

1958

The evaluation of promotional communications to prospective clients of the Research Industry

<https://hdl.handle.net/2144/22051>

"Downloaded from OpenBU. Boston University's institutional repository."

BOSTON UNIVERSITY
School of Public Relations and Communications

THESIS

THE EVALUATION OF PROMOTIONAL
COMMUNICATIONS TO PROSPECTIVE CLIENTS
OF THE RESEARCH INDUSTRY

By

Richard Stimets

(B.S. Bryant College, 1957)

Submitted in partial fulfillment of the
requirements for the degree of
Master of Science

1958

Approved

by

FIRST READER

Howard Stephenson
Professor of *Public Relations*

SECOND READER

Frederick W. Cole
Professor of *Public Relations*
Instructor

TABLE OF CONTENTS

CHAPTER		PAGE
	INTRODUCTION	i
I	WHAT IS INDUSTRIAL RESEARCH	1
II	HISTORY OF ARTHUR D. LITTLE, INC.	5
III	HISTORY OF STANFORD RESEARCH INSTITUTE	9
IV	HISTORY OF FOSTER D. SNELL, INC.	13
V	WHAT CONSULTING RESEARCH COMPANIES OFFER	18
VI	HOW ARTHUR D. LITTLE AND FOSTER D. SNELL OPERATE	22
VII	HOW STANFORD RESEARCH INSTITUTE OPERATES	24
VIII	THE PROMOTIONAL EFFORTS OF THE RESEARCH INDUSTRY	26
IX	THE DIRECT MAIL CAMPAIGN OF FOSTER D. SNELL	31
X	THE PROMOTIONAL LUNCHEON OF ARTHUR D. LITTLE	33
XI	THE SYMPOSIUM OF STANFORD RESEARCH	39
XII	A PROMOTIONAL EVALUATION BY THE DUN AND BRADSTREET RECOGNITION	
	SURVEY	43
	Management Consulting	46
	Technical Consulting	46
	Use of Consulting Firms	48
	Specialization	49
	Comments	49
	Summary of Recognition Survey	50
XIII	FINAL EVALUATION AND SUMMARY	53
	APPENDIX	57
	BIBLIOGRAPHY	64

LIST OF TABLES AND EXHIBITS

TABLE		PAGE
I	Results Achieved by Industrial Research Customers	21
II	Statistics of Detroit Luncheon (ADL)	38

EXHIBITS

1.	Snell Direct Mail Questionnaire	30
2.	Letter of Little Promotional Luncheon	34
3.	Dun and Bradstreet "M" Questionnaire	51
4.	Dun and Bradstreet "T" Questionnaire	52

INTRODUCTION

During this age of Sputniks, Explorers, and other ballistic missiles, the American people have been abruptly reminded that research will play an important part in the future of America and the rest of the world. In President Eisenhower's Oklahoma City address delivered on November 17, 1957, he stated that scientists and researchers must learn to communicate findings to the layman so that the layman will understand and/or use those findings. Massachusetts Institute of Technology has recently realized the importance of this requirement of its future scientists, for it has initiated humanity courses in the undergraduate and graduate levels for the specific purpose of enabling students to express themselves more effectively.

It is the purpose of this thesis to show the communication problems with which these companies are faced, and to make an evaluation of how well they are communicating to clients and future clients. First, these companies must locate and communicate with prospects in order that the specific services they perform

will be understood by those prospects. Secondly, research concerns must be able to tell clients in layman language why and how products can be developed or changed. They must impart understanding in terms of nicotine in cigarettes, leather in shoes, quality control in a plastic process, and many other research problems. The communication problems of consulting industrial researchers, in this respect, are most timely for they deal with the highly technical problems of government and big business, and with the fundamental problems of a small, privately owned company.

Three consulting research companies will be studied. Specifically, a sample consisting of Arthur D. Little, Inc., of Cambridge, Massachusetts; Stanford Research Institute of Stanford, California; and Foster D. Snell, Inc., of New York City, New York, will be used. These companies were selected as samples for specific reasons. Arthur D. Little was chosen because it was one of the first science-for-profit companies in the country, and because today it is one of the largest profit-making research companies in the world. Foster D. Snell was selected because it is a smaller profit-making company which specializes mainly in chemical research

problems and because it generally serves smaller companies than Arthur D. Little. Stanford Research Institute was used as a sample because it is relatively new, (it has operated for twelve years) and because it has become one of the largest non-profit research consultants in the country. For these reasons, interesting comparisons can be made between the activities of the young and old, and the non-profit and profit-making research institutions.

CHAPTER I

What is Industrial Research?

Mr. Raymond S. Stevens, President of Arthur D. Little, Inc., in his speech at the Industrial Development Conference at Los Angeles, California in 1955, defined industrial research as "a great yeastly force at the center of the economy, creating new industries and re-creating old ones, and working changes on all sides."¹ And, Mr. David B. Hertz in his book, The Theory and Practice of Industrial Research, said that it is "the application of human intelligence in a systematic manner to a problem whose solution is not immediately available."²

Therefore, in combining the two definitions, industrial research can be described as a growth industry which explores the known and unknown in order to discover more and better answers to existing industrial problems. The problems may be varied from

¹Permission to quote secured.

²David B. Hertz, The Theory and Practice of Industrial Research (New York: McGraw Hill, 1950), p. 2

the coefficients of expansion in machinery friction to a problem concerning a tasteless wax substance on a paper cup container.

The history of American research can generally be traced to experimentation in the past quarter century. As of today, it can be said that modern industrial research in America is a little over twenty-five years old. It is not much more than that time since the severing of the ties to Europe from which American science, for more than a century, drew its intellectual sustenance. The first American ever to be honored with a Nobel Prize was Albert Abraham Michelson, who received it in 1907 for work in physics begun many years earlier in Cleveland. The Prize list was slow in growing, for American science remained almost completely left to the great minds of Europe. But a decade before Michelson's recognition the lines for future native greatness were being laid out. Before the turn of the century, young Americans of intellectual promise were making their trips to Europe in greater and greater numbers, to sit before the more experienced scientific minds in England, France, and Germany. They became inspired, and upon their return, they began to make felt

in America an influence that had scarcely stirred before. In turn, they became the teachers and inspirers of still younger men who then made their way to Europe.

It was from the contact with Europe that the young Americans at last imported into the United States on a going basis, the standards of European physical science, its rigor of thought and its soaring imagination. Thus, it was in the 1930's when everything else was going "down the drain" and American industry was so desperate that they thought it would never rise again, when American research came of age.

In the past years, Europe's intellectual and economic life has been shattered by the war, while ours has been vastly fostered and nurtured. Today, the growing power of American scientific thought is a prime fact in our life, but a fact of which we have even yet realized to its fullest extent. Certainly, it appears that the welding of science to industry and to the development of new products and processes through research will continue to shape the industrial pattern. Taking this pattern into account, it can be expected that changes will continue in regional life, educational opportunity, and in the chances for the individual to fill up his growing leisure in a more positive way.

As Henry B. duPont once said, "Industrial technology provides the extra food on the table, the extra mile on the speedometer, the extra dollar in the wallet. It is the extra bushel in the barn, the extra suit in the closet, the extra diploma at commencement time. It is extra hours of leisure, the extra years of health and life, the extra measure of security. Our very security as a free people is dependent upon our capacity to produce and to employ the most modern industrial techniques."

