

A STUDY OF SYSTEMS CONTRACTING

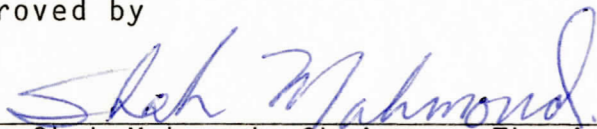
by

Bill D. Bradley


COPYRIGHTS RESERVED

August, 1975

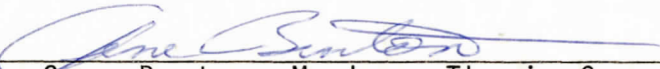
Approved by



Dr. Shah Mahmood, Chairman, Thesis Committee



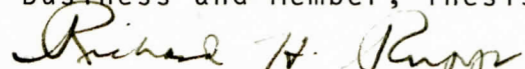
Dr. Orus Sutton, Member, Thesis Committee



Dr. Gene Burton, Member, Thesis Committee



Dr. Richard Sorensen, Dean, College of
Business and Member, Thesis Committee



Dr. Richard Rupp, Dean, Graduate School

337493

Archives
Closed
LD
175
.A40K
TH 345
359

A STUDY OF SYSTEMS CONTRACTING
//

A Thesis
Presented to
the Faculty of the Graduate School
Appalachian State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Bill D. Bradley
//
July 1975

ACKNOWLEDGMENTS

This study could not have been completed without the help of many people who have generously given of their time, wisdom, expertise, and encouragement.

When I consider the gratitude I feel to those who have had a part, I would first like to thank the forty purchasing agents who answered my questionnaire. This effort took knowledge, willingness to share, and time. Without their help, I could not have accomplished this study.

Next, I would like to thank my thesis committee for their guidance and thorough reading of the manuscript. These to whom I owe much appreciation include: Dr. Shah Mahmoud, Chairman of the thesis committee; Dr. Richard Sorensen; Dr. Orus Sutton; and Dr. Gene Burton.

I especially want to thank Dr. Shah Mahmoud, who has been an inspiration as teacher and counselor to me throughout my graduate study. Without his tireless encouragement and efforts, I could not have realized my goal.

To the other graduate instructors under whom I have had the pleasure of studying, I wish to express my gratitude. These include: Miss Kathryn Tully; Dr. Fred Badders; Dr. Ralph Hall; Miss Jane Riner; and Dr. Leland Cooper.

I would finally like to express my sincere thanks to my wonderful wife Kay and our dear children Donna, Russ, and

Robin, whose support and patient understanding have helped make this endeavor possible.

Bill D. Bradley

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	ii
LIST OF TABLES	vi
Chapter	
I. INTRODUCTION	1
STATEMENT OF THE PROBLEM	3
HYPOTHESES	3
IMPORTANCE OF THE STUDY	4
DEFINITION OF TERMS	5
Systems Contracting	5
Conventional Purchase Order	6
Maintenance, repair, and operational items	6
LIMITATIONS OF THE STUDY	7
ASSUMPTIONS	8
ORGANIZATION OF THE STUDY	8
II. REVIEW OF LITERATURE	10
III. PROCEDURES FOR CONDUCTING THE STUDY	36
INTRODUCTION	36
DEVELOPING THE QUESTIONNAIRE	36
CONTENT OF THE QUESTIONNAIRE	36
SELECTING THE RESPONDENTS	37
LETTER ACCOMPANYING QUESTIONNAIRE	37
FOLLOW-UP LETTER AND SECOND QUESTIONNAIRE	37

Chapter	Page
ORGANIZING THE DATA	38
ANALYZING THE DATA	38
IV. ANALYSIS OF DATA	39
SUMMARY OF QUESTION RESULTS	65
Question No. 8	66
Question No. 9	67
Question No. 10	67
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS . .	69
CONCLUSIONS	71
RECOMMENDATIONS	72
BIBLIOGRAPHY	74
APPENDIX A	77
APPENDIX B	78
APPENDIX C	84
APPENDIX D	85
ABSTRACT	91

LIST OF TABLES

Table	Page
4.1 FROM AN OVERALL POINT OF VIEW, HOW SATIS- FACTORY IS SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM)?	43
4.2 ON THE BASIS OF YOUR EXPERIENCE WITH SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM) HOW WOULD YOU RATE YOUR COMPANY'S BUYING AND SELLING PROCEDURES UNDER THIS METHOD	44
4.3 HOW WOULD YOU RATE THE VOLUME OF BUSINESS YOUR COMPANY HAS DONE UNDER SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM)?	45
4.4 HOW WOULD YOU RATE THE COST OF SYSTEMS CON- TRACTING (THE CONTRACT SUPPLIER SYSTEM) AS COMPARED WITH THE CONVENTIONAL SUPPLIER SYSTEM?	46
4.5 RATE THE AMOUNT OF PAPER WORK INVOLVED IN SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM) AS COMPARED WITH PAPER WORK IN THE CONVENTIONAL SUPPLIER SYSTEM	51
4.6 HOW WOULD YOU RATE THE TIME REQUIRED FOR HANDLING BUSINESS TRANSACTIONS USING SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM) AS COMPARED WITH TIME REQUIRED IN USING THE CON- VENTIONAL SUPPLIER SYSTEM?	52
4.7 PLEASE RATE THE FOLLOWING ITEMS IN TERMS OF HOW BENEFICIAL SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM) IS OPERATING FOR YOUR COMPANY	53
4.8 WHAT WOULD YOU SAY ARE THE MAJOR SHORT- COMINGS OF SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM)?	55
4.9 WHAT WOULD YOU SAY ARE THE MOST SATIS- FACTORY RESULTS YOUR COMPANY HAS DERIVED FROM USING SYSTEMS CON- TRACTING (THE CONTRACT SUPPLIER SYSTEM? .	58

	vii
Table	Page
4.10 PLEASE MAKE ANY FURTHER COMMENTS YOU MAY HAVE REGARDING SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM). ANY IDEAS YOU HAVE WILL BE HELPFUL	62

Chapter I

INTRODUCTION

With an ever-increasing need for industrial firms to find ways to cut costs, increase efficiency, and maintain good customer relationships, there is a growing need for finding the best way to deliver goods, perform services, and maintain mutually beneficial business for both vendors (suppliers) and buyers (users).

Modern Distribution Management published an article entitled "Systems Selling for Distributors," in 1970, in which the Consultant, Ernest L. Anderson, Jr., relates the history of Systems Contracting. Anderson, as Purchasing Director for Brown and Sharpe Manufacturing Company in the late 1950s, conceived and developed the "systems" method. Later, as purchasing director for Carborundum Company, Niagara Falls, New York, he further developed the method and began using systems purchasing in all of the Carborundum Company plants.¹

Contractual purchasing systems might be typically described as mutually beneficial or cooperative contract relationships which exist between a vendor (supplier,

¹Ernest L. Anderson, Jr., "Systems Selling for Distributors," Modern Distribution Management, New York: Van Ness Philip, Publisher, 1970, p. 1.

industrial wholesaler-distributor) and a purchaser (buyer, user) for the selling and buying of the repetitively-purchased, low-value items which are necessary for the maintenance, repair, and operation of a business. Economies are realized by both, simplifying the buying process with less paper work, placing the responsibility of maintaining stores' inventory on the supplier, and assuring the user that prices will be kept as low as possible.²

When the contract specifies that the vendor is the sole supplier of an item or items that will be purchased, the vendor is guaranteed a certain amount of business as long as the contract is in force. This arrangement also assures the purchaser will have priority rating for items that become scarce or hard to find.

Evidence is available which indicates that firms using Systems Contracting for procurement and supplies have had great success, but at the same time, there are other firms which have found the method unsatisfactory. Some firms use the method almost exclusively, whereas, others use it for certain items only, and other have tried it and have been disillusioned by the whole contract idea.

The question of whether or not Systems Contracting is the better method of purchasing maintenance, repair, and operating items than the Conventional Purchase Order system has been of interest to the researcher for some time.

²Ibid.

STATEMENT OF THE PROBLEM

What will be the overall satisfaction with Systems Contracting perceived by companies which have used both Systems Contracting and the Conventional Purchase Order?

How will companies which have used both Systems Contracting and the Conventional Purchase Order perceive Systems Contracting as providing better buying and selling procedures, increased volume of business, less cost, reduced paper work, less time required for handling business transactions, and other benefits?

How will companies which have used both Systems Contracting and the Conventional Purchase Order perceive shortcomings, identify most satisfactory results derived from using Systems Contracting, and further comment about Systems Contracting?

HYPOTHESES

1. Companies which have used Systems Contracting and the Conventional Purchase Order will express overall satisfaction with Systems Contracting.

2. Companies which have used both Systems Contracting and the Conventional Purchase Order will perceive Systems Contracting as providing better buying and selling procedures, increased volume of business, less cost, reduced paper work, less time required in handling business transactions, and other benefits.

3. Companies which have used both Systems Contracting and the Conventional Purchase Order will perceive certain shortcomings, be able to identify most satisfactory results derived from using Systems Contracting, and will be able to provide further comments regarding Systems Contracting.

Hypothesis₁ will be tested by the responses to Question 1, (See Appendix B, Questionnaire, for all Questions) which asks respondents to respond on a 5-point Likert scale as to how satisfactory they perceive Systems Contracting.

Hypothesis₂ will be tested by the responses to Questions 2, 3, 4, 5, 6, and 7, which ask respondents to respond on a 5-point Likert scale as to how they perceive Systems Contracting compared to the Conventional Purchase Order as providing better buying and selling procedures, increased volume of business, less cost, reduced paper work, less time required in handling business transactions, and other benefits. (See Question 7, Appendix B for other benefits.)

Hypothesis₃ will be tested by responses to Question 8, which asks respondents to respond subjectively as to how they perceive shortcomings of Systems Contracting.

IMPORTANCE OF THE STUDY

Systems Contracting has been growing in popularity ever since the techniques were developed at

Carborundum in the late 1950s and early 1960s.³ Many specialized purchasing procedures have attempted to facilitate the purchasing cycle necessary for acquiring maintenance, repair, and operating items, and many have utilized some of the Systems Contracting techniques.

It is important that an effective method be found in purchasing that will provide users with the supplies and goods needed for business maintenance, repair, and operation, with less down time. These items need to be available at as little cost to the purchaser as possible. Systems Contracting is a method of purchasing which provides the advantages of efficient service, with shorter time, at less cost, as well as other benefits.

DEFINITION OF TERMS

Systems Contracting. Systems Contracting is defined as:

. . . a total corporate technique designed to assist the buyer and seller to improve reordering of repetitive-use materials or services with an absolute minimum of administrative expense and with the maintenance of adequate business controls.⁴

This term was first used in 1962 by the Carborundum Company of Niagara Falls, New York, and was registered by that firm. The method differs from blanket order buying, national purchase agreements, automatic purchasing

³ Ibid.

⁴ Ralph A. Bolton. Systems Contracting. New York: American Management Association, 1966, p. 14.

arrangements, and other similar ideas in practice. A Systems Contract is long-term in its operation, whereas, these other methods are short in duration and generally bring about a relatively frequent change in suppliers.⁵

(For an example of a contract, see Appendix D.)

Conventional Purchase Order. Although there are many variations among industries, companies, products, and personnel, it is not feasible to establish a single set of procedures that would be true for all Conventional Purchase Orders. However, the following steps are necessary in one way or another to complete a Conventional Purchase Order.

