

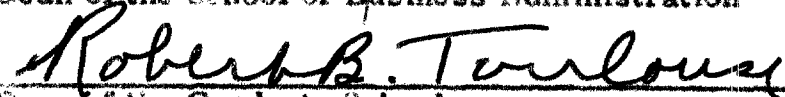
A STUDY AND CASE ANALYSIS OF SELECTED CURRENT
PROBLEMS OF ELECTRONIC PARTS
WHOLESALEERS

APPROVED:


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Minor Professor


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A STUDY AND CASE ANALYSIS OF SELECTED CURRENT
PROBLEMS OF ELECTRONIC PARTS
WHOLESALERS

THESIS

Presented to the Graduate Council of the
North Texas State University in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF BUSINESS ADMINISTRATION

By

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Denton, Texas

January, 1964

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CHAPTER I

INTRODUCTION

The Present Business Climate for the Electronic Parts Wholesaler

"Continued growth against a background of changing patterns will be the main characteristics of the electronics market in the immediate future." ¹ The phenomenal growth of the electronics industry, coupled with constant changes and continuous product improvements has created many problems for the industry. These problems have increased the cost of doing business and reduced profits. With competition increasing, "the question of greater profitability is the central issue confronting management today." ² Means of reducing costs and of increasing sales are discussed daily throughout the industry; however, until specific problems are uncovered and analyzed in each individual business it is doubtful that any substantial increase in profit margins can be expected. It is also doubtful that the industry can ever substantially improve the

¹ Thomas Emma and others, "Our Growing Markets," Electronics, XXXV (January 5, 1962), 42.

² George W. Chane, "The Coming Role of Administrative Management," The Management Review, XLIX, No. 12 (December, 1960), 17.

overall efficiency of its members until the findings of these problems are made public for the purposes of study and comparison.

Purpose of This Investigation

There appears to be a need to analyze the problems of greatest current significance in electronic parts wholesaling. The purposes of this study, therefore, will be to:

1. Determine and pinpoint the problems of greatest current significance in electronic parts wholesaling;
2. Describe and analyze the problems selected, utilizing case illustrations where needed to more effectively present the problem or possible solutions to the problem;
3. Indicate possible means of solving each problem.

Sources of Data

Primary data were obtained from:

1. Personal interviews with carefully selected executive personnel in the electronic parts wholesaling industry in the North Texas area whose opinions were recorded and later used in the selection and presentation of the problems for study;
2. Unpublished data furnished by electronic parts wholesale distributors;

3. Specially prepared questionnaires completed by radio-television service dealers.

Secondary data were drawn from:

1. Current periodicals in, and related to, the electronic parts industry;
2. Current books, publications, and other library sources.

Methods of Study

In discussion of the problem with C. L. Littlefield of North Texas State University, it was agreed that a preliminary study of the electronic parts distribution industry should be made by reading as many current periodicals as possible.³ From these readings, all current problems should be noted. It was further suggested that these problems be discussed with owners and/or managers of electronic parts distributors in order to determine the more important current problems. Each of these important problems was then to be studied individually. This pattern of study has been followed during the past two years in an attempt to provide information and/or possible solutions to the selected current problems of the electronic parts wholesaler.

³C. L. Littlefield, Ph. D., Chairman of the Management Department, School of Business Administration, North Texas State University, Denton, Texas.

A separate set of procedures was used in the study of each individual problem. In addition, each problem has its own hypothesis, findings, conclusions and recommendations.

Definition of Terms

Wholesaler, distributor and jobber in this report are considered to be synonymous. Each is considered to be a merchant middleman, operating at the wholesale level, who stocks "diverse product lines designed to supply virtually all of the electronic requirements of customers buying for resale or use." ⁴

Electronic distribution: "the entire chain of marketing from the manufacturer of parts, tubes and/or equipment to the ultimate user." ⁵

Radio-television service dealer: a business enterprise operating at the retail level, and serving the needs of the consumer by repairing radio and television sets, and other related electronic products.

Industrial and commercial sales: those sales made to industrial manufacturing plants, research laboratories, government agencies, communication stations, and others motivated to purchase because of a business reason and not mentioned as being a service dealer.

⁴"I Wonder What He Meant By That," Electronic Distributing, XXXIII, No. 5 (May, 1962), 113.

⁵Ibid., p. 113.

Profit margin or percentage of profit: the difference between the resale price and cost price being stated as a percentage of discount of the resale price.

Factory billing price: the manufacturer's billing price to the distributor as shown on the manufacturer's printed price list.

Management: "The setting of overall objectives, formulation of policies and plans designed to achieve those objectives, and the establishment of standards for measuring the activity that puts men, money, and machines to work in the production and distribution of goods and services." ⁶

Marketing: "The activities of an organization dealing with the movement and consumption of goods and services to meet consumer needs and wants." ⁷

Product line: "is understood to mean a group of products which perform generally similar functions and which are somewhat similar in physical characteristics." ⁸

Policy: general instructions on which actions are taken with some amount of frequency, or recurrence.

⁶ Hector Loya and Arnold Corbin, Management in Marketing, McGraw-Hill Book Co., Inc. (New York, 1959), p. 21.

⁷ Ibid., p. 21.

⁸ Ralph S. Alexander and others, Industrial Marketing, Richard D. Irwin, Inc. (Homewood, Illinois, 1956), p. 49.

Procedure: a specific application or action taken.

Concept: an idea, philosophy, method, theory, creed, or image conceived as being proper and correct; and which is suitable for acceptance, being associated with, or identified by.

Related Studies

Related studies are included as a part of the introduction to individual problems.

Treatment of the Data

Determination of the problems. --In order to pinpoint the problems of greatest current significance a thorough preliminary investigation of the problems of the electronic parts wholesaler was made. At a meeting of the Texas Electronic Distributors Association a discussion was held concerning current distributor problems.⁹ Mentioned at this meeting were the problems of increasing inventories, product line duplication, declining profits, increasing cost, liability insurance, state licensing laws, pending legislation, forecasting, distributors going bankrupt, and price cutting. Later, the Texas Chapter of the National Electronic Distributors Association met to discuss many of these same problems.¹⁰ In

⁹ Annual meeting of the Texas Electronic Distributors Association, November 17, 1961, Houston, Texas.

¹⁰ Quarterly meeting of the Texas Chapter of the National Electronic Distributors Association, November 18, 1961, Houston, Texas.

addition, such problems as salesmen's compensation, inventory obsolescence, customer demands for additional service, increasing delivery costs, new markets, collections, and new products were also discussed. Methods and changes in distribution as well as supplier-distributor relations were discussed in many private meetings among distributors.

A series of interviews were held with owners and managers of electronic parts wholesalers in order to secure their opinions regarding problems peculiar to the North Texas area. E. P. Miles of the Adleta Company believed the more important problems being faced by the industry to be inventory control, market research, sales and product training, and methods of sales promotion.¹¹ Jack Wilkinson of Wilkinson Bros. Electronic Co. expressed his belief that declining profit margins and increasing costs were primary problems.¹² He believed increased delivery costs, small size orders, and increased customer demands for additional services were definitely affecting the profit picture. Product line duplication, increasing competition, and a general lack of planning on the part of the distributor were believed by Howard Klein of All State

¹¹ Interview with E. P. Miles, General Manager, Adleta Company, Dallas, Texas, December 9, 1961.

¹² Interview with Jack Wilkinson, Owner-Partner, Wilkinson Bros. Electronic Co., Dallas, Texas, February 6, 1962.

Electronics to be important industry problems.¹³ John Leedom of Wholesale Electronic Supply Co. believed price cutting to be the most serious problem being faced by the industry.¹⁴ His partner, Pat Patterson, believed that too many distributors did not know what was taking place in their industry.¹⁵ This lack of knowledge was causing many distributors to take action based on fantasy rather than fact. As a result, he believed this to be the cause of the increasing number of failures in the industry. R. B. Bryan of Crabtree's Electronic Parts Co. expressed his concern over the high and increasing cost of operating an electronic parts distributorship. Other factors which he believed to be current problems of the industry were increasing inventories and increasing accounts receivables.¹⁶ Ray Miller of Scooter's Radio Supply Co. believed increasing competition, the relationship between distributors and manufacturers, and increasing cost of operations

¹³ Interview with Howard Klein, President, All State Electronics Co., Dallas, Texas, February 8, 1962.

¹⁴ Interview with John Leedom, Owner-Partner, Wholesale Electronic Supply Co., Dallas, Texas, February 6, 1962.

¹⁵ Interview with Pat Patterson, Sr., Owner-Partner, Wholesale Electronic Supply Co., Dallas, Texas, February 6, 1962.

¹⁶ Interview with R. B. Bryan, General Manager, Crabtree's Electronic Parts Co., Dallas, Texas, February 8, 1962.

to be the most serious problems of the electronic parts distributor.¹⁷ It was generally agreed among those interviewed that increasing costs, declining profit margins, distributors lack of planning, product line duplication, supplier relationships, market knowledge, increasing accounts receivables, salesmen's compensation, increased competition, small size orders, and delivery were the most serious problems being faced by the electronic parts wholesale distributor today. It should be noted that several of those interviewed believed that other than acknowledging that a problem existed, they expected little to be done individually or collectively toward solving any of the problems.

R. B. Sampson of the Radio Corporation of America expressed his beliefs that distributors must first decide what they want to be, or what they intend to do. He believed decisions as to the image to be created must be the first decision of the distributor. Secondly, the distributor should completely analyze his internal operations to determine and attempt to solve the problems peculiar to his own operation. Finally, complete market research programs should be instituted for the area in which the distributor intends to continue to market.¹⁸

¹⁷ Interview with Ray Miller, Manager, Scooter's Radio Supply Co., Fort Worth, Texas, April 5, 1962.

¹⁸ Interview with R. B. Sampson, Director of Market Research, Radio Corporation of America, Camden, New Jersey, March 7, 1962.

Subsequent interviews were held with E. P. Miles in which permission was granted to study and analyze any of the aforementioned problems as they might be related to the Adleta Company.¹⁹ Data were made available for study as requested.

Further study was made of the current problems in order to attempt to locate related studies. The greatest amount of information pointing out the importance of each problem is found in recent issues of Electronic Distributing and Jobber News Magazine and in the NEDA Journal. Both of these periodicals are recognized as being leading publications in the electronic parts distribution industry. In a survey conducted by the Electronics Information Bureau to determine preference of editorial content 482 distributors indicated the following, listed in order of preference, as being their choice for editorial content:

1. Management problems and solutions;
2. Inventory control methods;
3. Trends in electronic industry;
4. Sales pointers for distributor salesmen;
5. Sales training methods;
6. Manufacturer merchandising programs;
7. Government legislation;
8. New products;

¹⁹ Interviews with E. P. Miles, General Manager, Adleta Company, Dallas, Texas, Feb. 16, 1962; March 9, 1962; April 4, 1962.

9. Reporting individual distributor's sales;
and profits.²⁰

The preferences indicated give some idea of the current problems of the industry. Both of the aforementioned periodicals have provided editorial content in an almost identical manner of coverage. While each periodical has done a superb job of making one aware of the problems that exist, solutions and/or methods of solution or comparison have been relatively limited. Since there appeared to be adequate data available regarding inventory control systems, credit and collection methods, sales training, sales compensation systems, and the results of price cutting, these problems have not been included in this study. Effort has been made, however, to present data on which limited information has been published. Where possible, an attempt has been made to provide data which could become criteria for comparison to be utilized by other electronic parts distributors. Also, it was intended to provide as much market information as possible for the benefit of the entire electronics industry.

Problems selected for study. --From this preliminary investigation problems relating to the electronic parts distribution industry believed to

²⁰ An Electronics Information Bureau survey released by the NEDA Journal in "A Roadship Report to the Electronics Industry," Fall, 1962.

be of importance and to have the greatest current significance were selected for independent study and analysis. The problems selected were:

1. Developing a concept of doing business;
2. Supplier evaluation;
3. Three factors relating to the profit squeeze:
the first being a method of analyzing profit margins; the second, an analysis of the small order problem; and the third, a study of delivery problems;
4. A market research study as specifically related to the radio-television service dealer market.

Order of presentation. --Chapter II is a presentation of the importance of establishing a concept of doing business and of creating a desirable image on the part of the individual business. Methods and case presentation for formulating a concept of doing business are included.

Chapter III is a supplier evaluation study wherein the principal factors of supplier evaluation have been related to the electronic parts industry.

Included in Chapter IV are three separate studies relating to the commonly called "profit squeeze". The first of these studies is a method of analyzing profit margins of various product categories of

merchandise. The second study is a comparative analysis of the small order problem; and the third study is related to delivery problems.

Chapter V is an extensive market research study relating to the radio-television service dealer market.

The summary, conclusions, and recommendations are included in Chapter VI.

CHAPTER II

DEVELOPMENT OF A CONCEPT

OF DOING BUSINESS

"You can't escape the responsibility of tomorrow by evading it today." ¹ These words were spoken by Abraham Lincoln nearly 100 years ago, yet they still hold true. The leaders of today's business must quickly analyze and adjust to the ever increasing number of changes that are taking place. They must be aware that the "needs of tomorrow's markets will be radically different from those of today, and the company that expects to be in business ten years from now should be planning now to meet those needs." ² The economy, either good or bad, competition, government regulations, credit and finances, new products, and changes in organizational structure all create the need for changes. It is impossible for any company to stand still in today's economic climate. "If management is to remain adaptable and up-to-date, it must continually reappraise, realign, and restate its

¹ Abraham Lincoln, quotation reprinted in, The Management Review, XLIX, No. 12 (December, 1960), 47.

² Hamilton Herman, "Uncovering New Sources of Product Ideas," The Management Review, XLIX, No. 12 (December, 1960), 10.

policies,"³ as it is these basic business policies that "guide and govern what an organization does."⁴ Management's philosophy, creed, code of ethics, or concept of doing business must be planned and stated.

One Company's Creed

To demonstrate the value of a written philosophy or creed of doing business, a case study of the Adleta Company of Dallas, Texas, is presented in the following sections. It was intended to determine this company's policies as developed over a thirty-year period, and to restate and develop these policies into a written concept of doing business. While no attempt was made to point out an exact series of steps or procedures needed to develop a concept of doing business, an attempt was made to integrate policies of a successful and mature business with the ideas and philosophies of various current writers and management leaders. A combination of the two was believed to provide the proper ingredients for a modern concept of doing business.

The Adleta Company, a Dallas, Texas company, was organized in June, 1932. Since its formation it has operated successfully as a partnership at the wholesale level in the distribution of radios and television products; appliances; phonograph records; and electronic industrial parts,

³The Management Review, XLIX, No. 4 (April, 1960), 54.

⁴Ibid., p. 55.

and service replacement parts. A purpose of doing business was formulated in the beginning, and has been primarily transmitted verbally over the years along with newer management policies. No formal, written concept of doing business exists, however.

The Basic Idea of a Concept of Doing Business

A concept of doing business begins with a purpose and ends with an image. What takes place in between determines its success or failure. It should be remembered in developing a concept of doing business that "a philosophy is a basic attitude. It is a frame of mind. It is a guiding principle and should be a deep conviction."⁵ It is, therefore, important to realize the need for establishing a concept, for expressing it in writing, and for including a clear statement of company policies. A formal concept can thus be developed.

The Need for a Concept of Doing Business

Increased competition, the continued reduction in the ratio of profits to sales, changes in methods of distribution and merchandising, and an increasing amount of government controls have created the need for new thinking and reorganization. A creed, or concept of doing business fulfills two basic needs of today's business. First, the need for clarifying one's

⁵ Stewart Thompson, Management Creeds and Philosophies, American Management Association, Research Study Number 32, 1958, p. 5.

own thinking in preparation for establishing goals and objectives is of significant importance. It is interesting to note that this becomes a self-disciplinary device for clearing one's own thoughts. Secondly, a pattern is established for communicating ideas to others. The need of communications is, therefore, fulfilled at an early date.

Establishing Objectives

Management has been assigned the responsibility for successful operation of the company; this includes making a profit, performing a service, and representing suppliers with leadership in the industry. Management must also assume the responsibility for establishing objectives which are understood and accepted; the most important of these being:

1. Creating new markets;
2. Anticipating the future;
3. Training and motivating the business organization toward contributing to the joint accomplishments of common goals;
4. Establishing high standards for efficiency, service, and performance;
5. Operating within the spirit, and the letter of the law;
6. Communicating "the basic purposes and ethics of the company to all those in company ranks so they

may communicate them to customers and others outside the firm through their actions." ⁶

Planning. -- "Planning for the reorganization of business for the decade of the 1960's along marketing management lines calls for a basic creed, a statement of basic principles and objectives under the customer oriented concept." ⁷ This concept or theory assumes that for business to be able to supply the right product or service at the right time, place and price that it must establish first: what the customer wants, when and where he wants it, and what price he wants to pay. Although this theory may appear ambiguous, it is the planning and the establishing of an objective that allows the successful business to seek out and to create its market.

Rendering a service. -- The second part of the customer oriented concept is that business exists to supply a product or service needed or wanted by the customer. "Rendering a service" ⁸ is the original philosophy which was formulated by the founders of the Adleta Company. This

⁶ Stewart Thompson, Management Creeds and Philosophies, American Management Association, Research Study Number 32, 1958, p. 818.

⁷ Henry Loya and Arnold Corbin, Management in Marketing, McGraw-Hill Book Co., Inc. (New York, 1961), p. 30.

⁸ Adleta Company, original policy, as dedicated in June, 1932 by E. C. Adleta, Sr., T. M. Merrick, and E. P. Miles.

was established and has been their "concept of doing business" for nearly thirty years. This dedicated idea of rendering a service has enabled the Adleta Company to pioneer new products for its suppliers; to develop new and increased markets for its customers; to increase benefits and give security to its employees; to provide a steady growth for itself; to become important to the community; and to be recognized as a leader in the industries in which it associates itself. These accomplishments point up the fact that business can justify its existence by the services it renders.

Achieving consistency of policies. --One of the most difficult problems that continues to face business today is the ability to provide equal treatment for similar situations. The growth of the Adleta Company has created several managerial units, each being allowed to formulate policies and to make decisions, but each acting independently of the other. The decisions made in various units quite often are not consistent on similar problems. Policies and procedures differ in each unit; therefore, there exists a problem of one company having varying policies for similar situations. An extreme, but true example of this is four different units of the company ordering pencils from four different suppliers. While this example does not assist in establishing a concept of doing business, it does emphasize the fact that "policies become important to a company when:

1. The organization has reached a size that requires decision making centers that will act consistently;
2. Situations requiring decisions occur frequently." ⁹

The Need for the Concept to Be in Writing

Quite often, there is conflicting information regarding company policies, creeds, and concepts. "Some business enterprises have no organization policy or philosophy as such, but have grown along the lines of the preferences of the strongest members of the management teams." ¹⁰ In other companies, principles have been recognized but their application has varied so greatly as to evidence very little consistency, teamwork, understanding, and the continuity and ease of transmission from one generation of executives to another. The time taken in writing the concepts for doing business can be justified. First, "top management has no function more clearly its own, nor more urgent, than policy formulation;" ¹¹ and second, "the time spent in preparing a clear

⁹ Ernest C. Miller, "Personnel Policies - Framework for Management Decisions," The Management Review, XLIX, No. 1 (January, 1960), 20.

¹⁰ Milton C. Lightner, "Patchwork Organization; Its Causes and Cures," The Management Review, XLVI, No. 4 (April, 1957), 46-48.

¹¹ "Written Policies Help Nine Ways," Nations Business, XLVII, No. 12 (December, 1959), 84.

policy pronouncement will be made up many times over by the executive man hours saved in eliminating repetitive, routine decisions." ¹²

The Value of Restating Company Policies

"Basic objectives established over a period of time develop a certain character and create an image in the minds of customers and competitors." ¹³ It is only natural that those companies who are rendering services, developing new products, creating new markets, and developing new marketing ideas are characterized as being progressive. It is these companies who know why they are in business, who know the purpose of their business, who have set their objectives not just for today, but for what they will be doing five years from today. The companies that will prosper in the years ahead will be those who have made plans and know what they are looking for. "They are organized to evaluate and develop profitable ideas in the most efficient way possible; and that overlook no possible source in their search for new ideas that are the raw material of any vigorous product development program." ¹⁴

¹² Ibid., p. 84.

¹³ Thomas J. McNichols, Policy Making and Executive Action, McGraw-Hill Book Co., Inc. (New York, 1959), p. 11.

¹⁴ Hamilton Herman, "Uncovering New Sources of Product Ideas," The Management Review, XLIX, No. 12 (December, 1960), 11.

Values of a Concept of Doing Business

Encouraging individual initiative. --To develop a progressive image, management must not only exert its leadership in establishing and attaining objectives, but must encourage individual initiative throughout its organization. "It is generally assumed that a person will be a more effective member of an organization if he has a knowledge of the purpose of the organization and its operations." ¹⁵ The greatest benefit of this knowledge will, of course, be common effort toward common goals.

The image created by the employee. --"Perhaps the greatest single corroborative evidence which a community or society can obtain about the corporate intent is from those who are employees of it." ¹⁶ "When your customer thinks of your company, he doesn't see an image of buildings, factories, offices. He sees you in his mind's eye. You are the living image of your company." ¹⁷

¹⁵ Carrol L. Shortle, Executive Performance and Leadership, Prentice-Hall, Inc. (Englewood Cliffs, New Jersey, 1956), p. 35.

¹⁶ George S. Odiorne, "Personnel Administration and the Corporate Image," Personnel, XXXIX, No. 7 (December, 1960), 311.

¹⁷ E. P. Miles, General Manager, Adleta Company, "Balance Sheet of Selling," letter of October 7, 1957.

Planning for a profit. --One of the original goals of the Adleta Company can be restated as "providing or planning for a profit." ¹⁸ This concept provides a plan whereby every product or merchandising program that is presented to the customer includes a method for providing for a reasonable profit for the customer. "Unless a line of merchandise or business policy is profitable for the dealer, the Adleta Company does not offer it; past records are proof of this statement." ¹⁹ This concept provides for a profit to be paid to employees for their efforts and productivity. This concept further provides that a reasonable profit be returned to the owners for their investments and risks. In planning for a profit, it is the responsibility of each managerial unit of the Adleta Company to contribute a profit to the company. It should be established that it is possible for managerial units to exist side-by-side, each with its own products and objectives, but where these units touch they will be competing with one another; yet, all managerial units shall be working together toward the common objectives of the company.

Providing opportunity for growth. --While profit is normally measured in terms of money, it is the objective of the company to provide

¹⁸E. C. Adleta, Sr., T. M. Merrick, E. P. Miles, original policy statement as dedicated in June, 1932, on the formation of the Adleta Company.

¹⁹T. M. Merrick, Manager of the Adleta Company, a restatement of the original policy statement of 1932 in a sales letter of March 27, 1954.

opportunity for growth for its customers, employees, suppliers, and itself. The objectives for growth are: first, to provide for the maximum market penetration and percentage take of the market as justified for each product; and second, the annual growth of each customer, product, supplier, employee, and of the Adleta Company shall equal or exceed the annual rate of increase in sales and earnings of comparable businesses, products and personnel in the area served. It has been stated that "each employee can expect to grow with the company, and to participate and advance with the growth and need of the Adleta Company." ²⁰

Recognizing responsibility. -- "The shaping of the corporate image is also inextricably tied in with the firm's relations with external groups." ²¹

The manner and methods employed to attain its desired goals has a profound effect on its employees, customers, and general public. "The business entity develops an institutional social philosophy which guides its actions in personal relations, community relations, and relations with business associates and competitors, and its stockholders." ²² This ties

²⁰ E. Charles Adleta, Jr., Owner-Partner, policy statement presented on the announcement of the Adleta Company profit-sharing plan, December 22, 1961.

²¹ Thomas J. McNichols, Policy Making and Executive Action, McGraw-Hill Book Co., Inc. (New York, 1959), p. 11.

²² Ibid., p. 11.

in with what most employee interviews revealed as business responsibilities. Business, principally, has some responsibility and obligation to the following:

1. Customers;
2. Employees;
3. Suppliers;
4. Ownership;
5. Community;
6. Government;
7. Competition.

Development of high ideals. --Since responsibility encompasses several areas of influence, it is difficult to pinpoint the most important single area. However, in creating the favorable and lasting image, it is important to establish high ideals for honesty, integrity, and fairness.

"If you tell the truth, you don't have to remember what you said." ²³

More and more people are wondering whether today's business leaders have a code of ethics, especially one other than making a profit. Business management should attempt to "develop a simple and affirmative code of conduct, and let it profess that every business manager as an

²³E. P. Miles, General Manager, Adleta Company, letter to sales and management personnel of March 4, 1961.

individual has an obligation to society that overrides any other obligation he may have. " ²⁴

Creating civic interest. --The community places great demands on both the individual and the business. It has been expressed that members of the Adleta Company should "enjoy the personal satisfaction of actively participating in civic and community affairs; and that the company should maintain a position of high esteem and respect in the community. " ²⁵

Communicating with customers and employees. --The policy of the Adleta Company has been to promote from within the organization whenever possible, and to encourage individual initiative throughout the organization. The "open door" is used by the Adleta Company as a means of expressing to employees and customers the availability of owners and management for counseling. This is an ideal policy in that it encourages communications from employees and customers; however, to be effective, "employees must be encouraged to use it, and conditions of use must be as friendly and as informal as possible so that the employees will not be ill at ease. " ²⁶

²⁴ Robert W. Austin, "Positive Code of Ethics, " Business Week, No. 1659 (June 17, 1961), p. 166.

²⁵ H. J. Adleta, Owner-Partner, policy statement obtained in interviews.

²⁶ Stewart Thompson, Management Creeds and Philosophies, American Management Association, Research Study Number 32, 1958, p. 818.

The Adleta Company's continued willingness to render a service was restated recently as "let us be known as the firm that is willing to make a contribution to the industry and let us do it." ²⁷

From the material presented in the preceding sections, a written concept of doing business can be formalized, and is presented as follows:

The Adleta Creed

"The Adleta Company, a privately owned business enterprise, dedicated to operating at the wholesale level of distribution, and believing in the freedom of the American Economic System, restates the original purpose of its organization as that of 'rendering a service'."

"Management recognizes that its primary responsibilities in rendering a service are to: its customers; its employees; its suppliers; and itself. It also recognizes its secondary responsibilities to the community, the government, and the industry it represents."

"The Adleta Company's principal objective in rendering a service is that management planning always 'provide for a profit'. Management recognizes planning for a profit as being first in importance to those to whom it has dedicated the fulfillment of its primary responsibilities. Profit is recognized not only as a necessity for survival, but as the

²⁷E. P. Miles, General Manager, Adleta Company, correspondence of April 18, 1962 to Ray Miller, Manager of Scooter's Radio Supply Co., Fort Worth, Texas (a newly acquired division of the Adleta Co.).

greatest single motivational factor in the American economy. Only with profit can any person or organization be successful. "

"The Adleta Company is dedicated to the fulfillment of its primary responsibilities of its customers, its employees, its suppliers, and itself by:

1. Establishing objectives which are known, understood, and accepted;
2. Training and motivating its associates to contribute to the joint accomplishment of its stated goals;
3. Being consistent in its policies, and operating with the intent of discharging its obligations for integrity, fairness, loyalty, and equality;
4. Providing counsel, guidance, and finance to meet the needs of its industry;
5. Providing the opportunity for growth in areas where it is felt that a greater personal, technical and/or marketing knowledge can be achieved;
6. Maintaining a position of leadership by giving full support to the industries that it serves and of which it is a part;
7. Assisting in the creation of new markets by developing marketing ideas and plans that are efficient,

and that anticipate the future needs of our industry;

8. Expanding only in areas where it can perform the original purpose of 'rendering a service', and attain the principal objective of providing a profit."