CHAPTER II

History of Arthur D. Little, Inc.³

"Allow us to call to your attention the chemical laboratory which we have established at No. 103 Milk Street, Boston, -- Mr. Griffin and Mr. Little have had several years' experience in the development of new chemical processes on the commercial scale and are prepared to undertake, either in their own laboratory, or upon the spot, investigations for the improvement of processes and the perfection of products. Inventors and Manufacturers engaged in developing new ideas, can obtain from us full information upon any chemical points involved and feel sure that their communications will be considered strictly Confidential." This was the first business announcement of two partners, Roger B. Griffin and Arthur D. Little, who joined forces in 1886 to start one of the first consulting research companies in the United States.

³The material for this historical account of Arthur D. Little, Inc., was taken from a talk delivered to the Newcomen Society of England held at the Hotel Somerset in Boston, Massachusetts, on May 5, 1953 by Dr. Earl P. Stevenson, then President of Arthur D. Little, Inc.

After Mr. Griffin died suddenly within a few years, Mr. Little went on to direct the organization now known as Arthur D. Little, Inc. Stunned by the loss of his friend and partner, Mr. Little felt slight inclination to continue alone. In 1900 he formed a partnership with Dr. William Walker, Professor of Chemistry at M. I. T. The company at this time had moved to No. 7 Exchange Place, Boston, an excellent location, for it was in the heart of the financial district. The period beginning with 1890 saw the introduction into the United States of the tremendous scientific progress of the Nineteenth Century in Europe. Another reason for extensive industrial expansion was the fall of Napoleon at Waterloo, and with that, the reduced fear of world war. So, Arthur D. Little found himself conveniently surrounded by favorable conditions for which his services could be facilitated and applied. From 1900, the Little and Walker partnership realizing the increased interest in development and applied research, added to its staff of persons possessing extensive specialized knowledge and experience who built up departments of specialization within the organization. This organizational plan was highly successful for the over-all competence and integrated

effectiveness of the staff was greatly enhanced. Other research companies soon realized the value of this plan and followed suit.

Industrial contracts and activities expanded steadily, and in 1909 under a charter drawn by Louis D. Brandeis, the organization was incorporated under Massachusetts laws. Mr. Little was named President. The corporation, with added working capital, increased the volume of business until it was realized that enlarged facilities were needed and the present site on the Cambridge side of the Charles River was selected in 1917. The beginning of the First World War caused an interruption of the flow of scientific, synthetic, and dye-stuff goods from Germany, and the United States started developing them themselves. Again, Arthur D. Little, Inc. found itself conveniently in a nationally important position. After the war, Dr. Little was able to convince leaders of the importance of continued research developments, and his suggestions were followed. In the late 1920's, the company's staff was reorganized to meet better the needs of the rapidly changing industrial climate, a move which was to mark the flexible nature of the company in the years to come. Dr. Little died on August 1, 1935.

Dr. Earl P. Stevenson was named President of the corporation shortly after Dr. Little's death, and with it he inherited the many problems of the depression. The bulk of these problems were short-lived, however, for soon afterward, the corporation was operating at a new higher capacity with more and better scientifically trained employees. Phenomenal growth has marked the post depression years due to World War II, post war expansion, the Korean War, and a natural development of an expanding economy. The physical plant facilities were moved to Acorn Park in 1953 with many of the administrative offices remaining in Cambridge on the Charles River site. Mr. Raymond Stevens was named President in 1956.

During the 72 years of Arthur D. Little, Inc., its existence has been instrumental in helping to develop the cyanamid industry, the Diesel engine, the X-ray, the automobile, cellulose products, wax papers, coal derivatives, and thousands of other key products. It has expanded from the staff of the two chemists in 1886, to a multi-talented professional group numbering over 800 in 1957.

CHAPTER III

History of Stanford Research Institute⁴

The end of World War II brought to the Western part of the United States, as elsewhere, problems of re-adjustment. In addition, the West was faced with countless problems arising out of unprecedented growth of population, expansion of industry, and demands on its physical resources. Stanford Research Institute was established in the fall of 1946 to apply the techniques of applied research to such problems.

Many local groups were instrumental in organizing interest for the proposed research center, but the San Francisco Bohemian Club started serious mention of a center in the summer of 1939. Several years of correspondence and intermittent meetings followed. By September 1942, an organizational plan had been prepared by two members of Stanford University's Chemistry Department.

World War II prevented establishment of the plan, so the dream of an applied research organization

⁴The material for this historical account of Stanford Research Institute was taken from Research for Industry, Stanford Research Institute's news bulletin, Vol. 9, November 1, 1956.

lay dormant until September 1945 when a trustee presented a plan to the president of the University. A committee was formed and it was assigned visits to other research centers in order that a report could be made as to the feasibility of starting a new research organization. Their conclusions definitely favored the creation of a research organization to be guided policy-wise by the University, but to operate separately and under its own charter of incorporation.

The basic objective of the Institute was for it to be a scientific and educational organization. It was recognized that this goal would be met in many ways, including programs of applied research and fact finding as a service to business, industry, and government on a contract basis.

The Institute was established physically in buildings originally constructed for use as an Army hospital by the U. S. Army on a site in Menlo Park, California, known as Stanford Village, about two miles from the Stanford campus. In 1955 the Institute purchased land within Stanford Village upon which it was to erect its own permanent buildings. Most of the Institute's early projects were in chemistry, the chief project being

methods by which smog could be controlled in the Los Angeles section. Work was undertaken later in physics. The two fields have since become the two largest segments of the Physical Sciences Division. A Division of Economics Research was established in 1947, followed by an Engineering Division in 1948.

Today, Stanford Research Institute is an independent, non-profit corporation chartered by the State of California. The Trustees of Stanford University are the general members of the Institute corporation, and the president of the University is Chairman of the Institute's Board of Directors, although there is no day-to-day operational connection between the University and the Institute. However, a mutual interest in the advancement of knowledge has maintained an atmosphere of close collaboration between the Institute and the University.

In order that the Institute maintain its non-profit status, a certain amount of research work must be performed on a public service basis. In the course of its activities, SRI observes areas in the public good that would benefit from an Institute research effort and, either solely with its own funds, or in cooperation with

other organizations, continually sponsors a number of such research projects. In fulfilling this requirement, extensive work has been done in the fields of air pollution, waste utilization, public health, and agriculture. Recently, SRI took on a large project for the Apache Indians located on the San Carlos Reservation in Arizona. The project was financed in part by the Institute. The tribal council asked SRI to study the reservation's resources and to make recommendations for its fullest utilization. An areas development specialist, economists, a mining engineer, a timber specialist, a social psychologist, and an anthropologist took part in the study.

The Institute has expanded steadily since its beginning in October 1946. From a limited staff totalling 46 at that time, it has grown to a staff totalling about 1,410 at the present time. Because of the Institute's non-profit nature, it holds the enviable distinction of being tax exempt. This fact is a contributing reason why the facilities have grown so rapidly, for the so-called "profits" can be turned back into building, equipment and skilled labor.

CHAPTER -IV

History of Foster D. Snell, Inc.⁵

Just as many other beginners, Foster D. Snell entered the field of chemistry without the benefit of a novel introduction.

After a youth spent in Binghamton, N. Y. where he was born on June 29, 1898, young Snell entered Colgate University. A short interruption of his college career due to service in the Navy during World War I did not prevent his graduation from Colgate in 1919 with a B. S. degree on schedule. Jobs in chemistry in those days were hard to find, and a kindly professor encouraged Mr. Snell to continue his studies in chemistry while waiting for the economic clouds to roll by. The young chemist, however, successfully used his salesmanship, fostered by summertime jobs as a seed salesman, to land a job with the Binghamton Gas Works. Mr. Snell held this, his only

⁵The material for this historical account of Foster D. Snell, Inc. was taken from Chemical and Engineering News published by the American Chemical Society, Vol. 27, August 8, 1949.

industrial job, for a period of two months before he quit, to devote himself to the task of writing a thin volume on colorimetric analysis. This book, published in 1921 by D. Van Nostrand, was one of the foundation stones of that field of analysis and has since been followed by several other tomes on the subject by Mr. Snell and his collaborators.