1. Recognition of need.
2. Description of requirements.
3. Selection of possible sources of supply.
4. Determination of price and availability.
5. Placing the order.
6. Follow-up and expediting of the order.
7. Checking the invoice.
8. Processing discrepancies and rejections.
9. Closing completed orders.
10. Maintenance of records and files.⁶

Maintenance, repair, and operational items. Maintenance, repair, and operational items are items, which in the main, ". . . are regularly stocked and used, some of which cannot be purchased in large quantities because of special problems of storage."⁷

⁵ Ibid.

⁶ J. H. Westing, I. V. Fine, and Gary Joseph Zenz. Purchasing Management. New York: John Wiley and Sons, Inc., 1969, pp. 44-45.

⁷ Ibid., p. 148.

Maintenance, repair, and operational items include such things as: drills, nuts, bolts, fasteners, bearings, taps, dies, files, V-belts, light bulbs, drill bits, sand paper, etc. Other examples are supplies which require special storage due to the hazards they create. Included are such items as: gasoline, naphtha, paint, lubricants, and excelsior and other packing items. Also included are items which tend to deteriorate when they are stored for long periods of time, such as batteries, cement, and paste.

When a firm considers buying Maintenance, Repair, and Operating supplies, it usually becomes necessary to consider storage space, hazards, and shelf-life characteristics of the items, as well as the least costly unit in which to purchase them.

LIMITATIONS OF THE STUDY

1. This study will be limited to responses to a questionnaire (See Appendix B) evaluating benefits and shortcomings of Systems Contracting as compared with conventional methods of purchasing, by forty firms which have used both methods of purchasing.

2. This study will be limited to the period of time of the survey which began May 1, 1975 and ended July 1, 1975.

3. This study will be limited to a comparison of Systems Contracting and the Conventional Purchase Order method.

ASSUMPTIONS

1. Firms using Systems Contracting have knowledge of the benefits and weaknesses of this method of procurement.
2. Firms using Systems Contracting will be truthful in their responses to the questions on the questionnaire.
3. Not all responding companies meet with equal success using Systems Contracting.

ORGANIZATION OF THE STUDY

The first chapter of this thesis includes the introduction of the study of Systems Contracting, a brief statement of the problem, hypotheses, importance of the study, definition of terms, limitations of the study, assumptions and organization of the study. Chapter Two includes a review of the literature concerning Systems Contracting, with an emphasis on the studies that have been done during the past few years. This shows how firms have reacted to Systems Contracting since it became a widely used method of procurement of maintenance, repair, and operational items. Chapter Three will include procedures for conducting the study, developing the questionnaire, content of the questionnaire, selecting the respondents, letter accompanying questionnaire, follow-up letter and second questionnaire, organizing the data and analyzing the data. Chapter Four includes analysis of the data,

methodology, results, tables which chart responses to each question, including Mean for questions answered objectively on a 5-point Likert rating scale. Chapter Five contains a summary, conclusions, and recommendations.

Chapter II

REVIEW OF LITERATURE

A careful review of literature concerning Systems Contracting, also known by such names as Contract Supplier System, Contract Buying, Stockless Purchasing, Contract Purchasing, reveal that only one book has been devoted exclusively to the topic (Ralph Bolton's book: Systems Contracting), but this purchasing method has been discussed in many periodical articles. John Van deWater, writing in Purchasing Magazine, November 18, 1963, stated, ". . . a revolutionary buying technique that is saving Carborundum Co. millions of dollars each year has the purchasing world in a tizzy."⁸ Numerous books have capsule explanations of Systems Contracting, and several handbooks devote a few lines to this purchasing idea. This chapter will present summaries of the materials available to the researcher.

In an introduction to a series of articles dealing with systems purchasing, the editors of Purchasing World in May, 1974, wrote the following:

. . . If anybody knows about purchasing systems and systems contracting, it's Anderson. (Ernest L. Anderson, Jr.) Anderson, former Director of Purchasing at Carborundum. He's the granddaddy of

purchasing systems approach and, in fact, originated many of the contracting techniques. Systems contracting itself, SOS (speed order system), and the latest COP (controlled order plan) are familiar to most purchasing managers. Anderson created all of them.⁹

When Carborundum adopted Systems Contracting, Ernie L. Anderson was Director of Purchasing. By November, 1963 over 80 percent of Carborundum's total buying was being done by Systems Contracting. This innovative method of buying eliminated a big investment in slow-moving in-plant inventories, because needed items were stocked by the supplier. Large amounts of storage area formerly provided for these inventories were released for other more profitable uses. Personnel who had spent time doing repetitious paper work were freed to do other more profitable jobs in purchasing.¹⁰

Systems Contracting saves a company money by cutting operating expense and purchase costs. Carborundum found that purchasing, centrally controlled, could be less humdrum and piecemeal, but having requisitions go to headquarters for processing and approval was both time consuming and costly. Ernie Anderson suggested that headquarters could make the contracts with suppliers, set up the system, and let the individual plants (users) do the purchasing and make the releases. After acceptance of this method,

⁹Ernest L. Anderson, "The Job is Money Management," Purchasing World (May 1974), p. 42.

¹⁰Van deWater, p. 70.

⁸John Van deWater, "Systems Contracting," Purchasing Magazine (November 18, 1963), p. 70.

Anderson worked to eliminate duplication in the whole purchasing process.

Systems Contracting, which is set up and approved by headquarters, is basically a fast-order technique used for such items as office supplies, bearings, steel mill supplies, tools--in fact, ". . . for all repetitively used materials commonly bought from distributors."¹¹

Systems contracting is designed to eliminate in-plant inventories and paper work; it requires no purchasing releases, receiving inspection, nor formal invoices. Systems Contracting covers a large group of materials or supplies. Each contract, when completed, will include a detailed catalog of items covered, giving type, size, and characteristics of each item, and a catalog number. The contract would stipulate that suppliers (vendors) keep sufficient supplies on hand, so buyers (users) could have goods when they need them, thereby virtually eliminating back orders.¹²

Another article in Purchasing World (February 6, 1965), p. 45f., entitled "Carborundum Makes the Switch to Central Buying," contains questions about the change to central buying. Manager of Purchasing Bob Murphy's answers are revealing. When asked what changes occurred in the Purchasing Department at Carborundum, he replied:

¹¹ Ibid., pp. 71-72.

¹² Ibid.

Purchasing is now divided into two main groups. One is responsible for capital equipment and construction, the other for raw materials, supplies, and service.

Q. How did plant operating people react to the switch to centralization?

A. At first they were upset. They felt that things would bog down because they wouldn't have their own purchasing group. They were afraid that purchasing service would deteriorate.

Q. What effect has your reorganization had on individual buyers?

A. One of the main objectives in centralizing was to develop specialized buyers--and that's just the way it has worked out. . . .

Q. Are there any purchasing systems that have been particularly helped in your efforts to centralize your purchasing function?

A. Yes. I would say Systems Contracting and blanket orders are the main ones.

With Systems Contracting, for example we've been able to streamline supplies purchases--the ones that used to account for 70% of our purchase orders but only 20% of our dollars. This means that our buyers have more time to analyze high value items.¹³

John Van deWater, Technical Editor of Purchasing Magazine, on January 13, 1964, observed "Purchasing's empire is shrinking. The pressure is on to cut costs, and with them purchasing staffs."¹⁴ However, he stated that a Purchasing Agent who takes the lead in the new methods revolutionizing purchasing will find his department gaining

¹³ "Carborundum Makes the Switch to Central Buying," Purchasing World (February 6, 1964), pp. 49-50.

¹⁴ John Van deWater, "What's Behind the Big Change in Purchasing?" Purchasing Magazine (January 13, 1974), p. 74.

in efficiency and prestige. Technology is changing the buying considerations and a Purchasing Agent needs to have a combination of commercial, industrial, and administrative abilities to get the job done--to get the right vendors to supply the right products at the right moment. Van deWater saw the Purchasing Agent's traditional time-wasting methods, such as order placing, expediting, talking to salesmen, signing hundreds of orders daily, recording large amounts of trivial data on traveling requisitions and buyer cards as outdated. Moreover, Van deWater found purchasing departments overstaffed, unproductive, and incredibly expensive.

To answer the purchasing Agent problem, many companies turned to Systems Contracting. He describes the procedure as follows:

Systems Contracting, for example, upsets traditional purchasing by throwing out the customary frills and concentrating strictly on the main function of procurement. It starts with long-term contracts which purchasing negotiates for a wide range of items with several suppliers, usually distributors. Descriptions, prices, and procedures are spelled out in detail, and become a permanent agreement. The vendor holds the inventory.

Once the system is set up, requisitions go directly to suppliers and purchasing has little to do but run an occasional check on its operation. The system eliminates most purchase orders, receiving reports, invoices, and plant inventories.¹⁵

Two case studies dealing with Systems Contracting were reported in this article with the following results: the

¹⁵Ibid., p. 75.

Purchasing Agent's authority increased significantly; his title was changed to Purchasing Director and he regularly visited plants to approve annual contracts. The contracts themselves took the place of all repetitive purchases. When necessary, many needs were reviewed monthly and contracted. Contracts permit requisitions to go directly to suppliers. Purchasing Agents do not write orders, and invoicing occurs once a month. Paper work decreased. Operation costs came down and there was a sizeable reduction in purchasing costs as well.

This article also notes that:

. . . no matter how efficiently purchasing is organized today, no system is the ultimate. New ideas and methods will come up that will be used to cut costs where costs had seemingly already hit rock bottom. Advancing technology will continue to make steadily increasing demands on purchasing.¹⁶

In February, 1964, Bausch and Lomb, Incorporated prepared an unpublished report entitled "Systems Contracting: A Concept in Materials Management," which contained the following information:

A Systems Contract is a long term commitment for the procurement of specific items with a minimum of administrative cost. Paralleling an important objective of Materials Management, Systems Contracts treats inventory as an investment of working capital and therefore seeks to shorten the cycle of investment risk to the lowest total cost (acquisition and possession).

Systems Contracting is not designated as a gimmick to force distributors to cut price. It

¹⁶John Van deWater, "What's Behind the Big Change in Purchasing?" Purchasing Magazine (January 13, 1964), pp. 74-78.

is intended to provide the distributor with the means to operate his business more efficiently and at the same time allow his customer to reduce or eliminate unnecessary functions, which often cost more than the items involved.

The potential of Systems Contracting to contribute to profit can be shown by comparing it to the normal way of doing business. Maintenance, Repair and Operating items have been selected for the illustration because experience has proven this an area of high order frequency with normal low item cost. It should be recognized, however, that the principles of the concept are not limited to Maintenance, Repair, and Operating materials.¹⁷

In order for a clear understanding of Systems Contracting to be realized, it is necessary to compare Systems Contracting with a conventional purchasing procedure. Usually, a requisition for a cutting tool would involve the following procedures:

1. A machinist (user) would request a store's clerk to issue the tool from a store's inventory.
2. The person in charge of stores would issue a requisition to replace a store's inventory.
3. Central stores issue the tool and adjust inventory levels on permanent store record cards (90 day minimum/maximum).
4. Accounting would be notified so the department's record can be adjusted.
5. Central stores would forward a traveling requisition to Purchasing to replenish stock.

¹⁷"Systems Contracting: A Concept in Materials Management," (unpublished) Corporate Systems Bulletin No. 1, Bausch and Lomb, Inc., February 1964, p. 4.

6. Purchasing would check three or more suppliers for best price and delivery information.

7. Purchasing issues an eight-part purchase order and sends two copies to the supplier, one copy to Receiving (duplicating master), one copy to Accounting, two copies to the storeroom, one copy retained in Purchasing for follow-up. One copy is destroyed.