"The Adleta Company fulfills its responsibility to the government by operating within the limits and the spirit of the law."

"The Adleta Company assumes its responsibility to the community by assisting in its growth. It further encourages its associates to actively participate in civic, religious, and industry undertakings."

"The Adleta Company fulfills its responsibility to its industry by developing progressive advertising, marketing, and training programs, and setting for itself high standards of performance, efficiency, and business ethics."

"This is The Adleta Company's Concept of Doing Business."

CHAPTER III

SUPPLIER EVALUATION

It has been determined that the electronic parts wholesaler recognizes a primary responsibility to his supplier. With such a relationship existing it becomes important for the wholesaler to know as much as possible about his supplier.

The constant flow of new products at such a rapidly increasing rate has made it impossible for a single distributor to stock all, or even a portion of all of the new products being offered. In studying the operations of electronic parts wholesalers, it has been observed that the wholesaler has been representing a multiplicity of suppliers, many of whose products duplicated those of other suppliers. New products were being announced by manufacturers almost daily. It could be seen that the duplication of product lines was costly from an inventory and investment point of view; and that new products were creating obsolescence in existing inventories. Product planning, therefore, takes on increasing importance. Within the general area of product planning is found the more specific need of supplier evaluation, however. A basis must be established for evaluating the suppliers of electronic component parts, supplies, and equipment at the manufacturer's and manufacturer's

agent's level of distribution. The evaluation should serve as a guide preparatory to making the following decisions at the wholesale level of distribution:

1. Purchasing a new product or product line;
2. Representing a particular supplier or manufacturer;
3. Continuing to represent or eliminating a product, product line, or supplier;
4. Selection or choice between representing two or more suppliers or manufacturers.

It was the intent of this part of the study to determine and analyze the factors important in evaluating the suppliers of electronic component parts, supplies, and equipment to the wholesaler; and to present these factors on the basis that an evaluation of their importance could be utilized in making decisions in selection of products and suppliers to represent. An attempt has been made to draw heavily on published data in determining the factors important in supplier evaluation, and to relate these factors to the electronic parts distribution industry. A simplified worksheet has been designed for normal everyday use as an aid in providing basic information necessary for evaluating suppliers.

Preliminary Evaluation Factors

Image to be created by wholesaler. --Proper evaluation of any product, product line, or source of supply of the wholesaler can be considered only when the wholesaler's management has made known its basic objectives. These objectives should define: the position or level which the company seeks within the industry; the size of operation desired, along with the speed or rate of growth; the extent of diversification desired; and the quality level of products to be offered for sale. "The first job to be done in good merchandise management is to determine specifically what the merchandising image of the company is to be." ¹ Who will our customers be? Will they be industrial buyers, service dealers, commercial users, amateur or hobbyist, retail consumers, or a combination of several types? Decisions must be made known as to planned market coverage.

Product policy. --"Management decision with regard to product policy are of several types. First is the question as to the characteristics and number of the product lines to be offered for sale. Closely

¹William M. Kordwielemon, "Controlling Inventory for Sales and Profit Growth," NEDA Journal, XVIII, No. 2 (February, 1962), 10.

allied to this is the range of items or varieties to be offered within each product line." ²

Product planning suggests a course of action which has been thought through in advance to achieve a consistent pattern of decisions regarding the product mix. Careful attention by top management to the formulation of product-planning policy appears to be the exception rather than the rule. "Lacking such a policy, decisions regarding additions to or deletions from the product mix of the company are likely to be based on pressures of the moment." ³

Product need. --There are other preliminary questions which should and can be answered prior to extensive supplier evaluation. Most of the questions refer to the need for a product line, or the reasons for buying a product line. The best and quickest approach is to ask the question: "Why do we (or why should we) buy this line?" Generally, "the underlying purpose of product additions is to increase competitive effectiveness and make more money. Economic opportunities for adding products arise from various kinds of unused capacity." ⁴ This unused capacity can take

²Ralph S. Alexander, James S. Cross, Ross M. Cunningham, Industrial Marketing, Richard D. Irwin, Inc. (Homewood, Illinois, 1956), p. 49.

³Ibid., p. 52.

⁴Joel Dean, Management Economics, Prentice-Hall, Inc. (Englewood Cliffs, New Jersey, 1956), p. 119.

the form of managerial or marketing abilities, idle capital, or unused physical facilities. It is quite possible that a product line can be added and handled by the present organization with little or no increased cost. It is important to determine if the product line addition will overburden the organization, or if activities and effort on present product lines will be less.

It should be determined whether product line additions are to take the place of existing lines or whether they are to complement existing lines. Is the addition necessary to fill the vacancy or opening in existing lines?

While profit is the prime reason given for considering product line additions, the profitability factor is not truly known until many other factors have been fully evaluated. Profit potential, however, will be discussed immediately following the discussion of market potential.

Market potential. -- Before making an investment in any new line of products, effort should be made to forecast the market potential of the products involved. A sales forecast is an attempt to determine the anticipated results of the planned marketing actions within the framework of a set of assumptions about competition and customer reactions. In this respect forecasting for new products is no different from forecasting for established ones. "The purpose of a sales forecast is to test the current adequacy of planned action and help to indicate the nature of

desirable changes in the plan (within the limitations imposed by the environment) that will help achieve business goals." ⁵ Proper study of the market and its trends should determine answers to the following questions:

1. Who are the customers who buy this type of product?
 - a. What are the current needs of these customers?
 - b. What are the motives and buying habits of these customers?
 - c. What influences him to buy this type of product?
 - d. How does he buy?
 - e. Where are these customers located geographically?
2. Does the product line meet the market requirements--
is it what the customer wants?
3. What is the likelihood of obsolescence--either planned
or otherwise?
4. What are the anticipated dollar sales for this line of
products versus the total industry dollar sales for the
trade area assigned:
5. Is this a product line that is known and pre-sold; or is
there likely to be abnormal cost in developing the market?

⁵ John F. Balm, Jr., "Testing for Market Reaction," Developing A Product Strategy, American Management Association, Report No. 39 (New York, 1959), p. 273.

6. Is the product line definitely needed now, or would it be beneficial to delay purchasing and introduction until a future date?

A complete market survey is not always necessary in order to forecast trends. A company that has been dealing with a certain segment of the market for a period of time should have extensive information within its own internal sales organization. "Company salesmen carry both qualitative and quantitative information in their heads, and have access to unlimited funds of marketing information if they are coordinated and guided to be both objective and selective." ⁶

Operating on the theory that good market planning and measurement begins at home, the following valuable information can usually be "derived from internal company sales records: dollar sales by product, dollar sales by geographic sales territory, dollar sales by individual customer account, dollar sales by class of industry (possibly according to SIC classification)." ⁷ By reviewing such information, actual sales trends can be determined in each of these categories and an analysis made of the areas of potential growth and decline. This analysis can then be utilized in evaluating existing or prospective product lines. In evaluating the

⁶ Albert D. Ehrenfried, "Techniques of Market Measurement," How To Plan Products That Sell, American Management Association, Report No. 13 (New York, 1958), p. 73.

⁷ Ibid., p. 73.

market potential of new product lines, consideration should be given to the fact that successful new products are the life blood of our expanding American economy. New products are vitally important to every business organization. The sales value of each existing product is ultimately limited only by the population of the country and the income of the individuals in it. "The development of profitable new products is the only means by which sales values can be continually expanded and total net profits constantly increased." ⁸

Profit potential. --Profit is the one evaluation factor which is considered not only at the beginning of any product evaluation study, but is studied thoroughly after all other factors have been evaluated. While there are many evaluation factors yet to be discussed in this study, profit will be discussed at this point because of its relationship to market potential. Certainly, profits are directly related to the size of the available market. The information gathered and utilized in forecasting is also utilized in profit planning. Profit planning can usually be projected to cover the life span of the product or the realistic visible market.

Every factor in this study is evaluated in order to determine if a product supplier offers profit opportunities. The profit opportunities

⁸H. M. Corley, "Planning for Products," How To Plan Products That Sell, American Management Association, Report No. 13 (New York, 1958), p. 7.

may not always be available immediately. "A company can justifiably carry certain unprofitable lines of business if the likelihood is great that they will soon become profitable." ⁹ In many instances experience alone makes it possible to distinguish in advance between those products and accounts that are likely to be profitable and those that will forever remain a financial burden. The latter are the products and accounts that a company should relinquish to its competitors.

A company who gains the reputation of being profit conscious will soon find itself being approached by suppliers with more profitable product programs. It is not always true, however, that a successful supplier will have the most profitable program. This is one of the principal reasons that supplier evaluation is necessary.

Quite often a wholesaler adds a supplier's products in order to balance risk and profit prospects. A company dealing in high profit, high risk products may seek to balance his product structure by adding products which are more stable, but with less profit margin.

It is wise to remember that "the adoption of a new product carries with it explicitly or tacitly the commitment to stay with the new venture

⁹ Albert D. Ehrenfried, "Techniques of Market Measurement," How To Plan Products That Sell, American Management Association, Report No. 13 (New York, 1958), p. 74.

at least until it has had a fair trial, and possibly longer." ¹⁰ Frequent changes of product lines and suppliers is costly and creates the impression of instability with the customer.

"The companies that will prosper in the years ahead will be those that know what they are looking for; that are organized to evaluate and develop profitable ideas in the most efficient way possible; that overlook no possible source in their search for the new ideas that are the raw material of any vigorous product-development program." ¹¹

Effects of product additions. --An important factor to evaluate at this point is the amount of inventory on hand of existing lines. Also, will obsolescence be created by the addition of a new line? And, what are merchandising plans to sell existing lines if they are to be replaced? Again, a word of caution concerning duplication of lines: "carrying multiple lines in competition with one another is practically the same as offering your competitor a place to do business in your own store." ¹² When stocks are duplicated, profits are reduced or lost, because you have lower turnover per line, a dual cost investment, your sales organization and purchasing personnel have a diluted product knowledge, and enthusiastic sales efforts are going to be hampered by divided brand loyalties.

¹⁰ Joel Dean, Managerial Economics, Prentice-Hall, Inc. (Englewood Cliffs, New Jersey, 1956), p. 122.

¹¹ Hamilton Herman, "Uncovering New Sources of Product Ideas," The Management Review, XLIX, No. 12 (December, 1960), 11.

¹² Albert Coumont, "Your Keys to Profitable Distribution," NEDA Journal, XVII, No. 4 (April, 1961), 11.

Factors to be Used in Evaluating Suppliers

Supplier Background and Reputation Factors

Financial strength. --The fast rate of growth of the electronics industry has created industrial giants out of many small manufacturers practically overnight. In most of these companies management has taken time to plan for the future. "That is why so many companies (and often these are small companies) have pre-empted territories of bigger businesses whose managements are too preoccupied to think about the future." ¹³ However, there are more who have failed than have achieved success. Therefore, one important consideration in evaluating a supplier should be that of financial stability. A preliminary credit check should be made of every supplier. Where weakness is detected, a complete credit and financial report should be drawn. Unless the supplier is able to fulfill his warranties, guaranties, production commitments, and to withstand possible price reductions, additional burden is likely to be transferred to the wholesaler.

Length of time in business. --The age of a company is important, particularly for suppliers in business prior to World War II since these

¹³ Ralph J. Cordiner, "Business and the Space Age," The Management Review, XLIX, No. 8 (August, 1960), 11.

suppliers have had to weather many "business storms." Comparing the size of a supplier following World War II with their present size would reveal valuable information as to growth. Further comparison should be made as to products being produced then and now. For companies in business less than five years, closer study should be given to evaluating all factors in this study. Of particular importance in performing efficiently, "a company must be soundly organized, well-managed, and adequately financed, and it must make a fair profit on its operations." ¹⁴

Stability recognized in industry. --The basic objectives of a firm, particularly when viewed along with its past accomplishments, creates a certain character, personality, or image within the industry it serves. This image is of great importance in evaluating a supplier. Some firms are characterized as being progressive, the forerunners in the industry, and the ones who are most likely to develop new products. These companies "seek and create new opportunities and assume the consequent risks attached to the innovating process. Others have a reputation for being conservative and steady and are content to make changes and adaptations only when the groundwork has been laid." ¹⁵ It is, therefore,

¹⁴ Hector Loya and Arnold Corbin, Management in Marketing, McGraw-Hill Book Co., Inc. (New York, 1961), p. 30.

¹⁵ Thomas J. McNichols, Policy Making and Executive Action, McGraw-Hill Book Co., Inc. (New York, 1959), p. 11.

important that thought be given to weighing the importance of aggressiveness and progressiveness, and of the willingness to take risks versus the conservative, cautious approach as used by many manufacturers. Proper evaluation should be given to both the product image and the marketing image, as many suppliers' approaches will differ in that product research programs may be aggressive while marketing programs are conservative. The reverse might also be true. In either case, the stability of an organization is important.

Reliability, quality, brand acceptance. -- "Differences between manufacturers' products exist in reliability levels, failure rates, and life performance." ¹⁶ Cautious distributors should seek the products of quality manufacturers across their entire line, since the failure of one product will create doubt in the customer's mind about the distributor's entire inventory. While reliability is of great importance to the industrial user, quality is recognized as being subjective in nature and a prime motivating factor for all types of consumers. Quality is a characteristic desired in all manufacturers. Generally, quality is associated with a particular brand's full line of products rather than only one product singled out of a product line. This factor takes on greater importance

¹⁶ John Hickey, "The Distributor's Role in the Standards Picture," NEDA Journal, XVIII, No. 2 (February, 1962), 28.

when the brand represents a manufacturer whose long range policy is one of growth and planned product development and innovation. The wholesale distributor will find that his association with suppliers of quality products and an accepted brand image will enhance his own reputation. Therefore, along with the evaluation of reliability and quality is the necessity of comparing the quality image of the brand or supplier with that of the distributor. Are they compatible? Does the product brand name have acceptance of such proportions that its reputation will be beneficial in gaining acceptance of the distributor's complete merchandising programs.

Executive group. --Observation and analysis of the management or executive group should be made on the basis of their abilities, judgment, imagination, aggressiveness, and direction of the company. What is their length of service, and are they known in high levels of the industry? Most important is their product and merchandising strategy! "Although strategy is usually focused on profits in the long run and is confined by economic limitations, it is also affected by the technical abilities and personal preferences of management." ¹⁷ "A well-keyed product policy also is a helpful chart of the general course which the company is to follow and thus enables research personnel as well as others to route the

¹⁷ John A. Howard, Marketing Management; Analysis and Decision, Richard D. Irwin, Inc. (Homewood, Illinois, 1957), p. 125.

organization to move in directions which key promise of profitable returns." ¹⁸ The executive group is directly responsible for continued product leadership within the industry.

Leadership. -- "Recognition of the need for product development is a response to the competitive system when it's working in high gear. Put another way, when competitors become complacent, opportunity abounds." ¹⁹ Farsighted management, even though its company's products occupy a dominant position on the market will promote new product development. "Leadership in any product line depends in a large measure upon the ability of the company's engineers to develop new product and upon the willingness of its management to take the investment risks involved." ²⁰

In addition to leadership in product development, a manufacturer must show leadership in marketing knowhow. Planned market research is equally as important as planned product research: "The key to success no longer lies in building a better mousetrap. It is necessary first to prove that it catches mice, and to determine that there are people with

¹⁸ Ralph S. Alexander, James S. Cross, Ross M. Cunningham, Industrial Marketing, Richard D. Irwin, Inc. (Homewood, Illinois, 1956), p. 61.

¹⁹ Ibid., p. 61.

²⁰ A. A. Johnson, "The Role of Engineering in Product Development," How To Plan Products That Sell, American Management Association, Report No. 13 (New York, 1958), p. 34.

mice, money, and . . . an urge to kill." ²¹ Successful product introduction and continuous high level merchandising programs are vital and necessary to sustain leadership. The creation of new markets by developing marketing ideals and plans that are efficient is indicative of leadership.

Other factors. --Only a partial list of the factors concerning the importance of supplier background and reputation have been discussed. There are numerous others which can be considered that have varying degrees of importance when evaluating. Some factors overlap or parallel those already discussed. Additional factors which can be considered are: goodwill; prestige, both locally and nationally; history; value of public relations; labor relations; and adequate facilities in terms of equipment, manpower, locations, inventories, and warehouses.

Evaluation factors concerned directly with the supplier's policies will be discussed in the following paragraphs.

Evaluating the Supplier's Policies

If the manufacturer of industrial goods is to be successful in using the distributor as a part of his marketing system, he must offer an

²¹ Myles M. Walker, "Determining What the Customer Wants for New-Product Development," How To Plan Products That Sell, American Management Association, Report No. 13 (New York, 1958), p. 71.

arrangement that is attractive to distributors in inducing them to give his product the local representation it needs to achieve adequate distribution. The manufacturer will be wise to understand the factors the industrial distributor considers when "deciding whether to handle a producer's goods and to endeavor to set up a marketing program that includes as many as possible of the features the distributor desires and as few as possible of those he resents or dislikes." ²² This phase of this study is devoted to an evaluation of supplier's policies and methods of operation.

Dependability in delivery. -- There are several factors to be considered relative to supplier dependability. The first is delivery. "Two elements in the supplier's delivery service are particularly convincing as selling appeals: speed and certainty." ²³ The supplier of such articles who has a reputation for delivering within a short period of time after he receives the order; and who can be relied upon always to make delivery when promised; and who ships merchandise of the quality agreed upon enjoys a great advantage. Such a reputation can be capitalized upon very effectively in promoting the sale of this merchandise. While fast delivery is of great importance, the ability to depend

²² Alexander, Cross, and Cunningham, Industrial Marketing, p. 191.

²³ R. S. Alexander, "Goods for the Market: Industrial Goods," Marketing By Manufacturers, edited by Charles Phillips, Richard D. Irwin, Inc. (Chicago, 1951), p. 56.

upon a supplier to complete the delivery on schedule is one of the most important of all factors to be considered when evaluating a supplier. Not to be overlooked, however, is the fact that many manufacturers maintain field warehouse inventories in various cities throughout the country. Local warehousing is an important factor when evaluating availability, capital investment, and turnover. Each is important in the profit structure.

Dependability in warranty performance. -- "A related aspect of the problem of product quality is the product guarantee. Brand acceptance and loyalty on the part of buyers in any market are based in part on the familiarity and in part on confidence." ²⁴ It is not possible for any manufacturing process to turn out only perfect products; and no inspection system can catch all sub-standard units. It is almost inevitable, therefore, that the manufacturer who guarantees his product will frequently have to make that guarantee good. Many manufacturers have created a great deal of ill will by modifying the terms of guarantees after their merchandise has been sold. The only safe approach is to consider guarantees purely from the policy point of view before any announcement is made. The warranty policy must be known in its entirety by the distributor since he becomes responsible for fulfillment of its guarantees. It is

²⁴L. C. Lockley, "Marketing Policies," Marketing By Manufacturers, edited by Charles Phillips, Richard D. Irwin, Inc. (Chicago, 1951), p. 69.

wise that a complete understanding be agreed upon with the supplier as to the methods of receiving credit or adjustment for warranty merchandise. Methods agreed upon should be simple in their mechanics. Whenever possible, additional allowances for handling and for freight should be requested in the adjustments.

Dependable servicing agencies. --Many suppliers of equipment and special electronics gear utilize authorized service agencies for the repair of their merchandise during warranty periods and/or for servicing out of warranty merchandise. These agencies should be evaluated as to their ability to repair merchandise properly and promptly. It is most important that charges for out-of-warranty repairs be reasonable; otherwise, the product image could be endangered. Courtesy extended the customer by authorized service agencies is a factor to be considered. Service agencies can prove to be an asset or liability, particularly if they operate with no control from either the supplier or the wholesaler. Their function in servicing and maintaining the product is a necessary one, however.

Ability to build special items. --Every successful electronics firm engaged in research and development is seeking to develop highly reliable, marketable devices or systems at competitive prices, and within required time schedules. Those engaged in aerospace electronics are also confronted with numerous rigid requirements for performance of fantastic

precision and extreme reliability--and everything must fit a minimum of space and weigh very little." ²⁵ These factors are usually intensified by the importance of meeting extremely tight schedules. Quite often the intelligence which must be engineered into electronic devices pushes the frontiers of technology beyond the state of the art. The availability of the proper items, or the research needed to provide them, is an absolute necessity to the successful accomplishment of many of the aforementioned factors. The manner in which the manufacturer or the supplier works with the wholesaler in taking care of the specialized requirements of the wholesaler's customers, particularly the industrial user, is important as an evaluation factor. The manufacturer's flexibility in being able to build or produce non-standard items on special request is a big advantage to the wholesaler.

Research and development. --References have already been made regarding the importance of research and development by the supplier. However, specific attention must be given to this factor when evaluating the supplier since development work is formalized through a number of programs, all aimed at more products, better products, and more profitable products. More specifically, the objectives of research and

²⁵ W. H. Clausen, "Developing Vendor Specifications," Guides To More Effective Purchasing, American Management Association, Report No. 68 (New York, 1962), p. 62.

development effort are to provide new or improve products which, because of their unique features, create a new market. "Each new product developed creates opportunities (and markets) for a development of other products, by ourselves and by others--and so the cycle continues." ²⁶

Although research and development are stressed greatly in product evaluation, caution must also be used, as many product innovations are in the too distant future to be considered as having present or potential near future value. Also many products have become obsolete, by newer innovation, even before they reach the market. "One of the dangers accompanying any new development is the tendency to become so intrigued by novelty that reality is overlooked. Space-age developments certainly captivate the imagination." ²⁷

Extent of product line coverage. --The promotional advantages of a full line are great. "The tactical advantage of a full line of sizes, grades, and supplementary products in getting good dealers and in merchandising high margin specialties make this kind of interrelation of

²⁶ A. A. Johnson, How To Plan Products That Sell, American Management Association, Report No. 68 (New York, 1962), p. 35.

²⁷ Phillip Marvin, "Business and the Space Age," The Management Review, XLIX, No. 8 (August, 1960), 16.

demand a commonly used basis for product line policy." ²⁸ The advantages of a supplier having a full line of related products is important, especially if the reputation of that supplier carries customer acceptance across the entire line. Lines of this type are usually primary lines, and are used by the wholesaler as a basis for formulating over-all marketing plans. Secondary lines are usually short lines used to complement weaknesses sometimes found in the primary line. Duplication of primary lines is very costly, although it is sometimes possible that a full line supplier will allow purchases of only parts of his line. This is generally found where a line lacks proper distribution, or has such an excessive amount of distribution that its value is of little importance to any wholesaler. The extent of a supplier's product line coverage is definitely an important factor in supplier evaluation.

Product Line Features

The product line features, benefits, and selling points should be evaluated for their importance. A comparison should be made with the benefits offered by existing lines. A further comparison should be made with competition. Important differences should be noted. Are there important features that can be demonstrated or dramatized? Are there

²⁸ Joel Dean, Managerial Economics, Prentice-Hall, Inc. (Englewood Cliffs, New Jersey, 1956), p. 129.

exclusive features not found in other lines? Are there particular specifications which have been approved by the military or government agencies? Each of these factors is important in evaluating. An additional check should be made as to whether parts of the product line are written into present and future specifications of industrial users. This is one area of supplier evaluation where a gain results whether supplier changes are made or not, for product knowledge (including knowledge of competition) is a must for the marketing-oriented firm. "The most consistently profitable sales are those built upon a knowledge of the product, its functions, and the service it performs for the customer." ²⁹

Pricing Policies

Standardized prices. -- There are numerous factors to be considered when evaluating a supplier's pricing policies. The first factor to consider is: are cost and resale prices in any way standardized in the industry? In many American industries a considerable degree of price coordination among competitors takes place in the complete absence of collusion. Price changes arising out of cost valuations or changes in demand usually take place through price leadership. One company often becomes the accepted leader, and no one changes prices until the leader changes, then

²⁹ Dan F. Kagan, "Are We Asking for a Belly-Ache?", NEDA Journal, XVII, No. 2 (February, 1961), 12.

all follow. "In essential conditions leadership is that the leader be able to lead upward price changes, since any company of significant size can usually force an industry-wide price cut."³⁰ Where prices are standardized, discounts are usually known and are generally adequate.

Price cutting. --Investigation should be made as to the amount of price cutting that is taking place on particular types of products. Unless reasonable profit margins can be maintained little consideration should be given to adding it to your product line. It must be noted, however, that many suppliers do attempt to "police" their distributors in order to maintain reasonable profit levels on their product lines.

Quantity discounts. --Many suppliers will offer additional discounts on the purchase of sizeable quantities of merchandise. In many cases this discount applies to orders for delivery at one time such as carload allowances; while, in other instances, discounts or rebates are given on monthly or annual purchases. The latter of the two types is sometimes called "loyalty discounts" since it is an attempt to channel as much business as possible through one supplier.³¹

³⁰ John A. Howard, Marketing Management; Analysis and Decision, Richard D. Irwin, Inc. (Homewood, Illinois, 1957), p. 50.

³¹ Claude Walters, The information regarding quantity discounts, industrial discounts, and other specialty pricing information was obtained from Claude Walters, Manager of Adleta Electronics Co., an electronics parts wholesaler in Dallas, Texas.

Industrial discount. --Suppliers of industrial electronic products usually price their merchandise in such a manner that permits the distributor to sell to industrial users and original equipment manufacturers (O.E.M.). Usually the distributor can secure small order business only from this type of customer. Some suppliers offer a special "industrial jobber" or "super-jobber" franchise which enables the wholesaler to sell larger quantities to industrial users. In some cases it permits the wholesaler to sell to other wholesalers or jobbers on a sub-jobbing basis. In each of these instances profit margins are generally low and highly competitive. There are a few super-jobber franchises that rebate the distributor a small percentage on all sales made by the supplier to other wholesalers within the trade area assigned by the supplier. Other names used in franchising are "master," "major," "general line," and "warehouse." From this, it can be seen pricing policies and types of franchises are numerous; it is therefore of great importance to remember these factors when evaluating suppliers.

Trade discounts. --Many suppliers used what they may call "trade discounts." Usually, these are small or minimum discounts allowed because of the wholesaler being established in business. Quite often suppliers will allow discounts of this type even though the wholesaler may not stock the supplier's merchandise. Oftentimes, it is better to take the minimum discount rather than maintain an inventory investment.

Terms of sale. --Cash discounts and terms of sale are additional factors to evaluate. Many suppliers vary their cash discount, some being lower than others. Special consideration should be given to seeking special terms of sale in the form of: deferred billings; length of regular credit extended; split payments; and long term financing. Special cash discounts and/or deferred payments should be secured on seasonal merchandise.

Price protection. --It is most important that the supplier offer some form of price protection guarantee. "On a declining market the guarantee may be given that prices will not be reduced for a definite period or that, if prices are changed the buyer will be protected by giving them the benefit of the reduced prices through a refund of the difference in price on items in stock." ³² Where a refund is to be given, the guarantee should be as definite as possible. Many suppliers have some type of price protection plan. This guarantee should be in writing. Where inventory requirements are unusually large, full price protection should be requested.