It was in that same year that Foster Snell married Cornelia A. Tyler, a Syracuse University graduate whom he met while he was taking graduate courses in chemistry at Columbia. Except for the three-hour period in November of every year when Colgate and Syracuse fight their classic football duel, the collaboration has been frictionless. Mrs. Snell, who received her Ph.D. in chemistry shortly after her husband obtained his in 1923, has been Dr. Snell's favorite co-author in the 68 papers and books he has published to date.

While doing his work at Columbia, Mr. Snell was an instructor at the College of the City of New York. After the receipt of his doctorate, he accepted a position at Pratt Institute in Brooklyn under the famous Allen E. Rogers. He was placed in charge of the courses in technical chemistry during the day session, and given

the task of developing a course in organic chemistry for the night session. His remaining time began to be filled by numerous consulting jobs with which he was approached.

By the time Dr. Snell had been at Pratt only two years, the volume of his consulting activities grew to a point where it became necessary for him to open a separate laboratory to handle it. Three years later, the press of work as a consultant brought about his decision to resign from Pratt in order to devote himself completely to the business of "experting."

The increase in the number of consulting problems offered to Dr. Snell brought with them a need for an increased staff and facilities. By 1929, the office and laboratory space of his organization had doubled and the staff had grown to 25 in number. In 1930, Foster D. Snell, Inc., of which Dr. Snell is president, was formed, and to the astonishment of business experts, grew and prospered during the gray depression years at about the same rate that other commercial enterprises were withering and dying. In 1933, Dr. Snell moved his company into several floors of the Brooklyn Daily Eagle Building, where it continued its rapid growth pattern.

In the latter part of 1946, Dr. Snell moved to West 15th Street in Manhattan, where it now occupies two 10-story elevator-equipped buildings in the shadows of New York's skyscrapers.

It would be hard to name a field of applied chemistry in which Dr. Snell's organization has not tackled some particularly knotty problem. Successful solutions to sticklers on acidproof elements, silicates, mortar, glass, cosmetics, foods, and leather have been ground out by the technically well-rounded group Dr. Snell has gathered around him. Considerable work has been done on problems involving soaps and detergents, a field in which Dr. Snell has always had a particular personal interest and has published extensively.

Consulting work is not without its lighter side at Foster D. Snell, Inc., for its files contain the case histories of several whimsical problems that have been solved. Among these are the development of a "magic" powder for use by a magician to put an instantaneous "head" on beer. Another of these assorted gems was the task of formulating a non-poisonous stable white liquid for use in dolls' nursing bottles.

Today, Foster D. Snell, Inc., employs about 180 people. It has expanded by the acquisition of plants in Bainbridge, N. Y., Baltimore, Maryland, and Worcester, Massachusetts, in addition to its central offices in New York City.

CHAPTER V

What Consulting Research Companies Offer

The many consulting research companies located throughout the United States offer services and products to their customers. It would be almost impossible to list all the services in the diversified fields. However, a recent accounting has shown that Arthur D. Little performs over 210 services which, listed in alphabetical order, start with abrasives and end with X-ray diffraction. Foster D. Snell with its more specialized field of chemical research is available for service in anything from the evaluation of the vitamin content of products, to the investigation of the probable merits of a raw material. Similarly, Stanford Research Institute's services range all the way from helping make major management decisions, such as those it helped make in creating Disneyland amusement park, to studies for transportation concerning an estimate of the long-term demand, supply, and cost of coal, natural gas, hydroelectric power, the various grades of fuel oil, oil from shale deposits, and nuclear power in the different regions of the western

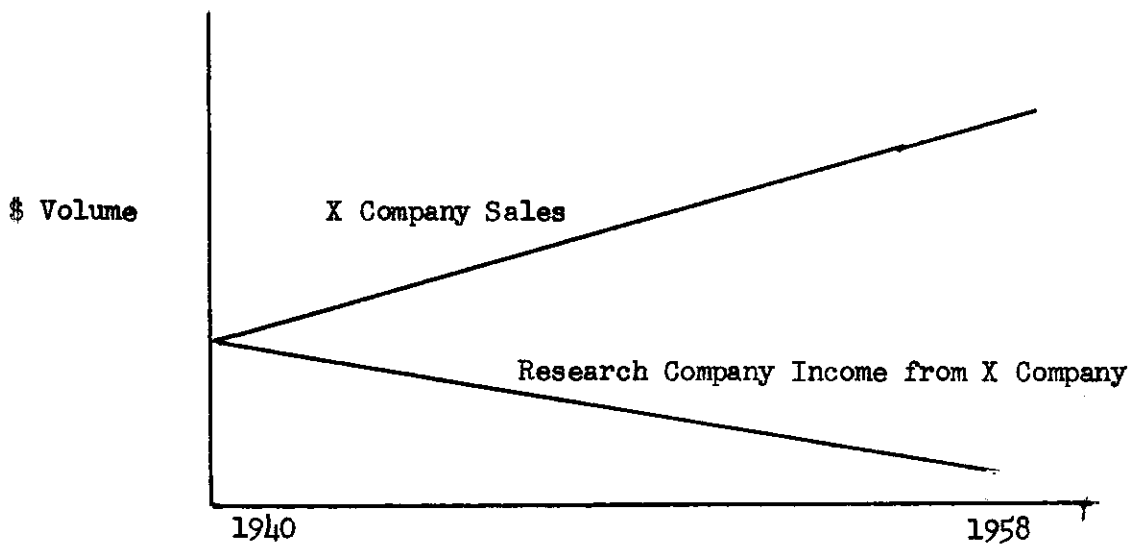
states. In evaluating how their services can best be used, these companies will (1) define the objective of the program, (2) assess the resources and facilities, (3) study the economics of production and marketing of the various industries which seem best suited to the program, and (4) carry the program out.

The research companies also offer products to its customers. Oftentimes, a company which is in financial doldrums will approach a research firm and ask for advice in developing a new "line" for production. Recently, a new president of a paper products company did exactly that. He employed an industrial research team to tackle the whole program of the company's products and sales. The research team began by marketing and product study. One of the resulting recommendations was that the company in point should have a hot liquid paper cup, a product it did not then have. There was, in fact, no outstandingly good paper cup for hot liquids on the market. The next task of the research group was to develop a cup of this kind that would be better than anything then being produced. They first had to find a satisfactory paper base. Then they had to develop a coating. Their efforts led to the development of a plastic coating that was entirely new to the

industry. In the course of the work they used a team in the flavor laboratory in developing a coating that was tasteless and did not contribute off-flavor. The end product met the special combination of requirements; a coating that gave added stiffness, that could be applied quickly and dry quickly, that was non-toxic and flavor free, without unpleasant odor, and that could stand hot liquids. After the coating was developed, the problem went to the development engineers who designed a new machine which would apply the coating. In the final stages of development, basic information was assembled for the suitable schedule of production, and methods of distribution and sale. The cup developed by the research team became one of the key assets of the company, and was recognized as such when the firm was acquired by one of the country's largest container companies. Today that company is in a position to promote and market this product as the "Tiffany of Paper Cups."