Professor William Hannaford, Ph. D., Assistant Professor of marketing, Bowling Green State University, recently did a study of systems contracting vs. blanket orders. This investigation was done for the Distribution Research and Education Foundation of the National Association of Wholesaler-Distributors. Three hundred fifty distributors were used in the study. He reported:

Seventy percent of distributors using systems contracts indicated that system sales were up 20% or more since the program's inception vs. only 23% of those using the blanket order approach who reported an increase.

Higher gross margins were reported by 20% of the systems contract users whereas only 3.5% of blanket order users could claim likewise. In fact, 31.6% of the latter group indicated margins decreased.

Twenty-three percent of systems contract users recorded increases in their ROI of 20% or more. Only 3.6% of the blanket order users had the same results with their approach.¹⁸

Hannaford (1975) reports the characteristics of Systems Contracting as follows: he comments on such

¹⁸"Blanket Orders vs. Systems Contracts," Industrial Distribution (May 1975), p. 83.

things as terms, inventory, routing, billing, catalog, services, initiation, price, and relations.

The contract between distributor and buyer is based primarily on mutual co-operation and trust; therefore, the terms are relatively loose. One contract might cover all MRO items available from the distributor. The buyer does not specify the quantity of items in the contract he is going to buy, nor does he specify the quantities the distributor will carry. The contract is subject to periodic review, but it does not have to be renegotiated. Moreover, there is no specified date of termination required. Prices can be changed after proper notification and a reasonable waiting period. Certainly the prices are not tied to the entire contract period.

The distributor secures and maintains inventories and provides for storage of the items. Also, the distributor guarantees such standards of performance as: adequate inventories of items on the contract based on prediction of usage provided by the buyer. 95% of all contracted items are available at all times. The distributor guarantees delivery in 48 hours or better and immediate deliveries to meet emergencies.

The function of the purchasing department is overseeing the whole operation. The users of MRO items are able to requisition items needed directly from the distributor.

Once or twice a month the distributor will send a bill (invoice) which covers all items purchased over a certain period of time. This bill serves as a tally sheet, and it eliminates a great deal of paper work.

The distributor compiles a catalog of all items giving descriptions, stock numbers, and order quantities. These catalogs are sent to designated individuals who have the authority to use them.

The distributor can provide certain cost-reducing services as part of the total package, such as: helpful information concerning the usage of certain items, meetings to educate users, and constant servicing and maintenance by distributor salesmen.

The distributor often initiates the whole program and negotiations, and these are centered

upon the buyer's top purchasing, accounting, and financial management. Systems contracting is not necessarily the lowest cost available to the buyer, but the whole effort is sold to the buyer on the basis of lowering the buyer's total cost of procurement. Pricing is a secondary consideration.

Systems contracting depends for success on a cooperative relationship between distributor and buyer. Necessary is a spirit of trust, faith, and harmony.¹⁹

In order to determine the attitudes and acceptance of systems selling of MRO supplies, Professor William J. Hannaford did a survey of over 350 distributors. He found and reported that 68.4 percent of the members of the following organizations use some form of Systems Contracting: National Industrial Distribution Association, 79.1 percent; Southern Industrial Distribution Association, 69.2 percent; National Association of Electrical Distributors, 60.0 percent; American Supply Association, 54.5 percent; Bearing Specialists Association 87.2 percent. This means that nearly three-quarters of the members of the above cross-section of associations use some form of Systems Contracting.²⁰

Professor Hannaford found the following facts in his study: 62.3 percent of the distributors polled claim systems selling contributes 10 percent or over to the total annual sales of the companies.²¹

¹⁹"Planned Purchasing . . . or How Good is System Selling?" Industrial Distribution (February 1975), pp. 48-49.

²⁰Ibid.

²¹Ibid.

In rating overall performance of systems accounts, Hannaford found the users of systems contracts rated that method in terms of gross sales, gross margins, stock turns, ROI account expenses, number of new accounts, on a rating scale of 1 to 4, with 4 high and 1 low, systems contracting rated 4, or received the highest rating.

The firms using systems contracting claimed no decreases in margins; 70 percent said gross sales were up 20 percent. Systems contracting appeared to present the best financial picture.

Users of systems contracting are more service oriented. Ninety-two and four-tenths percent of them offer four or more specialized, customer-tailored services. Specialized staffs are not necessary to handle systems contracting.

More than 50 percent of the respondents agreed on the following pros and cons of systems contracting:

Advantages:

The distributor can lock in the business of major customers.

He can forecast sales, plan inventories better.

His sales volume increases.

Profitability and sales increase via systems selling.

Paper work is reduced or simplified.

Disadvantages:

Customers force the distributor to negotiate on a price basis. The distributor is forced to stock added inventory.

Another evaluation of Systems Contracting was reported in the following article: James J. Kistner, writing in Purchasing Magazine (June 1967), pp. 57-59, notes what purchasing agents like and what they don't like about contract buying. These are the results of a Purchasing Magazine survey of more than 400 purchasing executives.

Likes:

1. Lower price
2. Supply availability
3. Less paper work
4. Price stability
5. Shorter leadtime
6. Reduced inventory
7. Saving of buyer's time

Dislikes:

1. Inability to take advantage of spot offerings
2. Less vendor contact
3. Possibility that the market will fall
4. Chance that fire or strikes will disrupt the supplier's production
5. Inability to negotiate individual orders
6. Ineffectiveness due to design changes
7. Poor service due to vendor complacency
8. Buyer's tendency to forget review and control aspects
9. The possibility of overbuying.²²

²²James J. Kistner, Purchasing Magazine (June 1967), pp. 57-59.

Paul Farrell writes, "Purchasing agents should realize that contract buying is no panacea. It's just another purchasing method--with drawbacks as well as benefits."²³

One magazine article discussed Contract Buying as "a fad, a trap, or a panacea?"²⁴

Instead of focusing on the opposite points of view normal between buyer and seller, the accent falls on the establishment of the frankness and loyalty of a true partnership. The fundamental consideration rests on the confidence of each party in the other, and the responsibility which each accepts in the study of their common problem.

Carefully planned long-range buying arrangements always provide for the introduction of new competition, when necessary, through periodic reviews based on supplier performance.

Properly applied, contract buying is not a fad, or an accident, or a trap, but a logical development of intelligent, profit-oriented purchasing.

How does a firm go about selecting a vendor?

Wilbur J. Pierce of the Detroit Edison Company says "The selection of a vendor to participate in a

²³Ibid.

²⁴Paul V. Farrell, "Contract Buying--A Fad, a Trap, or a Panacea?" Purchasing Magazine, Feb. 23, 1967, p. 5.

stockless purchasing program is more critical than the selection of a regular vendor."

In selecting a supplier for CASP (Contract Agreement Stockless Purchasing) one must align oneself for an indefinite period of time so one must be doubly sure one is making the right choice.

Supplier evaluation forms keep subjectivity to a minimum and assure that the categories the buyer thinks important are considered by the vendor.

What are the legal implications of Systems Contracting?

To be enforceable, a contract must be definite in its terms, requirements, commitments, and obligations. If it isn't, chances are the contract won't stand a chance in court.

Certainty is vital to contract enforcement. Reservations destroy certainty. A case in point took place in the Midwest when the courts ruled in favor of the defendant because of reservations in the contract. The Alabama Supreme Court said contracts must be fixed and definite enough as to be exact in meaning.

The Georgia Court of Appeals ruled a case enforceable even though no time of completion, who would furnish the tools, or when payment would be made, were included. This was because the purpose and intent were ascertainable. That is certain which may be made certain!

In Oklahoma, the judge ruled that a lack of available facts made a contract uncertain and inadequate. They also concluded that there could be no breach of contract since the contract was indefinite.

The vast majority of contracts are legal and binding. An exception is a contract running counter to legislation--even when that legislation is enacted long after the contract was signed.

If they are properly executed, most contracts between Purchasing Agents and a supplier will stand up in court.²⁵

Whether a purchase agreement covering several different items is legally "one indivisible contract" or actually several contracts (one for each item), can be of tremendous importance to a Purchasing Agent. Where an agreement is an "indivisible contract" under the law, "breach" of an agreement in relation to even one of the many items may serve to nullify the entire contract.

On the other hand, when a contract is viewed by the courts as "severable" the law holds that "a default in relation to one item is that and nothing more." The contract remains in "full effect and force with regard to the remaining items."

Under the law, there's a big difference between "indivisible" and "severable" purchase agreements. The

²⁵Albert Woodruff Gray, "Your Contract Could Be KO'd." Purchasing Magazine, Feb. 22, 1968, pp. 73-75.

former treats an order as a whole; the latter on an item-by-item basis.²⁶

Systems Contracting works well for smaller distributing operations, also. Everett P. Alther, President of Twin States Industrial Distributors, Keene, New Hampshire, attributes the sales increase of his business from \$600,000 in 1970 to \$1.4 million in 1973 and an anticipated sales of \$1.8 million or \$1.9 million this year to Systems Contracting. The items which are constantly used by customers do not have to be reordered each time they are needed. The customer gets a pre-coded International Business Machines card for each repetitively used item--and it is processed by an International Business Machines System Three computer. This takes the place of a purchase order. Each customer's order is analyzed, and price discounts are possible, based upon the customer's total order. This firm gives personal attention and service to each account, and this adds to the success of the operation.²⁷

Contract buying of office supplies means lower prices because of volume discounts. In addition, when each office department orders supplies directly from a contract vendor, no stationary storerooms, traveling requisitions, or purchase orders are needed.

²⁶Albert Woodruff Gray, "The P. O.: One Contract or Many?" Purchasing Magazine, Sept. 21, 1967, pp. 76-78.

²⁷"His System: 'Systems,'" Industrial Distributor, (February 1975), p. 52.

Benefits include lower prices, faster service, reduced paper work, trimmed inventories, less chance of obsolescence on stock items, and automatic monitoring of office standards.

The over-all emphasis is on total cost reduction rather than raw price.

The Purchasing Agent reports his contract plan is working extremely well. It saves time and money, eliminates paper work all along the line--and does it without limiting purchasing's over-all control.²⁸

Under Stockless Purchasing used by the Fellows Gear Shaper Company, requisitioners and suppliers handle the paper work. Purchasing simply directs the plan--a program that has trimmed inventories drastically.

Here the stockless purchasing is keyed to a materials release form filled out by the requisitioner--or sometimes even by the vendor--but never by purchasing.

Eliminating purchase orders, receiving slips, and invoices, the form trims paper work and speeds vendor deliveries for the plants.

The system has reduced inventory levels (grinding wheel stocks are down from \$40,000 to \$5,000), freed storage space, and made more capital available for other purposes.

²⁸"Stockless Purchasing Cuts Office Supply Costs," Purchasing Magazine, Oct. 6, 1966, pp. 64-66.

Another advantage is that this plan creates a closer relationship between the company and the vendors, thus creating a surer flow of materials and better control of inventory.

Too, since the ordering has become routine, buyers have time to spend on more important jobs.

The stockless plan is used for a wide range of maintenance, repair, and operating supplies.

Vendors also gain from the system. They are closer to the company's operation, so they get a better understanding of the company's needs and know just what to stock for them.

