conclusions were drawn from the analysis of the data collected.

Research Question Number One

How much information is contained in agricultural advertisements? There appears to be a considerable amount of information in agricultural advertising; 99.4 percent of the advertisements contained at least one information cue, nearly 90 percent contained two or more cues and almost half the advertisements contained four or more information cues. The fact that there was an average of 3.42 information cues per advertisement is remarkable considering there was no distinction made in the size of the advertisements or the amount of copy in the advertisement. A quarter page advertisement was judged by the same criterion as the multi-page spread.

Research Question Number Two

Has there been a change in agricultural advertisements between 1979 and 1985? There have been several changes in agricultural advertisements during the time period studied. The most obvious change was a significant decrease in the number of advertisements placed in The Farmer in 1984 and 1985. The decrease in the number of advertisements placed per issue corresponds to the same time period (after 1983) as the decline in the farm economy, the introduction of several government programs to reduce grain surpluses, and

the merger of several farm equipment companies. A direct relationship between the farm economy and the number of advertisements placed in The Farmer would require additional study.

The information content of the advertisements changed significantly from year to year. There was a significantly higher amount of information in 1980 (4.10 cues per ad) and a significantly lower amount of information in 1984 (2.75 cues per ad). The first three years of the study scored the highest average cues per advertisement (1979 = 3.8 cues, 1980 = 4.1 cues, 1981 = 3.86 cues) and were all above the mean of 3.42 cues. The remaining four years studied (1982 - 1985) all averaged below the mean. This indicates that the amount of information in advertisements actually decreased from 1979 through 1985. It seems that farm advertisers responded to the changing farm economy by reducing the amount of information in advertisements as well as reducing the number of advertisements placed.

One explanation for the decrease in information in conjunction with a decrease in advertising during the time period studied is that advertisers decreased the size of their advertisements. This is very plausible since advertising budgets are quite often set as a percentage of sales and if sales decreased then advertising budgets would decrease. Also, different units of measure other than information cues per advertisement could yield different results. Statistics such as information cues per square

inch or information cues per hundred lines of advertising copy may yield a different picture of how information content changed over time.

Research Question Number Three

Does the number of information cues in an advertisement vary among product categories? The analysis of the data indicates that the information content of the advertisements also varied significantly by product category. There was a significantly higher amount of information in advertisements related to building materials (4.29 cues per ad) and a significantly lower amount of information in advertisements related to field crop seeds (2.81 cues per ad). Part of the explanation for the difference in information content could be the nature of the products. Building materials as a product have many different components (steel, wood, doors, etc.) as well as many different types and sizes. Field crop seeds have different product types but are less differentiated than building materials. Also, there were more seed ads (99) than building ads (35). This is an indication of more competition within the seed industry and less product differentiation.

There is also a general difference in the content of an advertisement for a new product or company than for an established product or company. A new product or company needs to build awareness and knowledge of how it is used and how it works and as a general rule contains more information, however, this was not a part of the study.

Research Question Number Four

Is there a correlation between the number of information cues in an advertisement and the Starch Readership score of the advertisement? Establishing the relationship between information content and readership is difficult. Pearson correlation coefficients sorted by year, product type, and both year and product type, yielded mostly negative correlations between information and readership. As the sample sizes increased, positive correlations were reduced to zero or became negative.

When sorted by year there was a significant negative correlation between the information content of the advertisements and Starch Readership scores in 1979. Even though farmers are information seekers it appears that the information content of advertisements does not have a positive effect on the readership score. It was expected that information would become more important to farmers during the time period studied. Therefore, the advertisements with high information content would score higher in readership over time. However, the data shows that advertisements with high information scored the same or lower in readership with time having no apparent effect.

As previous studies have shown, readership is influenced by a combination of many different factors (i.e. size, color, headline). Apparently information content was not enough to cause a significant change in the readership of an advertisement. Even though the information needs of

farmers are high, farm advertising does not seem to be remembered because of its information content alone. While information is an important part of agricultural advertising, it does not have a significant positive effect on the Starch Readership scoring process.

When the correlation coefficients were sorted by product type the correlations were consistently negative. Of the twelve product categories there was only one positive correlation with the recognition index and two positive correlations with the partial/thorough index. None of the positive correlations were significant. However, there were six significant negative correlations with the recognition index and six with the partial/thorough index.

Apparently, within product types, advertisements with high information score lower in the Starch survey and advertisements with low information score higher in the Starch survey. A possible explanation for this is the power of the market leaders within each product type to dominate the readership scores. Theoretically, a higher percentage of the readers of the magazine will own a product from the market leader and are more likely to read and remember the advertisement (Starch, 1966).