This is just one remote example of how a consulting research company can offer a new product to a company that could profitably make room for a product line development. (See Table I)

RESULTS ACHIEVED BY INDUSTRIAL
RESEARCH CUSTOMERS



This chart shows typical growth in sales of a company served by a consulting research company. It shows the extent to which sales have continually increased whereas the charges have decreased proportionately for an industry hiring a consulting research company on a long-term retainer basis.

TABLE I

CHAPTER VI

How Arthur D. Little and Foster D. Snell Operate

Simply speaking, the contract research companies such as ADL and FDS operate by renting man hours of time and by renting their creative people to clients. These are closely related activities and indeed they are interwoven by each other. Recently, ADL was hired by the Egyptian Government to survey the materials and methods best suited for village housing. The research engineers reached a somewhat startling conclusion that mud, which they have been using for several thousands of years, was the Egyptians' best bet, but recommended its mixture with petroleum products to make it more resistant to rain in the rainy areas, as well as some changes in the traditional design of the dwellings. They felt that these modest conclusions, which are well on the way to execution, may do more to house the homeless than millions of dollars worth of shiny steel and concrete model houses that the villagers or the nation could never afford. More recently, ADL had another team in Egypt investigating the possibilities for more industry in the land where industry began.

The basis of cost for the Egyptian Government during this project was the charge for man hours of time consumed by the research team in Egypt along with the rent of ADL's creative people in the home laboratory. All in all, it was a nominal charge to a people for whom the results of the investigation will effect economically speaking for many years to come.

Similarly, operations at Snell are widespread. Services range from elementary analyses for a few dollars to and beyond fees like \$36,000 annual retainer from the Sugar Research Foundation. (See Table I) The Foundation had several ideas for new uses of surplus sugar. Because the field for synthetic detergents is growing so rapidly, and because they have done a lot of work on detergents, the Foundation asked Snell to try to make a detergent from sugar. They were able to develop sucrose monofatty acid esters from sugar and fats. Since both of these were overproduced, the new detergent will be very cheap. Right now, they are already in the pilot-plant stage with this great new product.

Fifty per cent of all jobs cost less than \$100, but bigger projects bring in the bulk of income.

CHAPTER VII

How Stanford Research Institute Operates

Because of the non-profit nature of Stanford Research Institute, restrictions are placed upon the money-raising operations of the company. First and foremost is the requirement that Institute-sponsored research must consist of at least 10 percent of total projects in process. The remaining 90 percent of the on-going projects are carried on as regular contract agreements between the parties.

SRI recently made a complete survey of the transportation system in the Philippine Republic for the National Economic Council of that country. The study of all forms of transportation on and among the Islands presented the facts about the present status of Island transportation and expected trends and needs, to provide a basis for planning the further economic development of the Islands.

The cost of this to the Philippine Council was the cost of the time hours of personnel involved, and an additional charge of 150 percent of the overhead

used. A final charge of 12 percent of the total project is added on for "growth" purposes in the company. This assessment is similar to that of ADL's and FDS's charge called "mark-up".

Therefore, the charges of the profit making and the non-profit making companies are very similar. The greatest Difference, however, is that some of the excesses are absorbed by the Institute-sponsored projects of SRI, whereas that particular restriction is not placed upon the profit-making companies.

CHAPTER VIII

The Promotional Efforts of the Research Industry

Since 1940, the research industry in America has grown in leaps and bounds. The reasons for this, as the author indicated previously, were the war defense effort and the expanding economy. New products were sought to replace the hard-to-obtain war materials, and more "mileage" was needed from the existing products. After the war, new horizons were still sought and the research industry has continued to prosper.

Because the nature of the nation's need for research has been continually changing, so the promotional approaches of those companies have also changed. Ten years ago the difficulty was to persuade those with the responsibility of allocating funds to provide enough for research. Today the situation tends to be the opposite. Both industrial and governmental funds are being poured into research at such a rate that the limiting factor is a shortage of trained personnel. This creates other problems of administration, for nowhere is it easier to waste money than in research activity. A research man,

lacking insight and imagination, can spend just as much money, if not more, than a man performing an executive function, and it is feared that the present high regard in which research is held may eventually suffer from too lavish an expenditure of funds in the wrong places. Therefore, the promotional position of the researcher has been endowed with a new responsibility. He must not only seek new customers for his company, but he must rationally and sensibly explore the needs of the prospective client. The promotional efforts must be sophisticated enough so that a clear need for research can be determined, and only by acting wisely in an advisory capacity, can respect for the research industry be maintained and retained.

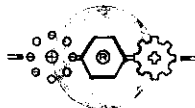
Inasmuch as the research industry has grown so rapidly, and although many companies seek the services of consulting industrial researchers, a great deal of competition exists between the researchers. For that reason, as in many other industries, promotional efforts play an important financial role. Therefore, the research companies have spent a great deal of money for the purpose of determining their most effective communication tool or tools for pinpointing prospects. As a

general statement, however, it can be said that industrial researchers, as a group, are reaching the public by every promotional means available. That is to say, every technique in communication is being used by one, some, or all of the research companies in order that effective promotional contacts be established. Also, it may be said that the selected sample of Arthur D. Little, Foster D. Snell, and Stanford Research Institute are employing, as a group, most of the promotional techniques. Some of these techniques are publicity of all kinds, books, articles in professional journals, seminars, conferences, luncheons, symposiums, and messages through all the media. It may be said at this point that according to Walter Hardy of Foster Snell the industrial researchers are most interested in developing a sophisticated promotional program. He stated that the professional nature of the industry almost demands a sound, sensible selling campaign divorced of traditional gimmicks of other promotional efforts.

Because of the all-encompassing nature of the research promotional efforts, the major means of promotion by each company of the sample will be studied.

Specifically, the informal luncheon of Arthur D. Little, the direct mailing campaign of Foster D. Snell, and the symposium of Stanford Research Institute will be fully explored.

Consulting
CHEMISTS · ENGINEERS



CABLE ADDRESS
CONCHEMIST
TELEPHONE
WATKINS 4-8800

FOSTER D. SNELL, INC.

29 WEST 15TH STREET
NEW YORK 11, N.Y.

April 11, 1958

Miss M. F. Hughes
Refined Syrups and Sugars, Inc.
Yonkers, New York

Dear Miss Hughes:

Have you not often wondered how folks first met?

We have. In fact, we would like very much to know just how you first became acquainted with us. I don't remember. Probably chemical journals.

Listed below are several possibilities. Please check the appropriate line and return to us in the enclosed, self-addressed, postpaid envelope.

Direct Mail

The Chemical Digest _____
Memorandum to Management _____
Marketing and Economic Research Newsletter _____
Other (State) _____

Advertising or Publicity

Business Week _____ I & EC _____
Chemical Week _____ Wall Street Journal _____
Dun's Review _____ Other (State) _____
(more recently) - Sugar Research
Foundation Reports

Professional Card

Yellow Pages (Telephone Redbook) _____

Personal Recommendation _____

Thank you for your assistance in conducting this survey. We hope we can continue to serve you.

Very truly yours,

FOSTER D. SNELL, Inc.

Encl.

CHAPTER IX

The Direct Mail Campaign of Foster D. Snell

"Foster D. Snell prides itself with the fact that it was the first research-for-profit company to develop a direct mail campaign for promotional purposes. The company has done its own market research and developed its market mainly through selected mailings and carefully placed advertising."⁶ FDS feels that the greatest number of prospects are reached through the mailing program. It obviously has been an effective method of promotion for the company client list has grown from 2 in 1920 (its first year of operation) to a record of over 12,000 clients served up to 1958. In addition, FDS requests its management staff to belong to professional chemical societies in order that those people establish informal business contacts.