Their paper work has also been cut. They don't have to send an invoice; they are paid automatically.²⁹

The conventional purchase order, which is used by most companies to acquire materials from outside vendors, requires at least ten individual multipart forms. These forms include: requisitions, inventory stock cards, departmental expense controls, traveling requisitions, request for quotation, vendor quotations, purchase orders, shipping papers, invoices, and checks. The mere task of using so many forms is the main reason purchasing departments are swamped with paper work.

Besides being concerned with this vast amount of paper work, the purchasing department is also concerned with

²⁹"Stockless Buying Form Ends Purchasing Paperwork," Purchasing Magazine, July 27, 1967, pp. 60-63.

the length of time that conventional purchase ordering takes for the completion of the entire purchasing cycle. To illustrate, a material requisition spends an entire day traveling from the requisitioning department to the purchasing department through the intracompany mailing system. The second day is oftentimes necessary for the purchasing department to issue a purchase order. The third day is required by the vendor for processing the order for shipment. This is the case when the needed materials are available for immediate shipment. The fourth and fifth days of the cycle will be spent by the shipper and the internal delivery system necessary for moving materials from the receiving point to the place where the requisition was made or to a place for storage. Five days are usually required to complete the purchasing process.³⁰

Ralph Bolton's book, Systems Contracting, which was published in 1966 by the American Management Association, is the only full book devoted to this topic. Ernie L. Anderson and Purchasing World's Management Editor are currently working on a book that will "develop all the modifications and variations of the various systems."³¹

Bolton evaluates the traditional purchase order method, presents Systems Contracts a better way, special

³⁰Russell F. Moore, ed., AMA Management Handbook. New York: American Management Association, 1970, pp. 10-27.

³¹Ernest L. Anderson, "Conclusion XI," Purchasing World, March 1975, p. 33.

situations, benefits to all concerned, writing a Systems Contract, implementing a Systems Contract, and an evaluation of Systems Contracts. This is the definite work that has been widely used by companies experimenting with or beginning to use Systems Contracting, but it does not contain many variations on the original concept.

Bolton rates the overall effectiveness of Conventional Purchase Order System as follows:

1. Eighty percent of all purchasing activity involves repetitive-use materials of nominal value.
2. Company storerooms concentrate on high-volume, low-value materials and supply about fifty percent of the plant requirements on a twenty-four hour basis.
3. Availability of other than stores materials requires six or more days from receipt of goods to point of need.
4. Inventories exist over and above those under inventory control.
5. The cost of such a system is a major contributor to the burden expense.³²

Bolton sees the Systems Contracting plan as offering improved service to the plant. Systems Contracting provides a method whereby most repetitive-use items can be delivered to the user within a twenty-four hour period. This means that about eighty percent of plant needs can be secured by vendors under Systems Contracting as compared with about fifty percent through company controlled inventory. This means sixty percent improvement in service.

³²Bolton, p. 37.

Systems Contracting provides such conveniences as pre-priced information, charge numbers, approved signature, and receiving verification, as well as control measures.

Systems Contracting simplifies work by eliminating or reducing store record cards, traveling records, requests for quotes, bids, purchase orders, expediting letter, acknowledgement copies, shipping papers, invoices, and other general correspondence related to purchasing. Sales calls by vendor representatives are made less often, thereby freeing them for other more important work.

Systems Contracting reduces such administrative expenses and provides storerooms, store clerks, and typists who do all the forms in the Conventional Purchase Order method. Each reduction of personnel and paper work is reflected in increased profits.³³

A series of eleven articles dealing with Systems Contracting, by Ernest L. Anderson, Purchasing Consultant, developer of Systems Contracting while he was Director of Purchasing at Carborundum Corporation, Niagara Falls, New York, in 1962, appeared in Purchasing World. They began in May, 1974 and one appeared each month for eleven months. Summaries of several of those relating to this investigation follow.

One lesson purchasing executives learned from the seller's market is to consider the idea of safety via

³³ Ibid., pp. 59-61.

multiple sourcing as a myth. Fifty-two percent say they are going to use fewer, more reliable suppliers. The way they will do this is with long-term Systems Contracts. Sixty percent say they will be using more Systems Contracts. Anderson says they will not make it unless they steep themselves in the systems approach. Anderson is the "Grand-daddy" of the Purchase Systems approach. They started when he was Director of Purchasing for Brown and Sharpe. When he was Director of Purchasing at Carborundum, things really got going. He then developed the speed order system and controlled plans. He said Systems Contracting was designed to eliminate inventories, not paper work. Most purchasing people can not do systems work. Purchasing is money management and this means daily systems work.

Reasons purchasing agents are not systems-oriented are fear and lack of knowledge. There are three basic types of systems in manufacturing operations: products systems, material systems, and paper work systems.

Agents should not hide behind the excuse that they have not the authority--because they are managers they must do something just because that is what they are hired, as managers, to do.³⁴

Most purchasing people are afraid of systems analysis. But they will have to learn. The job of the future will be money management. Systems analysis can be

³⁴ Ernest L. Anderson, Jr. "The Job Is Money Management," Purchasing World, May 1974, p. 42+.

as simple or as complex as you want to make it. You can analyze paper work without ever leaving your desk. The reason is simple. Only logic and common sense are involved.

A good example of analysis at work has nothing to do with systems. The dropped milk carton, wet and slippery because it had been stacked in a warm place, was a perfect lesson for answering "why?" "how?" and "what?" These are the right questions.³⁵

Negotiation is not buying--it is selling! You must be able to see inside your company as well as outside. A system might best be described as a combination of parts or tasks that work smoothly to perform a function. For purchasing that function is reducing the total procurement cost. One must not confuse the concept of systems with the techniques of systems. Systems selling requires obtaining the approval and cooperation of all management. To assure success the first step is acceptance by management. To make the presentation tangible, use pictures. Show all four parts of the procedure cycle (ordering, purchasing, receiving, and paying) on the old and new systems charts. Set up objectives. "Now, you are ready for the first management presentation. Go right to the top. Then, go to your peers. Now, you are ready to go to work."³⁶

³⁵Ernest L. Anderson, Jr. "PW Systems Purchasing II," Purchasing World, June 1974, p. 66+.

³⁶Ernest L. Anderson, Jr. "Systems Selling: PW Systems Purchasing III," Purchasing World, July 1974, p. 46+.

Systems Contracting is a total systems application between user and the supplier. Today there are seven parts to the average purchasing order, generating six pieces of paper (total thirteen). Systems Contracting reduces thirteen pages and two writings to four pieces and one writing.

Over fifty percent of the things purchased fit Systems Contracting in one form or another. Systems Contracting is not a bidding for price. It is not a program that involves the rewriting of a number of forms. It is not something negotiated with a sales representative. It is not something that generates a great deal of paper work. It has four basic goals: (1) eliminating inventory, (2) reducing personnel, (3) reducing paper work, and (4) reducing price.

With this in mind, one must set one's objective high and shoot for it. Start with one line and carry through the seven steps.

Each of these steps is necessary for successful completion of a systems contract. (1) Detailed proposal; (2) forms design; (3) item analysis; (4) evaluation and selection of supplier; (5) negotiation; (6) implementation; and (7) audit of performance of the contract.³⁷

Now, begin the next step, which is item analysis. For a good item analysis, there is only one way of using

³⁷Ernest L. Anderson, Jr. "Systems Contracting Overview IV," Purchasing World, August 1974, p. 40.

it. Sit down with last year's invoices from all suppliers and prepare a list of items on an item analysis card. Group these cards according to product classes and further sort them according to size of product. When these cards are properly sorted, the exact amount of purchasing and the exact amount of each product class is known. This long, laborious way of analyzing cannot be short-circuited. Evaluating the supplier regularly is also very important. To get the best results from Systems Contracting, each of these seven steps must be followed methodically. This routine will also keep the purchaser aware of total dollars spent in each product class, and it will also be important for planning future purchasing. The ton of cards will keep the purchaser informed about products, costs, and needs.

For a Mexican firm, innovativeness on contract buying boosts efficiency all along the line. Purchasing negotiates long-term agreements and monitors supplier performance. The end result of accounting machine usage and procedure cards to make releases is less paper work, faster service, and lower inventories.

The major advantages are less paper work, elimination of partial shipments, purchasing involvement only at original source selection time, no transcription errors, inventory and buying costs reduced and finally,

stockouts are almost non-existent.³⁸

Anderson concludes his articles by asserting that ". . . the prime requirement for success in the purchasing job is for purchasing people to understand the importance of both systems and selling."³⁹ He thinks both management and co-workers have to be sold on the idea. He thinks Systems Contracting will work wherever there is industry and for any manufacturing process. He further claims the techniques are adaptable to all kinds of situations, including surgical supplies. The concepts are a pure system, but these techniques can be modified with great success.⁴⁰

This chapter has attempted to review the literature that is available to the researcher on the subject of Systems Contracting. Most of the material that has been reviewed has come from periodicals, business administration handbooks, textbooks which deal with purchasing, and the book written by Bolton. The next chapter will present the methodology, the sample, the questionnaire, tables which chart the data and an explanation of the tables.

³⁸Ernest L. Anderson, Jr. "Contract Buying Knows No Boundaries," Purchasing Magazine, May 14, 1970, p.

³⁹Ernest L. Anderson, "Conclusion XI," Purchasing World (March 1975), p. 33.

⁴⁰Ibid.

Chapter III

PROCEDURES FOR CONDUCTING THE STUDY

INTRODUCTION

The procedures necessary to accomplish the objectives of the present study are described in this chapter under the following topics: Developing the Questionnaire, Content of the Questionnaire, Selecting the Respondents, Letter to Accompany the Questionnaire, Writing a Follow-up Letter and Questionnaire, Organizing the Data, and Analyzing the Data.

DEVELOPING THE QUESTIONNAIRE

The hypothesis and assumptions were used as a basis for developing the questionnaire. A review of the related literature contained valuable information and many suggestions, especially some which dealt with characteristics of Systems Contracting, were incorporated in the questionnaire. An authority of Systems Contracting was interviewed and his comments were considered very valuable.

CONTENT OF THE QUESTIONNAIRE

The questionnaire contained ten questions, seven of which were rated objectively on a five-point Likert rating scale, and three of which were answered subjectively. The

questions compared cost and efficiency and revealed shortcomings as well as benefits perceived by the firms regarding Systems Contracting.

SELECTING THE RESPONDENTS

The researcher compiled a list of one hundred firms named in Fortune Magazine. Each name was written on individual slips of paper and placed in a box. One name at a time was drawn from the box, recorded, and returned to the box. This procedure kept the odds the same for each name chosen. This drawing process was continued until fifty different names had been randomly selected for the study.

LETTER ACCOMPANYING QUESTIONNAIRE

A letter was prepared to accompany the first mailing of the questionnaire. (see Appendix A)

The letter and questionnaire were mailed May 16, 1975, with self-addressed, stamped envelopes. The respondent was asked to please answer immediately. By May 27, 1975, twenty-three answers had been received. All had used conventional (traditional) purchase ordering, and all were now using Systems Contracting.

FOLLOW-UP LETTER AND SECOND QUESTIONNAIRE

A follow-up letter and second questionnaire were mailed June 4, 1975, with a request for an immediate response. Seventeen more responses were received by

June 25, 1975. Once again, all seventeen used Systems Contracting, and all seventeen had previously used the conventional (traditional) purchase order method of procurement.

ORGANIZING THE DATA

A number was assigned to each questionnaire and a card prepared with the company name and address included. The firms were told in the questionnaire that anonymity would be granted, if desired, and also that results of the study would be sent upon request. The card was used for recording information about when an answer was received and for helpful notations.