When the correlation coefficients were sorted by both year and product type there were more significant positive correlations than negative correlations. However, when the correlations are broken down to this level (i.e. ads for building materials in 1979) the sample sizes were much

smaller. The four negative correlations occurred in product types with larger sample sizes (herbicides and crop machinery). The six positive correlations occurred in product types with smaller sample sizes. Again, it appears that larger sample sizes tend to yield zero or negative correlations indicating a slight negative relationship between information content and readership.

Recommendations

Limitations of the Study

Three limitations of the study can be identified: sample size, content analysis, and the Starch scoring process. Although there was a sample size of 483 advertisements, it was drawn from a single magazine, The Farmer. Greater reliability could be realized by including other farm magazines from the same time interval. This would increase sample size and reduce the error introduced by peculiarities of the readers of a single magazine. It would also widen the population being surveyed by the Starch Company and reduce the influence of the editorial content of the magazine on its readership.

The Resnik and Stern information cues are the best available method of operationally defining the information content of an advertisement. However, as with any method of content analysis, there is a subjective judgement that takes place when the information content is analyzed. The subjective judgement error could be reduced by selecting judges more familiar with the magazine used in the study and

agricultural advertising in general.

Finally, there is still a question about what the Starch Readership scoring process measures. Does it measure readership, the ability of an advertisement to be remembered, or a combination of things. If it does measure readership, there is still no clear connection between the Starch score and the response to an advertisement in terms of products sold.

Recommendations for Further Study of the Data

This study identified several areas that are of interest for further study. The study determined that information was an important part of the content of agricultural advertising. Although the majority of significant correlations indicated that there was a negative correlation between the information content of the advertisement and its readership score, further study of the data collected is recommended to answer the following questions:

1. Is there a relationship between information content and page size of the advertisement?
2. Is there a relationship between information content and the amount of color used in the advertisement?
3. Is there a relationship between information content and the position of the advertisement in the magazine?
4. Is there a relationship between page size and readership?

5. Is there a relationship between color and readership?
6. Is there a relationship between position and readership?
7. Which information cue occurs most frequently?
8. Is there a relationship between a single information cue (i.e. price, performance, etc.) and readership?
9. Did the amount of information expressed by each single information cue vary from year to year?
10. Did the amount of information expressed by each information cue vary by product category?

Recommendations for Additional Study of the Subject Area

1. Can the results of this study be replicated with a different sample of agricultural advertisements?
2. Would the results of this study vary if an actual control group were used to score the readership of the advertisements rather than using the Starch scores?
3. Would the results from a similar study of the years 1974 to 1979 vary significantly from this study?
4. Is there a relationship between information content and other information content variables?
5. What caused the negative correlation between information content and readership in 1979?
6. Why do some product types have a high amount of information and some have a low amount of information?
7. Is there an optimum amount of information in

advertisements?

8. Do certain types of information have a greater influence on readership of advertisements in certain product types?

Appendix

COMPANY _____ PAGE NO. _____
PRODUCT TYPE _____ SIZE _____
COLOR _____ ISSUE _____

CRITERIA OF EVALUATION

Independent Research:

_____ Are results of research gathered by and independent firm presented?

Company Research:

_____ Are data gathered by the company to compare its products with a competitor presented?

New Ideas:

_____ Is a totally new concept introduced?
_____ Are the advantages of the new concept presented?

Price:

_____ What does the product cost?
_____ What is the product's value retention capability?
_____ What is the need satisfaction capability/ dollars?

Quality:

_____ Distinguishing quality characteristics from other products.

Performance:

_____ What does the product do?
_____ How well does it perform relative to other products?

Components / Contents:

_____ What is the product composed of?
_____ What ingredients does it contain?
_____ What ancillary items are included with the product?

Availability:

_____ Where can the product be purchased?
_____ When will the product be available for purchase?

Special Offers:

_____ What limited-time non-price deals are available with a particular purchase?

Taste:

_____ Is evidence presented from an independent source that the taste of the product is superior to others?

Nutrition:

_____ Specific data given concerning nutritional value of product?
_____ Direct specific comparison made with other products?

Packaging or Shape:

_____ What packages or shapes is product available in?
_____ Direct comparison of package or shape with other products?

Guarantees/Warranties:

_____ What post-purchase assurances accompany the product?

Safety:

_____ What safety features are available on the product compared to alternative choices?

Energy:

_____ What is the energy consumption of the product as compared to other alternatives?

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