The direct mail lists according to Walter Hardy, Director of Client Relations, is comprised of past and present clients, companies who have asked to be included on the mail lists, and leads which have been discovered

⁶Management Audit; Published by the American Institute of Management, June 1958, Vol. VII, No. 14, Page 2.

through direct and indirect contacts. (See Exhibit I)

The direct mail itself consists of pamphlets and journals which the latest findings of the chemical research field (especially as discovered by Snell) are reported.

Recently, FDS undertook a survey designed to discover the extent to which published articles and complete Snell publications were reaching the desired audience. (See Recognition Survey, Appendix) The survey received a 9.3% response which is considered an average response for a written questionnaire.

The results of the survey showed that the material was reaching a desirably varied economic audience, and that the efforts of Snell's Public Relation Department to have material published in national publications are recognized by the reading audience.

CHAPTER X

The Promotional Luncheon of Arthur D. Little

Although Arthur D. Little, Inc. uses almost every method possible in gaining new customers, the method that has proven to be the most successful is the "product line audit function". The meetings are held in the form of a luncheon where the staff members of ADL entertain invited guests of a pre-determined geographical area. The guests are informed at the dinner meeting of the services the company performs.

The writer attended a sales function held in New Haven, Connecticut on April 24, 1958. The meeting was conducted at the New Haven Lawn Club which was considered to be an exclusive club according to responses given the writer by people on the New Haven streets. Executives of many of the manufacturing plants around the New Haven area were invited by personal letters from ADL to attend that meeting. (See Exhibit No. 2) The purpose of the meeting was carefully explained to those executives in the letter so that they understood the nature of the function at the outset.

EXHIBIT No. 2

April 7, 1958

Mr. Joseph R. Neill, President
Watertown Manufacturing Company
Echo Lake Road
Watertown, Connecticut

Dear Mr. Neill:

We are giving a small luncheon for a group of executives from the major industrial companies in the New Haven area and hope that you can be our guest on Thursday, April 24, at 12 noon, at the New Haven Lawn Club, 193 Whitney Avenue in New Haven.

For some time we have been conducting product audits for many of our clients and this program will present a brief review of the major factors involved. Basically the program is geared to help you with your long range product policy planning and to provide a blueprint for your future product line. Consideration is given to present products which should be dropped either now or later and to products which should be introduced with an approximate timetable for their introduction.

Mr. Richard J. Coveney, Vice-President of Arthur D. Little, Inc., who has directed these audits since their inception, will be the principal speaker. The program will discuss the complex integration of skills involved in the successful development and improvement of products. Specific reference by other speakers will include such factors as material analysis, product methods, evaluation of competitive products, marketing problems and the relationship of research to corporate growth.

We hope that you will be with us on April 24th. The program has been designed so that we will conclude no later than 2:00 p.m.

Please let me know if you can attend.

Sincerely,

Fred B. Foulk

FBB:sp

This particular meeting was designed to bring to the attention of the guests the many problems involved in analyzing which products a company should or should not manufacture. ADL called for "product line audits" either by the individual company or by outside experts, which implied, in a subtle manner, that ADL would be the agent to handle that particular problem.

As guests arrived, they were given tags to wear which identified each person by his name and the company which he was representing. After each person had signed in, he was greeted by a member of the ADL staff, and cocktails were offered to those who wished them. The cocktails were an excellent method of "breaking the ice" for it gave ADL and the other businessmen a good chance to meet informally. It was observed that there was no high pressure selling by the staff members and a cordial, informal, friendly atmosphere was maintained. After about a half an hour, the guests were invited to sit at any table of their choosing. Each table had one ADL staff member which was an excellent idea. Again, it was observed that there was no high pressure message delivered by the staff members at the individual tables. After the meal, the speakers spoke

very briefly of ADL's history, its services, and its past projects. All the speakers did an excellent job of informing the visitors of the "corporate image" of ADL in view of the time allotted to each. Everyday uses of research and research findings were explained with a minimum of technical terms which seemed to make the presentations very understandable to the visitors. Slides were also shown to explain even more thoroughly ADL's products and analyses. After the luncheon, all those who were interested in talking to the staff members were invited for coffee and dessert. This was an excellent idea, for the guests were promised that the presentation would be completed by two o'clock. Those guests who were on a tight schedule seemed to appreciate that the two o'clock limit was met.

The over-all impression of the product line luncheon was excellent. ADL presented itself in a most professional, yet friendly, manner. One visitor to whom the writer spoke said, "These people certainly are an alert group. It is refreshing to see that research people are human beings. I've enjoyed this meeting very much, and it has proven to be most informative." The writer was particularly impressed with the low pressure sales approach. The company was not identified as such more than a dozen

times, yet it is believed that each visitor attending clearly understood the promotional aspect of the meeting. Attendance was about half of all those invited, which is understood to be an excellent turnout. It was particularly good in this instance, for a local manufacturing association called a last-minute meeting which undoubtedly cut down on the ADL attendance.

It is certainly too soon to know the results of the New Haven meeting. Oftentimes the results of such meetings are not uncovered for several months, or, in some instances, several years. However, interesting figures can be used from the results of a Detroit luncheon held in January 1956 to show the nature of expenses and the growth of projects undertaken. (See Table II) These are cases directly resulting from the promotional meeting.

STATISTICS OF DETROIT LUNCHEON HELD IN
JANUARY, 1956

Number of guests invited:	450
Number of guests attending	227
Total cost of luncheon (including meals, transportation, etc.)	\$5,500.00 (approximate)

CASES RESULTING

<u>Case No.</u>	<u>Type of Company</u>	<u>Original Cost</u>	<u>Total billing to date</u>
60234*	Plastic Products	\$6,000.	\$6,000.
60262*	Manufacturing Company	7,500.	22,500.
60331-1**	Carpet Sweeper Company	7,500.	9,000.
60375*	Metal Products Division	17,000.	17,000.
60440*	X Corporation	18,000.	36,000.
60520*	Y Steel Corporation	<u>36,000.</u>	<u>36,000.</u>
		\$ 92,000.	\$ 126,000.

* Still continuing

** Closed 4/4/57

TABLE II

CHAPTER XI

The Symposium of Stanford Research Institute

Among the Articles of Incorporation of Stanford Research Institute under the laws of the State of California, one of the corporation's purposes is "... to establish a center for the accumulation of information useful to scientific and technical information with other research and educational institutions and to publish and disseminate such of its findings as may be deemed of general public interest."

Practically the sole means of disseminating information to the public is by the means of symposiums (defined in Webster's Collegiate Dictionary as "...a gathering at which discussion on a certain subject is held.") For this reason, symposiums and conferences have played a large role in the Institute's first 12 years. Another reason for depending upon this type of promotion is that it is one of the few ways of promoting services because the State laws prohibit SRI from using "space" advertisements in newspapers and magazines.

The Institute sponsors or co-sponsors a number of symposiums each year at which scientists and industrialists from many nations present technical papers, engage in panel discussions, and informally explore matters of mutual interest. Also, the meetings provide forums for research problems in which SRI is vitally interested. Thus, three air-pollution symposiums have attracted leading scientists concerned with control of smog; two meetings have dealt with the capabilities and problems of automation; and four gatherings have evaluated the role of social sciences in industry.

The assemblies have focused national and world attention on research programs in which SRI is taking leading roles. A World Symposium on Applied Solar Energy last November in Arizona attracted scientists from 34 foreign countries to the first meeting of this magnitude concerned with the applications of solar energy.