The data was considered complete July 1, 1975. Forty questionnaires had been received by that date. All respondents were using Systems Contracting, and all respondents had used the conventional (traditional) purchase order method of procurement.

Tables were constructed to show the results and mean rating value from the Likert rating scale.

ANALYZING THE DATA

The analysis of data involved determining a mean value for responses to questions one through seven (see Appendix B, Questionnaire) which asks respondents to respond on a five-point Likert Rating Scale as to how satisfactory each perceived Systems Contracting to be.

Chapter IV

ANALYSIS OF THE DATA

Question one, which asked from an overall point of view, how satisfactory is Systems Contracting, based on a 5-point Likert rating scale, received a 4.375 Mean, is reported in Table 4.1. This results supports Hypothesis₁, which states that companies having used Systems Contracting and the Conventional Purchase Order will express overall satisfaction with Systems Contracting.

Hypothesis₂ states that companies which have used both Systems Contracting and the Conventional Purchase Order will perceive Systems Contracting as providing better buying and selling procedures, increased volume of business, less cost, reduced paper work, less time required for handling business transactions, and other benefits. (See Appendix B, Question number seven for benefits.) The response mean for Questions number two, three, four, five, six, and seven are presented in Tables 4.2; 4.3; 4.4; 4.5; 4.6; and 4.7. The results shown below support Hypothesis₂:

TABLE	MEAN	QUESTION
4.2	4.5	Buying and Selling Procedures
4.3	4.2	Volume of Business
4.4	4.38	Cost
4.5	4.43	Paper work

TABLE	MEAN	QUESTION
4.6	4.68	Time required
4.7	4.1	Benefits

The objective answers to the first seven questions in this study, rated on a 5-point value Likert rating scale express overall satisfaction with Systems Contracting.

Questions eight, nine, and ten were answered subjectively as follows:

QUESTION	NUMBER OF RESPONSES	PERCENT
8	25	62.5
9	28	70
10	13	32.5

Question number eight requested respondents to state any shortcomings perceived in Systems Contracting. Fifteen respondents found no shortcomings in Systems Contracting. The shortcomings mentioned by twenty-five (62.5 percent) of the respondents which found shortcomings are summarized as follows:

1. Inadequate training of purchasing personnel.
2. Lack of acceptance of Systems Contracting.
3. Lack of knowledge of Systems Contracting.
4. Buying complacency.
5. Periods of shortage.
6. Systems Contracting eliminates competition.
7. Location of buyer and vendor.
8. Lack of flexibility

These shortcomings support Hypothesis₃, which states that respondents will perceive certain shortcomings to Systems Contracting.

Question number nine requested respondents to state the most satisfactory results each firm derived from using Systems Contracting. Twenty-eight respondents (70 percent) stated the most satisfactory results derived from using Systems Contracting as follows:

1. Standardization of supplies.
2. Reduced inventory.
3. Good service and convenience.
4. Reduced paper work.
5. Reduced truck shipments.
6. Reduced overall cost.
7. Reduced cost of acquisition.
8. Reduced purchasing personnel.
9. Faster responses.
10. Better cash flow.
11. Frees capital.
12. Saves time.
13. Efficiency.

Question number ten requested respondents to state any further comments regarding Systems Contracting. Thirteen respondents (32.5 percent) gave the following comments:

1. Recommend use of Systems Contracting with reputable firms.

2. Systems Contracting will be more widely accepted when purchasing personnel understand the method.

3. Take time to choose the best vendor and help personnel to feel they are a part of the system.

4. A method of meeting demands in times of shortage is a need to consider.

5. Systems Contracting is the new way of procurement--the conceptual way.

All three hypotheses have been supported by the data that has been described.

Table 4.1

FROM AN OVERALL POINT OF VIEW, HOW SATISFACTORY IS SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM)?

Value	Response	Number	Total Value	Per-cent	Mean
5	Always satisfactory	11	55	27.5	
4	Usually satisfactory	25	100	62.5	
3	Adequate	4	12	10	
2	Usually unsatisfactory	--	--	--	
1	Always unsatisfactory	--	--	--	
	TOTAL	40	167	100	4.375

Table 4.2

ON THE BASIS OF YOUR EXPERIENCE WITH SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM) HOW WOULD YOU RATE YOUR COMPANY'S BUYING AND SELLING PROCEDURES UNDER THIS METHOD?

Value	Response	Number	Total Value	Per- cent	Mean
5	Much better	25	125	62.5	
4	Slightly better	10	40	25	
3	About the same	5	15	15	
2	Slightly worse	--	--	--	
1	Much worse	--	--	--	
	TOTAL	40	167	100	4.175

Table 4.3

HOW WOULD YOU RATE THE VOLUME OF BUSINESS YOUR COMPANY HAS DONE UNDER SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM)?

Value	Response	Number	Total Value	Per- cent	Mean
5	Increased considerably	20	100	50	
4	Increased slightly	10	40	25	
3	Remained about the same	9	27	22.5	
2	Decreased slightly	--	--	--	
1	Decreased considerably	1	1	2.5	
	TOTAL	40	168		4.2

Table 4.4

HOW WOULD YOU RATE THE COST OF SYSTEMS CONTRACTING
(THE CONTRACT SUPPLIER SYSTEM) AS COMPARED WITH
THE CONVENTIONAL SUPPLIER SYSTEM?

Value	Response	Number	Total Value	Per- cent	Mean
5	Considerably lower	22	110	55	
4	Moderately lower	13	52	32.5	
3	About the same	3	9	7.5	
2	Moderately higher	2	4	5	
1	Considerably higher	--	--	--	
TOTAL		40	175		4.375

Table 4.4 continued:

REASONS FOR ANSWERS ON TABLE 4.4

COMPANY NUMBER	REASONS
3	"Based on projected annual usage of high volume products, this results in lower prices for these items and less chance of stockout."
5	"Volume of business when under contract usually brings bigger discounts to buyer."
6	"Reduced purchase order volume reduced material handling, reduced invoice volume, reduced in house inventory, reduced storage area requirements, reduced back order volume."
10	"Contracts are generally for 3 year period. The supplier knows he has a good chance for a longer relationship if his prices are satisfactory."
11	"Vendor gives best discounts and makes his profits on volume which he knows is his if he performs."
12	"We are better able to plan and to program purchases (buyer) inventory levels by category. Better overall control of our purchase-inventory economies."
13	"Less paper work, reduced costs, total business concentrated in one supplier, volume purchase decrease."
14	"Prices may be a little higher cost. Inventory, Obsolescence have been reduced."
16	"In some cases the cost is higher but is offset by less hidden dollar costs."

Table 4.4 continued:

COMPANY NUMBER	REASONS
18	"Less paper work, lower cost."
19	"A number of items are under a contract price for 6 mos. and one year. Prices are adjusted each quarter. All items on the system are on a cost plus per cent mark up. We have option of checking vendors invoice cost at any time. Since price does not change as often, we have a moderately lower cost on the contract supplier system."
20	"Due to a larger volume of business."
21	"Systems contracting has eliminated the use of purchase orders, lowered in-plant inventories, simplified checking of material receipts, and reduced invoice handling."
22	"Moderate lower prices, plus lower cost of acquisition and retention."
24	"None of following--purchase orders, receiving invoices, (1 per month), Inventory, Errors, Late deliveries, <u>to name a few!</u> "
25	"Reduced paper work, pre-arranged prices, less inventory, freed purchasing people to do other duties, better deliveries."
27	"Less paper work; usually better prices built around large blanket orders."
28	"Less paper work; reduced inventories, better deliveries; lower prices; improved utilization of time."

Table 4.4 continued:

COMPANY NUMBER	REASONS
33	"A punched card is forwarded to the vendor in place of a purchase order. A punched card is returned with the material and is used as the receiving record and the invoice."
34	"No comment."
35	"Because the supplier can anticipate the requirements and he has less sales expense."
36	"Reduction in cost of acquisition and possession, reduction in paper flow, reduction in invoices and checks, reduction of stores and handling."
37	"The cost of supplies are going to be about the same from each supplier but the availability and demand of supplies needed from suppliers is the reason for SC."
39	"Prices are marked up a per cent from cost by supplier on SC."
40	"The price of material is higher under this system, but we have reduced inventories and paper work."
43	"Price structure, less involvement for purchasing."
44	"Because of dollar volume our company has been able to purchase items at a lower cost because the supplier as well purchased at a lower price. Also fixed per cent on profits has lowered our cost."

Table 4.4 continued:

COMPANY NUMBER	REASONS
48	"Whoever the supplier, he would have the same carrying cost, clerical, and handling cost, so his cost would naturally be higher for providing these services."
49	"As a seller higher inventory levels are required, more frequent deliveries to user location and order size is generally smaller."

Table 4.5

RATE THE AMOUNT OF PAPER WORK INVOLVED IN SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM) AS COMPARED WITH PAPER WORK IN THE CONVENTIONAL SUPPLIER SYSTEM

Value	Response	Number	Total Value	Per-cent	Mean
5	Greatly reduced	20	100	50	
4	Considerably reduced	17	68	42.5	
3	About the same	3	9	7.5	
2	Considerably increased				
1	Greatly increased				
	TOTAL	40	177	100	4.425

Table 4.6

HOW WOULD YOU RATE THE TIME REQUIRED FOR HANDLING BUSINESS TRANSACTIONS USING SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM) AS COMPARED WITH TIME REQUIRED IN USING THE CONVENTIONAL SUPPLIER SYSTEM?

Value	Response	Number	Total Value	Per-cent	Mean
5	Considerably less	29	145	72.5	
4	Slightly less	10	40	25	
3	About the same				
2	Slightly more	1	2	2.5	
1	Considerably more				
	TOTAL	40	187	100	4.675

Table 4.7

PLEASE RATE THE FOLLOWING ITEMS IN TERMS OF HOW BENEFICIAL SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM) IS OPERATING FOR YOUR COMPANY.

LOW MODERATE HIGH
1 2 3 4 5

(40 RESPONSES OUT OF 50)

ITEMS TO BE RATED	MEAN VALUE
A. Reductions of store's inventory	4.1
B. Reductions of store's records	3.75
C. Regaining floor space previously used for storage	3.875
D. Reducing obsolescence	3.825
E. Reducing sales calls	3.65
F. Eliminating open order files	3.90
G. Giving suppliers opportunity to perform engineering services	3.725
H. Delivery	4.4
I. Simplifying back-order procedures	4.3
J. Predetermining price structure	4.3
K. Eliminating duplication of effort both in-plant and between supplier and customer	4.075
L. Transferring every function possible from buyer to seller which reduces seller's cost	4.025
M. Freeing capital for more profitable investments	3.775

Table 4.7 continued:

ITEMS TO BE RATED	MEAN VALUE
N. Freeing purchasing personnel to perform other duties	4.15
O. Promoting better planning for maintenance and operations	3.775
P. Reducing pilferage	3.375
Q. Improving supplier service	4.15
R. Improving order accuracy	4.2
S. Improving profits through cost reduction	4.125
T. Encouraging standardization	4.25

Table 4.8

WHAT WOULD YOU SAY ARE THE MAJOR SHORTCOMINGS OF SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM)?