Many electronics suppliers offer a thirty day advance notice on price increases. This information is useful not only for placing orders for the appreciation gain, but can be utilized in sales promotion. It is

³²H. W. Huegy, "Price Changes and Special Pricing Problems," Marketing By Manufacturers, edited by Charles Phillips, Richard D. Irwin, Inc. (Chicago, 1951), p. 501.

very beneficial in being able to print new price lists and advise all interested employees and customers without unnecessary rush.

Other pricing factors. --Other factors which affect pricing and must be evaluated are the supplier's policies regarding: minimum orders, minimum billings or shipments, special packaging, prepaid freight, rush shipments requiring special handling or transportation, and availability of local warehousing.³³

"While price is a potent matter in influencing patronage in the use of industrial goods, it is usually not the factor of primary importance. The wise industrial buyer is likely to rank it in third place after quality and service among buying motives."³⁴ Service includes such matters as speed and certainty of delivery, assurance of uniformity of quality, efforts out of the ordinary on the part of the supplier to help the buyer handle emergency requirements and unusual matters, and the extent to which the supplier is willing and able to aid the buyer with information regarding the market and the probabilities and uses of the product he has for sale.

³³ Alpha Wire Corporation; Policy For Distributors, New York. Other policy factors were taken from the Alpha Wire Corporation's policy directory.

³⁴ Alexander, Cross, and Cunningham, Industrial Marketing, p. 40.

Nevertheless, the numerous factors related to price assume great importance as evaluation factors since they are so closely associated with profit potential. Once the complete pricing policy and structure is known, comparisons should be made with similar competitive products and suppliers. Evaluate, not only cost and resale prices, but also the profit margins maintained across the line. Special rebates and allowances should be noted, especially if they can be retained as profit; or if they exist as a definite competitive price advantage.

Competition

"Competition is the degree of rivalry among companies in terms of the number and size of the companies in the industry and other marketing characteristics that limit a marketing executive's freedom to maneuver." ³⁵

"The competitive behavior found in an industry does not spring so much from the personalities of the executives in that industry as from the structure of competition within which the company operates." ³⁶ Proper evaluation of the makeup of this competitive structure would include the following factors not previously discussed: distribution policies, advertising and promotional policies, sales training and assistance.

³⁵ John A. Howard, Marketing Management; Analysis and Decision, Richard D. Irwin, Inc. (Homewood, Illinois, 1957), p. 5.

³⁶ Ibid., p. 54.

Competitive distribution policy. --Suppliers of electronic parts have historically used multiple distribution at the wholesale level. Only in recent years have a few suppliers begun to offer exclusive franchises; this trend is noticeable, however, in industrial goods. Certainly, the number of distributors representing a supplier in one trade area should be evaluated. The aggressive distributor will seek exclusive distribution whenever possible; although in many instances he is willing to accept a supplier's line on the basis of the supplier's limiting his distribution outlets. This is called "selective distribution."³⁷ An interesting evolution is slowly taking place in the components business where both suppliers and wholesalers are becoming more and more selective. It is believed that selectivity is more efficient for both. At the same time, merely because a wholesaler becomes selective and drops a number of product lines does not mean that those product lines are going to disappear from his market. "He must be prepared to pay the cost of his selectivity by competing with the same lines in the same market but sold by somebody else, perhaps even by different methods."³⁸

³⁷ Hector Loya and Arnold Corbin, Management In Marketing, McGraw-Hill Book Co., Inc. (New York, 1961), p. 361.

³⁸ Fred H. O'Kelley, "The Economics of Electronics Parts Wholesaling," NEDA Journal, XVIII, No. 5 (May, 1962), 133.

Direct sales competition. -- "The manufacturer of industrial goods who sells through distributors often couples his use of this outlet with the practice of selling direct to customers or groups of customers, often known as house accounts." ³⁹ When carried to the extreme this sometimes involves the practice of selling direct to all worthwhile customers and leaving only the cats and dogs to be served by the distributor. Needless to say, such an arrangement is not likely to be viewed with any great amount of enthusiasm by the distributor. This form of distributor-supplier competition is generally practiced throughout the electronics industry. Product suppliers must recognize that "you can eliminate a wholesaler from your distribution pattern but you cannot eliminate his function. Someone has to perform it, either you, or your customer, whoever he may be." ⁴⁰ The amount of protection offered by the supplier is to be considered when evaluating the supplier as a competitor.

Private brand competition. -- Competition from private label or private brand merchandise must be considered from several aspects.

³⁹ Ralph S. Alexander, James S. Cross, Ross M. Cunningham, Industrial Marketing, Richard D. Irwin, Inc., (Homewood, Illinois, 1956), p. 191.

⁴⁰ Paul J. Courtney, Excerpts taken from a speech presented at the EP and EM Seminar. Mr. Courtney is Executive Vice-President of the National Association of Wholesalers, NEDA Journal, XVII, No. 4 (April, 1961), 56.

First, does the supplier (whom you are evaluating) build private brands and merchandise them in direct competition to his standard brand?

Second, are private brands an important factor in your trade area?

Third, should you give consideration to a private brand of your own?

"One successful means of meeting competition has been the use of private labels . . . Because private-brand items are purchased directly from the manufacturer, and because many of the expenses of advertising and selling them are lower, more distributors than ever have found that they can sell private-label items below the price of nationally advertised brands, and still make a healthy profit." ⁴¹

Where a supplier is building a private brand, it should be determined if it is of the same quality and nature of the standard brand. Investigation should be made as to price differences and if it is available to regular line distributors.

Imported merchandise closely follows the pattern of private-label merchandise.

Caution must be observed when evaluating private brand and import brand competition. It is wise to rely on market research to keep abreast of the acceptance of this type of merchandise. In some trade areas their sales have "mushroomed," whereas, in other areas they have "flopped."

Advertising and Sales Promotion Policies

"Sales potential represents the possible purchases of industrial buyers who have a use for the product and might purchase if it were

⁴¹

George Christopoulos, "Retailing's Wide, Wide World," The Management Review, XLIX, No. 12 (December, 1960), 4.

brought to their attention effectively." ⁴² The means by which a product can be brought to the attention of a potential purchaser are by use of advertising, publicity, and/or personal contact. Once his attention is captured, means must be utilized to hold this attention in order to create desire. Desire must be converted into action which results in sales. This is sales promotion. Many factors can be evaluated when considering a manufacturer's advertising and sales promotion programs. A few will be discussed.

Trade and national advertising. --A supplier's trade and national advertising program is important in that it presells the market by making the product and brand name known. This preselling makes the sales job much easier for the distributor.

Publicity. --Aggressive suppliers utilize good publicity at every opportunity. "The principle behind good publicity is sound: the opinion of a disinterested and objective third party about the company carries more weight and is considered more authoritative than the company's opinion about itself." ⁴³ The aggressive wholesaler will likewise attempt to secure good publicity in his community.

⁴² Alexander, Cross, and Cunningham, Industrial Marketing, p. 95.

⁴³ Dave Finn, "Avoiding Waste Motion in Corporate Publicity," The Management Review, XLIX, No. 8 (August, 1960), 22.

Co-operative advertising. --A supplier's policy of co-operative advertising must be weighed carefully. Several questions should always be answered. Is there a co-operative policy? If so, how is it created and for how much? Does the distributor participate in its cost? Are there restrictions as to how the co-operative fund is to be used?

Special advertising. --Quite often a supplier will offer special advertising to be used in key markets. Sometimes, special advertising funds are created for the introduction of a new product line; other times, a supplier may offer additional funds for use in the promotion of specific products. The supplier sometimes requests that the wholesaler participate in the cost of special advertising, although, oftentimes, the expenditures are entirely that of the supplier.⁴⁴

Special promotion. --The supplier who is aggressively promoting his products will generally offer special promotions. These promotions are planned to create sales or emphasis on selling. Often, special incentives, premiums, and give-aways are utilized. Caution is the rule when promotions appear to be "loading programs" which do not attempt to move merchandise through the marketing channels to the consumer or user.

⁴⁴George E. Stone, Jr.; Many evaluation factors and comments regarding advertising and sales promotion are credited to Mr. Stone, Advertising Manager for the Adleta Company and Adleta Electronics Co., Dallas, Texas.

The promotion minded supplier should receive a plus when evaluated--the same as the profit oriented supplier.

Catalogues, literature, and price list. --While catalogues, technical data, literature, cross-reference charts, mailing pieces, and price list may at first seem insignificant, their value is of great importance. The first consideration is their continuous availability. This type of informative literature is utilized in creating an interest in the product, closing the sales, and in completing details of the transaction. Lack of information has a definite effect on sales and turnover. Because of the quantities of this type of information which is used, a second consideration must be given to cost. Is there a charge? If so, how much?

Trade shows. --The aggressive supplier is usually represented at most major trade shows and exhibitions. It should be determined if the distributor is permitted to work in the supplier's exhibit. It should also be determined if the supplier displays in local shows. If not, does he participate in the cost incurred for the distributor exhibiting in these shows?

Sampling. --Industrial goods are frequently purchased on the basis of how well the product performs. While the performance in most instances has been checked out physically and/or chemically and has been graded, the user sometimes wishes to check the part or component

in its actual end use. Often, samples will be requested of the supplier. Also, when introducing a new or unknown product, it is sometimes wise for the wholesaler to provide samples to the prospective users in order to encourage future purchases. In these instances, the supplier should be called on to furnish samples at little or no cost.

Other sales promotion aids. -- There are numerous other sales promotion aids such as window displays, signs, decals, point of sale materials and demonstration devices which are important in the promotion of sales.

Sales promotion and advertising must be evaluated along with the entire merchandising program. Each individual factor must be studied, and the marketing program evaluated as a whole.

Special Assistance Policies

Training programs. -- It is generally considered a responsibility of the supplier to properly train a wholesaler's selling organization. To a great extent it is also his responsibility to participate in technical, specialized, and service training programs for the wholesaler's customers. The degree to which a supplier provides this type of assistance is important.

Supplier sales representatives. -- The first factor in evaluating a supplier's sales agent or representative is his position and stature in

the market. What type of an image has he created: personally; for his company; and for his product? Sales representatives should be graded on their product knowledge and the amount of assistance they provide the distributor. Another important factor is whether the representative maintains a local inventory; this has advantages and disadvantages, thus, it is wise to determine if the representative is possibly in direct competition to the wholesaler.

Missionary salesmen. --A missionary salesman is a salesman who is employed by the manufacturer to call on customers of his distributors. Usually his plan is to "develop good will and stimulate demand, to help or induce them to promote the sales of his employer's goods, to help them train their salesmen to do so, and, often, to take orders for delivery by such distributors." ⁴⁵ This type of assistance is one of the most beneficial that can be provided by any supplier.

Field engineers. --The function of the field engineer is similar to that as provided by the missionary salesman. He works closely with industrial customers in an attempt to get his company's product written into specifications at the earliest stage of planning. "If he waits until a customer has completed plans and specifications for the finished product,

⁴⁵ "I Wonder What He Meant By That," Electronic Distributing, XXXIII, No. 5 (May, 1962), 114.

he may find that there is no place in it for the material or part; whereas, if he had participated in the early stages of planning work, he might have forestalled this misfortune." ⁴⁶

Emergency assistance. -- In every business there seems to exist from time to time a need for special or emergency assistance. The manner in which these special needs of the distributor are handled by the supplier is worthy of consideration.

General assistance. -- The methods in which a supplier assists in expediting orders, shipments, credits, and special quotations are all important in an evaluation. The people who are responsible for the performance of these responsibilities are the test of an efficient organization.

The special assistance factors mentioned in the foregoing are generally weaknesses of most suppliers rather than strengths. Where strength is noticed, it is usually individual rather than general throughout the organization.

Inventory Considerations

Inventory is much like pricing in that there are numerous factors which are to be considered in the supplier evaluation which could be related to several areas of the study.

⁴⁶H. S. Alexander, "Goods for the Market: Industrial Goods," Marketing by Manufacturers, edited by Charles F. Phillips, Richard D. Irwin, Inc. (Chicago, Illinois, 1951), p. 54.

Inventory requirements. -- Most manufacturers of industrial products who market through distributors include in their franchise agreement some sort of requirement designed to assure that "a distributor will carry a stock of the manufacturer's products which will be sufficiently representative of his line and adequate in size to enable the distributor to fill all orders, except the very largest, without delays." ⁴⁷

"If the manufacturer seeks to establish and enforce an inventory requirement that is too heavy, he is liable to lose the cooperation of his distributor." ⁴⁸ Therefore, inventory requirements are usually negotiated.

Inventory turnover. -- "Most electronic distributors recognize that successful business operations depend upon a satisfactory rate of stock turnover." ⁴⁹ Increased turnover releases capital, cuts cost, and improves profits. Inventory turnover can be determined from past experience and sales for existing lines. The market potential of a new product line as previously discussed allows for forecasting possible rate of turn based on the initial inventory requirements as negotiated.

⁴⁷ Ralph S. Alexander, James S. Cross, and Ross M. Cunningham, Industrial Marketing, Richard D. Irwin, Inc. (Homewood, Illinois, 1956), p. 193.

⁴⁸ Ibid., p. 194.

⁴⁹ Joseph Powers, "How Turnover Affects Your Bank Account," reprint of NEDA Journal (May, 1960 issue).

Return goods policies. --"A distributor is likely to be much attracted by the policy of the manufacturer who allows returns of slow moving items and obsolete merchandise." ⁵⁰ The practice of such a policy does a great deal toward enlisting the cooperation of the distributor and any inventory program the industrial marketer can set up. Many distributors highly favor the practice of reviewing their stocks once each year in cooperation with the manufacturer, who at that time takes back any obsolete or slow moving items and recommends new ones. Return policies for obsolescence type merchandise should be in writing. Generally, full return privileges are limited to unsold merchandise from the initial order after a specific period of time, usually six months or one year. Other return policies provide for returns of from 5- to 10 per cent of annual purchases. Still others offer stock adjustments when one to two times the value of returned merchandise is purchased. Practically all inventory adjustment programs provide for a penalty of from 5- to 20 per cent discount on all returned goods not accompanied by an offsetting order. It can be seen from this that return goods policies are one of the more important factors in any supplier evaluation study.

Consignment programs. --Consignment inventories are sometimes possible. It is not often, however, that a supplier with high acceptance

⁵⁰Ralph S. Alexander, James S. Cross, and Ross M. Cunningham, Industrial Marketing, Richard D. Irwin, Inc. (Homewood, Illinois, 1956), p. 194.

will offer programs of this type. There is a trend to be observed whereby some suppliers are setting up "warehouse distributors." Merchandise is placed in the distributor's warehouse on "field" or "bonded" warehouse type arrangement.

Non-stocking buying privileges. --There are some suppliers who allow a distributor to make purchases even though no inventory is carried. As previously mentioned, the profit margin on such purchases is less.

Partial stocks. --There are many suppliers who allow a distributor to stock only desirable parts of a product line, and yet be allowed to make purchases of all of the parts as needed. Usually a distributor will purchase an entire product line, and as slow moving items are sold, he does not replace them. ⁵¹

Storage, warehousing, packaging. --Storage, warehousing, and packaging are considered as inventory evaluation factors primarily because of their nature and cost effects. The addition of any new product line must take into consideration the added space necessary for storage. Consideration must be given as to whether existing facilities are adequate, or will capital improvements, or commercial warehousing be necessary.

⁵¹ Ray Miller, Manager, Scooter's Radio Supply Co., Fort Worth, Texas. Many evaluation factors and comments regarding supplier inventory policies are credited to Mr. Miller.

The type of packaging is important in many respects. First, does it protect the product? Excessive damage means added cost. Second, can it be stored easily? Third, is the product easily identified? An easily identified product package can be checked in quickly, and have orders pulled with ease. Fourth, is the product packaged in economical units to the package? Fifth, a sales rather than inventory factor, does the package have sales appeal?

Supplier Evaluation Worksheet

To summarize the numerous and diverse factors, and to rearrange them in usable form a three-page supplier evaluation worksheet has been prepared and is shown in Figures 1, 2, and 3. The first two pages are designed in such a manner that they may be forwarded to the supplier for completion and return. This would be time-saving and beneficial when an initial evaluation is being made of all suppliers. The third page is retained and completed in privacy, since some of the evaluation factors are of a confidential nature.

Figure 1

SUPPLIER EVALUATION WORKSHEET--Page 1

Mfg. Name _____ Street Address _____

City _____ State _____ Telephone _____

Name of Local Rep _____ Street Address _____

Town _____ State _____ Telephone _____

Area Engineers _____ Street Address _____

Town _____ State _____ Telephone _____

Person to contact at factory regarding:

1. Shipping delivery _____
2. Billing and Credits _____
3. Special quotes _____

Products available in line: _____

Other distributors in area: _____

Does manufacturer sell direct? _____ To Whom? _____

Under what circumstances? _____

If so, is there a rebate to Distributor? _____ How Much? _____

Minimum billing charges _____

Minimum shipments _____

Is Freight Prepaid? _____

Class of Distributor:

Master _____ Major _____ General Line _____

Our Buying Price, or Discount _____

Cash Discount _____ Terms of Sale _____

Figure 2

SUPPLIER EVALUATION WORKSHEET--Page 2

Volume rebate plan? _____

Annual rebate plan? _____

What is return policy? _____

Are there penalties on returns? _____

Defective merchandise policy? _____

Do you have a co-op advertising policy? _____ How is it created, and for how much? _____

Does distributor participate? _____ How much? _____

Can co-op be used on following:

- | | |
|----------------------|---------------------------------------|
| 1. Newspaper _____ | 6. Trade shows and exhibition _____ |
| 2. Radio _____ | 7. Wholesale or retail "spiffs" _____ |
| 3. Television _____ | 8. Price reduction _____ |
| 4. Direct mail _____ | 9. Other _____ |
| 5. Catalogues _____ | |

Type of catalogues available _____ Any charges? _____

Type of literature available _____ Any charges? _____

Type of mailing pieces available _____ Any charges? _____

Are cross reference charts available for (a) competitive parts numbers
_____ (b) military specifications _____ (c) other _____

Price sheets available? Cost? _____ Resale _____ OEM _____ List _____

NOTE:

Special merchandising programs: _____

Manufacturer product and training programs: _____

Three most important features of line: _____

Any exclusive products in line: _____

Figure 3

SUPPLIER EVALUATION WORKSHEET--Page 3

Required inventory to be carried _____

Price Protection Policy _____

Annual dollar potential _____

Actual dollar sales _____

Purchases last year _____

Inventory turn _____

Territory or trade area assigned _____

Why do we buy this line? _____

Is it a profitable line? _____

Do we have to buy all of line to get just a small part we need? _____

If so, is this economically profitable? _____

What parts of line are slow moving--or not needed? _____

D & B Rating _____ Financial status _____

Brief history of company _____

Product reliability and acceptance _____

Efficiency in Speed and Delivery _____

Research status _____

Special assistance _____

Remarks _____

CHAPTER IV

THE PROFIT SQUEEZE

"It has become apparent to all in the industry that distributors must recognize the importance of making a fair profit if they are to survive."¹ The profit squeeze, a problem of increasing operating costs combined with diminishing profit margins, is seriously affecting the future of the electronic parts distributor. It is impossible for distributors to continue to sit idle when faced with a problem so potentially great that it endangers their future existence. Distributors today must analyze all phases of their business to determine what factors are placing them in the profit squeeze. This study concerns itself with an analysis of three potential problems generally related to the profit squeeze. The first to be presented concerns itself with methods of analyzing profit margins. The second study is a presentation of the small order problem. And the third is a discussion of the delivery problem.

¹Henry P. Schott, "Profit Need Dictates Efficiency," Electronic Distributing Including Jobber News, XXXV, No. 1 (January, 1963), 26.

Profit Margins

It has been shown in the preceding chapter that supplier evaluation requires an individual analysis of each vendor. For the going concern it becomes necessary at times to analyze complete product groups of merchandise in order to obtain a true perspective into what is taking place profit-wise.

Management today is attempting to keep a sharp eye on profits. They are interested in knowing what profits are, where they come from, and how they can be retained. As a result of such things as product emphasis, specialization, and product line duplication, a most vital factor to be determined in this part of the study is where and how much profit is being made on each product group of merchandise. Efforts have been made to collect the necessary data for analyzing the cost and resale prices and the resulting average percentage of profit maintained on twenty-five different types of electronic parts sold at the wholesale level by the Adleta Company. Any variation in the percentage of profit maintained on sales to industrial and commercial users of electronic parts versus sales to service dealer types of accounts is included in the analysis.

Collection of Data

Invoices of current sales of the Adleta Company were used in securing data. From approximately 1100 electronic parts invoices billed between January 20, 1962 and January 30, 1962, a total of 224

invoices were selected at random. No attempt was made to be selective other than to make certain each sales territory was represented, including house sales by the department manager. It was believed that a sample of this size would represent each product type. Each item or part number was cost priced by using the manufacturer's printed price lists. No consideration was made for manufacturer's cash discounts, volume rebates, or special types of discounts other than the quantity price groupings as would apply to the quantity shown as being shipped on the invoice. Percentages of profit were calculated manually by using a wheel type percentage calculator for each unit of each invoice after invoices were sorted by sales territory.

Use of a billing machine was made in tabulating and recording the number of units on each invoice line plus the extension of units times selling price less the percent of discount on selling price. Each invoice line was grouped according to its merchandise type code during this procedure. At the end of each code group it was necessary to manually total the units column and to count the number of lines. This provides information on the activity of each product type. It was also necessary to manually total the extended resale prices. With dollar totals on both cost and resale, an average percentage margin of profit could be calculated for the entire group.

At this point in the collection of data, it was possible to check the percent of profit on each individual line item as coded in groups; and to

TABLE I

AN ANALYSIS BY PRODUCT GROUP OF 224 INVOICES
 SHOWING ACTIVITY IN LINES BILLED, UNITS
 SHIPPED, DOLLAR COST AND BILLING
 PRICES AND PERCENTAGE
 OF PROFIT

Product* Code Number	Number Lines Billed	Quantity Units Shipped	Total Dollar Billing	Total Dollar Cost	Average Per Cent Margin of Profit
81000	126	484	\$ 1077.16	\$ 765.53	28.6
82100	19	91	1393.30	1608.00	19.4
82200	8	9	442.00	319.41	27.7
82300	.....	.....	.....	.....	.....
82400	33	1062	892.39	642.46	28.0
82500	.....	.....	.....	.....	.....
83300	24	1010	800.61	561.64	30.0
83400	31	658	475.59	320.62	32.6
83500	5	234	70.58	60.78	13.9
83600	.....	.....	.....	.....	.....
83700	.....	.....	.....	.....	.....
84200	4	4	13.80	10.36	25.0
84300	.....	.....	.....	.....	.....
84400	5	5	67.91	41.67	38.6
84500	3	4	3.42	2.27	33.6
84600	20	757	1732.03	1267.46	26.7
85100	5	13	1943.07	1374.33	29.2
85200	1	3	23.85	16.46	31.0
85300	2	8	3.92	2.34	40.3
85400	6	45	15.55	12.28	21.1
85500	3	203	45.95	41.65	9.4
86100	2	4	.86	.68	21.0
86200	1	1	2.25	1.78	21.0
86300	3	9	9.76	7.51	23.1
87000	147	218	474.07	325.90	31.4
Total	448	4822	\$10089.07	\$7383.13	26.7

*See Table II for the Electronic Parts Product Type as assigned to each product code number.

make a comparison of the group average. Any line items showing to be considerably higher or lower could be analyzed for accuracy, or unusual circumstances creating the difference.

The aforementioned procedures were repeated until all code groups were completed. Data were accumulated and totaled for all groups as well as being separated into individual sales territories for complete analysis. Table I records all data and provides a total for the company by product code of the number of lines invoiced, quantity of units, total dollar billing at resale prices, total dollar cost, and average percent margin of profit.

For ease of comparison the product codes have been labeled and are shown in Table II. This table indicates the average margin of profit by sales territory and company total.

Analyzing the Data

Other wholesale distributors could derive the greatest amount of benefits from this study by making an identical study of their own business, and then compare the results of the two studies.

In analyzing Table I it is possible to not only determine the maintained profit margin for each group of products, but it is also possible to accurately determine the amount of activity that takes place. Activity is indicated by the number of line items billed, the quantity of units shipped, and by the amount of dollar billing. It should be noted that five product groups did not have any activity in the sample selected. Reasons

TABLE II --Continued

A COMPARATIVE ANALYSIS OF MARGINS OF PROFIT RELATED IN PERCENTAGES, AND SHOWN BY PRODUCT TYPE BY SALES TERRITORY AND COMPANY AVERAGE

Product Code Number	Product Type	Margin of Profit in Percent Sales Territories*					Average % of Profit for Company
		#25	#35	#20	#30	#99	
85500	Tools	.. .	.. .	.. .	9.4	.. .	9.4
86100	Wire & Cable	21.0	.. .	.. .	.. .	.. .	21.0
86200	Solenoids, Switches	.. .	.. .	.. .	21.0	.. .	21.0
86300	Signal Indicators	.. .	.. .	23.1	.. .	.. .	23.1
87000	RCA Components	30.2	32.8	.. .	33.0	26.7	31.4
Total		27.3	29.2	26.7	29.9	16.5	26.7

*Sales Territories:

- #25 - Sales to Service Type Accounts
- #35 - Sales to Service Type Accounts
- #20 - Sales to Industrial and Commercial Accounts
- #30 - Sales to Industrial and Commercial Accounts
- #99 - Sales to House Accounts

for this lack of activity should be determined. It is possible that these groups should be discontinued, or that special promotional efforts should be placed on them in order to increase sales.

By separating the information contained in Table I into individual sales territories which composed the total, it would be possible to determine the efforts being placed by individual salesmen on each type of product. This type of information is valuable, particularly for sales training purposes.

Table I should be studied from the standpoint of determining which product groups produce a margin of profit below the average of 26.7 per cent as shown maintained by all products. Effort should be placed on improving the profit margin of these products, or consideration given to discontinuing the product group. A separate study should be made of the products producing an above average margin and increased selling efforts placed on these product groups. A helpful method of determining solutions to this problem would be to determine the actual gross profit in dollars for each product group, and then determine what percent of the total profit each group represents. This figure, when related to the average percent margin of profit provides a more accurate measurement of where efforts should be placed. For example, in Table I, it can be determined that far greater profits can be derived by promoting code group 81000 at a gross profit of 28.6 per cent than could be derived from code group 85300, even though group 85300 has a much higher profit

margin of 40.3 per cent. Code group 81000 produced \$311.63, whereas group 81000 produced only \$1.58. Consideration should be given to the amount of actual or potential dollar profit available for each product group.

In analyzing Table II it is possible to compare the percentage margin of profit of each individual sales territory by product with the average maintained margin of profit of the company. It can be seen that industrial sales territory number twenty produced less profit than industrial territory number thirty. By determining individual product groups which are above average and below average for each sales territory, it is possible to determine why these differences in profit exist between sales territories. Additional information could be obtained from a study of individual accounts assigned to each sales territory. It is possible that territory number twenty has more accounts assigned to it which operate on a competitive bid system, thus commanding lower prices. Or it is also a possibility that salesman number twenty could be bidding lower prices than is necessary to secure the business. Numerous possibilities exist which requires study of individual accounts in order to determine the profitability of such accounts. This is amplified to an even greater extent in the following study dealing with the small order problem.