The High Temperature Symposium last June exceeded all expectations of co-sponsors SRI and the University of California. An overflow audience of 700 chemists, physicists, and engineers attended the meetings at the University's Berkeley Campus. And three area-development conferences have been so successful in

pointing up the tasks facing the West that a meeting on an even more ambitious level - an International Industrial Development Conference - was held in mid-October 1957 in San Francisco.

Promotional information also is disseminated through Institute publications. A Chemical Economics Handbook in six years has gathered a wealth of economic data for chemical, market research, and other companies concerned with economic planning in the chemical and related industries.

The dollar volume of business to SRI resulting from the symposiums is very difficult to measure, according to Mr. David G. Parkes, Director of Public Relations, because of the professional atmosphere maintained at the meetings. Promotional efforts, identified as such, are not emphasized. The general approach seems to be that the subtle mention of Stanford Research Institute enhances greater public relations than other, more ambitious selling programs.

The only measure of the success of symposiums seems to be in examining the company growth pattern in its first twelve years of operation. The Institute has expanded from a company employing forty-six employees

in 1946, to a staff of over 1,400 in 1948. Its position in the research field has grown so rapidly that SRI is now considered the company doing the greatest dollar volume of all the non-profit research companies.

With these facts in mind, it appears that SRI is communicating effectively to prospective clients in spite of tax restrictions imposed upon it by the State of California.

CHAPTER XII

A Promotional Evaluation by the Dun and Bradstreet Recognition Survey⁷

Dun and Bradstreet, Inc. was hired by Arthur D. Little, Inc. to conduct a survey in order that ADL's comparative market position could be examined. Dun and Bradstreet was hired so that the responses would be impartial, for ADL was not identified as the sponsoring company.

Two basic questionnaires were used in the survey; the "M" questionnaires seeking information about management consulting firms and activities and the "T" questionnaires seeking information about technical research firms and activities. (See Exhibits 3 and 4) The "M" questionnaire was sent only to presidents. The "T" questionnaire was split between research directors and presidents. Half of the list, or a total of 2,308 questionnaires was mailed in February 1958; 1,170 "M" questionnaires and 1,133 "T" questionnaires. The names of the presidents were taken from "Poor's Register of Directors (1958) and Fortune's top 500 firms. The names of

⁷Reprinted by permission of Arthur D. Little, Inc. and Dun and Bradstreet, Inc.

the research directors were taken from Industrial Laboratories of the United States (1956). Competitors and non-manufacturing firms were removed from the lists, and no individual was mailed more than one questionnaire, although several companies received two questionnaires.

The return for the 1958 mailing was 27%. As compared to the mailout, it appears that there is some bias in the returns as measured by types of respondents. Technical directors comprise 10% more of the total return than the mailout, and as a result "T" questionnaires comprise more of the return than the mailout and technical directors account for a great share of the "T" questionnaires.

In evaluating the results of the survey, it should be stressed that percentage differences between groups of respondents and their ratings are more meaningful than numerical differences. Also, unless a sizable difference exists in tabulations of small groups, it cannot be assumed significant. There is no absolute definition of the services offered for checking, but it can be assumed from the responses that ADL is thought to perform all of these services. Therefore, ADL receives more mentions than those firms offering a narrow range of services. The absence of non-manufacturing concerns from

the respondents undoubtedly affects some of the recognition responses, especially regional development, and this should be kept in mind when reviewing client responses particularly.

It should be noted that both parent companies and divisions have been coded as clients, even though the respondent may have been at one level and the client relationship at another level. Also, all companies who have ever been clients were counted as such, even though the relationship may have been terminated prior to present management's experience. Care should be taken not to confuse clients with users of consultants; clients refer to ADL, FDS, and SRI relationships only; users of consultants are those respondents who report that they have used any consultants in the past three years. There may be some geographical bias present in the returns, but it has not yet been determined.

Large companies include those with 200 or more employees, a capital strength rating of over \$1,000,000. (either Dun and Bradstreet or Thomas' Register) and firms with sales over \$1,000,000.

Management Consulting

Tabulation of the "M" questionnaire (mailed only to presidents) shows that ADL is well recognized for Chemical Product Development and compares very closely with Booz-Allen (non-profit research firm) in overall recognition. Clients recognize all of these services readily as ADL services, except management appraisals. ADL has the most outstanding mentions for four of the seven services, although the differences between ADL and Booz-Allen are small. It is interesting to note that only one-third of the clients identified ADL as outstanding in any service, although the other two-thirds probably did not comment on the other firms either. When firms are not identified for any service, ADL has the fewest number of "have never heard of" and the greatest number of "I am familiar with" responses. It appears that recognition is therefore greater for ADL than other firms, since the responses for the other firms are in reverse order.

Technical Consulting

ADL has the greatest number of mentions for five technical services and mentions range from seventy to five ahead of the second ranking firm as follows:

Industrial market research - 70 ahead of Snell

Operation research - 39 ahead of Snell

Plan design - 55 ahead of Snell

Industrial design - 52 ahead of Armour and
Battele and 51 ahead of Stanford Research
Institute.

Chemical Process Development - 5 ahead of
Stanford Research Institute

ADL is identified by more respondents than any other firms, leading U. S. Testing (non-profit firm) by three and Armour and Battelle by twenty. ADL is recognized as having a broad range of services and leads SRI by seventy mentions for services over four small companies, presidents and non-users of consultants recognize U. S. Testing ahead of ADL.

For outstanding recognition, ADL leads or ties for six out of nine services, as follows:

Industrial market research - 26 ahead of Snell

Operations research - 14 ahead of SRI

Industrial design - 4 ahead of SRI

Plant design - 10 ahead of SRI

Chemical process development --3 ahead of Snell

Mechanical equipment - tied with SRI, one ahead
of Snell

Only 16% of the clients recognized ADL as outstanding, and both clients and research directors gave the same response as total "T"'s, except that ADL was given 2 less mentions for chemical process development than Stanford Research Institute.

Use of Consulting Firms

ADL has been employed by 24% of the 300 users of consultants who identified the firms they retained. Battelle follows with 20%, Armour 11%, Snell 10% and Stanford 7%. Eighteen non-clients reported having used ADL in the past three years. ADL has the most mentions by clients, large firms, small firms, and presidents, and follows one mention behind Battelle for "T" respondents. It follows four mentions behind Booz-Allen by "M" respondents, and seven mentions behind Battelle by research directors.

ADL and Stanford both received a higher proportion of mentions from "T" than "M" respondents. All except two consultants - Snell and U. S. Testing - received many more mentions from large firms than small firms. Clients mentioned the firms listed on the "T" questionnaire more frequently than those on the "M" list.

Specialization

Although the greatest number of respondents indicated no preference, there is a decided interest in specialization over a broad range of services. Respondents who did not identify any of the consultants listed indicated a stronger interest in specialization over no preference as did the "M" respondents.

Comments

Sixty percent of all comments on ADL, FDS, and SRI were favorable. Users comments were highly favorable, and non-users highly unfavorable, as follows;

Percent of favorable comments

Users - 95%

Clients - 80%

Large companies - 75%

"T" questionnaires - 68%

Research directors - 62%

"M" questionnaires - 57%

Non-clients - 56%

Presidents - 51%

Respondents with identifying consultants - 52%

Small companies - 49%

Respondents not identifying

consultants - 46%

Non-users - 28%

Summary of the Recognition Survey

The Recognition Survey was conducted by Dun and Bradstreet, Inc. for Arthur D. Little, Inc. The Survey was designed to show the extent to which Arthur D. Little was recognized by businessmen throughout the country for the services they perform. Competitors were included in the questionnaire so that a true relationship with competing companies could be visualized by Arthur D. Little, Inc.