COMPANY NUMBER	RESPONSE
3	"None"
6	"The only shortcoming we have realized is requisitioner education and acceptance of SC. This shortcoming of SC is eliminated after a short period of proven performance and reliability by the contract supplier. The system is so simple people won't believe it will work."
10	"No record of usage activity to evaluate price increases."
11	"People who don't or won't understand the total objective. We establish a contract with the best vendor to supply goods at a price that is fair, of stated quantity when we need it for use."
12	"We do not use the Contract as such on a legal basis. We use the title 'Program' or 'Programmed Account.' Too many people shy from the legal holds."
13	"Tendency to not receive contract often enough letting the system manage the buyer rather than the buyer managing the system."
14	"Buyer complacent in not keeping abreast of market changes and innovations. Become too complacent with suppliers."

Table 4.8 continued:

COMPANY NUMBER	RESPONSE
16	"Reluctance on part of the vendor."
18	"Some contract suppliers unable to perform during periods of shortages."
19	"I know of no shortcomings of the Contract Supplier System (Systems Contracting)."
20	"If the vendor fails to maintain the inventory, no other vendor is interested in helping. Eliminates competition."
21	"Elimination of multiple sources, loss of exact knowledge of inventory dollar value."
22	"A tendency to get 'too content' with contractor. Lose a part of competitive atmosphere, once supplier is 'in.' Limit in variety of items available. Tendency to 'lose track' of what company is spending in various items."
24	"Don't know of any."
25	"Being out of touch with other suppliers in order to recognize competition. Become too complacent with suppliers."
27	"Can be high risks involved if supplier runs out of products. Everything gained can be lost if your production is interrupted because materials are not at hand."
28	"Explaining the system to other suppliers who are not familiar with the concept."

Table 4.8 continued:

COMPANY NUMBER	RESPONSE
33	"The loss of contract with the competing vendors and the reluctance of those vendors outside the contract to be of assistance in obtaining the hard-to-get items are a definite deterrent."
35	"Reluctance of employees to accept it."
40	"There are no major shortcomings in a good contract. If the contract is not a good one there will be many major shortcomings in almost every area you have mentioned above."
43	"Our case (Plant locations in respect to vendor)."
44	"Our Contract Supplier System is unique in that it is part of our parent corp. However, the main problem seems to be delivery of materials."
48	"Slightly higher cost, getting 'locked-in' with one supplier, provides little flexibility, eliminates competitive bidding for duration of contract. Encourages by-passing purchasing and 'back-door' selling."
49	"When properly implemented, there are no significant shortcomings."

Table 4.9

WHAT WOULD YOU SAY ARE THE MOST SATISFACTORY RESULTS YOUR COMPANY HAS DERIVED FROM USING SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM)?

COMPANY NUMBER	RESPONSE
3	"Standardization of supplies purchased; no time used checking prices, no stock-outs, permanent record of annual usage of each item."
5	"Reduced inventories, vendor does the shopping, use of vendors suppliers we may not know of. Vendor supplies technical aid by sending the most knowledgeable people relating to lines bought for help on new buys. Good service as contract is important to vendor. Reduced paper work in purchasing. Guaranteed good pricing."
6	"The major results of SC for us have been: (a) Reduced inventory which results in reduced cost. (b) Increased delivery performance. (c) Reduction of paper work."
10	"Reduced inventory dollars, reduced warehouse space, improved delivery, reduced purchase orders and related paper work, reduced buyer man-hours."
11	"Cut paper work, face up floor space, reduce inventory, reduce truck shipments and receivings, reduce prices overall, reap the benefits of annual volume buying."
12	"No Comment."

Table 4.9 continued:

COMPANY NUMBER	RESPONSE
13	"Reduced cost overall. We would need at least one extra buyer to perform MRO function, availability of supplies of shortage during troublesome economy. By putting eggs in one basket, we have considerable leverage."
14	"Reduced total costs of acquisition and clerical effort to make purchase."
16	"Less paper work."
18	"Reduced inventory of item carried in stock. Reduced paper work. Saving in mailing cost since trucks pick up cards. Eliminated a typist in purchasing department. As 80% of MRO items represent 20% of dollar value items. More time can be spent on saving on larger dollar items. 1974 when items were in short supply and cost increasing daily, we were very pleased with our supplier and its performance."
19	"Inventory reduction, better delivery, lower costs."
20	"Elimination of purchase orders, receiving reports, and corresponding invoices."
21	"Elimination of purchase orders, releases against purchase orders, reduction in time required to process vendor's invoices, reduction in inventory. More competitive pricing structure and prior notification of price increases."
22	"Lower stocks, less paper work, faster response, better cash flow, move toward fewer items."

Table 4.9 continued:

COMPANY NUMBER	RESPONSE
24	"Too many to list if not already stated."
25	"Reduction in overall cost of procurement. Reduction of stores inventory, freeing purchasing personnel to spend more time on high priced buying. Better service by supplier. Less down time."
27	"Fast delivery, freeing capital for other purposes. Improving profits through cost reduction."
28	"Reduction of paper work, elimination of inventories, improved deliveries, lower prices, better use of buyer's time."
33	"The reduction of paper work for the low value, frequent repeat item is the major benefit of a contract supplier system."
34	"Service and convenience."
35	"Saving of both time and money along with improvement in efficiency."
36	"Improved delivery of catalog and non-catalog items, freeing purchasing personnel to perform other duties, reduced paper work, improved planning, maintenance and operations, improved communications between user and supplier, pre-determined prices."
39	"Good delivery, fairly good supply of items requisitioned, supplier has more contacts for providing items that are difficult to obtain."

Table 4.9 continued:

COMPANY NUMBER	RESPONSE
40	"Supplier service is one area we are very happy with; during the past two years of material shortages our contracts have been a great help."
43	"Price structure; less involvement for purchasing."
44	"Reducing amount of time required to order materials and process paper work. Foremost is considerably lower prices."
48	"Eliminates routine buyer duties, eliminates expediting (should inventory be sufficient), reduces paper-work, encourages better vendor relations."
49	"Increase business at reasonable margin of profit. Better inventory turns due to better mix of items sold."

Table 4.10

PLEASE MAKE ANY FURTHER COMMENTS YOU MAY HAVE REGARDING
SYSTEMS CONTRACTING (THE CONTRACT SUPPLIER SYSTEM).

ANY IDEAS YOU HAVE WILL BE HELPFUL.

COMPANY NUMBER	RESPONSE
5	"Recommend use of contract supplier system. Choose legitimate responsible companies with proven reputation."
6	<p>"Systems Contracting has proven to be an efficient method of procuring goods. It can be utilized by any firm even though many firms say it won't work for them. In my opinion, SC has not received wide acceptance for the following reasons:</p> <p>(a) Traditionally, purchasing agents fear they will eliminate a portion of their responsibility and eventually lose their authority within the corporate structure. This objection is obviously ridiculous, and in my opinion, indicates the type of non-professional individual commonly found in the purchasing profession. Systems contracting opens a new frontier for the truly ambitious and goal-oriented purchasing man.</p> <p>(b) Lack of understanding of what "Systems Contracting" is.</p> <p>(c) Lack of knowledge of how to implement a systems contract. Many purchasing people attempt to change their current system (One of too much control) to a system of too little control. Hence, the common objections stated by the financial people.</p> <p>Although SC was originally designed for use with suppliers that were reasonably local to the buyer, SC can be modified so that buyer and seller can be located at great distances from each other."</p>

Table 4.10 continued:

COMPANY NUMBER	RESPONSE
10	"All parties involved must understand that this is a long-time relationship. Performance must be excellent. Seller must be willing to disclose information which is not normally given to other customers. There has to be unquestionable mutual trust. The system must be profitable to both seller and buyer."
11	"Take the time at the outset to pick the best vendor and make your people feel a part of the system so it will work."
19	"The Contract Supplier System is the way of future purchasing. We need more vendors to see this and become involved in this type of system so there will be more competition."
21	"Use of the Contract Supplier System permits negotiation of contracts by a central organization for several using units. The purchasing power generated by heavier volume of sales generally results in obtaining more favorable contracts in terms of price and vendor performance."
22	"During periods of shortage, we have often had to 'go around' suppliers to get needed items. Also, prices have not been as firm as formerly anticipated."
25	"Personally, I believe that this is the new way of procurement the conceptual way."
28	"This system is one of the best purchasing concepts that can be used today, yet one of the least understood. Purchasing people are aware of its existence but reluctant to use it."

Table 4.10 continued:

COMPANY NUMBER	RESPONSE
33	"In my estimation the most serious deterrent in a contract supplier system is the alienation of those vendors who are excluded, because the bulk of the procurement is going to one source."
35	"The South has been slow to implement it. The North saw it spread very rapidly 8-10 years ago."
40	"The most important factor is supplier selection. If a proper supplier evaluation is made, the contract will be a great benefit to both buyer and seller."
49	"I suggest that you more fully explain what your definition of Contract Supplier System is. It obviously has various meanings to various people. Some systems are sophisticated and others are relatively simple."

SUMMARY OF QUESTION RESULTS

	Mean Response
1. How satisfactory is Systems Contracting?	4.375
2. Buying and selling procedures under Systems Contracting?	4.5
3. Volume of business?	4.2
4. Cost of Systems Contracting?	4.375
5. Amount of paper work (reduced)	4.425
6. Time required for handling business transactions (less)	4.675
7. Benefits	
Reduction of store's inventory	4.1
Reduction of store's records	3.75
Regaining floor space	3.875
Reducing obsolescence	3.65
Reducing sales calls	3.65
Eliminating open order files	3.90
Performing engineering services	3.725
Delivery	4.4
Simplifying back orders	4.3
Predetermining price	4.3
Eliminating duplication	4.075
Reducing seller's cost	4.025
Freeing capital	3.775
Freeing purchasing personnel	4.15
Better planning for maintenance	3.775
Reducing pilferage	3.375
Improving supplier service	4.15
Improving order accuracy	4.2
Improving profits through cost prediction	4.125
Encouraging Standardization	4.25
	4.1

The overall average rating to all parts of questions 1 through 7 is 4.1. On a five-point Likert rating scale, with 1 low and 5 high, a 4.1 average rating would indicate

an above average response to all questions in the survey. When respondents react this positively to each item considered, the conclusion shows that companies using Systems Contracting find this method of procurement considerably better than the traditional method of purchasing.

Questions eight, nine, and ten, which were answered subjectively, contain explanations of:

8. Shortcomings of Systems Contracting.
9. Most satisfactory results derived from Systems Contracting.
10. Further comments regarding Systems Contracting.

Question No. 8

Of forty firms which answered this questionnaire, twenty-five (60 percent) answered this question. Major shortcomings can be summarized as follows:

- (a) Inadequate training of purchasing personnel;
- (b) Lack of acceptance of Systems Contracting;
- (c) Lack of knowledge of Systems Contracting;
- (d) Buyer complacency;
- (e) Periods of shortages;
- (f) Systems Contracting eliminates competition;
- (g) Location of buyer and vendor; and,
- (h) Lack of flexibility.

Question No. 9

Twenty-eight responses (70 percent) of forty respondents answered that the most satisfactory results derived from using Systems Contracting were:

- (a) Standardization of supplies
- (b) Reduced inventory
- (c) Good service and convenience
- (d) Reduced paper work
- (e) Reduced truck shipments
- (f) Reduced overall cost
- (g) Reduced cost of acquisition
- (h) Reduced purchasing personnel
- (i) Faster response
- (j) Better cash flow
- (k) Frees capital
- (l) Saves time and money
- (m) Efficiency

Question No. 10

Thirteen responses (32.5 percent) of forty answered question No. 10, which asked for further comments regarding Systems Contracting. The comments are summarized as follows:

- (a) Recommend use of Systems Contracting with reputable firm;
- (b) Systems Contracting will be more widely accepted when purchasing personnel understand the method;

(c) Take time to choose the best vendor and help personnel to feel they are a part of the system;

(d) A method of meeting demands in times of shortage is a need to consider; and,

(e) Systems Contracting is the new way of procurement--the conceptual way.