The Small Size Order Problem

"Distributors are in business to make profits for themselves, their customers, and their suppliers."² As the electronic parts business increases, customer demands for additional service increases proportionally. Unless methods are discovered for controlling these increasing costs, profits will continue to decline. It is imperative that the distributor begin to analyze his business in an attempt to discover these factors which are causing costs to increase. Orders of small size and the increasing number of deliveries each day have been determined to be factors which are increasing costs. In order to provide a basis for an analysis and comparison of orders placed by customers an attempt will be made to point out by case analysis the high percentage of low dollar value orders being placed by customers. The findings should point out the importance to all distributors of making similar comparative studies of their own individual businesses.

Case Study and Analysis

The increasing costs of handling small orders has been discussed as an industry problem for quite some time. While the Adleta Electronics Company has known that its costs were increasing, it has not been able

²"Profit Primer," Electronic Distributing Including Jobber News, XXXV, No. 2 (February, 1963), 43.

to determine the exact causes of these increases. Until this study was prepared, it was not known whether the handling of small orders was a problem or not. In a survey conducted by the American Institute of Supply Associations, Inc., it was determined that in many instances costs for handling small orders exceeded the gross profit produced by these orders.³ This study revealed the average sale per invoice by members of the association to be \$57.88. The average expense for handling each invoice was \$13.90. More significant perhaps was the fact that 57.7% of all invoices were for less than \$25.00 and produced only 8.3% of the sales dollar. Invoices accounting for 22.6% of the total invoices were for \$5.00 or less and produced only .9% of the total dollar volume. While the results of the survey pertain to a different industry, the pertinent facts brought to light are the basis for being alerted to this problem.

In order to determine the existence of a problem all invoices of the Adleta Electronics Company for a complete billing cycle were grouped into categories representing the dollar values of each invoice. The number of invoices in each group were totaled by the quantity represented and the percent of the total represented by each group. The number of items on each invoice group and the dollar amount on each invoice group were totaled, and percentages of the total calculated for each group. Average

³"Sales Analysis Survey - The Small Order Problem," NEDA Journal, XVIII, No. 5 (May, 1962), 20-22.

AN ANALYSIS OF ALL INVOICES GROUPED BY DOLLAR VALUE TO INDICATE ACTIVITY IN THE NUMBER OF INVOICES, LINE ITEMS, AND TO SHOW DOLLAR AVERAGES

Invoice Amount Group	Number Invoices	Invoice % of Total	Number Line Items on Invoices	Line Item % of Total	Dollar Amount	Dollar % of Total	Average \$ Per Line Item	Average \$ Per Invoice
\$ 0 to 2.50	397	25.35	651	12.96	514.46	1.21	.79	1.29
2.51 to 5.00	249	15.90	432	8.60	948.44	2.24	2.19	3.80
5.01 to 10.00	245	15.65	665	13.24	1,783.07	4.20	2.68	7.27
10.01 to 25.00	332	21.20	1,466	29.19	5,490.90	12.94	3.74	16.53
25.01 to 50.00	197	12.58	1,078	21.47	6,939.16	16.36	6.43	35.22
50.01 to 100.00	78	4.98	518	10.32	5,083.22	11.98	9.81	65.17
100.01 to 500.00	58	3.70	192	3.82	11,275.01	26.58	58.72	194.39
All over 500.00	10	.64	20	.40	10,389.44	24.49	519.47	1,038.94
Totals	1,566	100.0	5,022	100.0	42,423.80	100.0	8.44	27.09

dollars per line and per invoice were also calculated for each group. The results of this study are shown in Table III. From Table III it can be seen that there were 1566 invoices used in this study; they represented a total dollar billing of \$42,423.80, and an average dollar billing per invoice of \$27.09. The number of line items was totaled in order to determine how many items were being billed on each invoice. It can be seen that the 1566 invoices represented 5022 line items, or an average of 3.2 line items per invoice and \$8.44 average per line item.

The exact processing cost of writing, billing, posting and collecting an invoice by the Adleta Company is not known, although it has been estimated at approximately \$3.25.⁴ Using certain assumptions, however, the total cost of handling an order can be determined. Assuming that the company is now breaking even, neither making a profit nor sustaining a loss, and that the cost of goods sold is currently 69.6%, then the gross operating profit and cost of doing business (including all sales and operating expenses) would be equal, or 30.4%. This would also mean that the present average dollar billing per invoice of \$27.09 would be the break even point of billing per invoice and that 30.4% of this amount or \$8.24 would be the average total cost for handling invoices. Therefore, all invoices showing less than \$8.24 profit would be unprofitable to handle.

⁴ E. H. Miller, Jr., Office Manager, Adleta Company, Dallas, Texas. Cost estimate given in interview of January 16, 1962.

TABLE IV

AN ANALYSIS OF ALL CASH INVOICES GROUPED BY DOLLAR VALUE TO INDICATE ACTIVITY IN THE NUMBER OF INVOICES, LINE ITEMS, AND TO SHOW DOLLAR AVERAGES

Invoice Amount Group	Number Invoices	Invoice % of Total	Number Line Items on Invoices	Line Item % of Total	Dollar Amount	Dollar % of Total	Average \$ Per Line Item	Average \$ Per Invoice
\$ 0 to 2.50	209	48.95	296	31.76	255.36	8.47	.86	1.22
2.51 to 5.00	92	21.54	186	19.96	332.11	11.02	1.78	3.60
5.01 to 10.00	64	14.99	168	18.03	460.07	15.27	2.73	7.18
10.01 to 25.00	45	10.54	150	16.09	725.77	24.08	4.83	16.12
25.01 to 50.00	11	2.58	32	3.43	365.42	12.13	11.41	32.22
50.01 to 100.00	3	.70	71	7.62	216.74	7.19	3.05	72.24
100.01 to 500.00	3	.70	29	3.11	658.09	21.84	22.69	219.36
All over 500.00	-	-	-	-	-	-	-	-
Totals	427	100.0	932	100.0	3,013.56	100.0	3.23	7.05

For ease of figuring, all invoices of less than \$25.00 (rather than \$27.09) will be considered as unprofitable to handle. By applying this consideration to Table III it can be determined that 1223, or 78.1% of the total invoices are unprofitable; this represents 20.6% (\$8,736.87) of the total dollar volume. At this point it would appear necessary to accept only orders of \$25.00 or more; however, to establish such a policy would likely antagonize many customers who normally place larger orders, and would cause a loss in this business. It was determined that additional information should be sought concerning the problem.

The total invoices in Table III were reworked and separated into three groups consisting of cash sales, industrial accounts, charge sales and service dealer accounts charge sales. This information is shown in Tables IV, V, and VI. Table IV shows that 27% of the invoices were cash sales with the average cash invoice total being \$7.05. While this is considerably lower than the \$25.00 minimum figured as a break even point, consideration must be given to the fact that cash invoices require, for the most part, very little handling as compared to charge invoices. Also, approximately one half of the cash sales are will-call orders where no delivery costs are involved. In addition, no collection expenses are involved and cash flow is improved. Therefore, it would be difficult to say that seven dollar cash sales are unprofitable.

Table V presents an analysis of all charge invoices to industrial types of accounts. The 362 invoices represent only 23% of the total

TABLE V

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AN ANALYSIS OF ALL INDUSTRIAL CHARGE INVOICES GROUPED BY DOLLAR VALUE
 TO INDICATE ACTIVITY IN THE NUMBER OF INVOICES,
 LINE ITEMS, AND TO SHOW DOLLAR AVERAGES

Invoice Amount Group	Number Invoices	Invoice % of Total	Number Line Items on Invoices	Line Item % of Total	Dollar Amount	Dollar % of Total	Average \$ Per Line Item	Average \$ Per Invoice
\$ 0 to 2.50	26	7.18	36	4.30	38.78	.18	1.07	1.49
2.51 to 5.00	51	14.09	82	9.79	230.50	1.08	2.81	4.51
5.01 to 10.00	50	13.81	88	10.50	366.84	1.71	4.16	7.33
10.01 to 25.00	94	25.97	194	23.15	1,594.88	7.45	8.22	16.96
25.01 to 50.00	69	19.06	235	28.04	2,536.58	11.85	10.79	36.76
50.01 to 100.00	35	9.67	109	13.00	2,435.08	11.37	22.34	69.57
100.01 to 500.00	30	8.29	79	9.43	7,070.90	33.02	89.50	235.69
All over 500.00	7	1.93	15	1.79	7,138.22	33.34	475.88	1,019.74
Totals	362	100.0	838	100.0	21,411.78	100.0	25.55	59.14

invoices in Table III, yet account for 50% of the total dollar sales. It should be noted also that the total number of line items invoiced to industrial types of accounts represent less than 17% of the total number of line items. This would generally mean less handling was involved in orders of this type. Even though an average of \$59.14 per invoice was obtained on sales to industrial accounts, the fact that 61% of all invoices to this type of account are less than \$25.00 still presents a problem.

Invoices billed to service dealers, as shown in Table VI account for approximately 50% of the total number of invoices from Table I. It can be quickly seen, however, that the average dollar invoice total for this type of account is only \$23.16. It would appear that all sales to this type of account are unprofitable, particularly since 76% of all invoices are for less than \$25.00. It cannot be overlooked, however, that this group's charge purchases account for over 42% of the company's total business. Ways must therefore be found to salvage this business, since it is too great a percentage of the company total to give up without effort.

Since Adleta Electronics Company handles the warranty replacement parts for the Adleta Company's RCA Victor products, it was thought possible that the high percentage of small orders was caused by dealers ordering only the part needed for repair of the product, and later returning the defective part for credit. Recommendations are made to attempt to reduce this possibility of creating a small order by adhering more closely

TABLE VI

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AN ANALYSIS OF ALL SERVICE DEALER CHARGE INVOICES GROUPED BY DOLLAR VALUE
TO INDICATE ACTIVITY IN THE NUMBER OF INVOICES, LINE ITEMS,
AND TO SHOW DOLLAR AVERAGES

Invoice Amount Group	Number Invoices	Invoice % of Total	Number Line Items on Invoices	Line Item % of Total	Dollar Amount	Dollar % of Total	Average \$ Per Line Item	Average \$ Per Invoice
\$ 0 to 2.50	162	20.85	319	9.81	220.32	1.22	.24	1.36
2.51 to 5.00	106	13.64	164	5.04	385.83	2.15	2.35	3.63
5.01 to 10.00	131	16.86	409	12.58	956.16	5.32	2.33	7.29
10.01 to 25.00	193	24.84	1,122	34.50	3,170.25	17.61	2.82	16.42
25.01 to 50.00	117	15.05	811	24.94	4,037.16	22.43	4.97	34.50
50.01 to 100.00	40	5.15	338	10.40	2,431.50	13.50	7.19	60.78
100.01 to 500.00	25	3.22	84	2.58	3,546.02	19.70	42.21	141.84
All over 500.00	3	.39	5	.15	3,251.22	18.07	650.24	1,083.74
Totals	777	100.0	3,252	100.0	17,998.46	100.0	5.53	23.16

to the manufacturers policy which states defective parts are to be exchanged. Where exchanges can be made, invoices and credits can be eliminated, and considerable cost savings can be effected.

Few comparisons on average sales are possible, although "a recent study showed that the average sale for a parts distributor amounts to \$3.20. This compares most unfavorably with large retail department stores that average \$8.50 per sale."⁵ The Adleta Electronics Company would appear to be doing very well if the aforementioned \$3.20 figure is correct. However, as long as the present situation of a minimum of a \$25.00 billing being necessary to break even, the problem of ways of reducing cost, and/or increasing profits still exists, and the need for continued study of the problem remains.

The Delivery Problem

Electronic parts distribution has been known as high cost distribution, partly because of poor management and poor controls. While most distributors have become aware that a profit squeeze exists, few distributors have taken any positive action to locate or correct their problems. Most distributors are dedicated toward providing increased services to their customers; yet, the fear of competition apparently keeps many distributors from curtailing certain services that are unprofitable. Increased delivery costs is apparently an area where such a fear exists.

⁵Fred H. O'Kelly, Jr., "...A Tiger By the Tail," TEA Times, VI, No. 2 (April, 1963), 13-17.

Case Study and Analysis

Delivery records of the Adleta Electronics Company were checked and data compiled by month for the year 1962. The data are shown in Table VII, and are expressed as an average number of deliveries per day. In addition, Table VII also shows the percentage of deliveries per day to industrial accounts as compared to the percentage of deliveries per day to service dealer accounts. It should be noted how the average number of deliveries per day by month increased during 1962. Though sales dollar volume may vary from month to month, neither the variation nor percentage increase in dollar volume during the year was anywhere near the percentage increase in deliveries. Maximum difference in dollar sales volume between the lowest and highest month was 15%, whereas deliveries varied from an increase of 25% to almost 90% from the lowest to the highest month.

Most significant to note is the increase in the percentage of deliveries to service dealers, whereas the industrial percentage has dropped. Deliveries to industrial accounts actually declined during the year, although sales to industrial accounts increased; therefore, all of the increase in the average daily deliveries was to service dealer accounts.

Current cost per delivery is calculated at \$1.49 per delivery.⁶

While this cost may be a little high because the large trucks that are used

⁶E. P. Miles, General Manager, Adleta Company, Dallas, Texas; actual costs for first quarter of 1963 as stated in interview of April 27, 1963.

TABLE VII

ANALYSIS OF THE AVERAGE NUMBER OF DELIVERIES PER DAY
 BY THE ADLETA ELECTRONICS COMPANY
 FOR THE YEAR 1962

Month	Average Number Daily Deliveries	% Deliveries To Industrial Accounts	% Deliveries To Service Dealer Accounts
January	25	40	60
February	31	46	54
March	40	41	59
April	43	32	68
May	39	33	67
June	43	33	67
July	46	30	70
August	47	32	68
September	45	34	66
October	46	28	72
November	39	24	76
December	38	25	75
Total	40	33	67

for delivery of television sets are also sometimes used in the delivery of parts. It is doubtful, however, that cost would be less than \$1.35 per delivery even if smaller trucks were used. This does not compare very favorably with automotive parts jobbers who in 1961 showed an average delivery cost of \$.84 per delivery.⁷ According to Jobber Topics, delivery costs are continuing to increase, but most jobbers are reluctant to curtail the service because of a continually increasing number of competitors. The automotive jobber averages 2.3 regularly scheduled deliveries per day.⁸ The Adleta Electronics Company currently offers three regularly scheduled deliveries per day.

How others handle problem. --Joe Hanson, Controller for Bosco Nuts and Bolts Company of Dallas, Texas, indicated that his company's sales had not been affected by establishing minimum charge billings of \$2.00 and minimum cash billings of \$.50. The good customer was appeased by giving him the five, ten, or fifteen cent item at no charge rather than charging him a minimum. This method seemed to be cheaper than invoicing. Bosco leased not only its delivery truck, but the driver also. They scheduled only one delivery per day.⁹

⁷"Delivery Cost Increasing, But Service Is A Must," Jobber Topics, LXXXIII, No. 4 (November, 1962), 134-6.

⁸Ibid., p. 134.

⁹Joe Hanson, Controller, Bosco Nuts and Bolts Co., Dallas, Texas, Statements recorded in an interview of September 18, 1962.

In an interview with Richard Baker, President of W. A. Green Department Store, Dallas, Texas, it was indicated that their problems in regard to small orders, particularly as related to deliveries, had lessened since eliminating their downtown store. Their downtown store was averaging approximately 80 to 100 deliveries per day, many of these of a low dollar value. Their average deliveries today in their Oak Cliff suburban store are only approximately twenty deliveries per day. W. A. Green contracts their deliveries with an independent delivery service company who picks up the packages once a day and delivers them the following day. Mr. Baker mentioned that they have a \$3.00 minimum order for any type delivery. Most of their small order costs have been substantially reduced by use of charge-a-plates, cash registers, simplified accounting procedures and cycle billing systems.¹⁰

Possible solutions. --Most solutions to the delivery as well as the small order problem seem to involve some type of minimum order and/or delivery charge. Most distributors, however, are reluctant to establish minimums, for fear of their competition taking over their customers. Today, the majority of manufacturers have minimum order standards which they enforce; therefore, as long as distributor minimums are reasonably well below that of manufacturer's, the danger of loss of

¹⁰ Richard Baker, President, W. A. Green Department Store, Dallas, Texas. Interview of May 25, 1962.

an industrial account's business to the manufacturer is not likely. Many distributors, particularly in Northern and Eastern metropolitan cities, have discontinued deliveries to service dealers. Others have found the high cost of serving the service dealer to be prohibitive and have been forced into bankruptcy, or have begun to open their doors to retail customers. Because of the belief in the need for greater information regarding the radio-television service dealer industry, a complete market research study is included in the following chapter.

CHAPTER V
THE VIEWPOINTS AND OPINIONS
OF RADIO-TELEVISION
SERVICE DEALERS

As pinpointed in the concept of doing business, management assumes the responsibility of establishing objectives which are known and understood. Complete market knowledge is necessary for properly establishing these goals. Market research is the tool used in obtaining this knowledge.

In an article¹ related to analyzing your market, the Educational Sub-Committee of the Electronic Industries Association Distributor Relations Committee points out that the electronic distribution industry is in a transition period, with the service dealer market leveling itself out, and the industrial market becoming broader and increasing rapidly. With this condition existing, a thorough market analysis is needed. The Committee suggests that such an analysis should begin with the market area being defined on the basis of proper balance between required sales

¹ Educational Sub-Committee of the Electronic Industries Association Distributor Relations Committee, "How to Analyze Your Market: Sales Analysis and Market Coverage," NEDA Journal, XIX (September, 1962), 8-12.

volume and distribution costs. Factors such as competition, distance, natural barriers, normal flow of trade, and historical sales experience should be considered. Customer data should be secured such as product lines carried, sales volume, buying habits, and information regarding key personnel and owners. It is suggested that sales areas or districts be created based on the preceding information received.

Products should be analyzed and studied with the purpose of establishing broad product categories within the accounting system in order to maintain proper inventory control levels. Sales performance records should be maintained on each customer and salesman. The Committee believes this information can be utilized in establishing realistic sales objectives. They also note that there is a point reached where sales cost to low volume customers becomes a prohibitive, thus corrective action would be needed.

It is pointed out that management must use the information mentioned in the foregoing. In addition, management must align product availability, company policies and service in accordance with the market and customer requirements. This article is summarized by the following: "the distributor's role in improving market coverage is basically that of having full knowledge of the market and the sources within that market from which sales must be derived."²

²Ibid., p. 12.

It is intended that this research study provide the basis for an analysis of the viewpoints and opinions of radio-television service dealers regarding their buying habits, motivation factors, sources of supply, and plans for the future. The findings should provide facts which can be utilized by radio-television service dealers, electronic parts wholesalers, and manufacturers in planning and programming for more efficiently and effectively serving themselves, their customers, and their industry.

Presentation and Summary of the Sample

Questionnaires were mailed to every radio-television service dealer listed in the Dallas, Texas and Fort Worth, Texas yellow page telephone directories. In addition, questionnaires were mailed to the attention of radio and television service managers of all major department stores, furniture stores, chain stores, discount stores, and national television service agencies located in Dallas and Tarrant counties. Additional questionnaires were mailed to principal radio and television dealers located in North Central Texas. This listing of dealers was obtained from reports of taxes paid to the State of Texas during 1960 by each of these dealers. Complete details of the size of the sample, the areas covered, and the returns received are shown in Table VIII.

An effort was made to collect as large a sample as possible, particularly in Dallas and Tarrant counties. It was discovered after the mailing of questionnaires, that a March, 1960 telephone directory

TABLE VIII

AN ANALYSIS OF THE TOTAL NUMBER OF QUESTIONNAIRES MAILED, AND COMPLETED QUESTIONNAIRES RECEIVED BY EACH AREA SAMPLED

Area Covered	Total Number of Questionnaires Mailed	Less Questionnaires Returned Unclaimed	Net Questionnaires Mailed	Questionnaires Completed and Returned***	Per Cent of Net Questionnaires Completed
Dallas County	372	10	362	63	17.40
Tarrant County	255	22	233	29	12.45
Major Trade Areas*	51	...	51	17	33.33
Secondary Markets**	37	...	37	17	45.94
Total	715	32	683	126	18.45

*Major Trade Areas are the North Central Texas cities of Wichita Falls, Waco, Tyler, Abilene, and Sherman.

**Secondary markets are cities located outside Dallas and Tarrant Counties which have a smaller population than major trade areas, and do not have an electronic parts distributor located in the city.

***Four additional questionnaires were returned by the addressees and marked with special notations of no longer being in the service business. These are not included in the total.

had been used for the Tarrant County mailing. This partly accounts for the high percentage of "returned unclaimed" questionnaires for Tarrant County. This proved beneficial in one respect, however, since a very high rate of service dealer turnover was detected when a thorough investigation was made. A total of 172 service dealers are listed in the March, 1962, Greater Fort Worth Yellow Page telephone directory as compared to 170 service dealers being listed in the March, 1960 directory. This indicates a lack of growth in the number of firms for the radio-television service industry in the Fort Worth area. A further study revealed that 51 service dealers were listed in the 1962 directory that were not listed in the 1960 directory. While this would first seem to indicate growth as a result of new businesses, it only indicates turnover, since there were 49 dealers who were included in the 1960 directory, but missing from the 1962 directory. This represents a turnover of businesses of approximately 22 per cent every two years.

A second mailing was made to the 51 dealers listed in the 1962 directory who had not previously received a questionnaire. This is included in the total shown in Table VIII.

Dallas and Tarrant County returns were separated primarily to determine if any major differences in buying motives and habits existed between the two markets.

It can be noted in Table VIII that a separate group of samples was taken for an area designated as "major trade areas." This sample

consists of questionnaires mailed to and received from the following cities: Waco, Wichita Falls, Tyler, Abilene, and Sherman. Each of these cities has electronic parts wholesalers that perform most of the services of wholesalers in Dallas and Tarrant Counties. These cities are growth markets, but are possibly still attached to the Dallas and Tarrant County markets to some degree.

A fourth group of samples was taken from smaller cities. It was believed that these returns, many from cities rural in nature, would differ considerably from the samples of other groups. Each of these cities is located outside Dallas and Tarrant Counties, is smaller in population than the major markets previously mentioned, and is not served by an electronic parts wholesaler within the city. Questions relating to delivery, and picking up merchandise could, naturally, not be utilized in evaluating the sample of this group, or in the total. This group is being referred to as secondary markets.

It should be noted from Table VIII that there were four questionnaires returned but not included in the total. These returns had one of the following notations made by the dealer:

1. Do not service T. V. and radio; therefore, do not buy parts.
2. Sorry, we quit the business. Could not make any money in the T. V. or service business on T. V.
3. We do not service television.
4. Out of business.

TABLE IX

PRINCIPAL NATURE OF BUSINESS OF RESPONDENTS AS RELATED
TO SERVICE OR SALES BY MARKET AREA

Type of Business	Dallas County		Tarrant County		Major Markets		Secondary Markets		Total	
	Number Replies	%	Number Replies	%	Number Replies	%	Number Replies	%	Number Replies	%
Service	42	66.6	17	58.6	6	37.5	5	29.4	70	56.0
Sales	2	3.2	2	6.9	5	37.5	3	17.7	13	10.4
Both Service and Sales	19	30.2	10	34.5	4	25.0	9	52.9	42	33.6
Total Respondents	63	...	29	...	16	...	17	...	125	...

When considered from the standpoint of type of business, the sample of completed questionnaires can be considered good, since Table IX indicates that better than 89 per cent of the respondents are primarily engaged in the service business. Over one half of the replies indicated "service" as being the prime nature of business, while an additional one-third indicated service and sales as being of equal importance.

Only 3 per cent of the Dallas County returns and 7 per cent of the Tarrant County returns indicate the principal business activity as being sales. This contrasts noticeably with the 37 per cent of major market respondents reporting sales as their prime business.

It should be noted at this point that 108 of the 126 respondents, or 86 per cent requested that they receive a summarized copy of the findings of the study. This indicates a very high degree of interest in the problem, particularly since it was pointed out in the letter accompanying the questionnaires that a signature was not necessary, unless the respondent desired a copy of the findings.

Buying Habits and Factors Motivating The Radio-Television Service Dealer to Purchase

Methods of Placing Orders

The service dealer utilizes practically every known method of placing orders for his requirements; however, his most frequent method is use of the telephone. Table X indicates that 39 per cent of all orders are placed by telephone as compared to only 2 per cent by mail order.

The importance of the distributor salesman as the recipient of orders varies greatly by area. Only 22 per cent of the dealer's orders are placed through the distributor salesmen in Tarrant County, 29 per cent in Dallas County, and 9 per cent in the major trade areas. This

TABLE X

MANNER IN WHICH THE SERVICE DEALER PLACES HIS ORDERS

Method of Placing Orders	Dallas County		Tarrant County		Major Trade Areas		Secondary Markets		Total	
	Number Replies	%*	Number Replies	%*	Number Replies	%*	Number Replies	%*	Number Replies	%*
Number of Respondents	63		29		17		17		126	
With salesman who calls on him	46	29.2	20	22.3	11	19.4	16	63.7	93	30.9
By going to distributor store and picking up needs	49	27.0	22	27.2	15	35.2	8	18.8	94	27.0
By telephoning a distributor	55	42.8	26	46.4	15	39.2	14	14.2	110	39.3
By mail order	10	1.0	11	1.9	11	5.9	7	3.3	39	2.2
Other (Specify)	0	0.0	1	2.2	1	.3	0	0.0	2	.6
Total	160	100.0	80	100.0	53	100.0	45	100.0	338	100.0

*The per cent shown is an average of the total of each percentage figure by method of placing order, written in by respondents divided by the total number of service dealers indicating that method of order placement.

contrasts greatly with the high of 63 per cent of orders of secondary market dealers being placed through salesmen.

Better than one fourth of all orders are placed by the dealer going to the distributor's store and picking up what he wants. When this figure is added to the orders placed by telephone, the importance of the inside salesperson or counterman becomes significant at the distributor level since this points out that the inside salesman is in direct contact with the customer by means of personal contact or by telephone contact when two thirds of all orders are placed.

The results shown in Table X would lead one to believe that mail orders are practically a thing of the past when considered as a means of placing orders. Only approximately 2 per cent of all orders are placed by mail.

There was one reply which indicated that 65 per cent of its purchases were made through material control. This, apparently, is a chain or factory servicing organization.

Purchasing Habits

An attempt was made to determine information regarding purchasing habits of the service dealer. Table XI points out a significant weakness of the service dealer in that he, apparently, is trying to place an order with a majority of the salesmen who contact him. In fact, in the major and secondary markets, two thirds of the service dealers attempt to give

TABLE XI
 PER CENT OF SERVICE DEALERS WHO ATTEMPT
 TO GIVE BUSINESS TO EACH SALESMAN
 CONTACTING THEM

Area	% Who Do	% Who Do Not	Total Number of Replies
Dallas County	40.0	60.0	60
Tarrant County	44.4	55.6	27
Major Markets	66.7	33.3	15
Secondary Markets	67.5	37.5	16
Total	47.5	52.5	118

each salesman who contacts them an order. This is important to the wholesaler also, since it points out a lack of loyalty to any one wholesaler by the service dealer. It would also mean that by increasing the frequency of contact, the wholesaler could produce additional orders, but of diminishing size, since the available business of the service dealer remains the same. As competition increases the number of salesmen who are contacting service dealers, orders would become smaller for the same reason. When this is related to data presented in Table X, which indicates only 31 per cent of the total orders are placed through salesmen, who contact the service dealer, the problem becomes more

acute and increasingly difficult to evaluate when attempting to determine the importance of the distributor salesman as a means of increasing business.