Dun and Bradstreet was hired by ADL so that a neutral agent would be implied in the survey. In other words, ADL felt that if Dun and Bradstreet's letterhead accompanied the questionnaire, the respondent would be more liable to answer it and that the answer would be more liable to be impartial. The cost of the Survey is estimated to be about \$4,830.

T

EXHIBIT No. 3



EXECUTIVE OFFICES
88 CHURCH STREET
NEW YORK 8, N. Y.
Digtly 812200

Dun & Bradstreet, Inc.

The Mercantile Agency

What are your impressions of consulting firms? We have a customer who faces a problem which sometime may be your own. His question is, "What do executives know about me and my competitors?" You can be of very real help to us and to our client in his future planning by giving us the one or two minutes it will take to answer this short questionnaire.

Your identity and that of other respondents will be held confidential in this survey. Neither your name or that of your firm will be divulged to our client.

We have enclosed a return envelope for your convenience.

Thank you for your help.

Confidential Survey \oint

(Please turn over)

IMPREJUDICIALS OF CONSULTING FIRMS

1 Here is a list of activities which may be performed by consulting firms. For each of the firms listed below, please check all of the services you believe it offers. You may not be familiar with some of the firms. If so, please check line 9, 10, or 11 below.

NO.	CONSULTING SERVICES	CONSULTING FIRMS							
		BOOZ, ALLER & HAMILTON	CREAD, MC CONNOR & PABST	CRAND SERVICE INC.	FOOD SAISON & DAVIS INC.	ARTHUR D. LITTLE INC.	MC KINNEY & COMPANY	STAMFORD, JENCKES & FUTE	STEWART, DONNELL & ASSOC.
1.	Organization and Management Appraisals								
2.	Plant Location								
3.	Product Testing - Technical Factors								
4.	Regional Development - Economic & Industrial								
5.	Chemical Product Development								
6.	Consumer Marketing Research								
7.	Product Line Planning								
8.	Industrial Marketing Research								
	I am familiar with this firm but I do not believe they perform any of these services.								
	I am familiar with this firm but I don't know what they do.								
11.	I have never heard of this firm.								

3 When retaining a consulting organization, do you prefer the organization to be specialized in the field of your problem or to have competency in a wide range of problems, including your own?

Please check one:

I prefer a consulting organization with a broad range of services _____

I prefer a consulting organization who specializes _____

I have no preference as between specialization or broad range of services as long as a consultant is competent in the area of my problem _____

4 Has your company used the services of any consulting firm in the last three years?

Please check one:

No _____

Yes _____

(If yes) what firm (s)?

Please List:

2 Please circle the appropriate check marks above to show the firm you consider outstanding in each type of service.

COMMENTS:

5 Any comments relating to your reasons for using or not using consulting firms?



RESERVE OFFICE
66 CHURCH STREET
NEW YORK 4, N. Y.
City 9-5500

Dun & Bradstreet, Inc.

The Mercantile Agency

PLEASE CHECK ONE

What are your impressions of consulting firms? We have a customer who faces a problem which sometime may be your own. His question is, "What do executives know about me and my competitors?" You can be of very real help to us and to our client in his future planning by giving us the one or two minutes it will take to answer this short questionnaire.

Your identity and that of other respondents will be held confidential in this survey. Neither your name or that of your firm will be divulged to our client.

We have enclosed a return envelope for your convenience.

Thank you for your help.

Confidential Survey $\frac{1}{2}$ (Please turn over)

IMPRESSIONS OF CONSULTING FIRMS

1 There is a list of activities which may be performed by consulting firms. For each of the firms listed below, check all of the services you believe it offers. You may not be familiar with some of the firms. If so, please check lines 10, 11, or 12 below.

TA	CONSULTING FIRMS						
	ARMOUR RESEARCH FOUNDATION	BATELL MEMORIAL INSTITUTE	ARTHUR D. LITTLE, INC.	MELLON INSTITUTE	FOSTER D. REEVE, INC.	STANFORD RESEARCH INSTITUTE	UNITED STATES TESTING CO., INC.
1. Electrical Product Development						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2. Industrial Design						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Chemical Process Development						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. Chemical Research						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5. Industrial Marketing Research						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Mechanical Equipment						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. Plant Design and Construction Engineering						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8. Product Testing - Technical Factors						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9. Polymer Research and Applications						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10. I am familiar with this firm but I do not believe they perform any of these services.						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11. I am familiar with this firm but I don't know what they do.						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
12. I have never heard of this firm.						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

2 Please circle the appropriate check marks above to show the firm you consider outstanding in each type of service.

COMMENTS:

3 When retaining a consulting organization, do you prefer the organization to be specialized in the field of your problem or to have competency in a wide range of problems, including your own?

Please check one:

I prefer a consulting organization with a broad range of services _____

I prefer a consulting organization who specializes _____

I have no preference as between specialization or broad range of services as long as a consultant is competent in the area of my problem _____

4 Has your company used the services of any consulting firm in the last three years?

Please check one:

No _____

Yes _____

(If yes) what firm (s)? _____

Please List: _____

5 Any comments relating to your reasons for using or not using consulting firms?

CHAPTER XIII

Final Evaluation and Summary

As this thesis has shown, research has been a dynamic force in the past history of our country and it promises to be even more important in our future. The research companies are performing an important function for they are helping to create new jobs, new opportunities, and greater use of our resources.

The history of research in this country has been traced so that its rapid growth has been shown. The writer does not feel that the growth has occurred independently of careful planning in promotional services. It is felt that intelligent education of the public as a whole and individual clients has made a great contribution for the general recognition of the importance of research. This does not mean that misrepresentation has not occurred by consulting researchers. Malpractice has been in evidence in the past just as it has in other fields, but it felt by clients that malpractice has occurred in a bare minimum of total projects undertaken.

The entire project of evaluating promotional activities by the research industry is obviously impossible.

For that reason, the writer has selected three outstanding companies to represent a sample of consulting researchers. Arthur D. Little, Inc. was selected because it is the largest profit-making research company in the country. Foster D. Snell was selected because it is a small profit-making researcher. Finally, Stanford Research Institute was selected because it is one of the largest non-profit research firms. Interesting comparisons of the companies have been made because of the difference in size and operating scope. It has been seen that the consulting research companies have grown in size and operating scope. Stanford Research Institute, Foster D. Snell, Inc., and Arthur D. Little, Inc. have many clients on a retainer basis and, as the Recognition survey shows, those companies which have used consulting researchers are more than satisfied with the results. These factors, in themselves, appear to be important endorsements for these companies.

A final evaluation of the effectiveness of the promotional activity of the three companies was made through the Dun and Bradstreet Recognition Survey. The survey showed that Arthur D. Little, Inc. has been most successful in delivering its "corporate image" to the public. That company is most favorably and readily recognized

for its services performed than the other companies in the research field, although the other companies received appropriate recognition for specialized promotional efforts.

The future of the research industry appears to be very bright indeed. Certainly the welding of sciences to industry and the development of new products and processes through research will continue to shape the industrial pattern. Taking this trend into account, we can look for changes in the pattern of the last century - changes that will affect regional life, educational opportunity, and the chance for the individual to fill up his growing leisure in a positive way. According to a recent McGraw-Hill publication "we will reach a point in the mid-1960's when there will begin the greatest surge of capital investment in all history. And then - around 1965 - the new processes (full automation, atomic power, continuous steel casting) which are the slowest and most expensive part of the research chain to develop, will come into play.