From these subjective answers there are few problems that have been experienced by users of Systems Contracting that cannot be corrected. Most comments are favorable. The shortcomings seem to stem from lack of proper training of personnel, or lack of knowledge of the method of Systems Contracting. Twenty-eight (70 percent) of the forty respondents gave satisfactory results their firms derived from using Systems Contracting.

This constitutes favorable responses from nearly three-fourths of the respondents. This is a considerable acceptance of Systems Contracting. Thirteen (32.5 percent) made further comments which were mostly constructive statements, praising the Systems Contracting method of procurement. Since all respondents were comparing Systems Contracting with conventional purchase ordering, Systems Contracting for these companies is more satisfactory than the conventional (traditional) purchase order system.

Chapter Five will contain summary, conclusions, and recommendations.

Chapter V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to investigate Systems Contracting as compared with the Conventional Purchase Order method of procurement, especially for maintenance, repair, and operational items. The investigation was conducted from May 1, 1975, to July 1, 1975. The instrument used in the investigation was a ten-question questionnaire, seven of which were answered objectively on a five-point value Likert rating scale as follows: 5, high; 4, medium high; 3, medium; 2, medium low; and 1, low. Three questions were answered subjectively. The participants in the study were forty randomly selected firms which had used both Systems Contracting and the Conventional Purchase Order method of procurement. Forty firms responded to questions one through seven, twenty-five responded to question eight, twenty-eight responded to question nine, and thirteen responded to question ten. (See Appendix B, Questionnaire.)

The responses to questions were as follows:

<u>Question Number</u>	<u>Question</u>	<u>Mean</u>
1	Overall satisfaction	4.375
2	Buying and Selling Procedures	4.5
3	Volume of Company Business	4.2

<u>Question Number</u>	<u>Question</u>	<u>Mean</u>
4	Cost of Systems Contracting	4.375
5	Amount of paper work	4.425
6	Time required	4.675
7	Benefits (See Appendix B)	4.1

Question eight was answered by twenty-five firms. Fifteen found no shortcomings. The shortcomings noted were summarized as follows:

1. Inadequate training of purchasing personnel.
2. Lack of acceptance of Systems Contracting.
3. Lack of knowledge of Systems Contracting.
4. Buying complacency.
5. Periods of shortage.
6. Competition eliminated.
7. Location of buyer and vendor.
8. Lack of flexibility.

Question nine was answered by twenty-eight firms. The most satisfactory results are summarized as follows:

1. Standardization of supplies.
2. Reduced store's inventory
3. Service and convenience.
4. Reduced paper work.
5. Reduced truck shipments.
6. Reduced overall cost.
7. Reduced cost of acquisition.
8. Reduced purchasing personnel.

9. Faster response.
10. Better cash flow.
11. Frees capital.
12. Saves time and money.
13. Efficiency.

Question ten allowed for further comments. Thirteen firms responded as follows:

1. Recommend use of Systems Contracting with reputable firms.
2. Systems Contracting will be more widely accepted when purchasing personnel understand the method.
3. Take time to choose the best vendor and help personnel to feel they are a part of the system.
4. A method of meeting demands in times of shortage is a need to consider.
5. Systems Contracting is the new way of procurement--the conceptual way.

Except for shortcomings as noted by twenty-five firms (63 percent of the respondents), firms participating in the study indicate favorable ratings for all phases of Systems Contracting compared with the Conventional Purchase Order method.

CONCLUSIONS

The forty companies which responded to the Questionnaire express overall satisfaction with Systems Contracting as compared with the Conventional Purchase Order. All

responses rated on a Likert rating scale had a Mean of over 4.0, Medium High. This indicates that the overall perception of Systems Contracting approaches 5, which is the highest rating on the Likert scale. The shortcomings of Systems Contracting apparently stem from lack of understanding the system or complacency on the part of the firms using and supplying goods.

Companies using Systems Contracting have better buying and selling procedures, increase volume of business, reduce costs, have less paper work, require less time for handling business transactions, and have many other benefits which eliminate costs to both supplier and user and create greater efficiency in the purchasing cycle.

RECOMMENDATIONS

1. The researcher recommends that a further study of Systems Contracting be made of firms which have found the technique unsatisfactory.

2. The researcher recommends that further study be made to determine the overall effectiveness of Systems Contracting, possibly using a larger number of firms familiar with this purchasing method.

3. The researcher recommends that top management needs to understand Systems Contracting before a firm adopts the system, and that these top managers train employees and regularly check to see that the method is working properly.

4. The researcher recommends that the methods of Systems Contracting be used for other repetitively used items than maintenance, repair and operational items.

5. The researcher recommends that Systems Contracting be considered for use by small companies as well as large ones, for it can be beneficial to companies of all sizes.

6. The researcher recommends that after Systems Contracting is initiated every effort should be made by both supplier and user to live up to the agreement.

BIBLIOGRAPHY

A. Books

- Aljian, George A. "Systems Contracting." Purchasing Handbook. New York: McGraw-Hill Book Co., 1972, pp. 5-42.
- Best, John W. Research in Education. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970.
- Bolton, Ralph. Systems Contracting. New York: American Management Association, 1966.
- _____. Systems Contracting: A New Purchasing Technique. New York: American Management Association, Inc., 1966.
- Business Periodicals Index. New York: The H. W. Wilson Co.
- Farmer, Samuel C., "Dynamic Purchasing," Handbook of Business Administration. New York: McGraw-Hill Book Company, pp. 6-35-6-43.
- Hanson, Robert P., ed., et al., Moody's Industrial Manual. New York: Moody's Investors Service, Inc., 1973.
- Maynard, H. B., ed., Handbook of Business Administration. New York: McGraw-Hill Book Company.
- Moore, Russell F., ed., AMA Management Handbook. New York: American Management Association, 1970.
- Rosenblatt, S. Bernard, Robert L. Bonnington, and Belverd E. Needles, Jr., Modern Business, A Systems Approach. Boston: Houghton-Mifflin Co., 1973, p. 29.
- Westing, J. H., I. V. Find, and Gary Joseph Zenz. Purchasing Management, Materials in Motion. New York: John Wiley and Sons, Inc., 1969.

B. Periodicals

- Anderson, Ernest L., Jr., "Systems Purchasing--I, Introduction to Systems," Purchasing World, May 1974, p. 43.

- _____. "Anderson: The Job is Money Management," Purchasing World, May 1974, p. 42.
- _____. "PW Systems Purchasing II," Purchasing World, June 1974, pp. 66-67.
- _____. "Systems Selling III," Purchasing World, July 1974, p. 46.
- _____. "Systems Contracting Overview IV," Purchasing World, August 1974, p. 40.
- _____. "Item Analysis V," Purchasing World, September 1974, p. 59.
- _____. "Systems Purchasing--VI Vendor Evaluation," Purchasing World, October 1974, pp. 17-18.
- _____. "Systems Purchasing--VII Negotiation," Purchasing World, November, 1974, p. 8.
- _____. "Systems Purchasing--VIII Implementation and Performance Audits," Purchasing World, December 1974, p. 33.
- _____. "Systems Purchasing--IX Speed Order System," Purchasing World, January 1975, p. 12.
- _____. "Conclusion XI," Purchasing World, March 1975, p. 33.
- "Blanket Orders vs. Systems Contracts," Industrial Distribution, May 1975, pp. 83-84.
- Brookman, Denise, "Top Executives Can Add Punch to Purchasing," Purchasing, January 21, 1975, pp. 34-37.
- "Contract Buying Knows No Boundaries," Purchasing Magazine, May 14, 1970, pp. 63-65.
- Dillon, Thomas F., "Stockless Buying Form Ends Purchasing Paperwork," Purchasing Magazine, July 27, 1967, pp. 60-62.
- Dillon, Thomas F., "How To Select Vendors for Stockless Purchasing," Purchasing, March 10, 1966, pp. 89-92.
- "Fortunes Directory of the 400 Largest Industrial Corporations," Fortune LXXXIX (May 1974), 230.
- Gray, Albert Woodruff, "One Reject Doesn't Break a Contract," Purchasing Magazine, January 8, 197?, pp. 43-44.

- _____. "The P. O.: One Contract of Many?" Purchasing Magazine, September 21, 1967, pp. 76-78.
- _____. "Your Contract Could be KO'd," Purchasing Magazine, February 22, 1968, pp. 73-75.
- Greenberg, John. "Contract Buying Solves Leadtime Problems," Purchasing Magazine, May 4, 1967, pp. 67-71.
- _____. "More P. A.'s Turn to Contract Buying," Purchasing Magazine, February 23, 1967, pp. 46-69.
- Hannaford, William J. "Vendor Perceptions of Contractual Purchasing Systems," Journal of Purchasing (November 1974), 17-32.
- "His System: 'Systems,'" Industrial Distribution, February 1975, p. 52.
- "Planned Purchasing . . . or How Good Is System Selling?" Industrial Distribution, February 1975, pp. 48-49.
- "Standard Corporation Descriptions," New York Standard and Poor's Corp., Publishers.
- "Stockless Purchasing Cuts Office Supply Costs," Purchasing Magazine, October 6, 1966, pp. 64-66.
- "Systems Contracting--One Route Through the Small Order Maze," Purchasing Magazine, August 22, 1972, pp. 55-61.
- "Systems Contracts: Do They Work?" Purchasing, May 7, 1974, pp. 47-49.
- "20 Goals for Better Purchasing," Purchasing, January 23, 1973, pp. 44-47.
- Van deWater, John. "Systems Management Means a New Kind of Purchasing," Purchasing Magazine, January 9, 1969, pp. 59-62.

APPENDIX A

125 Fernwood Drive
Gaffney, South Carolina 29340
May 10, 1975

Gentlemen:

Your company was selected for a research project on Systems Contracting as a segment of my work for a graduate degree at Appalachian State University, Boone, North Carolina.

Results from the collection of this data will define and specify critical problem areas concerning Systems Contracting for professionals. Furthermore, it is hoped that this study will provide a reference or guideline on this important subject.

Results of the study will be made available to you. For your convenience, I have included a stamped-addressed envelope. Your cooperation and earliest response will be greatly appreciated.

Sincerely yours,

Billy D. Bradley

SURVEY OF SYSTEMS CONTRACTING

APPENDIX B

SURVEY OF SYSTEMS CONTRACTING

This survey is sent to your company to secure your evaluation of Systems Contracting. All responses will be treated statistically, with no single report nor individual response being identified.

A. Does your company use the practice of Systems Contracting?

Yes _____

No _____

B. If your answer is "No," please review the questionnaire and share your reasons. (Use back, if needed.)

Did your company use conventional purchase orders before using SC? _____ Yes _____ No

1. From an overall point of view, how satisfactory is the system?

- _____ Always satisfactory
- _____ Usually satisfactory
- _____ Adequate
- _____ Usually unsatisfactory
- _____ Always unsatisfactory

2. On the basis of your experience with Systems Contracting how would you rate your company's buying and selling procedures now as compared with the previous system used?

- _____ Much better
- _____ Slightly better
- _____ About the same
- _____ Slightly worse
- _____ Much worse

If your answer is "slightly worse" or "much worse," please give reason(s) why.