The amount of time consumed in preparing an order with each different sales representative should be given greater consideration by the service dealer. Since his time is what he has to sell, it would appear that the service dealer could become more productive if he were to spend his time with fewer salesmen, rather than spending time with each representative who calls on him.

Purchase Motivation Factors

One of the principal purposes of this study was to determine reasons or factors which motivate a radio-television service dealer to make a purchase. Each questionnaire asked the service dealer if he was: definitely motivated to purchase for any of the specific reasons listed; if he was motivated only on occasion; or if he was never motivated for the reasons given. It was felt that a degree of importance could be placed on the motivation factor in this manner, since it was possible for the service dealer to indicate a value for each factor. A total of all replies for each motivation factor is presented in Table XII. The large sample included in this table indicates an above-average interest in the question. The total replies given to each factor varied from 73 to 112. Quality of the product, followed by fast delivery service

TABLE XII

FACTORS MOTIVATING THE RADIO-TELEVISION SERVICE DEALER
TO MAKE A PURCHASE AS RELATED TO THE DEGREE OF
MOTIVATION FOR EACH FACTOR*

(1) Motivation Factor	(2) No. Replies Indicating Factor Definitely Motivates Respondent To Make A Purchase	(3) No. Replies Indicating Factor Occasionally Motivates Respondent To Make A Purchase	(4) No. Replies Indicating Factor Never Motivates Respondent To Make A Purchase	(5) Relative Importance Factor**		(6) Rank of Relative Importance Factor
				Value Units	Value Unit % of Total	
Quality of Product	103	6	3	209	20.69	1
Fast Delivery Service	88	13	8	181	17.93	2
Like the Company	77	24	6	172	17.03	3
Like the Salesman	66	25	14	143	14.15	4
Added Cash Discount	53	29	16	119	11.78	5
Cut Price	29	40	24	74	7.33	6
Close Out Merchandise	17	50	22	62	6.14	7

TABLE XII --Continued

(1) Motivation Factor	(2) No. Replies Indicating Factor Definitely Motivates Respondent To Make A Purchase	(3) No. Replies Indicating Factor Occasionally Motivates Respondent To Make A Purchase	(4) No. Replies Indicating Factor Never Motivates Respondent To Make A Purchase	(5) Relative Importance Factor**		(6) Rank of Relative Importance Factor
				Value Units	Value Unit % of Total	
Gifts and Premiums	12	49	36	37	3.66	8
Rebate on Purchases	17	22	48	8	.79	9
Allowances on Purchases of Test Equipment, Trucks, Etc.	11	27	48	1	.10	10
Convenience of Wagon Jobber	15	14	44	0	.0	11
Consignment	10	24	50	6	.59	12
All Other Factors	7	3	17	10	.99	13

*Data compiled from replies of 126 respondents in North Central Texas.

**The relative importance of each factor was determined by placing a value unit of plus two for each reply indicating a definite motivation factor (Col. 2), a value unit of plus one for each reply indicating an occasional motivation (Col. 3), and a minus one for each reply indicating never being a motivation factor (Col. 4).

received the largest number of replies, indicating each to be a definite reason for making a purchase. Consignment, rebate on purchases, and allowances on test equipment and trucks received the greatest response for not being a factor determining a purchase. Close-out merchandise, and gifts and premiums were the factors most often mentioned as occasionally motivating the respondent to make a purchase. There were a number of write-in answers, indicating other motivation factors such as: availability of parts; convenience; warranty replacements; sincere appreciation of my patronage; wholesalers who refuse to sell retail; and salesmen who can make decisions that stick with company -- not just promises.

It was felt that while the foregoing pictures some degree of importance of each factor, a single relationship combining these degrees of importance into a single value could be established. Therefore, as a part of Table XII a relative importance factor was established by assigning a value to each reply. An arbitrary unit value of plus two was given to each reply indicating the factor was a definite motivating reason for making a purchase. If the factor only occasionally motivated the respondent to purchase, it was assigned a unit value of plus one. If the factor never motivated the respondent to purchase, it was assigned a negative value of minus one. Column five (5) of Table XII shows the value units, the percentage total of value units of each factor, and the rank of importance of each motivation factor when using this method. Quality of product, fast delivery service, a liking for the company, and a liking for the

salesman, listed in the order of importance, account for 70 per cent of the reasons motivating the service dealer to make a purchase. It is significant to note that quality of product and fast delivery service combined are greater motivating factors than are all combined price cuts, close outs, rebates and discount factors.

It is interesting to note in Table XII that "liking the salesman" has a relative importance motivation factor of only 14 per cent; yet, nearly one half of the service dealers indicate they attempt to give each salesman contacting them an order. It would appear almost that the service dealer feels an obligation in placing an order because of the personal contact. This brings to mind some question as to the effectiveness of a well trained salesman in securing business versus that of an inexperienced salesman and his productive capacities so long as each is contacting the service dealer with equal frequency!

Careful analysis of Table XII should prove beneficial to all wholesalers and manufacturers, particularly in their overall merchandising plans. Data contained in Table XII were compiled for each individual marketing area, but were not included in this study because there was very little variation of the individual markets from that of the total.

Additional effort was made to determine motivation factors of the service dealers by asking that they note only the two most important factors which motivate them to make a purchase. The results of this question are shown in Table XIII.

TABLE XIII

FACTORS MOTIVATING THE RADIO-TELEVISION SERVICE DEALER
TO MAKE A PURCHASE WHEN RESTRICTED TO THE CHOICE
OF THE TWO MOST IMPORTANT MOTIVATION FACTORS

Motivation Factor	Number Replies*	% of Replies	Rank of Importance
Fast delivery service	59	30.72	1
Quality of product	54	28.12	2
Like the company	33	17.19	3
Added cash discount	17	8.85	4
Like the salesman	13	6.77	5
Cut prices	6	3.12	6
Allowances on purchases of test equipment, trucks, etc.	4	2.08	7
Gifts and premiums	1	.53	8
Close out merchandise	1	.53	8
Consignment	1	.53	8
Rebate on purchases	0	.00	11
Convenience of wagon jobber	0	.00	11
All other factors	3	1.56	13

*Data compiled from replies of 105 respondents in North Central Texas.

Fast delivery service is the most important motivating factor in this survey question, while quality of product rates close in importance,

with a liking for the wholesaler ranking third. These three factors account for 76 per cent of the total replies. Such things as gifts, close outs, consignments, rebates and the wagon jobber have little importance as being the prime motivating factor for purchases.

TABLE XIV

THE AVERAGE DISCOUNT REQUIRED TO MOTIVATE SERVICE DEALERS TO (1) PICK UP THEIR MERCHANDISE, AND TO (2) PICK UP AND PAY CASH FOR THEIR MERCHANDISE

Area	To Pick Up Merchandise*		To Pick Up and Pay Cash for Merchandise*	
	Number of Replies	Average % Discount Required**	Number of Replies	Average % Discount Required**
Dallas County	31	9.3	34	12.6
Tarrant County	11	9.5	14	8.6
Major Markets	4	5.5	6	7.8
Secondary Markets	4	5.5	5	8.0
Total***	46	9.0	54	11.0

*The fact that a wholesaler would be located within three miles of the dealer was assumed and made known to respondents.

**All discounts were totaled and divided by the number of replies in order to determine average.

***Secondary markets replies were not included in total. Also, six replies indicating unusually large percentages were deleted from the total.

The Effect of Discounts on Picking Up Merchandise

An attempt was made to determine how much extra discount would be necessary to get the radio-television service dealer to pick up his

merchandise; and how much discount would be necessary to get him to pick up and to pay cash for his merchandise. The results in Table XIV would seem to indicate that the service dealer has little interest in either of these proposals, regardless of the discount, since the response to this question was less than one half that of most other questions; and the replies totaled only approximately 40 per cent of the sample returns completed. However, based on the limited returns, a discount of approximately 9 per cent would have to be offered in order to induce the service dealer to pick up his merchandise. A discount of 11 per cent would have to be given in order for the service dealer to pick up and pay cash for his needs. This should have some significance to the service dealer, wholesaler, and manufacturer in not only indicating the importance of delivery, but also the high value placed on delivery when related to cost.

An assumption was made in this question that there would be a wholesaler located within three miles of the dealer store. It is believed, however, that possibly some respondents did not understand the question since one reply indicated a question; another replied "not practical". Also, there were six respondents who answered with such large percentages that it is felt they misinterpreted the question to mean that if a cash and carry store were located within three miles, they would patronize these stores. Their averages were 66.2 per cent to pick up, and 95 per cent to pick up and pay cash. Secondary markets were not included in the totals of Table XIV since they do not have wholesalers located within the city.

Because of the foregoing reasons, the findings presented in Table XIV are considered to be of limited value with the exception of Dallas and Tarrant Counties. An interview-type of survey requesting answers to this question would probably receive better and more accurate results, since the question could be clarified.

The Radio-Television Service Dealer's Sources of Supply

The Number of Supply Sources

In an effort to determine as much information as possible regarding his sources of supply, each service dealer was questioned as to which distributors he had made purchases from this year, and what percent of the service dealer's total purchases did each distributor receive. From the 119 completed questionnaires, Tables XV and XVI were prepared. By totaling the number of distributors from whom all dealers had made purchases, it was possible to determine that each radio-television service dealer averaged making purchases from three and one-fourth suppliers. It is quite noticeable in Table XV that the Major Market service dealer purchases from one less distributor than dealers located in other areas. This is important when considered from the viewpoint that the Major Market dealer is dividing his business among slightly more than two sources, whereas all other dealers are dividing their business among over three sources. This could be of importance to both the distributor and manufacturer from a distribution standpoint.

TABLE XV

AVERAGE NUMBER OF DISTRIBUTORS FROM WHOM PURCHASES ARE BEING MADE

Market Area	Dallas County	Tarrant County	Major Markets	Secondary Markets	Total
Number of respondent dealers	63	24	16	16	119
Total number of distributors mentioned by all dealers as a supplier this year	216	79	35	57	387
Average number of suppliers per dealer	3.43	3.29	2.19	3.56	3.25

The accuracy of the average of 3.25 suppliers per dealer as shown in Table XV was tested by dividing the 402 times all distributors were mentioned as receiving business from all dealers by the 119 reporting dealers. The results are 3.38 different suppliers per dealer which verifies to a close degree the accuracy of the aforementioned figure. The 3.38 average would be slightly less if distributor duplication as a result of branch operations were eliminated from the total.

TABLE XVI

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THE AVERAGE PER CENT OF BUSINESS BEING PLACED BY THE
RADIO-TELEVISION SERVICE DEALER WITH
HIS NUMBER ONE SOURCE
OF SUPPLY

Market Area	Dallas County	Tarrant County	Major Markets	Secondary Markets	Total
Number of respondents	63	24	16	16	119
Average per cent of business being placed by dealer with his number one source of supply	66.68%	71.70%	62.75%	58.75%	66.10%
Total of percentages of business being placed by dealer with his number one source of supply	4201%	1721%	1004%	940%	7886%

Allocation of Business by Service Dealer

By reversing this procedure and dividing the 119 reporting dealers by the 402 times all distributors were mentioned as receiving business, and converting this figure to a percentage, it was possible to determine that each distributor should receive an average of 30 per cent of the service dealer's business. This is tested by dividing the 3.25 average number of suppliers

per dealers mentioned in Table XV into 100, which gives a closely related answer of 31 per cent average amount of business which each distributor should receive from each service dealer.

Table XVI reports the average amount of business received by the number one source of supply as reported by each dealer. This average figures 66 per cent for all reporting dealers, which is more than double the theoretical average mentioned in the preceding paragraph. It must be noted that this 66 per cent is the total of all number one sources of supply and not any one individual source of supply. It is significant to note, however, that the radio-television service dealer gives two thirds of his business to his number one choice of wholesalers, and divides the remaining one third of his business among two and one-fourth other wholesalers. Therefore, unless a wholesaler is the dealer's number one source of supply, he can expect to receive only an average of about 15 per cent of the dealer's business by being the dealer's second, third, or fourth choice of supply.

As previously mentioned, no effort was made to point out the importance of each individual distributor by name because of competitive reasons. A complete listing of all distributors mentioned as sources of supply is shown in the appendix. An effort was made to determine the number of sources of supply mentioned in each marketing area and to relate this to the amount of business placed by the radio-television

service dealer with each distributor. By adding the percent of business received by each distributor, and totaling the percentages for the three distributors receiving the greatest amount of business, it was possible to develop Table XVII. It can be seen from this table that the three top distributors account for over 50 per cent of the total business in each area. The significance of this in such areas as Dallas County is great, where the three top distributors receive 52 per cent of the business and the balance of seventeen distributors mentioned as sources of supply are splitting the minor part, or 48 per cent of the business. This would seem to indicate: (1) an industry being dominated by very few at the distribution level; (2) too many wholesalers in the business for maximum profits; (3) that the manufacturer should use caution in establishing new distributors; and (4) that persons interested in going into the electronics service parts distribution should use a similar degree of caution in determining their market potential before entering the field.

It is interesting to note in Table XVII that the sources of supply in secondary markets exceeded the number of dealers reporting. While the importance of this may be small, because of the size of the sample of the reporting dealers, it continues to point out not only the possibility of too many wholesalers in the business, but definitely points out again that the radio-television service dealer is attempting to divide his business among too many different sources of supply.

TABLE XVII

A COMPARISON OF DISTRIBUTORS MENTIONED AS SOURCES OF SUPPLY WITH THE PERCENTAGE OF BUSINESS OF THE THREE DISTRIBUTORS WHO RECEIVED THE GREATEST AMOUNT OF BUSINESS

Market Area	Number Distributors Mentioned As A Source of Supply	Percentage Points Received By Top 3 Distributors	Number Dealers Reporting	Average % of Total Business Placed with 3 Top Distributors
Dallas County	20	3279	63	52.0
Tarrant County	16	1343	24	55.9
Major Markets	19	799	16	49.9
Secondary Markets	22	1010	16	63.1
Total	44*	6431**	119	54.0**

*The total shown eliminates duplication of sources among trade areas and elimination of branch operations.

**The total shown is an average of the total of each market as presented within the table.

Per Cent of Market

From the original survey question mentioned at the beginning of the sources of supply section relating to the percent of business placed with each distributor, it is possible to determine the approximate percentage of market being sold by each distributor. For example, in Tarrant County the reporting dealers representing 2400 total percentage points of business

indicated they placed their business with 16 different suppliers. The number one supplier received 488 percentage points of the 2400 percentage points available. This is 20 per cent of the total, which indicates that the number one wholesaler in Tarrant County is receiving an average 20 per cent of all business in the county. The number two wholesaler received 453 percentage points, or 19 per cent of available business. The number three distributor received 402 percentage points, or 17 per cent, and the number four distributor received 393 percentage points, or 16 per cent of the total business in the county. These four sources of supply are receiving 72 per cent of the market, or total available business. The other twelve sources of supply are, therefore, sharing approximately 28 per cent of the remaining business. This, too, would seem to indicate that there are too many distributors serving the area.

Sources of Supply Doing The Best Job

Each radio-television service dealer was questioned as to which distributor does the best job, and why. A total of 111 respondents reported 24 different distributors as doing the best job. The number of distributors mentioned varied from eight in Tarrant County to ten in Major Markets; eleven in Secondary Markets, and twelve in Dallas County. About the only significance to the number of different distributors mentioned as doing a good job is that it has little relationship as to how the service dealer places his business. This was indicated by the fact that where eight distributors

REASONS WHY RADIO-TELEVISION SERVICE DEALERS BELIEVE
A SOURCE OF SUPPLY IS DOING THE BEST JOB

Number of Respondents	57					27		13		14		111	
	Dallas County Replies	Tarrant County Replies	Major Market Replies	Secondary Market Replies	Total Replies	%	Dallas County Replies	Tarrant County Replies	Major Market Replies	Secondary Market Replies	Total Replies	%	
Fast delivery, good service	23	11	6	9	49	24.5							
Good inventory, complete stock, variety	18	3	2	4	27	13.5							
Good products, merchandise, quality, clean stock, standard brands	9	4	3	4	20	10.0							
Good salesmen, sales personnel, honest, experienced countermen	5	2	2	2	9	4.5							
Efficient, careful, dependable, reliable	4	2	2	2	8	4.0							
Assistance in determining proper replacement, helpful	4	2	1	1	8	4.0							
Courteous treatment	6	3	2	3	8	4.0							
Lowest prices, or better prices	4	3	1	1	8	4.0							
We like them all - all good - all equal	4	3	3	3	7	3.5							
Convenient, close to shop	2	3	2	2	7	3.5							
Accommodating, cooperative, agreeable, helpful, considerate	1	3	2	3	6	3.0							
Friendliness	3	1	1	1	5	2.5							

TABLE XVIII - - Continued

Reasons	Dallas County Replies	Tarrant County Replies	Major Market Replies	Secondary Market Replies	Total Replies	Total %
	Assistance in locating parts elsewhere	2	1	3	1.5
Treat me as if I were their only customer, take an interest in me	3	.....	.....	.....	3	1.5
Calls on us more often, calls regularly	.....	.....	1	2	3	1.5
Regular prices, or in line	.....	1	.....	1	2	1.0
All customers treated equal	.....	2	.....	.....	2	1.0
No foolishness	.....	2	.....	.....	2	1.0
Carries brands desired or needed, complete lines	.....	1	1	.....	2	1.0
They don't sell to retail trade	2	.....	.....	.....	2	1.0
Smaller, or not too small or large	2	.....	.....	.....	2	1.0
RCA Replacement Parts, (we are RCA dealer), RCA Tubes	2	.....	.....	.....	2	1.0
Sales contact, salesmen help	2	.....	.....	.....	2	1.0
Reasonable, fair	.....	1	.....	.....	1	.5
Quick handling when we are picking up merchandise	.....	1	.....	.....	1	.5
Good company	.....	1	.....	.....	1	.5
Only one I deal with	.....	.....	.....	.....	1	.5
Accurate accounting	1	.....	.....	.....	1	.5

TABLE XVIII --Continued

Reasons	Dallas County Replies	Tarrant County Replies	Major Market Replies	Secondary Market Replies	Total	
					Replies	%
Truthfulness about product	1	..	..	..	1	.5
Lenient on returned goods	1	..	..	..	1	.5
There is not a good one in the lot	1	..	..	..	1	.5
One stop service	1	..	..	..	1	.5
Eager to please	..	..	1	..	1	.5
Good people to deal with	..	..	..	1	1	.5
Few back orders	..	..	..	1	1	.5
Salesman is owner	..	..	..	1	1	.5
Total	..	..	..	..	2200	100.0

were mentioned as doing the best job in Tarrant County, four distributors are receiving 72 per cent of the business. The same can be pointed out in each area by referring to Table XVII, where the top three sources of supply in each area receive in excess of 50 per cent of the business. However, the important part of this question is the "why." Table XVIII lists the 200 reasons given for a source of supply doing the best job. Most of the reasons are self-explanatory and require little discussion. It should be noted that fast delivery and good service account for 25 per cent of the reasons given, and that a combination of good inventory and good products account for another 24 per cent of the reasons given. All other reasons could be utilized by

wholesalers as guides to improvement. Personal attention and courteous treatment, efficiency and accuracy, and cooperation and fairness would briefly summarize practically all other reasons. There was only one adverse comment in the entire group of reasons. It made note that "there is not a good one in the lot."

TABLE XIX

NUMBER AND PERCENTAGE OF RADIO-TELEVISION SERVICE
DEALERS MAKING PURCHASES FROM OUT OF STATE
CATALOGUE MERCHANTS

Market Area	Dallas County	Tarrant County	Major Markets	Secondary Markets	Total
Total Respondents	61	29	17	17	124
Number who purchase from catalogue merchants	13	8	5	2	28
Per cent who purchase from catalogue merchants	21.2	27.5	29.4	11.8	22.6

Out of State Sources of Supply

An effort was made to determine the importance of out of state catalogue type wholesalers as a source of supply to the radio-television service dealer. Table XIX indicates an average of 22 per cent of all respondents make purchases from out of state catalogue merchants. It should be noted that 29 per cent of the dealers located in Major Market areas make purchases from these catalogue houses as compared to only 12 per cent of the Secondary Market dealers. Probably of greater

importance to manufacturer and distributor, however, are the reasons for these purchases. Table XX indicates the number one reason given to be lower prices. This reason accounted for 34 per cent of the total. Merchandise not being available locally accounted for 29 per cent of the reasons, and specialty parts and replacements, a related reason, accounted for 11 per cent. It must be noted that four respondents gave reasons for not purchasing from out of state catalogue houses. Their reasons basically concerned time lag, distance, inferior products, and a dislike for chain stores.

TABLE XX

REASONS RADIO-TELEVISION SERVICE DEALERS
PURCHASE FROM OUT OF STATE
CATALOGUE MERCHANTS

Reasons Given by 28 Respondents	Number Replies	% of Total
Low prices, bargains, close outs, discount	12	34.27
When merchandise is not available locally	10	28.56
Occasionally, special parts, German parts, replacements	4	11.43
For obsolete, unobtainable items	1	2.86
Our home office, material control	1	2.86
Only on rare occasions	1	2.86
Distributor of television in this area	1	2.86
Better buy	1	2.86
They are too far away if something goes wrong	1	2.86
Time element too long	1	2.86
No, inferior products	1	2.86
No, I do not like chain stores; trade at home	1	2.86
Total	35	100.00

Data Beneficial to the Radio-Television
Electronics Industry

A great deal of the data collected in this study contains information that should prove beneficial to all marketing levels of the electronics parts industry. The purpose of this portion of the study is to present the data that would be of interest to more than one phase of the industry.

The Number of Distributor Parts Salesmen Contacting
Radio-Television Service Dealers

Each radio-television service dealer was questioned as to how many distributor parts salesmen call on him. The results of this survey question are shown in Table XXI. It is revealed that an average of three wholesale salesmen contact each service dealer. It is important to note the great amount of variation of sales coverage in each of the different trading areas. The service dealers in Major Market trading areas have only two and one-fourth salesmen contacting them, whereas dealers in Fort Worth have over three and one-half salesmen contacting them. It is important to relate this table to Table XI, which indicates that 48 per cent of the service dealers attempt to place an order with each of the salesmen who contact him. It appears that the service dealer is spending too much of his time with salesmen when this time could be used for producing revenue. It is quite possible that by giving more of his business to one salesman that his importance to that salesman and source of supply would be increased with possible increased benefits. The wholesale

TABLE XXI
DISTRIBUTOR PARTS SALESMEN CONTACTING EACH
RADIO-TELEVISION SERVICE DEALER

Trading Area	Number of Respondents	Average Number of Salesmen Contacting Service Dealer
Dallas County	63	2.86
Tarrant County	24	3.63
Major Markets	17	2.24
Secondary Markets	17	3.29
Total	121	2.98

salesman would be wise to encourage this type of thinking on the part of the dealer.

An important fact was revealed when completed questionnaires from within the City of Dallas were separated from Dallas County and questionnaires from within the City of Fort Worth separated from Tarrant County. The average number of salesmen contacting City of Dallas dealers increased from 2.9 to 3.3. The remainder of Dallas County dealers were contacted by only 1.9 salesmen per dealer. Dealers in the City of Fort Worth were contacted by 4.1 salesmen, whereas the balance of the Tarrant County dealers were contacted by only 1.9 salesmen per dealer. It would appear from this and a study of Table XXI that the wholesaler

is working the city markets and the Secondary Markets, but is overlooking a vast business potential which is located close to his business operation.

Discounts Received on Receiving Tubes

The price which a business either has to pay, or will pay for its merchandise is of interest to all members of the industry. The sale of the receiving tube has historically been the heart of the radio and television service dealer business. No matter which level of the marketing process is considered, the sale of receiving tubes is of prime importance. Although tube sales have continued to drop each year since the introduction of the transistor, they still represent approximately 20 per cent or more of the radio-television service dealer's income, and approximately 40 per cent of his purchases from wholesalers.³ Table XXII summarizes the discounts off manufacturer's suggested list prices as received by service dealers on the purchases of receiving tubes. About 41 per cent of the respondents appear to be receiving discounts of 50/50 per cent. Only 10 per cent of the respondents are receiving less than 50/10 per cent discounts, whereas better than 44 per cent are receiving discounts above 50/10 per cent. Of the fourteen respondents

³Percentage revenue and profit figures quoted in interviews by Ray Miller, Manager, Scooter's Radio Supply Co., Fort Worth, Texas, and Sidney L. Hawkins, Administrative Assistant, Service Dealer Products, Adleta Electronics Co., Dallas, Texas.

TABLE XXII

DISCOUNTS WHICH RADIO-TELEVISION DEALERS RECEIVE
ON PURCHASES OF RECEIVING TUBES

Discount Received	Dallas County		Tarrant County		Major Markets		Secondary Markets		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Respondents receiving 50%	6	8.4	4	11.1	4	21.0	0	0.0	14	9.9
Respondents receiving 50/10%	31	43.7	12	33.3	7	36.8	8	50.0	58	40.8
Respondents receiving 50/10/5%	9	12.7	7	19.4	1	5.3	6	37.5	23	16.2
Respondents receiving 50/10/10%	9	12.7	5	13.9	1	5.3	2	12.5	17	12.0
Respondents receiving 60%	10	14.1	3	8.4	3	15.8	0	0.0	16	11.2
Respondents receiving other discounts	6	8.4	5	13.9	3	15.8	0	0.0	14	9.9
Total	71	...	36	...	19	...	16	...	142*	...

*123 Respondents report they purchased at 142 different discounts.

reporting other discounts, seven reported discounts above 50/10 per cent up to 70 per cent plus. One respondent reported a discount of 35 per cent; the remaining six did not write in an answer. The median average of discounts received by all service dealers is 50/10/5 per cent. It should be pointed out that no effort was made to relate discounts to brands of tubes. There is some indication of the relationship of private, foreign and domestic tube purchases presented in Table XXIII, however. It should be noted by all levels of the industry that in any business where such large profit margins exist on a product that this product and industry become highly susceptible to discounting and increased competition from sources both within and outside the industry. It would be wise to give consideration to elimination of suggested list prices, or to at least substitute more realistic profit margins.

Purchases of Foreign and Private Brand Merchandise

The continual increase in imports and the effect of private brands of merchandise has had a great impact on the electronics industry. The effect that each of these factors has on each marketing level and on the consumer must be reappraised often. In order to better appraise these factors, the radio-television service dealers were surveyed regarding their purchases of private and imported brands of electronic parts and tubes. The results have been reported in Table XXIII. At first glance,

it would appear that radio-television service dealers in the North Central Texas area have a resistance to private brands of electronic parts and tubes, and an even greater resistance to foreign brands. However, a closer look reveals over 30 per cent of the service dealers are purchasing private brands of tubes. Over 35 per cent of the Dallas County dealers report that they purchase private brands of tubes. Twelve per cent of all dealers report purchasing imported tubes, and 16 per cent report purchasing imported parts. Nearly 28 per cent of all respondents report they purchase private label electronic parts. With such large percentages as these, it must be concluded that both private brands and imported brands of electronic parts and tubes are an important part of today's electronic parts service dealer business. The service dealer must select the route most advantageous to him in merchandising, either foreign or domestic tubes and parts. He should test consumer reaction before making any big or definite change. The manufacturer has several possibilities to following along these lines. He can increase his advertising and place greater emphasis toward selling the ultimate consumer on the quality and features of his domestic built products. He can give consideration to using imports as part of his standard merchandise. Or he can make available a second line of imports that would parallel his domestic line of products. It is also possible for the manufacturer to make imported lines available to wholesalers or large dealers utilizing the wholesaler or dealer's choice

TABLE XXIII

NUMBER AND PERCENTAGE OF RADIO-TELEVISION SERVICE DEALERS
WHO PURCHASE PRIVATE BRANDED AND IMPORTED
PARTS AND TUBES

Trade Area	Dallas County		Tarrant County		Major Markets		Secondary Markets		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Total Respondents	62	...	26	...	16	...	17	...	121	...
Respondents who purchase private label tubes	22	35.5	8	30.8	3	18.7	4	23.5	37	30.6
Total Respondents	58	...	27	...	15	...	15	...	115	...
Respondents who purchase private label parts	18	31.0	7	25.9	2	13.3	5	33.3	32	27.8
Total Respondents	61	...	28	...	15	...	16	...	120	...
Respondents who purchase imported tubes	3	13.1	3	10.7	1	6.7	2	12.5	14	11.7
Total Respondents	58	...	29	...	15	...	15	...	117	...
Respondents who purchase imported parts	12	20.7	3	10.4	3	20.0	1	6.7	19	16.2

of private brand names. The wholesaler can follow methods of merchandising similar to those suggested to the dealer and manufacturer. It would probably be wise for them to either develop their own private label for all types of products, and/or to work with the manufacturer who is presenting a strong merchandising program along one or more of the suggestions mentioned in the foregoing.