"The combined impact of new products and new processes to meet an expanding market, will thus be felt in the mid-1960's, eight to ten years after the recent sharp increase in research spending. The full impact is

that far away because of the lags for applied research, pilot plant studies and market introduction. But, to a large degree, the prosperity of the 1960's has already been shaped by the research promotional programs now under way."⁸

⁸How Research Shapes Industry New York: McGraw-Hill, 1958, p. 4.

A P P E N D I X

FOSTER D. SNELL, INC.
29 WEST 15th STREET, NEW YORK 11, N.Y.
CONSULTING CHEMISTS
ENGINEERS

Memorandum to - Research Directors

from - Richard L. Moore, Director of Public Relations

Subject Results of Research Director Trade Journal and Business Paper Readership Study.

1. Our questionnaire was mailed to 4500 research directors in the United States who were asked: "What trade journals, business papers do you read?" and "What trade journals do you find most helpful in your work?"
2. We received over 420 replies which represents a 9.3% response.
3. The average number of publications listed on each questionnaire for question one was 7.
4. Many research people read far more extensively than they indicated and made note of this fact.
5. Some stated that their library or market research staff read dozens of trade journals and then mark specific articles and items for their attention.

(To put in a plug, this is what our CHEMICAL MARKET ABSTRACT service does with several hundred trade journals, too.)
6. Some research directors indicated that their readership of trade journals change as their field or interests change. (See item 8 also)
7. Pharmaceutical research people listed more publications per reader than the other fields.
8. We observed that usually you could determine the industrial field of the research director by noting the names of the publications listed. For instance a railroad researcher reads railroad publications first. A pulp and paper man lists most of the pulp and paper publications first as well as chemical and business papers too.
9. The majority of the companies answering were nationally known. We were able to classify many of our respondents by checking the Standard Advertising Register of national advertisers. (See Table IV.)

We appreciate your interest in taking part in this study and shall be glad to hear from you and try to answer your questions or comments.

RLM:VEM
oz.

(Signed) Richard L. Moore

TOP 24 PUBLICATIONS INDICATED BY ANSWERS TO QUESTION ONE.

Question One. "What trade journals, business papers do you read?"

Question Two. "What trade journals do you find most helpful in your work?"

<u>Publication</u>	<u>No. of Times Answered Question One</u>	<u>No. of Times Answered Question Two</u>
Chemical & Engineering News	183	117
Chemical Week	149	109
Business Week	91	33
Industrial & Engineering Chemistry	82	52
Chemical Engineering	77	52
Wall Street Journal	70	25
Oil, Paint & Drug Reporter	36	26
Fortune	34	7
Drug Trade News	33	19
Modern Plastics	32	21
Iron Age	29	13
Metal Progress	28	19
Chemical Abstracts	26	22
Soap & Chemical Specialties	26	13
Chemical Processing	25	16
Food Engineering	25	24
Journal of American Chemical Society	25	14
Steel	25	14
Science	24	13
Analytical Chemistry	23	18
Drug & Cosmetic Industry	23	19
Product Engineering	22	17
Machine Design	21	13
U. S. News & World Report	21	

TABLE I

Question One. "What trade journals, business papers do you read?"

Question Two. "What trade journals do you find most helpful in your work?"

	<u>No. of Times Answered Question One</u>	<u>No. of Times Answered Question Two</u>
A. C. S. Journals	20	15
Agricultural Chemicals	6	
American Dyestuff Reporter	17	10
American Paint Journal	11	
American Perfumer & Essential Oil Review	11	8
A. S. T. M. Bulletin	9	5
Automation	5	
Barrons	10	
Brick & Clay Record	5	
Ceramic Industry	6	6
Chemical Engineering Progress	10	7
Daily News Record	7	
Design News	8	6
Dun's Review	5	
Electrical Manufacturing	19	20
Electronic Designs	6	
Electronics	20	20
Feedstuffs	6	
Food Field Reporter	13	10
Food Processing	10	6
Food Research	5	
Food Technology	9	6
Forbes	8	
Foundry	6	
Harvard Review	11	8
Industrial Laboratories	18	11
IRE Proceedings	6	
Journal of Agricultural & Food Chemistry	14	13
Journal of American Management Association	8	
Journal of American Oil Chemists Society	6	
Journal of American Pharmaceutical Association	7	
Journal of Applied Physics	5	
Journal of Commerce	16	10
Kiplinger Letters	16	
Material & Methods	15	10
Mechanical Engineering	11	9
Metal Finishing	10	6
Modern Packaging	8	9
Nation's Business	9	
Newsweek	10	
Nucleonics	6	
Oil & Gas Journal	14	8
Packaging Parade	5	
Paper Mill News	7	5
Paper Trade Journal	17	11

<u>Publication</u>	<u>No. of Times Answered Question One</u>	<u>No. of Times Answered Question Two</u>
Petroleum Processing	14	8
Plastic World	10	5
Pulp & Paper	5	
Railway Age	5	
Rubber Age	14	9
Rubber World	12	
SAE Journal	5	
Scientific American	15	
TAPPI	15	15
Tele-Tech	5	5
Textile Industries	5	
Textile Research Journal	7	
Textile World	10	5
The Paper Industry	5	6
Time	9	

TABLE II

Note: Over 450 publications were mentioned. We have listed those mentioned 5 or more times.

TITLE OF THOSE RESPONDING TO QUESTIONNAIRE

Presidents and Owners	39
V. P. in charge of research and development	34
V. P.	9
Research & Technical Directors	172
Managers of Research & Development	15
Associate Directors of Research	7
Laboratory Managers	18
Chief Chemists	24
Chief Engineers, Metallurgists	23
Miscellaneous titles, e.g. Research Chemist, Sales Manager, Director of Public Relations	45
Unsigned	<u>34</u>
Total Response	420

TABLE III

BREAKDOWN & SUMMARY OF TYPES OF COMPANIES RESPONDING TO QUESTIONNAIRE

<u>Major Field of Activity</u>	<u>Number of Companies</u>
Building Construction & Materials	9
Cement	5
Ceramics	9
Chemical Companies	73
Chemical Specialty Manufacturers	10
Containers	8
Consultants	5
Cosmetics	5
Detergents	6
Electrical Manufacturing	14
Engineering	9
Floor Covering	2
Food	29
Government Laboratories	3
Ink	5
Iron & Steel	10
Machinery	11
Manufacturing	43
Metal Working	7
Miscellaneous - e.g. Dept. Store, Insurance Labs.	4
Oil, Gas Petroleum	18
Plastics	4
Paints & Varnishes	8
Paper & Wood	10
Research Labs, Independent & Non-Profit	25
Pharmaceutical	12
Railroads	3
Rubber	5
Scientific Instruments	8
Testing Laboratories	10
Textiles	11
Tobacco	2
Water Conditioners	3
	<hr/>
Total	386

TABLE IV

BIBLIOGRAPHY

BOOKS

The Editors of Fortune: The Mighty Force of Research (New York: McGraw-Hill Book Co., Inc. 1953)

Hertz, David B.: The Theory and Practice of Industrial Research (New York: McGraw-Hill Book Co., Inc. 1950)

ARTICLES

Earl P. Stevenson, "Scatter Acorns that Oaks May Grow" a reprint of a speech first read at the Newcomen Meeting at New York World's Fair on August 5, 1939.

"Research for Industry", Stanford Research Institute news bulletin, Vol. 9, November 1, 1956.

"Chemical and Engineering News", published by the American Chemical Society, Vol. 27, August 8, 1949.

"Management Audit", published by the American Institute of Management, June 1958, Vol. VII.

"How Research Shapes Industry", New York: McGraw-Hill, 1958.