3. How would you rate the volume of business your company has done under Systems Contracting?

- _____ Increased considerably
- _____ Increased slightly
- _____ Remained about the same
- _____ Decreased slightly
- _____ Decreased considerably

4. How would you rate the cost of Systems Contracting as compared to the conventional supplier system?

- Considerably lower
- Moderately lower
- About the same
- Moderately higher
- Considerably higher

Please give reasons for your answer.

5. Please rate the amount of paper work involved in Systems Contracting as compared with the conventional supplier system.

- Greatly reduced
- Considerably reduced
- About the same
- Slightly increased
- Considerably increased

Please list the paper work steps used to complete a transaction in Systems Contracting.

6. How would you rate the time required in handling business transactions using Systems Contracting as compared with using the conventional supplier system?

- Considerably more
- Slightly more
- About the same
- Slightly less
- Considerably less

7. Please rate the following items in terms of how beneficial Systems Contracting is operating in your company. Please use the following scale:

	Low	Moderate			High
	1	2	3	4	5
A. Reductions of store's inventory	1	2	3	4	5
B. Reductions of store's records	1	2	3	4	5
C. Regaining floor space previously used for storage	1	2	3	4	5
D. Reducing Obsolescence	1	2	3	4	5
E. Reducing number of sales calls made by suppliers	1	2	3	4	5
F. Eliminating open order files	1	2	3	4	5
G. Giving suppliers opportunity to perform engineering services	1	2	3	4	5
H. Delivery	1	2	3	4	5
I. Simplifying back-order procedures	1	2	3	4	5
J. Predetermining price structure	1	2	3	4	5
K. Eliminating duplication of effort both in-plant and between supplier and customer	1	2	3	4	5
L. Transferring every function possible from buyer to seller which reduces seller's cost	1	2	3	4	5
M. Freeing capital for more profitable investments	1	2	3	4	5

- N. Freeing purchasing personnel to perform other duties 1 2 3 4 5
- O. Promoting better planning for maintenance and operations 1 2 3 4 5
- P. Reducing pilferage 1 2 3 4 5
- Q. Improving supplier service 1 2 3 4 5
- R. Improving order accuracy 1 2 3 4 5
- S. Improving profits through cost reduction 1 2 3 4 5
- T. Encouraging standardization 1 2 3 4 5

8. What would you say are the major shortcomings of Systems Contracting?

9. What would you say are the results your company has derived from using Systems Contracting?

Please use back of the page to answer, if necessary.

10. Please use the space below to make any further comments you may have regarding Systems Contracting. Any ideas you have will be helpful.

IF YOU WISH, YOU MAY FILL OUT THE FOLLOWING INFORMATION:

YOUR NAME: _____ POSITION: _____

YOUR COMPANY: _____

YOUR COMPANY'S ADDRESS: _____

YOUR COMPANY'S TELEPHONE NUMBER: () _____

PLEASE RETURN THIS QUESTIONNAIRE IN THE STAMPED-ADDRESSED ENVELOPE PROVIDED.

PLEASE CHECK IF YOU WISH A COPY OF THE RESULTS OF THIS SURVEY.

CHECK HERE: _____

THANK YOU FOR YOUR HELP AND COOPERATION.

APPENDIX C

125 Fernwood Drive
Gaffney, South Carolina 29340
June 4, 1975

Gentlemen:

On May 16, 1975, I mailed a questionnaire to your firm requesting an evaluation of the Systems Contracting System (also called "Contract Supplier System" or "Stockless Purchasing"), which I understand is used by you.

So far I have not received a response from you, or your response might possibly have been lost in the mail. Each firm's evaluation is vital to my study, and your response will be especially helpful to me in completing my graduate work at Appalachian State University, Boone, North Carolina.

I am sending you another questionnaire and stamped-addressed envelope, which I hope you will be generous enough to complete and return to me by June 10, 1975, or soon thereafter. I apologize for the urgent tone of this letter, but I hope you will understand and reply.

Thank you very much.

Sincerely yours,

Bill D. Bradley

Enclosures: Questionnaire
 Stamped-addressed envelope

APPENDIX D

S A M P L E

REQUIREMENTS CONTRACT AGREEMENTPurchase Agreement

THIS AGREEMENT, executed this ____ day of _____, 19____, at _____, _____ by and between _____ (Seller) and _____ (Buyer).

1. Buyer will purchase, and Seller will sell, the items covered by this Agreement as listed in the Requirements Contract Agreement Catalog. Buyer agrees to purchase, and Seller agrees to sell, items covered by this Agreement and not listed in the Catalog using the Requirements Contract Agreement procedure and price. Both parties may mutually agree to deletions from, and amendments or additions to, the Catalog.

2. (a) Seller will sell Catalog and non-Catalog items to Buyer at a price based on the attached manufacturer's price schedules at a .85 multiplier.

(b) At the end of each year, the parties will review the multipliers to determine if they should be adjusted. If an agreement cannot be reached for the next

year, the old multipliers shall remain in effect for ninety (90) days. After the ninety (90) day extension this Agreement shall become void.

3. Buyer may, from time to time, audit the records of Seller to verify that the prices shown in the Catalog have been properly computed, including, but not limited to, Seller's costs through inspection and confirmation of invoices to Seller with respect to such goods. If the manufacturers list prices increase or decrease, the Seller will notify the Buyer in writing of the change. On the first of the month following such notice, the prices in the Catalog will automatically increase or decrease to reflect the change.

4. Both parties will follow the procedure for order handling as specified on the attached flow chart. The Seller will supply the Buyer with priced and unpriced Catalogs for use under this Agreement.

5. (a) Payment for all items delivered up to and including the 28th day of each month shall be made by Buyer to Seller on the 10th day of the following month.

(b) Cash discounts shall be allowed to Buyer by Seller on the same basis as received by Seller from its suppliers.

6. Seller will stock an adequate supply of Catalog items for the Buyer. The Buyer will assist the Seller in forecasting usage and the Seller will guarantee that there will be no stock-outs of Catalog items, unless

due to circumstances beyond the Seller's control. The Seller will immediately advise requisitioning personnel of the Buyer when a stock-out situation occurs and delivery within established time schedule cannot be accomplished. The Seller will take all possible action to provide these out-of-stock items.

7. Seller will stock certain items solely for the Buyer's account that are not to be sold to other customers. At the end of each calendar year, the Seller will invoice Buyer at the prime rate of interest in effect at location on that date for those items that have not been turned over at least one time during the year. The annual interest shall be based on Seller's net cost. The Buyer will then advise the status of these items for the next year.

8. (a) Seller will deliver Catalog and non-Catalog items to the receiving locations of the Buyer at approximately _____ a.m. each working day at no charge to the Buyer.

(b) Emergency deliveries during regular working hours, on weekends, and on holidays, will be charged to the Buyer at a rate of _____ per delivery.

9. No substitutions will be permitted on Catalog items unless previously agreed to by the Buyer.

10. Defective items may, even after use, be rejected by the Buyer and returned to the Seller for full

credit or replacement, depending upon manufacturer's warranty and/or guarantee.

11. (a) Seller will consistently secure all items at best price available to it and maintain quality necessary to meet Buyer's requirements.

(b) Seller will attempt to secure price protection from its suppliers for Buyer's benefit, as is customary and allowed by the trade.

12. (a) All items returned by Buyer to Seller's stock are to be credited to Buyer's account at full invoice price, less fifteen percent (15%) for handling charge.

(b) All charges for items returned to the suppliers of Seller, in addition to the fifteen percent (15%) of original invoice price from Seller to Buyer, shall be charged to Buyer's account.

13. Seller will purchase Buyer's present inventory at Seller's cost of said inventory, less the actual expense of handling said inventory; it being understood that Seller's cost includes, but is not limited to, the cash discounts allowed on said inventory, and provided further that Buyer will deliver said inventory to Seller's plant without charge to Seller. The Buyer will make every effort to reduce this inventory to a minimum prior to the beginning of this contract.

14. Seller will not, under any circumstances, extend entertainment, gifts, gratuities, or special services,

regardless of value, to any employee of the Buyer. The Seller will report to the Buyer any attempts made by the Buyer's employees to obtain such favors.

15. (a) The term of this Agreement starts on _____ 19__ and will continue for a three (3) year period, unless terminated in accordance with Paragraph 2 (b). This Agreement may be terminated by either party at any time upon thirty (30) days' written notice if the other party has consistently defaulted in its responsibilities under the Agreement.

(b) In the event Buyer terminates this Agreement for reasons other than default by the Seller, the Buyer will be obligated to purchase all special stock items (see Paragraph 7). These items will be priced in accordance with Paragraph 2 (a). In such event, the Seller will attempt, by Buyer's request, to return special stock items to Seller's suppliers and the Buyer will be charged for items so returned, as set forth in Paragraph 12 (b).

16. Seller may make this procedure or a similar procedure available to other qualified customers.

17. During the course of this Agreement, all standard terms and conditions of the Buyer's purchase order, a copy of which is attached hereto, and made a part hereof, and not superseded by the preceding conditions, shall be considered in effect and are hereby incorporated as part of this Agreement.

This Requirements Contract Purchase Agreement
 entered into and agreed upon by the contracting parties,
 _____ (Seller) and
 _____ (Buyer) on
 _____ day of _____, 19____.

By: _____

Title: _____

By: _____

Title: _____

ABSTRACT

BILL DEAN BRADLEY. A Study of Systems Contracting. (Under the direction of Dr. Shah Mahmoud.)

The purpose of this study was to investigate Systems Contracting as compared with the Conventional Purchase Order method of procurement. The instrument used for making this comparison was a ten-question questionnaire, seven of which were answered objectively on a five-point value Likert rating scale as follows: 5, high; 4, medium high; 3, medium; 2, medium low; and 1, low. Three questions were answered subjectively. Fifty randomly selected firms were sent questionnaires. Forty firms responded and all used both Systems Contracting and the Conventional Purchase Order method of procurement. The period of time covered in the study was May 1, 1975, to July 1, 1975.

Companies gave Systems Contracting an overall satisfaction score of 4.375. Other satisfaction ratings were: satisfaction with buying and selling procedures (4.5); satisfaction with business volume (4.2); satisfaction with cost savings (4.2); satisfaction with paper work (4.425); satisfaction with time required for handling business transactions (4.675). Twenty other benefits of Systems Contracting received ratings of 4.1 or higher.

Question eight was answered by twenty-five firms. Fifteen (60 percent) found no shortcomings. The

shortcomings noted were summarized as follows: inadequate training of purchasing personnel; lack of acceptance of Systems Contracting; lack of knowledge of Systems Contracting; buying complacency; periods of shortage; competition eliminated; location of buyer and vendor; and lack of flexibility.

Question nine was answered by twenty-eight (70 percent) of the respondents. The most satisfactory results derived from using Systems Contracting were summarized as follows: standardization of supplies; reduced inventory; service and convenience; reduced paper work; reduced truck shipments; reduced overall cost; reduced cost of acquisition, reduced purchasing personnel; faster response; better cash flow; frees capital; saves time and money; and efficiency.

Question ten allowed for further comments. Thirteen (32.5 percent) responded as follows: recommend use of Systems Contracting with reputable firms; Systems Contracting will be more widely accepted when purchasing personnel understand the method; take time to choose the best vendor and help personnel to feel they are a part of the system; a method of meeting demands in times of shortage is a need to consider; and Systems Contracting is the new way of procurement--the conceptual way.

Except for shortcomings as noted by twenty-five firms (63 percent of the respondents), firms participating in the study indicate favorable ratings for all phases of Systems Contracting compared with the Conventional Purchase Order method.