While lower prices is the factor creating the increased emphasis on foreign and/or private brand merchandise, it is important to evaluate the quality of each product considered before making final merchandising decisions. Defective merchandise and increased failure rate can quickly affect any price advantages.

Receiving Tube Purchases As Related to Revenue
and Profit

It is possible to determine with some degree of accuracy the actual size of the average radio-television service dealer. This is accomplished by means of projecting the service dealer's average receiving tube purchases with known cost prices, and relating this to the composition of their total revenue. According to reliable industry sources,⁴ the radio-television service dealer's revenue basically consists of income from labor received from diagnosis and repair, and from sales of receiving tubes, picture tubes, and parts and accessories. Labor

⁴Ibid.

represents approximately 50 per cent of the service dealer's revenue and a 100 per cent contribution to gross profits; receiving tubes represent 20 per cent of the service dealer's revenue, whereas picture tubes represent 5 per cent, and component parts and accessories represent 25 per cent of their total revenue. From a profit standpoint, the service dealer earns approximately 40 per cent on parts and accessories, 25 per cent on picture tubes, and approximately 50/10/5 per cent on receiving tubes when purchased at the median average purchase price noted in Table XXII. The wholesaler's profit margins average approximately 30 per cent on parts and accessories, 23 per cent on picture tubes, and 18 per cent on receiving tubes when sold at the average median discount of 50/10/5 per cent.

Table XXIV presents data from respondent service dealers indicating their total receiving tube purchases, average per dollar, and an average cost of purchases of receiving tubes when figured at an approximate factory to distributor cost of eighty-seven cents⁵ per tube for American made receiving tubes. Suggested resale prices to the consumer were calculated on the basis of approximately 65.5 per cent

⁵ Average factory to distributor cost of eighty-seven cents per receiving tube was obtained from Guy Rutherford, Dallas, Texas, Regional Representative for the Radio Corporation of America. This is the current average billing price per receiving tubes to distributors in the Southwest Region.

TABLE XXIV

SUMMARY OF RECEIVING TUBE PURCHASES IN UNITS AND DOLLARS BY RADIO-TELEVISION SERVICE DEALERS, AND THE RELATION OF PURCHASES TO TOTAL REVENUE AND PROFITS

Purchases, Cost, Revenue and Profit Factors	Dallas County	Tarrant County	Major Markets	Secondary Markets	Total
Number of Respondents	59	24	14	11	108
Total number of receiving tubes reported purchased by all respondents each month	16803	4695	4535	2550	28583
Average number of receiving tubes purchased by each respondent each month	285	196	324	232	265
Average revenue from sale of tubes per month by Service Dealer selling at Sugg't. List Price (Ave. x \$2.50)*	\$ 712.50	\$ 490.00	\$ 810.00	\$ 580.00	\$ 662.50
Average cost to the Service Dealer when purchasing at discount of:					
50% (Ave. x \$1.25)	\$ 356.25	\$ 245.00	\$ 405.00	\$ 290.00	\$ 331.25
50/10% (Ave. x \$1.12)	\$ 319.20	\$ 219.52	\$ 362.88	\$ 259.84	\$ 296.80
50/10/5% (Ave. x \$1.06)	\$ 302.10	\$ 207.76	\$ 343.44	\$ 245.92	\$ 280.90
50/10/10% (Ave. x \$1.01)	\$ 287.85	\$ 197.96	\$ 327.24	\$ 234.32	\$ 267.65
50% (Ave. x \$1.00)	\$ 285.00	\$ 196.00	\$ 324.00	\$ 232.00	\$ 265.00
Manufacturer selling price to Distributor (Ave. x 87¢)*	\$ 247.95	\$ 170.52	\$ 281.88	\$ 201.84	\$ 230.55

TABLE XXIV --Continued

Purchases, Cost, Revenue and Profit Factors	Dallas County	Tarrant County	Major Markets	Secondary Markets	Total
Average total revenue per month by the Service Dealer (Ave. Tube Revenue at List Price x 5)	\$3562.50	\$2450.00	\$4050.00	\$2300.00	\$3312.50
Average dollar gross profit per month by Service Dealer (60.8% of Total Revenue)**	\$2486.63	\$1710.10	\$2826.90	\$2024.20	\$2312.13

*Manufacturer's selling price to Distributor of 87 cents per tube is average billing price of Radio Corporation of America to its Southwestern Distributors. Suggested list price of \$2.50 is established by calculating discount on selling price at approximately 65.5 per cent to manufacturer's selling price.

**Consists of: Labor (50 per cent of revenue at 100 per cent profit); Parts and Accessories (25 per cent of revenue at 40 per cent profit); Picture Tubes (5 per cent of revenue at 25 per cent profit); Receiving Tubes (20 per cent of Revenue at 50/10/5 per cent profit).

discount from list to distributor cost. Table XXIV includes the dealer cost (wholesaler's selling price) of tubes when figured as several different discounts off list prices.

As presented in Table XXIV, the average radio-television service dealer purchases approximately 265 receiving tubes per month. This represents an income of \$662.50 per month to the service dealer selling tubes at the suggested list price. As mentioned the median average discount received by the

TABLE XXV

COMPOSITION OF REVENUE AND GROSS PROFIT
OF THE SERVICE DEALER

Revenue and Profit Components	Per Cent of Total Revenue	Dollars Revenue	Per Cent Contributed to Profit	Dollars Gross Profit
Labor	50	\$1656.25	100.0	\$1656.25
Parts and Accessories	25	828.12	40.0	331.25
Picture Tubes	5	165.63	25.0	41.41
Receiving Tubes	20	662.50	50/10/5	283.22
Total Revenue*	100	\$3312.50	69.8	\$2312.13

*Source: Table XXIV.

dealer on purchases of receiving tubes is a discount of 50/10/5 per cent off list. This means the average service dealer's expenditures per month for receiving tubes is \$280.90; this is also the distributor's potential average revenue per dealer on sales of receiving tubes. It can be

TABLE XXVI

COMPOSITION OF REVENUE AND GROSS PROFIT OF THE
ELECTRONIC PARTS WHOLESALER FROM SALES
TO RADIO-TELEVISION SERVICE DEALERS

Revenue and Profit Components	Dollar Revenue*	Average Per Cent Profit**	Dollar Gross Profit
Parts and Accessories	\$ 496.87	30.0	\$149.06
Picture Tubes	124.22	23.0	28.57
Receiving Tubes	379.28	18.0	68.27
Total Revenue*	\$1000.37	24.6	\$245.90

*Source: Table XXV, difference in gross profit and revenue, except for labor not included.

**Industry Sources, Footnote 3.

noted that at a discount of 50/10/5 per cent, an average dollar gross profit on receiving tubes per dealer by the wholesaler would be \$50.35 per month. At first glance this might seem impressive, but when it is recalled that the service dealer divides his business among three and one-fourth sources of supply, an average gross profit of only \$15.47 per wholesaler can be expected. Table XXVI indicates the revenue per month of wholesalers from the average service dealer to be \$1000.37. Gross dollar profit of 24.6 per cent, or \$245.90 can be anticipated. When dividing this by three and one-fourth sources of supply, an average gross profit of only \$75.66 per wholesaler per dealer can be expected. The question before the wholesaler now is: "can he provide the required services to the dealer within this margin of profit?"

The service dealer's total revenue in Table XXIV was obtained by multiplying his average monthly receiving tube dollar sales at the suggested list price by five. This was done because it was previously stated that 20 per cent of the service dealer's total revenue is from sales of receiving tubes. The average radio-television service dealer, therefore, has a total revenue per month of \$3312.50. From this can be obtained the average dollar profit per month per service dealer. Labor, being one half of the revenue, contributes 100 per cent, or \$1656.25 to gross profit; parts and accessories are 25 per cent of total revenue with an average profit of 40 per cent, or \$331.25; picture tubes are 5 per cent

of the total revenue with a gross profit of 25 per cent, or \$41.41; and receiving tubes, as mentioned, account for 20 per cent of the service dealer's revenue, and a profit of \$283.22 when purchased at discounts of 50/10/5 per cent. A combination of each of these percentage of revenue factors as related to their individual profit margins reveals a cost of goods sold of only 30.2 per cent, or a gross profit margin on revenue of 69.8 per cent. Therefore, based on a total revenue of \$3312.50, the average radio-television service dealer has an average monthly dollar gross profit of \$2312.13 before any expenses have been deducted. Further discussion of the service dealer's average gross profit will be made later in this chapter.

Total Market Potential

Assuming that the respondents and their average purchases are typical of the market, it is possible to calculate total market potentials of the service dealer trade in Dallas and Tarrant Counties, and in other areas also as long as the number of service dealers are accurately known. For example, there are 290 radio-television service dealers listed in the 1962 Dallas Yellow Page telephone directory, and 172 dealers listed in the Fort Worth directory. By multiplying 290 times the total revenue per dealer as shown in Table XXIV for Dallas County, a total retail potential of \$1,033,125 exists. This figure does not include many businesses such as furniture and department store service

departments, or businesses not listed in the directory, but it does give an approximation of the size of the market. In Tarrant County, the market is much smaller not only because of the difference in total size of the market, but because the average total receiving tubes purchased is much less than all other markets. This difference is noticeable throughout Table XXIV. However, the 172 radio-television service dealers in Tarrant County represent a total dollar potential of \$421,400. For the aggressive dealer and wholesaler, the potential is great.

The wholesaler's total potential revenue per month from the 290 radio-television service dealers in Dallas County is \$219,022; and for the 172 dealers of Tarrant County a revenue potential of \$89,266 per month exists. Once again, it must be remembered that these figures do not include many potential radio-television service dealers such as furniture and department stores. The greater the accuracy in determining the exact number of service dealers, the greater the accuracy in determining the market potential.

Parts and Tube Inventory

Proper inventory levels are of prime importance in today's business. This is particularly true in the radio-television servicing business. Being out of a part when making a house call is extremely costly for the dealer to have to call back again. An adequate inventory is a great necessity. Equally important, however, is inventory turn.

TABLE XXVII
PARTS AND TUBE INVENTORIES OF
RADIO-TELEVISION SERVICE
DEALERS

Market Area	Number of Respondents	Inventory in Dollars	Average Dollar Inventory Per Dealer
Dallas County	58	\$146,400	\$2524.14
Tarrant County	26	55,040	2116.92
Major Markets	15	35,230	2348.66
Secondary Markets	14	34,350	2453.57
Total	113	\$271,020	\$2398.41

Without proper inventory turnover, profits will suffer. Table XXVII reports the service dealer to be maintaining an approximate dollar inventory of parts and tubes of \$2400. If this were related to the total revenue as shown in Table XXV, an inventory turn of 16.6 times per year exists. Were the inventory related to only revenue received from parts and accessories, picture tubes, and receiving tubes, a turn of over eight times per year still exists. In either case, it would appear that the inventory turn is high. The service dealer would likely reduce his expenses and increase his profits if he increased his inventory and reduced the number of turns to nearer six turns per year based on parts, accessories, picture tube, and receiving tube sales.

Number of Employees Per Service Dealer

Each service dealer was questioned as to the number of full time employees he employed, including himself. The average for all dealers

TABLE XXVIII
 NUMBER OF PERSONS EMPLOYED BY RADIO-TELEVISION
 SERVICE DEALERS

Market Area	Number of Respondents	Total Persons Employed	Average Number of Persons Employed Per Dealer
Dallas County	61	182	2.98
Tarrant County	28	77	2.75
Major Markets	17	70	4.12
Secondary Markets	16	56	3.50
Total	122	385	3.16

is 3.2 persons employed per dealer. Dealers in Major and Secondary areas employ more persons than do Dallas and Tarrant County dealers. Table XXVIII provides the details as to number of employees per dealer.

The average number of persons employed should be related to Table XXV and to the total revenue and average dollar gross profit per month. For example, the average total revenue per service dealer of \$3312.50 divided by the average number of employees per dealer indicates that each employee averages \$1048.25 per month revenue. Dollar profit per month per employee averages \$731.68. Considering that no salaries, office expenses, overhead, depreciation, advertising, or any type of expenses have been deducted, it is questionable as to how much net profit the radio-television service dealer is actually making. A further study into these expenses to determine actual net profit or loss would be suggested.

Service Dealer Requests of the Manufacturer

Each service dealer was asked how the manufacturer could help him most. There was a very large response to this question considering the fact that all answers had to be written in. A total of 159 suggestions from 103 respondents were received. These data have been compiled in Table XXIX. While each of the suggested means of assistance are considered to be self-explanatory, it should be noted that over 40 per cent of the replies are requests for assistance in service training, or requests for being better served with technical data and servicing information. Suggestions that products be designed, engineered, and manufactured with quality in mind, and easily accessible for servicing were related to over 20 per cent of the replies. Although there were several replies which suggested that the manufacturer not sell certain classes of customers, most replies were suggestions that would appear to benefit the manufacturer as much or more than the service dealer. Practically all suggestions should be given thorough consideration as possibilities for improvement, including individual consideration to such suggestions as: "unnecessary changes without advantages"; "furnish schematics with each piece of new equipment"; "pay part of the service cost for the first ninety days"; and, "put plugs on all cables and wires going to tuner and yoke."

TABLE XXIX

METHODS BY WHICH THE MANUFACTURER CAN HELP THE
RADIO-TELEVISION SERVICE DEALER AS REPORTED
BY THE SERVICE DEALER

Replies from 103 Respondents (54 Dallas, 23 Tarrant, 13 Major, 13 Secondary)	Total Replies	
	Number	Per Cent
Methods		
More training, better service seminars, clinics, demonstrations and meetings	24	15.08
Better service literature, technical data	21	13.20
Design and engineer products with ease of accessibility and servicing in mind	17	10.69
By keeping you posted quickly on design changes made	15	9.42
Use proven, standard parts and tubes; stop unnecessary changes with no advantages	12	7.54
Strive to manufacture a better (or high) quality product - care in assembly	10	6.29
Come to us (service dealer) about our problems and ask what the customer wants - personal contact - counsel	6	3.77
Stay out of service business - quit factory or captive service business	5	3.14
Get service literature and manuals out faster - before product is put on market	4	2.52
Keep merchandise out of discount, grocery, and drug stores, and back door distributors	4	2.52
Furnish schematics, technical data, diagrams with each piece of new equipment	4	2.52
Making replacement parts available	3	1.89
Have less style and model changes - retool or engineering changes only	3	1.89
Build better tuner	2	1.26
Stop using printed circuits - or use fewer	2	1.26
Fewer distributors with more stock	1	.63
Establish more uniform prices	1	.63
Establish a standard warranty on parts and labor such as ninety days guarantee on new merchandise sold	1	.63
Lower the price on picture and receiving tubes	1	.63

TABLE XXIX --Continued

Methods	Total Replies	
	Number	Per Cent
Stop imports	1	.63
Do not sell to mail order catalogue companies	1	.63
Sell through parts and merchandise distributors only	1	.63
More consideration on defective and out-of-warranty parts	1	.63
Better warranty service setup	1	.63
Stop furnishing tubes to stand-up (drive-in) tube checkers	1	.63
Stand behind merchandise	1	.63
Faster service	1	.63
Provide information on most active breakdown of their particular units (service short cuts)	1	.63
Advertising	1	.63
Greater help in service and sales - merchandising ideas	1	.63
Discontinue practices that promote back door selling	1	.63
Pay part of the service cost for the first ninety days	1	.63
By putting plugs on all cables and wires going to tuner and yokes	1	.63
Keep me current on most equipment they sell, for a fee	1	.63
Keep me current on where to get parts and how to correct trouble	1	.63
Well planned field service with emphasis on independent service shop	1	.63
Supply line folders and information on new television and appliances, including price sheets	1	.63
Keep "cheap" sets off the market	1	.63
Give us the products we need at the time of year we have sales for them (fall months)	1	.63
By underlining "first year" tubes on price list, where stock could be provided for new sets	1	.63
No complaint with American manufacturers	1	.63
Total	159	100.00

Service Dealer Requests of the Wholesaler

The service dealers were also questioned as to how the electronic parts wholesaler could best assist the dealer. While assistance by conducting service schools, and providing technical data ranked high in importance, maintaining a good parts inventory and assortment was of equal importance. Each of these factors accounted for approximately 20 per cent of the total replies. Of significant importance to the service dealer is his request that the wholesaler sell only to qualified accounts. Approximately 16 per cent of the replies requested the distributor to: stop selling retail; stop selling back door; stop selling to part timers; and, stop selling discount, grocery, and drug stores. There were three requests to sell licensed shops only. As was the case with the requests of manufacturers, almost every reply appears to have some merit. Thus, it would be wise for the wholesaler to analyze each reply included in Table XXX.

Service Dealer Requests of the Service Dealer
Association

Each radio-television service dealer was requested to answer the question "How can the service dealer association help you most"? Once again, as was the case with the manufacturer and the distributor, the number one request was for assistance, and for the service dealer association to provide service training, clinics, technical programs and

METHODS BY WHICH THE WHOLESALER CAN HELP THE
RADIO-TELEVISION SERVICE DEALER AS REPORTED
BY THE SERVICE DEALER

Replies from 94 Respondents (51 Dallas, 20 Tarrant, 12 Major, 11 Secondary)		Total Replies	
Methods	Number	Per Cent	
Maintain a well stocked parts department with inventory and assortment adequate to fill needs from stock	18	16.36	
Conduct service schools, demonstrations, and instruction, including test equipment use	15	13.65	
Sell only to qualified accounts and not to retail customers - stop selling "back door"	14	12.73	
Provide service manuals, catalogues, technical data, price information on new merchandise promptly	8	7.27	
Maintain a good parts stock on current year model merchandise	4	3.63	
Provide better service, fast delivery, prompt filling of orders	4	3.63	
Have trained personnel, familiar with inventory, and with ability to read schematics	4	3.63	
Counsel - provide management courses - service advice - personal contact	4	3.63	
Advertising to tell customer the service dealer is qualified to service equipment	4	3.63	
Sell "licensed" shops only	3	2.72	
Stay out of service business	3	2.72	
Have a consignment plan for dealers to sell new merchandise	2	1.82	
Stocking hard-to-get parts, not just items that sell fast	2	1.82	
Keeping service dealer informed on new products beneficial to industry	2	1.82	
Eliminate red tape on handling warranty parts and tubes	1	.91	
More consideration on out-of-warranty and defective parts	1	.91	
More cooperation with manufacturer	1	.91	

TABLE XXX --Continued

Methods	Total Replies	
	Number	Per Cent
Co-op advertising money	1	.91
Stop selling to "part timers", "night-creeper", "do-it-yourselfers", "sundowners"	1	.91
Keep merchandise out of discount, grocery, and drug stores	1	.91
Charge retail prices when selling to retail customers	1	.91
Send an invoice with merchandise prices with each order	1	.91
Help in securing parts	1	.91
Provide advertising material	1	.91
Complete back orders quickly	1	.91
Keep informed on products - replacement items	1	.91
Checking needs of serviceman	1	.91
Assist in getting manufacturers to standardize parts and tubes, and to build quality sets	1	.91
Rendering good service to both large and small	1	.91
Have exact replacement parts	1	.91
By being quality minded instead of thinking of profits only	1	.91
They are doing about all they can - too many are going out of business now	1	.91
I have no complaints with my distributor	1	.91
Rapid service when we go in to pick up parts	1	.91
Increase stock	1	.91
Improve delivery	1	.91
None	1	.91
Giving volume discounts on receiving tubes	1	.91
Quality products	1	.91
Salesmen with experience so they know problem	1	.91
Total	110	100.00

demonstrations. This single request accounted for 21 per cent of the replies, or as much as the next three requests combined. It should be noted that 7 per cent of the replies were in favor of a state licensing law for radio and television service persons; another dealer thought such a law already existed and should be enforced. Four per cent of the replies indicated disfavor of licensing legislation. Many of the suggestions of means of assistance could prove extremely beneficial to the service dealer and could be encouraged by dealer associations. Some useful suggestions were: upgrading the service dealer by promoting ethics; providing business aids for profitable management; standardizing service techniques and prices; and, exchanging customer credit information. Approximately 11 per cent of the replies were determined to be non-association members. Some of these indicated an interest in an association, although the majority have a preference of being independent. Only three replies appeared to have strong opposition to associations of any type. Two of these suggested that associations disband.

The majority of the dealer replies concerning the service dealer association's means of providing assistance were constructive in nature. There were a number of replies which would be debatable throughout the electronics industry, even among association members. Such debatable replies were: state licensing laws for radio and television service persons; becoming militant with dishonest dealers outside the association;

TABLE XXXI

METHODS BY WHICH SERVICE DEALER ASSOCIATIONS
CAN HELP THE RADIO-TELEVISION SERVICE DEALER
AS REPORTED BY THE SERVICE DEALER

Replies from 71 Respondents (43 Dallas, 15 Tarrant, 8 Major, 5 Secondary)		Total Replies	
Methods	Number	Per Cent	
Provide service training, clinics, technical programs, demonstrations	17	21.00	
Don't know - none - questionable	6	7.43	
Promote a state licensing law for radio and television servicepeople	6	7.43	
Work on a program to raise the status, or upgrade the service (man) dealer - promote ethics	5	6.19	
Get more equalized pricing between different service shops - standardize prices and techniques	5	6.19	
Provide business aids and training to show how to operate profitably	3	3.72	
Exchange of information - working together	3	3.72	
Disband	2	2.46	
Reduce monthly dues to \$1.30 instead of \$2.50 - lower initiation and membership dues	2	2.46	
Keeping (giving) top quality service	1	1.23	
Charging legitimate pricing, reasonable, fair	1	1.23	
Eliminating stand-up (drive-in) tube checkers	1	1.23	
Enforce the law which prohibits distributors from selling part timers and unlicensed	1	1.23	
Become more militant with dishonest dealers and servicemen outside the association (they are tight with members)	1	1.23	

TABLE XXXI --Continued

Methods	Total Replies	
	Number	Per Cent
Keep in touch with industry, watching serviceman's interest in legislation	1	1.23
Placing service work where it belongs	1	1.23
Assist in securing local credit	1	1.23
Keep test equipment prices down	1	1.23
Exchanging list of poor pay customers	1	1.23
Consumer education of repairman's problems and hazards of do-it-yourself work	1	1.23
Making suggested techniques or improvements in repairing	1	1.23
Increasing membership	1	1.23
Use energy to upgrade profession instead of lobbying for legislation to eliminate competition	1	1.23
Although I am opposed to restrictive legislation, this is most likely the proper answer	1	1.23
Applying pressure for manufacturer to advertise and provide service schools	1	1.23
The primary good of these organizations is to wipe out the independent (little man)	1	1.23
We do not belong	1	1.23
I do not belong to any association; I operate along and cooperate with any shop in town	1	1.23
I really don't know, most anything would be an improvement	1	1.23
Secure from set manufacturer technical service data on a subscription basis	1	1.23
Restricting membership qualifications to qualified technicians (not dealers)	1	1.23
Group insurance	1	1.23
Better relations among competitors	1	1.23

TABLE XXXI --Continued

Methods	Total Replies	
	Number	Per Cent
Leave non-members, part time service dealers alone. Most members, or a big part of them got their start as "part timers"	1	1.23
We are afraid we have let this go by. We should, but have not participated in the last few years	1	1.23
Show how to serve public; ways to save public money	1	1.23
By doing just what it is doing - bring us the latest dope on economic conditions, technical and management information	1	1.23
Work with manufacturer and representatives in setting up service meetings	1	1.23
I am not interested in any association or union	1	1.23
Help get rid of "gyps and crooks" in this business	1	1.23
We are independent	1	1.23
Total	81	100.00

applying pressure for manufacturer to advertise and provide service schools; and, restricting membership qualification to qualified technicians (not dealers). However, all replies, as shown in Table XXXI, should prove to be of interest throughout the electronic parts service dealer industry.

Merchandising, Training, and Future Plans of The Radio-Television Service Dealer

There are several factors which affect both the long-range, and the immediate future of the radio-television service dealer. The following are important considerations which may affect the future of not only the service dealer, but the entire electronic service parts industry:

(1) Improvement in the quality of radio and television sets which reduces the failure rate, and incidence for service, resulting in a reduction of income.

(2) Gradual replacement of receiving tubes by transistors, printed circuits, and other similar innovations which reduces not only the failure rate of radio and television sets, but eliminates a major revenue producing factor which affects the total income of the entire industry.

(3) Anticipated electronic product innovations resulting from the past and presently heavy research expenditures. These innovations should produce new consumer and industrial products with a potential for increased revenue from both sales and service. At the same time, new product knowledge for both selling and servicing these devices will be required.

(4) The effect of color television! Will it be another television boom that will provide added revenue from both sales and service?

(5) Competition! What will be the effect of the discounter, the stand-up tube checker, the "open door" wholesaler, and the new generation of electronic technicians?

(6) Increasing costs, particularly labor and equipment. Particular attention to profit planning is needed as the gap closes between costs and profits.

Although it is not the purpose of this study to solve each of the foregoing problems, it is a purpose of this study to determine what the radio-television dealer is thinking and doing about some of these problems.

Merchandising Plans

It was related that 56 per cent of the total respondents included in this study were primarily engaged in only the service business, and an additional 33 per cent indicated their business to be a combination of both service and sales. Since product sales potentially represent an additional source of revenue for the service dealer, consideration should be given to increasing emphasis on product sales. Table XXXIII indicates that 46 per cent of the service dealers do intend to place greater importance on product sales. Although this is a minority, it must be noted that this would represent a high percent of change, or shift in the nature of business. For the wholesaler and manufacturer, this should indicate a vast potential of new outlets for product sales.

TABLE XXXII
 PLANS OF SERVICE DEALERS TO PLACE GREATER
 EMPHASIS ON PRODUCT SALES

Trading Area	Replies from Dealers Who Plan to Emphasize Product Sales		Replies from Dealers Who Do Not Plan to Place Greater Emphasis on Sales	
	Number	%	Number	%
Dallas County	23	37.7	38	62.3
Tarrant County	12	50.0	12	50.0
Major Markets	7	50.0	7	50.0
Secondary Markets	10	76.9	3	23.1
Total	52	46.4	60	53.1

Most service dealers, quite naturally, feel that radio and television sets would be the most profitable and well suited products to sell. According to Table XXXIII over 85 per cent of the respondents shared this feeling. Approximately 20 per cent of the respondents believe that communication equipment would be profitable and suitable. This same per cent held true for the sale of sound systems, also. It is felt that several of the "written in" answers have significance and, therefore, should be studied. Parts and accessories, as well as used sets, would appear to be very compatible to the service dealer. From the competitive viewpoint, it may become necessary for the service dealer to

PRODUCTS CONSIDERED MOST PROFITABLE AND WELL SUITED FOR THE SERVICE DEALER TO GIVE CONSIDERATION TO SELLING

Marketing Area	Dallas County Replies		Tarrant County Replies		Major Market Replies		Secondary Market Replies		Total Replies	
	Number	%	Number	%	Number	%	Number	%	Number	%
Radio-TV	51	82.3	21	91.3	10	71.4	16	100.0	98	85.2
Communications	15	24.2	4	17.4	5	35.7	0	0.0	24	20.9
Stereo	38	61.3	12	52.2	8	57.1	12	75.0	70	60.9
Sound systems	13	21.0	1	4.3	4	28.6	4	25.0	22	19.1
Major appliances	4	6.5	1	4.3	3	21.4	7	43.8	15	13.0
Traffic appliances	3	4.8	4	17.4	0	0.0	2	12.5	9	7.8
Other*	...	...	...	...	...	...	...	...	11	9.6
Total Replies	124	...	43	...	30	...	41	...	249	...
Total Respondents	62	...	23	...	14	...	16	...	115	...

*Other products mentioned were:

	Number of Times Mentioned
Parts and accessories	2
Used sets	1
More profit comes from used sets	1
Lawn mowers	1
Color television	1
All are (if cutthroats could be poisoned)	1
Any product that will meet the people's needs in his (dealer's) location	1
We sell nothing but service	1
Eventually; none are profitable at this time	1
None; sales personnel have a tendency to give away service in order to make and hold a sale	1

attempt to become sub-jobbers for parts and accessories in the future. There were three replies from respondents who felt that product sales of any type would be non-profitable. Another dealer reported that any product that will meet the people's needs in his (dealer's) location would be suitable. He is, of course, correct; however, the question remains as to what product.

Other types of competition continue to reduce the revenue of the radio-television service dealer today. One of the more important types of competition is the "stand-up type tube checker".⁶ This method of testing and selling tubes has appreciably affected the revenue of the service dealers. Of interest to the entire industry are methods of competing effectively with this mode of selling. Table XXXIV indicates that 78 per cent of the service dealers offer free tube checking. In certain areas of the nation, service dealers have offered free service calls on the assumption of profiting from the sale of tubes and parts. It is interesting to note that no respondents in the North Central Texas area report to have offered free service calls as a competitive measure. While only 7 per cent of the total dealers report discounting tubes, it should be noted that 15 per cent of the dealers in Tarrant County discount

⁶The "stand-up type tube checker" is that type of tube checker commonly found in drug stores, drive-in groceries and other high foot-traffic locations. The customer normally checks his own tubes, without assistance, either professional or otherwise.

HOW THE RADIO-TELEVISION SERVICE DEALER COMPETES
WITH STAND-UP TUBE CHECKERS

Method Used to Compete	Dallas County Replies		Tarrant County Replies		Major Market Replies		Secondary Market Replies		Total Replies	
	Number	%	Number	%	Number	%	Number	%	Number	%
Offer free tube checking	50	84.7	20	76.9	9	56.3	13	72.2	92	78.0
Discount tube prices	2	3.4	4	15.4	1	6.3	1	5.6	8	6.8
Offer free service calls	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Do nothing	11	18.6	5	19.2	6	37.5	4	22.2	27	22.0
Other*	...	...	...	...	...	...	...	...	27	22.9
Total Replies	...	...	...	...	...	...	...	...	153	...
Total Respondents	59	...	26	...	16	...	17	...	118	...

Number of Times Mentioned

*Other ways listed to compete:

Other professional advice	4
We use a stand-up checker in store	2
Discount 10 per cent	2
Have always offered free checking even before stand-up checkers were thought of	1
Standard ninety day warranty	1
Discourage people from using obsolete and inferior checkers in grocery stores	1
Let the situation take care of itself -- it costs the customer - not us	1
Buy groceries from Safeway Stores	1

*Other ways listed to compete:	Number of Times Mentioned
Courteous conversation	1
With television to check and answer questions	1
Free tube checking and advice on condition of all tubes checked	1
Also have a few (checkers) on location	1
Any member of association offers better prices than 7-11 stores	1
Carry better stock, use more reliable testers, give good advice from professional	1
Direct mailer	1
Best thing to ever happen to servicemen - customers check own tubes and replace in wrong sockets - I get more calls because of this	1
Inform customers of hazards of stand-up tube checkers	1
Also own a stand-up checker in drug store	1
We have a little trouble with this	1
Sell quality tubes - name brand	1
We advise customers how far to go and what to look for before he buys a lot of tubes not needed	1
Fair trade practices (nobody can succeed working for free)	1

as a competitive measure. Probably the most significant and surprising fact of all is that 22 per cent of the replies indicate that the dealer does nothing to compete with the stand-up checker. With such a large percentage of the service dealers doing nothing, it is not surprising that this form of competition has taken so much of the tube and battery market. Of the write in methods of competing,

the offer of professional advice and assistance appear to be the better method of competing. It should be noted that this and most other competitive methods noted are effective only if the customer visits the dealer. No effective methods of keeping the customers from using and purchasing through use of the stand-up checkers have been presented.

Plans for the Future

The new product innovations and rapid changes within the electronics industry make it necessary for the service dealer to definitely plan his future. The service dealer must be prepared to service the products which will be in use in the future. Table XXXV lists the products which the service dealers feel they should begin making preparations to be servicing five years from now. Color television was reported by 96 per cent of the respondents as the number one product to make preparations for servicing. It is interesting to note that 100 per cent of the respondents in Dallas reported color television as the product to make preparations for servicing. This could possibly have been anticipated. However, in the instance where 40 per cent of the respondents indicated communications equipment as being important¹ for future servicing would probably not have been anticipated. It is also doubtful that business machines and electric organs would have been anticipated as being as great a potential income producers as is indicated by Table XXXV. Write in answers did not indicate any unknown

TABLE XXXV

PRODUCTS WHICH THE SERVICE DEALER SHOULD MAKE PREPARATIONS TO SERVICE FIVE YEARS FROM NOW

Marketing Area	Dallas		Tarrant		Major Market Replies		Secondary Market Replies		Total Replies	
	County Number	Replies %	County Number	Replies %	Market Number	Replies %	Market Number	Replies %	Number	%
Radio	36	59.0	15	53.6	6	40.0	11	68.8	68	56.7
B & W TV	40	65.6	16	57.1	5	33.3	13	81.3	74	61.7
Color TV	61	100.0	25	89.3	14	93.3	15	93.8	115	95.8
Toys - Hobby eqpt.	2	3.3	1	3.6	0	0.0	0	0.0	3	2.5
Test equipment	6	9.9	3	10.7	0	0.0	1	6.3	10	8.3
Communication equipment	25	41.0	15	53.6	4	26.7	4	25.0	48	40.0
Business machines	9	14.8	4	14.3	2	13.3	2	12.5	17	14.2
Electric organs	11	18.0	4	14.3	1	6.7	2	12.5	18	15.0
Others*	...	...	...	...	...	...	...	...	12	10.0
Total Replies	190	...	83	...	32	...	48	...	365	...
Total Respondents	61	...	28	...	15	...	16	...	120	...

*Other products listed were:

Transistors	2
Transistor-operated radio and television	1
Air conditioners	1
Marine depth finders	1
Industrial gear	1
Electronic dishwashers	1
Phonograph records	1
Appliances	1
Closed circuit television	1
All need preparations - know your business, whatever it is	1
This would depend on establishment	1

developments. It is surprising to note that only three replies indicated that suggested planning or preparations be made for servicing transistors or transistorized products.

Service Training

Color television, during recent months, has taken on greater importance. It was noted in Table XXXV that 96 per cent of the radio-television service dealers believed they should prepare now for servicing color television five years from now. It should be noted in Table XXXVI that 96 per cent of the dealers feel that being trained in servicing color television is important today. This percentage varies from 90 per cent in Tarrant County to 100 per cent in Major and Secondary markets.

TABLE XXXVI

DEALERS WHO BELIEVE IT IS IMPORTANT TO BE TRAINED
IN SERVICING COLOR TELEVISION TODAY

Marketing Area	Replies from Those Who Believe It Is Important		Replies from Those Who Believe It Is Not Important	
	Number	%	Number	%
Dallas County	61	96.8	2	3.2
Tarrant County	26	89.7	3	10.3
Major Markets	15	100.0	0	0.0
Secondary Markets	17	100.0	0	0.0
Total	119	95.6	5	4.4

An interesting comparison to this is the number of dealers who have had training in servicing color television. Table XXXVII indicates only 81 per cent of the service dealers have had training in color television. It should be noted that the Tarrant County percentage indicates only 72 per cent trained, which is quite a bit below average. Several respondents indicated that only a part of their employees had received any color training. It is quite possible that the number of individuals still untrained is substantial. Particular note of this should be made by all levels of the industry with definite plans for action to be formulated.

TABLE XXXVII
DEALERS WHO HAVE HAD TRAINING IN
SERVICING COLOR TELEVISION

Marketing Area	Replies from Those Who Have Had Training		Replies from Those Who Have Not Had Training	
	Number	%	Number	%
Dallas County	51	82.3	11	17.7
Tarrant County	21	72.4	8	27.6
Major Markets	13	86.7	2	13.3
Secondary Markets	15	88.2	2	11.8
Total	100	81.3	23	18.7

Some guide as to where the service dealer has been receiving his color television training, and/or where he plans to receive this training, can

SOURCES WHERE SERVICE DEALER RECEIVED OR PLANS TO RECEIVE TRAINING FOR SERVICING COLOR TELEVISION

Marketing Area	Dallas		Tarrant		Major		Secondary		Total	
	County Replies Number	%	County Replies Number	%	Market Replies Number	%	Market Replies Number	%	Replies Number	%
Manufacturers	23	45.1	10	45.5	7	53.8	4	25.0	44	43.1
Distributor who sells Color TV	35	68.6	13	59.1	10	77.0	15	75.0	73	71.6
Regular parts distributor	3	5.9	1	4.5	1	7.7	0	0.0	5	4.9
Service Dealer Association	4	7.8	2	9.1	2	15.4	1	6.3	9	8.8
Other*									24	33.3
Total Replies									155	
Total Respondents	51		22		13		16		102	

*Other comments of places for training:

	Number of Times Mentioned
Books, publications, magazines, trade journals	10
Correspondence, home study course	6
Technical and trade schools	4
RCA color course	2
Do not plan any, at least not until more color sets are in use locally	2
Shop training - on the job	1
Adleta Company	1
Institute of Service and Technology, Chicago, Illinois	1
Texas Institute of Technology	1
Central Tech., Kansas City, Missouri	1
De Vey Tech. Institute (where I had previous training)	1
Manufacturer's night schools	1
Any place where we can	1
Don't plan to - plan to specialize in industrial and mechanical electronic equipment	1

be determined from Table XXXVIII. A great amount of dependence is on the wholesaler who sells the color television to provide service training, it is noted. A total of 72 per cent of the dealers depend upon the color television set distributor for training, whereas only 5 per cent depend on the regular parts wholesaler, and 9 per cent depend upon the service dealer association. Other important sources of color training included: publications and trade journals; Sam's Photo Fact color course; correspondence and home study courses; and trade schools.

The service dealer was surveyed as to who was making the greatest contribution in providing technical training to him and his personnel. Table XXXIX indicates the distributor who sells the product to be the most important source of this training. Fifty-four per cent of the respondents signify this importance. The manufacturer ranked second, with 38 per cent of the respondents, and third in importance was the regular parts distributor being mentioned by 21 per cent of the respondents. Fifteen per cent of the replies indicated the service dealer association to be providing the greatest amount of technical assistance. Once again, Howard Sam's Photo Facts was mentioned by nine respondents. Self-teaching along with the assistance of various trade publications should be recognized for their importance. Also, the importance of trade schools must be noted as a source of technical training.

TABLE XXXIX

SOURCES WHO MAKE THE GREATEST CONTRIBUTION IN PROVIDING TECHNICAL TRAINING, PARTICULARLY NEW PRODUCTS AND CIRCUITRY, TO THE SERVICE DEALER AND HIS PERSONNEL

Marketing Area	Dallas County Replies		Tarrant County Replies		Major Market Replies		Secondary Market Replies		Total Replies	
	Number	%	Number	%	Number	%	Number	%	Number	%
Manufacturer	21	36.8	9	37.5	8	53.3	4	25.0	42	37.5
Distributor who sells product	29	50.8	12	50.0	7	46.6	12	75.0	60	53.6
Regular parts distributor	9	15.8	7	29.2	4	26.7	3	20.0	23	20.5
Service Dealer Association	7	12.3	6	25.0	2	13.3	2	12.5	17	15.2
Other*										
Total Replies										
Total Respondents	57		24		15		16		165	

*Other organizations, or comments given:	Number of Replies
Howard Sam's Photo Facts	9
Service magazines; technical and trade publications	5
Trade schools	2
None	2
Manufacturer and distributor help through associations	2
We train our own men	1
Self, and Texas Institute	1
All choices mentioned assist	1
Personal effort with new trade publications	1

A great deal of data has been discussed within this study; however, a vast amount of data still remains in each of the tables. It is suggested that dealers, distributors, and manufacturers utilize this data for improving their individual efficiency and performance within the industry they serve.

CHAPTER VI
SUMMARY, CONCLUSIONS, AND
RECOMMENDATIONS

Summary of the Findings

The phenomenal growth of the electronics industry, coupled with constant changes and continuous product improvements has created many problems for the industry, especially to those engaged in the marketing of these products. This study concerns itself with problems specifically related to the electronic parts distribution industry. By means of personal interviews with carefully selected executive personnel in the electronic parts wholesaling industry in the North Texas area, and thorough study of industry trade publications the problems of greatest current significance were selected for individual study. These problems were:

1. Development of a concept of doing business;
2. Supplier evaluation;
3. Three factors relating to the profit squeeze:
 - a. Profit margins
 - b. The small size order
 - c. Delivery problems;

4. Market research as specifically related to the radio-television service dealer market.

It should be pointed out that the aforementioned problems were selected from a large group of industry problems found to exist.

These included:

1. Inventory control and obsolescence;
2. Product line duplication;
3. Bankruptcies within the industry;
4. Price cutting;
5. Salesmen's compensation methods;
6. Customer demands for additional service;
7. Credit, collections and increasing accounts receivable;
8. New markets and new products;
9. Sales, product training, and methods of sales promotion;
10. Increasing competition.

The purpose at this point in the study was to describe and analyze the problems selected for independent study, utilizing case illustrations where needed to more effectively present the problems or possible solutions to the problems. It was also intended to indicate possible means of solving each problem.

Development of a Concept of Doing Business

In order to obtain maximum efficiency distributors of electronic parts must first decide what they want to be and what they intend to do. Decisions as to the image to be created must be the first decision of the distributor. This image can be planted firmly by establishing a written concept of doing business. A concept or philosophy of business begins with a purpose and ends with an image.

By integrating policies of the Adleta Company, a Dallas, Texas electronic parts wholesaler for thirty years, with the ideas or philosophies of various current writers and management leaders, a modern concept of doing business has been developed.

The changing patterns of industry has created the need for planning for the future. Today's principles and objectives must be established under the customer oriented concept of determining what the customer wants, when and where he wants it and what price does he want to pay. It must be recognized that business exists in order to supply a product or service wanted by the customer.

The need exists for the concept to be in writing since it promotes a deep delegation of authority, consistency, teamwork, understanding, and the continuity and ease of transmission from one generation of executives to another. The time spent in writing the concepts will be made up many times over by the executive manhours saved in eliminating repetitive, routine decisions. It is also generally assumed that a person will

be a more effective member of an organization if he has a knowledge of the purpose of the organization and its operations; therefore, operating concepts should be restated in writing.

Business today, principally has some responsibility and obligation to customers, employees, suppliers, ownership, the community, the government, and competition.

In developing a concept of doing business management must assume the responsibility for establishing objectives which are understood and accepted; the most important of these being:

1. Creating new markets;
2. Anticipating the future;
3. Training and motivating the business organization toward contributing to the joint accomplishments of common goals;
4. Set high standards for efficiency, service, and performance;
5. Operate within the spirit and letter of the law;
6. And, to communicate the basic purposes and ethics of the company to all those in company ranks so they may communicate them to customers and others outside the firm through their actions;
7. Planning for a profit, for itself as well as those to whom it has responsibility.

It should be remembered in developing a concept of doing business that a philosophy is a basic attitude. It is a frame of mind. It is a guiding principle and should be a deep conviction.

Supplier Evaluation

It has been established that supplier evaluation is a part of product planning; and that product planning is definitely a function of management. Like most current management problems, the objectives of the business enterprise need to be established and known prior to beginning the supplier evaluation. The purpose of the evaluation also should be known. Is it in anticipation of adding product lines, of reducing the number of lines being merchandised, or is the purpose simply a periodic review of existing sources of supply?

Evaluation factors which were discussed in this study were:

1. Supplier background and reputation;
2. Supplier's policies;
3. Product line features;
4. Market potential;
5. Profit potential;
6. Pricing policies;
7. Competition;
8. Advertising and sales promotion;

9. Special assistance policies;
10. Inventory.

It might at first appear as if there are too many factors to be considered; however, it should be pointed out that all factors do not have to be considered in every evaluation. The degree of importance as related to the decision required determines the extent of the evaluation factors to be considered.

Since evaluation factors do vary according to the decision required it is difficult to establish a level of importance to each. The level of importance can only be weighed by the person or group who is studying and evaluating each factor. From the study as presented it appears that the more important evaluation factors are quality, competition, price, brand acceptance, and profit. When considering the suppliers of industrial goods only, the factors would likely be quality or reliability, price, profit, competition, inventory requirements, and dependability in delivery.

A three-page supplier evaluation worksheet has been prepared. The first two pages are designed in such a manner that they may be forwarded to the supplier for completion and return. This would be time saving and beneficial when an evaluation is being made of all suppliers. The third is retained and completed in privacy since some of the evaluation factors are of a confidential nature.

Analyzing Profit Margins

This study was to provide the basis for an analysis of the cost and resale prices and a maintained profit margin of twenty-five different types of electronic parts sold at the wholesale level by the Adleta Company of Dallas, Texas. A sampling of 224 invoices were taken at random from a total of approximately 1100. Price extensions were made and totaled for each product type. Invoices were sorted according to each sales territory division. Profit margins were calculated for each product code group as well as the total. These data have been grouped into tables for ease of analysis and comparison. Data concerning average profit margin by product and by sales territory which is also a customer type of classification is included. Additional information regarding the total lines billed, number of items, average dollar billing, total dollar cost and resale, and average percent margin of profit for the company is also included in the study.

Sales to service accounts showed a profit margin of 28.1 per cent, while sales to industrial and commercial accounts provided a profit of 28.6 per cent.

The total company average margin of profit was 26.7 per cent, or less than the profit as shown by either sales to service type accounts or sales to industrial and commercial type accounts. The lower company average was created by house account sales which provided a profit of only 16.5 per cent.

The Small Size Order

In order to provide a basis for an analysis and comparison of orders placed by customers, an attempt was made to point out by case analysis the high percentage of low dollar value orders being placed by customers.

A recent study by the American Institute of Supply Association, Inc. served as a guide for this study. Invoices of the Adleta Electronics Co. were collected and sorted into groups according to the total dollar value of the invoice. Further classification was made by determining the number and percentage of invoices in each group, and a percentage which each group's dollar value represented of the total dollar value of the entire sample. From this information the average dollar value per line item and per invoice could be determined for each group classification and for the total sample. Additional analysis was made possible by separating the invoices into charge and cash invoices as well as to type of customer.

In the survey conducted by the American Institute of Supply Associations, Inc., it was revealed the average sale per invoice by members of the association to be \$57.88. The average expense for handling each invoice was \$13.90. More significant was the fact that 57.7 per cent of all invoices were for less than \$25.00 and produced only 8.3 per cent of the sales dollar. Invoices for 22.6 per cent of the total invoices were for \$5.00 or less and produced only .9 per cent of the total dollar volume. While the results of this survey pertain to a

different industry, the pertinent facts brought to light are the basis for being alerted to this problem.

A total of 1566 invoices were used in the Adleta Electronics Co. study. This represented a total dollar billing of \$42,423.80; an average dollar billing of \$27.09 per invoice. There were 5022 line items, or an average of 3.2 line items per invoice and \$8.44 per line item.

The exact processing cost of writing, billing, posting and collecting an invoice by the Adleta Electronics Co. is not known, although it is estimated to be approximately \$3.25. Using certain assumptions, however, the total cost of handling an order can be determined. Assuming that the company is now breaking even, neither making a profit nor sustaining a loss, and that the cost of goods sold are currently 69.6 per cent, then the gross operating profit and cost of doing business including sales cost would be equal, or 30.4 per cent. This would also mean that the present average dollar billing per invoice of \$27.09 would be the break even point of billing per invoice and that 30.4 per cent of this amount, or \$8.24 would be the average total cost for handling invoices. Therefore, all invoices showing less than \$8.24 profit would be unprofitable to handle. For ease of figuring all invoices of less than \$25.00 (rather than \$27.09) were considered as unprofitable to handle. By applying this consideration to the total data collected 1223, or 78.1 per cent of the total invoices are unprofitable. This represents 20.6 per cent of the total dollar volume. At this point it would appear necessary

to accept only orders of \$25.00 or more; however, to establish such a policy would likely antagonize many customers who normally place larger orders, and would cause a loss in this business.

In order to determine additional information concerning the problem it was decided to separate the invoices into three groups consisting of cash sales, charge sales to industrial accounts, and charge sales to service dealer accounts. Cash sales consisted of 27 per cent of the total invoices and averaged \$7.05 per invoice. While this is considerably lower than the \$25.00 minimum figured as a break even point, consideration must be given to the fact that cash invoices require very little handling as compared to charge invoices. Also, approximately one half of the cash sales are will call, thus eliminating delivery expense. In addition, no collection expenses are involved and cash flow is improved. Therefore, it would be difficult to say that seven dollar cash sales are unprofitable.

Charge sales to industrial accounts represented only 23 per cent of the total invoices, yet accounted for 50 per cent of the total dollar sales. Even though an average of \$59.14 per invoice was obtained on sales to industrial accounts, the fact that 61 per cent of all invoices to this type of account are less than \$25.00 indicates that a problem still exists.

Charge invoices billed to service dealers accounted for approximately 50 per cent of the total invoices and averaged \$23.16 per invoice.

It would appear that all sales to this type of account are unprofitable, particularly since 76 per cent of all invoices were for less than \$25.00. It cannot be overlooked, however, that this group's charge purchases account for over 42 per cent of the company's total business. Ways must, therefore, be found to salvage this business, since it is too great a percentage of the company total to give up without effort. Warranty replacement parts are believed to have created a part of this problem because of dealers ordering only the part needed for repair and later returning the defective part for credit. It is believed a portion of the problem can be relieved by adhering to the manufacturer's policy which states defective parts are to be exchanged.

The Delivery Problem

In an effort to pinpoint the delivery problem an analysis of all deliveries of the Adleta Electronics Co. for the entire year 1962 was made. Deliveries were separated as to type of customer: service dealer or industrial user.

In analyzing the number of deliveries it was noted that the average number of deliveries per day by month increased substantially during the year. Closer observation pointed out that all of the increase was in deliveries to service dealers. Deliveries to industrial accounts actually declined during the year.

Delivery costs were analyzed to a degree and found to be considerably higher than that of the automotive parts jobber. Data from interviews with business leaders were related. Possible solutions are that minimum order regulations be established.

Viewpoints and Opinions
of the Radio-Television
Service Dealer

This study was made to provide the basis for an analysis of the viewpoints and opinions of radio-television service dealers regarding their buying habits, motivation factors, sources of supply, and plans for the future. The findings should provide facts which can be utilized by radio-television service dealers, electronic parts wholesalers, and manufacturers in planning and programming for more efficiently and effectively serving themselves, their customers, and their industry. This study was confined to opinions expressed by radio-television service dealers geographically located in the North Central Texas area. No attempt was made to include the opinions of commercial, industrial, or specialized users of electronic parts. Primary data were received from specially prepared questionnaires completed by radio-television service dealers. Secondary data were received from current books and trade publications, and published data from industry sources, and personal interviews with qualified persons in the electronics industry.

Questionnaires were mailed to 715 radio-television service dealers. This included every service dealer listed in the 1961 Dallas, Texas yellow page telephone directory, and every dealer listed in the 1960 and 1962 Tarrant County yellow page telephone directory. Additional questionnaires were mailed to dealers whose names were obtained from the 1960 Texas State Tax Reports. Completed questionnaires that could be utilized were received from 126 dealers. This represented a return of 18 per cent. A total of thirty-two questionnaires were returned marked unclaimed and another four questionnaires returned with special notations of no longer being in the service business. Twenty-two of the unclaimed questionnaires were from Tarrant County. Investigation of this high percentage of returns led to a discovery of use of a 1960 telephone directory in the original questionnaire mailing. A comparison of 1960 and 1962 directories revealed there were forty-nine dealers listed in the 1960 directory but missing from the 1962 directory; these were replaced by fifty-one new dealers. This represents a turnover of service dealers of approximately 22 per cent every two years.

All data was compiled and grouped into the marketing areas of Dallas County, Tarrant County, major market trade areas, and secondary market trade areas. This was made possible by using post office cancellations. It was almost possible to have accomplished the same result from signed questionnaires, since 86 per cent of the respondents did sign their questionnaires. This indicates a high degree of interest

on the part of the respondents. The major market trade areas consisted of the North Central Texas cities of Waco, Tyler, Abilene, Sherman and Wichita Falls. Secondary market trade areas are cities located outside Dallas and Tarrant Counties which do not have an electronic parts wholesaler located in the city. The sample proved extremely good for the study, since 56 per cent of the respondents are engaged in "service only", and an additional 33 per cent indicated both "service and sales" as being the principal nature of their business. Dallas County returns constitute approximately 50 per cent of the total sample, Tarrant County 25 per cent, and the balance of the samples is equally divided between major and secondary marketing areas. The division of the sample into trade areas not only provided additional information, but it provided a possible check for accuracy of the entire sample for each question being analyzed.

The service dealer places 39 per cent of his orders by telephone, 27 per cent by picking up his needs, 31 per cent through salesmen who call on him, and only 2 per cent by mail. Mail orders seem to be a thing of the past with most dealers. Even in major trade areas, mail orders amounted to only 6 per cent of the total methods used in placing orders. It should be noted, also, in secondary markets that 14 per cent of the orders are placed by telephone as compared to only 3 per cent by mail.

Nearly one half of all service dealers attempt to give each salesman who contacts them an order. In major and secondary areas this percentage increases to two thirds. The study further points out that each service dealer is contacted by an average of three wholesale salesmen. A reluctance to say "no," or a lack of loyalty to individual suppliers could be indicative of this type of business procedure. When data of the cities of Dallas and Fort Worth were separated from Dallas and Tarrant Counties, it was noted that service dealers were being contacted by less than two salesmen in the suburban portion of these counties.

The radio-television service dealer is motivated to purchase principally because of the quality of the product, fast delivery service, and a liking for the source of supply. These three reasons account for over one half of all reasons given. Added cash discounts had appeal for quite a number of dealers, although it is significant to note that quality of product and fast delivery combined are greater motivating factors than are all combined price cuts, close outs, rebates and other discount factors. Also, wagon jobbers and consignment merchandise motivates practically no dealers to purchase.

Although 27 per cent of the dealers orders are picked up at the wholesaler's, the study reveals that an extra discount of 9 per cent would be required in order to get all respondents to pick up their merchandise.

Each radio-television service dealer averages purchasing from three and one-fourth suppliers, and approximately two thirds of the dealer's business is placed with his number one source of supply. The remaining one third of his business is placed with his remaining two and one-fourth sources. By averaging the amount of business received by the three distributors receiving the greatest amount from each dealer, it was determined that these three distributors received from 50 per cent to 63 per cent of the total business in each marketing area. This means that the remaining thirteen to nineteen wholesalers in each trading area receive only a small portion of the business. It should be noted that 111 dealers reported 24 different distributors as doing the best job.

When questioned as to reasons why it was felt a distributor did a good job, good service and fast delivery accounted for nearly 25 per cent of the reasons. A complete stock accounted for 14 per cent of the reasons given, and good products accounted for another 10 per cent. Personal attention and courteous treatment, efficiency and accuracy, and cooperation and fairness briefly summarize all other reasons given.

Twenty-three per cent of the service dealers reported that they make purchases from out of state catalogue houses. The principal reasons given for these purchases were lower prices and non-availability of the merchandise locally. Foreign parts and obsolete items

could be detected as reasons for purchasing from these out of state catalogue merchants, also. Eleven per cent of the reasons written in were from respondents who gave reasons for not purchasing from out of state catalogue houses. Their reasons basically concerned time lag, distance, inferior products, and a dislike for chain stores.

The average discounts off manufacturer's suggested list prices received by the service dealer on his purchases of receiving tubes are as follows: 10 per cent of the dealers received 50 per cent discount; 41 per cent received 50/10 per cent; 16 per cent received 50/10/5 per cent; 12 per cent received 50/10/10 per cent; 11 per cent received 60 per cent; and the remaining 10 per cent received various other discounts. No effort was made to relate discounts to brands of tubes.

Eleven per cent of the dealers indicated they purchase foreign brand receiving tubes, while 31 per cent purchase private brands. Sixteen per cent of the dealers make purchases of foreign brands of parts, while 28 per cent purchase private brands.

The average service dealer in the North Central Texas area is purchasing 265 receiving tubes per month. By projecting this average with known cost prices and relating this to factors which compose revenue, it was possible to determine the average size or revenue of the radio-television service dealer. Further projection of these figures make it possible to estimate the approximate size of each marketing area.

The cost to the service dealer each month for receiving tubes, when purchasing at a discount of 50/10/5 per cent is \$280.90. Total revenue received by the service dealer from the sale of parts, tubes, and accessories, and labor per month is \$3312.50. When costs for parts, tubes, and accessories are deducted, the gross profit before any expenses is \$2312.13. When these figures are divided by the 3.2 employees per service dealer, it is determined that each employee is producing \$1048.25 per month revenue resulting in a gross profit per employee of \$731.68 before any expenses are deducted.

The service dealer purchases \$1000.37 per month from the wholesaler. If the wholesaler were receiving all of the dealer's business, a gross profit of \$245.90 could be expected by the wholesaler. However, the service dealer divides his business among three and one-fourth wholesalers; therefore, a profit of only \$75.66 per wholesaler can be expected. The wholesaler has a gross profit of \$50.35 per month if the dealer purchases all of his receiving tubes from one wholesaler at a discount of 50/10/5 per cent. If this profit is split among the three and one-fourth wholesalers, the average gross profit of only \$15.47 per wholesaler can be expected on the dealer's receiving tube purchases.

By multiplying the total revenue per dealer by the number of dealers in Dallas County, a total retail potential of over \$1,000,000 is known to exist.

An inventory of approximately \$2400 is carried by the service dealer. Based on sales of parts, tubes, and accessories this represents a turnover rate that exceeds eight times per year.

Over 40 per cent of the replies requested that the manufacturer offer more assistance in service training, and provide better service on technical data and servicing information. Suggestions that products be designed, engineered, and manufactured with quality, and be easily accessible for servicing accounted for over 20 per cent of the replies.

Other than conducting service schools and providing technical data, the electronic parts wholesaler is expected by the dealer to maintain a good inventory and to sell to only qualified accounts.

The dealer desires that service dealer associations provide service training, clinics, technical programs and demonstrations. Other useful requests of the service dealer association were that they: upgrade the service dealer by promoting ethics; provide business aids for profitable management; standardize service techniques and prices; and that they act as a credit exchange information bureau.

Over 46 per cent of the service dealers indicated that they intend to place greater emphasis on product sales. Radio and television products are considered the most well suited for the service dealer to sell, although communication equipment, sound systems, and parts and accessories should be considered.

In an attempt to compete with "stand-up type tube checkers", 78 per cent of the dealers indicated they offer free tube checking. Only 7 per cent of the dealers discount tubes as a means of competing. It is significant to note that 22 per cent of the dealers reported they do nothing to compete with stand-up checkers. Several dealers reported that they offer professional advice. There were no dealers who reported giving free service calls.

Color television was reported by 96 per cent of the dealers as the number one product to make preparations for servicing in the future. Other products indicated as being important for future servicing are communication equipment, business machines, and electric organs. Only three dealers mentioned transistors or transistorized products as being important for future servicing.

Eighty-one per cent of the respondents indicated that they have had color television service training. It is not known, however, as to whether all members of the dealer's organization have completed color training. It is quite possible that the number of individuals still untrained could be substantial. The vast majority of dealers, 71 per cent, have received their color television training, or expect to receive their training from distributors who sell color television sets. Forty-three per cent of the dealers look to the manufacturer for their training. Only 5 per cent of the dealers have received from or look to the regular electronic parts distributor for any type of color television training

assistance. Replies from dealers as to who is providing the greatest amount of technical training follow a similar pattern in that the distributor who sells the product has been making the greatest contribution; the manufacturer ranks second; and the regular parts dealer ranks third. It should be noted that 15 per cent of the replies indicated the service dealer association as being the greatest contributor of technical training.

Conclusions

Developing a Concept of Doing Business

It can be concluded that every business should take the time to develop a concept of doing business. The concept in its purest form is a method of planning or establishing permanent objectives. The concept should be written in order to promote teamwork and understanding. Where basic objectives have been established over a period of time but have not been written, they should be restated in writing as they have already developed a degree of character and created an image in the minds of customers, competitors, employees, suppliers, and the community. It has been concluded that a concept, or philosophy is a basic attitude, a frame of mind, a guiding principle and should be a deep conviction.

Supplier Evaluation

It is concluded that supplier evaluation is a part of product planning and a management function. Objectives of the business enterprise need to be established and known before proper product planning and supplier evaluation can take place.

All factors do not have to be weighed in every evaluation. The degree of importance as related to the decision required determines the extent of the number of evaluation factors to be considered.

It is concluded that the more important evaluation factors are quality, price, competition, brand acceptance, and profit. When considering the suppliers of industrial goods only, the most important evaluation factors would likely be quality, reliability, price, profit, competition, inventory requirements, and dependability in delivery.

It is further concluded that use of the three-page supplier evaluation worksheets would be time-saving and beneficial when an evaluation is being made of all suppliers.

Determining Profit Margins

A study of the tables in this part of the study reveal that the purposes of the study were accomplished in that: (1) the average percentage of profit maintained on each type of electronic parts product has been determined; and (2) variations in the percentage of

profit maintained on sales to industrial and commercial users versus sales to service accounts proved to be small.

The Small Size Order

It can be concluded that in many instances the cost of handling small orders exceeds the gross profit produced by these orders. There definitely exists a problem of too many small orders being handled by the Adleta Company. Methods need to be devised to reduce the severity of the problem.

The exact processing cost of writing, billing, posting, and collecting an invoice should be determined in order to establish a break even point for order handling. The data provided in this study should prove beneficial to the industry for purposes of comparative analysis.

The Delivery Problem

It can be concluded that a delivery problem not only exists, but that deliveries are increasing at such a rapid rate that methods must be devised immediately to control the increase. The increase in deliveries is attributed to deliveries to service dealers.

Delivery costs were found to be considerably higher than the comparable costs for automotive parts jobbers.

Viewpoints of Radio-Television
Service Dealers

It is determined from the summary of the findings that the total sample of completed questionnaires used in this study is of such size and quality as to fairly represent the radio-television service dealer business in North Central Texas.

Adequate telephone facilities and personnel to handle incoming calls is of great importance to the electronic parts wholesaler. Of equal importance is the inside salesman who personally assists in handling a majority of the customer orders.

The service dealer, in secondary markets in particular, places a high per cent of his orders by long distance telephone.

Since time is a factor which limits the revenue and income of the service dealer, it is concluded by this study that the service dealer is losing too much of his revenue-producing time in picking up merchandise, and with distributor salesmen who call on him.

The service dealer is placing his orders with too many different salesmen, and too many different sources of supply. His importance to each of these sources is, therefore, diluted.

Quality products and fast delivery are the two most important factors that motivate a dealer to purchase. Consignment merchandise and wagon jobbers have little motivation effect on the dealer.

Although the service dealer picks up a large per cent of his merchandise, he still places a high sense of value on having merchandise delivered. Considerable extra discount would have to be given in order to encourage him to pick up all of his requirements.

The electronic parts wholesale industry is dominated by a few wholesalers in each trade area. There are, apparently, too many wholesalers in the business in order for all to obtain reasonable business profits.

Good service and a complete stock of high quality merchandise are the reasons considered by a dealer as to why he feels a particular wholesaler is doing the best job.

Out of state catalogue merchants are definitely a source of supply for service dealers. Pricing and availability of foreign and/or obsolete merchandise apparently are the reasons for their penetration into the market.

The wholesaler is placing considerable sales emphasis on the city areas of Dallas and Tarrant Counties, but lets up on this emphasis on the suburban portions of these counties, and then increases emphasis again in secondary areas.

Large, unrealistic discounts on the purchase of receiving tubes are an open invitation for increased competition and price discounting from sources within and outside the industry.

Both imported and private brands of parts and receiving tubes are an important part of today's radio-television service dealer business. However, important decisions are yet to be made by the majority of the service dealers regarding imported and private brands of merchandise. Each level of the electronics industry will be affected by the decisions. Merchandising products of high quality is an important consideration to be remembered as these decisions are being made.

Considering that salaries, office expenses, overhead, depreciation, advertising, nor any other type of expenses have been deducted from gross profit in this study, it is questionable as to how much, if any, net profit the service dealer is actually making.

Based on the amount of merchandise the service dealer picks up, his requests for fast service, and the high rate of inventory turn, it is believed that the inventory of the service dealer is too small.

The service dealer desires additional training, and technical information. He anticipates or expects the manufacturer, and/or wholesaler to provide this information and assistance.

The service dealer organization offers a vast potential of new outlets for product sales for both the manufacturer and wholesaler.

Too many service dealers have a do-nothing attitude toward competing with the "stand-up type tube checker."

Free service calls are not being used by the North Central Texas service dealers as a method of securing business.

Color television is the number one product the service dealer should be preparing to service in the future. The dealer is possibly overlooking the future servicing requirements of transistorized products, however.

The service dealer anticipates receiving training in servicing color television primarily from the distributor who sells color television, and secondarily from the manufacturer.

Recommendations

Developing a Concept of Doing Business

It is recommended that all businesses develop a concept of doing business, and that this concept should be in writing.

Businesses who have formal concepts that were developed many years in the past should restate these concepts, making certain that the original policies are in keeping with current concepts as well as current operating procedures.

Supplier Evaluation

It is recommended that electronic parts distributors, and other businesses who are dealing with a multiplicity of suppliers take the following action:

First, make a thorough study of past and present company policies;

Second, plan objectives well in advance, and make known the image which the company desires to create;

Third, make a thorough study of its market potential;

Fourth, mail pages one and two of the supplier evaluation worksheet to all suppliers for completion and return;

Fifth, complete page three of the worksheet;

Sixth, evaluate all suppliers in order to determine strength and weaknesses in product or supplier structure;

Seventh, take appropriate actions to correct weaknesses in improving the product line structure.

Profit Margins

It is recommended that a study of this type be made each six months in order to observe any changing patterns in profit margins.

Tables should be studied carefully and plans be made to place greater effort on higher margin product types that also represent higher dollar volume.

Further study should be made of product types that are showing high dollar volume, but low profit margins, with plans to be formulated for improving the profit margins.

Further study should also be made on product types that show little or no activity, or that represent a small dollar billing. It is possible that these product types should be discontinued.

The Small Size Order

It is recommended that all electronic parts distributors make a study of their business to determine if similar small size order problems exist. The comparison of data should be beneficial in proving the existence of the problem.

Continued study of the problem should be made by all members of the industry. In addition, special emphasis should be placed on studying competitive industries such as tobacco wholesalers, food wholesalers, electrical supply companies, and automotive parts distributors in order to analyze their methods of operation and historical development.

Additional specific recommendations are as follows:

1. Establish policies and procedures that would upgrade and/or eliminate invoices that are less than \$5.00.

It is best to begin at a low dollar minimum figure and work up to higher levels, thereby not completely upsetting the entire business structure. This is the area where the primary problem exists and where greatest savings can be effected.

2. Handle warranty replacement and defective parts on an exchange basis rather than invoicing and crediting.
3. Establish minimum billings of \$2.00 on charge invoices.

4. Study specific accounts to determine who is continually placing small orders. Present these dealers with a plan for maintaining larger inventories.
5. Simplify invoicing and accounting procedures, particularly for customers who seldom use their accounts. A post card invoice and/or return money envelope could be prepared. This would eliminate normal invoice handling and processing, as all billings could be handled through one account.
6. Encourage cash sales and will call orders.
7. Continue to develop industrial type business with its larger average sale.
8. Develop sales on products that have a higher dollar value such as test equipment, citizen's band, and hi-fi gear. In addition, merchandise package deals in order to increase the size of the order.
9. Determine exact cost of invoice processing by means of standard cost accounting methods.

The Delivery Problem

1. Reduce scheduled deliveries to two per day.
2. Eliminate large trucks in making parts deliveries. Use pickup trucks, panel trucks, or economy vans.
3. Analyze delivery cost more carefully and determine ways of reducing. Compare cost with those of contracting deliveries with independent delivery companies.
4. Establish a \$5.00 minimum on orders to be delivered free. Establish a delivery charge of \$1.50 on special requests for deliveries under \$5.00. After the minimum idea has been accepted, gradually increase minimums until they reach a break even point.

Viewpoints of Radio-Television Service Dealers

The following are recommendations to the radio-television service dealers in North Central Texas.

Analyze long distance telephone expense, particularly in placing orders for merchandise. Attempt to place more orders by mail in order to reduce this telephone expense.

Reduce the amount of time spent in picking up merchandise by carrying additional inventory, and by having the wholesaler to deliver orders.

Conserve time by placing orders with fewer salesmen, and fewer sources of supply. This should reduce the amount of time spent with each salesman, and increase the dealer's importance with the sources of supply he continues to deal with.

Study income and expenses to accurately determine the current profit and/or loss condition of his business. From this, a study of methods for producing additional revenue and profit should be considered. With the continuing decline in the sale of receiving tubes, particular emphasis should be placed on the methods of increasing revenue from labor. A study of the automotive service dealer industry and their preventive maintenance promotion methods and standard rate charges would also be recommended.

Increase inventory, thereby reducing unnecessary customer call backs, and special trips to pick up merchandise at the wholesaler's.

The service dealer should enter the consumer products sales field in order to increase his income. An attempt should be made to develop parts, tubes, and accessories as over-the-counter sales items, and not just for customers requiring service.

Offer professional advice and free tube checking as a method of increasing over-the-counter sales, and competing with stand-up type tube checkers.

Prepare himself now for servicing color television, communications equipment, business machines, and electronic organs in the near future. He should also give greater consideration to preparing himself now for the future servicing requirements of transistorized products.

The service dealer should give more of his business and support to wholesalers and manufacturers who are providing him with assistance in service training.

The following are recommendations to the electronic parts wholesaler:

Review his ability to handle incoming telephone calls quickly and efficiently. He should determine whether his present telephone facilities are adequate. Also, if he accepts collect long distance telephone calls, the expenses involved should be reviewed in comparison to the revenue produced.

Greater emphasis should be placed on the training of inside sales personnel. The abilities of the inside salesman should be upgraded.

The wholesaler should encourage the service dealer to place his orders with fewer sources of supply.

Efforts should be made toward upgrading the quality of merchandise which he sells; and to make an effort to improve order handling; and

provide for fast deliveries of merchandise. Study the specific data in this study which lists the reasons as to why the service dealer believes a particular wholesaler is doing the best job. This should be utilized as a guide to improvement.

Observe the movement of foreign and specialty types of merchandise that are being purchased through catalogue merchants by the service dealer, and determine whether the amount of business justifies a local inventory.

Place a greater sales emphasis on the suburban areas of Dallas and Tarrant Counties.

Encourage the manufacturer to eliminate suggested list pricing on receiving tubes. An attempt should be made to maintain prices on receiving tubes, because of the limited amount of profit when discounts exceed 50/10 per cent.

Develop a private brand of parts and receiving tubes, and/or work with the manufacturer who is presenting a strong merchandising program, particularly at the consumer level. Caution must be taken on any move of this type to be certain that high quality standards will be maintained.

Study the services offered, overhead expenses, and pricing and discount structure on sales to service dealers in order to determine if

services required by the service dealer are possible within the potential profit possibilities shown in this study.

Make an effort to provide an increasing amount of technical training for the service dealer. Also, set up additional special training programs for servicing color television.

Improve the methods of distributing technical data to the service dealer.

Encourage the service dealer to enter into, and/or to place greater emphasis on product sales.

Follow up this study with a complete market research study of the commercial and industrial market in North Central Texas.

The following are recommendations to the electronic parts manufacturer:

Assist the wholesaler in training inside personnel.

Attempt to limit or better control the number of electronic parts wholesalers, as the industry appears to be crowded already.

Eliminate "suggested manufacturer's list prices" on receiving tubes, or substitute more realistic profit margins as a measure of avoiding excessive discounting and increased competition from sources outside the service dealer industry.

Place greater emphasis on selling the consumer on the quality and features of his domestic made parts and receiving tubes, and encourage the consumer to request brand names.

Give consideration to using imports as part of his standard merchandise; or to make available a second line of imported parts and/or tubes which would parallel his domestic-built line. The possibility of making available to the wholesaler and/or larger dealers private brands of foreign or domestic tubes and parts under brand names selected by the wholesaler or dealer.

Provide assistance to the wholesaler, and to the service dealer on methods of making a profit. Particular emphasis at the dealer level should be placed on simplified accounting procedures, and the preparation of profit and loss statements.

Provide additional service schools for the service dealer.

Give consideration to including service data with each product manufactured. This could be included with customer instruction information, or concealed on the inside of the cabinet. Consideration should be given to other suggestions such as: "do not make unnecessary changes without advantages"; "pay part of the service cost for the first ninety days"; and, "put plugs on all cables and wires going to the tuner and yoke".

Manufacturers of consumer type products should design product lines specifically for the service dealer market.

Manufacturers of electronic parts and tubes should give consideration to production of consumer type products through service dealers.

Set up programs for assisting the wholesaler in providing additional special training to the dealer in servicing color television.

The following are recommendations to the radio-television service dealer associations:

Avoid high pressure techniques on non-member dealers and associates, as many dealers have a willingness to cooperate, but have no desire to be members of any organization.

Attempt to work with wholesalers and manufacturers on programs that would upgrade their industry. Controversial political disagreements should be substituted with cooperative projects that would prove mutually beneficial to all members of the industry. Such things as business aids for profitable management; standardized servicing techniques; standardized job-time charges; promotion of preventive maintenance programs; and specialized training courses for meeting the servicing needs of the future are projects that would be beneficial to everyone.

In general, it is recommended that radio-television service dealers, electronic parts wholesalers, and manufacturers of electronic parts and tubes utilize the data included in this study in planning and programming for more efficiently and effectively serving themselves, their customers, and their industry.

APPENDIX A

LETTER TO RADIO-TELEVISION SERVICE DEALERS
ACCOMPANYING QUESTIONNAIRE

To Radio and Television Service Company Owners and Managers
Gentlemen:

A research study is being made to determine the viewpoints
and opinions of radio-television service dealers regarding:

1. Their sources of supply for electronic parts;
2. Their motives and buying habits;
3. Merchandising and training.

Your co-operation in answering the attached questionnaire
will be a great aid in the completion of this project.

A stamped addressed envelope is enclosed for your use in
returning the completed questionnaire. Should you wish a sum-
marized copy of the findings of this study, sign your name and
address at the end of the questionnaire; otherwise, no signature
is necessary. You will not be identified.

N. T. GRADUATE RESEARCH PROJECT
P. O. BOX 8376, NORTH TEXAS STATION
DENTON, TEXAS

APPENDIX B

QUESTIONNAIRE FROM WHICH STUDY
WAS PREPARED

(Original Questionnaire Was Mimeographed on Two Legal Size Pages)

QUESTIONNAIRE

1. In placing orders for tubes, parts, etc., approximately what percentage of your orders are placed in each of the following ways:

- a. With salesmen who call on you _____%
- b. By going to the distributor store
and picking up what you want _____%
- c. By telephoning a distributor _____%
- d. By mail order _____%
- e. Other? (specify) _____%

2. Approximately how many distributor parts salesmen call on you?

3. Do you try to give a little business to each parts salesman that calls on you Yes No

4. Do you feel you are motivated to make purchases for any of the following reasons:

Yes	On occasion	Never	
___	___	___	Gifts and premiums
___	___	___	Cut price
___	___	___	Close out merchandise
___	___	___	Allowances on purchase of test equipment, trucks, etc.
___	___	___	Fast delivery service
___	___	___	Consignment
___	___	___	Added cash discount
___	___	___	Like the salesman
___	___	___	Like the company
___	___	___	Rebate on purchases
___	___	___	Quality of product

4. (Continued)

Yes	On occasion	Never	
___	___	___	Convenience of wagon jobber
___	___	___	Other _____

Circle the two above which you feel are most important.

5. From which distributors have you purchased electronic tubes and parts this year?

a. _____

b. _____

c. _____

d. _____

6. What percentage of your total purchases does each one represent?

_____ %

_____ %

_____ %

_____ %

7. Of all the distributors you deal with, which do you think does the best job, and why?

8. Do you make purchases from out of state catalogue houses?

___ Yes ___ No If yes, why? _____

9. If a distributor were located within 3 miles of your store, what per cent extra discount do you feel would motivate you to:

a. Pick up your needs? ___ % b. Pick up and pay cash? ___ %

10. Do you purchase private label: TUBES? ___ Yes ___ No
PARTS? ___ Yes ___ No

11. Do you purchase: IMPORTED TUBES? ___ Yes ___ No
PARTS? ___ Yes ___ No

12. What discount do you now receive on purchases of receiving tubes?
___ 50% ___ 50/10% ___ 50/10/5% ___ 50/10/10% ___ 60% Other ___ %

13. How do you compete with stand-up tube checkers?

___ Offer free tube checking ___ Offer free service calls
___ Discount tube prices ___ Do nothing

14. Who makes the largest contribution to assist you personally with technical training for you and your personnel, particularly new products and circuitry?

___ MANUFACTURER
___ DISTRIBUTOR WHO SELLS PRODUCT

14. (Continued)
 REGULAR PARTS DISTRIBUTOR
 SERVICE DEALER ASSOCIATION
 OTHER _____
15. Do you think being trained in servicing Color TV is important today? ___ Yes ___ No
16. Have you had training in Color TV service? ___ Yes ___ No
17. Where did you, or where do you plan to receive Color TV service training?
 MANUFACTURER
 DISTRIBUTOR WHO SELLS COLOR TV
 REGULAR PARTS DISTRIBUTOR
 SERVICE DEALER ASSOCIATION
 OTHER _____
18. Is your prime business: ___ Service ___ Sales ___ Other
19. Do you plan to go further into sales? ___ Yes ___ No
20. What products do you consider most profitable and well suited for the service dealer to give consideration to selling:
 Radio-TV ___ Stereo ___ Major Appliances
 Communications ___ Sound Systems ___ Traffic Appliances
21. What products do you think the service dealer should make preparations for servicing 5 years from now:
 Radio ___ Test Equipment List others:
 B & W TV ___ Communication Eqpt. _____
 Color TV ___ Business Machines _____
 Toys - Hobby Eqpt. ___ Electric Organs _____
22. How could the manufacturer help you most? _____

23. How could the distributor help you most? _____

24. How could the service dealer association help you the most? _____

25. How many persons do you employ full time, including owner? _____

26. Approximately how many receiving tubes do you use a month? _____

27. Approximately how much parts and tube inventory do you carry? _____

Sign here if you wish to receive a summarized copy of the findings of
this survey.

Name

Street Address

City

APPENDIX C

WHOLESALEERS MENTIONED BY SERVICE DEALERS AS SOURCES OF SUPPLY

<u>Name of Wholesaler</u>	<u>Location</u>
Adleta Electronics Co.	Dallas, Texas
All-State Electronics Co.	Dallas, Texas
Best Electronics	Waco, Texas
Brooks Supply	Dallas, Texas
Budrow Radio Supply	Dallas, Texas
Porter Burgess Co.	Dallas, Texas
Byrons	Dallas, Texas
Central Electronics	Dallas, Texas
Clark Radio	Wichita Falls, Texas
Crabtree's Wholesale Electronics	Dallas, Texas
East Texas Electronics	Tyler, Texas
Electronics Parts Co.	Abilene, Texas
General Electric Supply Co.	Dallas, Texas
Goss Radio	Wichita Falls, Texas
Greenville Service Co.	Greenville, Texas
Hargiss Co.	Waco, Texas

<u>Name of Wholesaler</u>	<u>Location</u>
Hoods TV Supply	Fort Worth, Texas
L & M Supply Co.	Waco, Texas
Lavender Radio	Tyler, Texas
Lone Star Wholesalers	Dallas, Texas
Marts, Inc.	Wichita Falls, Texas
McGee Radio Supply	Fort Worth, Texas
Medaris Company	Dallas, Texas
Modern Electronics	San Antonio, Texas
R & R Electronics Co.	Wichita Falls, Texas
Radio City Distributing Co.	Dallas, Texas
Radio Communications Supply	Abilene, Texas
Radio Shack	Boston, Massachusetts
Ross Electronics	Fort Worth, Texas
Scooter's Radio Supply Co.	Fort Worth, Texas
Servitronics	Austin, Texas
Southern Radio	Dallas, Texas
Southwest Radio	Dallas, Texas
Standard Tube	Fort Worth, Texas
Sutton's, Bill Wholesale Electronics	Fort Worth, Texas
Swieco, Inc.	Fort Worth, Texas
Trice Electronics	Oklahoma City, Oklahoma

<u>Name of Wholesaler</u>	<u>Location</u>
Tube Mart	Dallas, Texas
United Electronics	Fort Worth, Texas
Wanslow & Company	Dallas, Texas
Wholesale Electronics Supply	Dallas, Texas
Wilkinson Bros. Co.	Dallas, Texas
Worth Electronics	Fort Worth, Texas

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