

E401

旅鮮異党宝

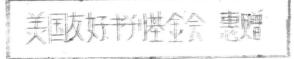
8390950

# MARKET RESEARCH AND ANALYSIS

By

#### LYNDON O. BROWN, Ph.D.

Professor of Marketing and Advertising, Northwestern University; Member of the firm Stewart, Brown & Associates





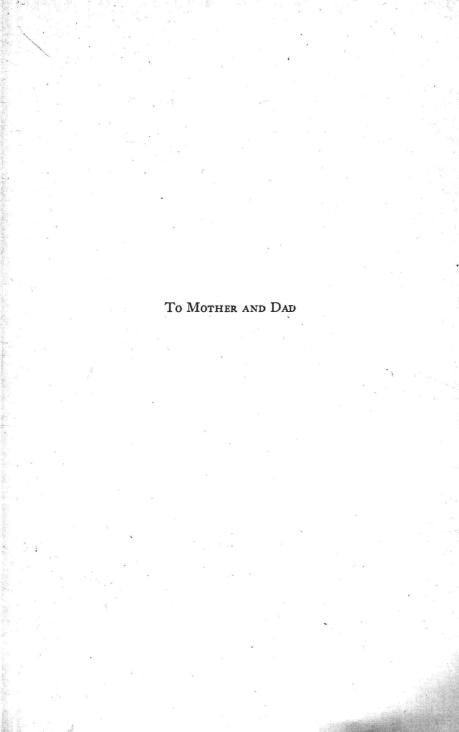
THE RONALD PRESS COMPANY
NEW YORK

## Copyright, 1937, by THE RONALD PRESS COMPANY

#### All Rights Reserved

The text of this publication or any part thereof may not be reproduced in any manner whatsoever without permission in writing from the publisher.

Fifth Printing, May, 1946



#### **PREFACE**

With the recent rapid growth of scientific method in marketing, a great deal has been written about market research and analysis. But in no one volume can the business executive find how to put them to work. In no single source can the practitioner find a complete handbook, and the teacher a balanced text. As its title suggests, this book is an effort to meet all three needs with a broad, fundamental treatment of the entire subject. The scope and uses of market research and analysis are considered at some length to reveal their specific practical applications to business. A discussion of the roots of the subject in scientific method discloses the fundamentals upon which the minor techniques rest. The basic research procedure is explained in detail. Techniques for the various steps in research are written in a "how-to-do-it" manner. subjects which often receive only slight attention, like quantitative analysis, sales analysis, market trends, advertising research, and product analysis, are discussed fully and related to the basic methods. While none of the technical subjects are slighted, they are not allowed to overshadow more important matters. The writing is purposely challenging to stimulate critical thinking and the development of a scientific point of view.

The subject of Market Research and Analysis is rapidly occupying a place alongside Principles of Marketing as a basic study. The fundamental preparation of any student of marketing requires both a course in general *principles* and a course in *method* which he can carry with him to meet the specific problems which arise in his later work. This book, in preparation since 1930, has been used as a text to supply the latter need for five years at Northwestern University, and more recently in three other universities.

Market research and analysis is too important a subject to be read lightly. Mere knowledge of its forms and techniques is not enough. To obtain the greatest value from its application to business, there must exist a fundamental understanding of the rôle it plays, the contribution it can make, its scientific foundations, and (perhaps fully as important), its limitations. It is hoped that this volume may make some modest contribution to economic theory by revealing the methods of an important form of applied economics, as well as contributing to the still broader field of scientific method in the social studies. In a sense it might be said that the ultimate objective of the book is to contribute to a genuine *understanding* of the subject.

I wish to acknowledge the permission of the Harvard Business Review to reprint parts of articles appearing in that magazine. The names of business associates and faculty colleagues who have helped me from time to time are too numerous to give. I am particularly indebted to Professor Fred E. Clark, who has encouraged the work and given liberally of his time in reading the manuscript. His support of the development of market analysis in the business curriculum and thoughtful criticisms have been most helpful. I wish, also, to acknowledge the special assistance of C. A. R. Wardwell, King C. Cook, and my assistants, Miss Coralie Schaefer, Miss June Betsberg, and Gene Olson. Among my faculty colleagues who have contributed to the work, directly or indirectly, are Professors F. S. Deibler, Horace Secrist, L. D. Herrold, J. R. Hawkinson, and Leon Bosch. My chief indebtedness is to my wife, Blanche Boyum Brown, who has taken an active part in the preparation of the book.

LYNDON O. BROWN

Evanston, Illinois.

## ILLUSTRATIONS

Fig	URE	PAGE
1.	St. Louis Market Laid Out for Analysis	14
2.	Results of a Qualitative Analysis of Brand Preferences on the Basis of Geographic Territories and Population Groups	30
3.	Distorted Map of the United States Showing Areas in Proportion to an Index of Spendable Income	32
4.	A Page from a Questionnaire Used for a Market Product Analysis by the General Motors Corporation	36
5.	Part of the Results from a Sales Analysis	44
6.	A Combination of Quantitative Analysis and Advertising Analysis—Results of an Analysis of Magazine Circulation Against Potential Sales by Population Groups	51
7.	Application of Cost Accounting Technique in Market Analysis Work	78
8.	Part of a Questionnaire for a Retail Market Analysis Which Illustrates the Survey Method in Its Three Basic Forms—Factual, Opinion, and Interpretive	93
9.	Questionnaire Used in the White Floating Soap Analysis .	130
10.	Form for Use in Reporting an Interview Made During the Informal Investigation	172
11.	Example of a Mail Questionnaire, Showing the Different Elements in a Complete Questionnaire	6-217
12.	A Mail Consumer Questionnaire, Showing the Use of Illustrations to Explain Terms	221
13.	Part of a Questionnaire Which Illustrates the Technique of Obtaining Data on Individual Instances to Stimulate Memory and Avoid Generalizations	226
14.	A Well-Designed Consumer Questionnaire Illustrating the Proper Restriction of the Survey Method and the Observance of the Chief Rules for Questionnaire Construction .	228

FIGURE	PAGE
15. Form for Store Check of Stock and Sales, for Use in an Observational or Experimental Study	. 245
16. Partial Example of Editing Instructions, Showing the Use of Standard Instructions for Each Question	
17. A Section from an Edited Questionnaire	. 308
18. Chart of Cumulative Frequencies Used in Testing a Sample for Reliability	318
19. A Counting Sheet and Table, Showing How Original Tabulations Are Set Up	. 332
20. A Page from a Technical Report	. 377
21. A Page from a Popular Presentation, Showing a Suggested Standard Form for Presenting the Facts Obtained in the Study	385
22. Introductory Page from a Popular Report	. 388
23. Examples Which Contrast Incorrect and Correct Methods of Visual Presentation	395
24. A Dramatized Bar Chart, Showing That It Is Not Necessary to Violate the Rules of Graphic Presentation to Make a Chart Interesting	397
25. An Interesting Application of Quantitative Analysis	. 411
26. A Comparison of Three Popular Indexes	. 436

## CONTENTS

### CHAPTER 1

	PAGE
Introduction	3
The Rise of Market Research and Analysis, 6. Some Weaknesses in Present Market Research and Analysis Practice, 8. General Plan of the Book, 10. Market Research and Market Analysis, 12.	
C-1, 2	
CHAPTER 2	
Types and Uses of Market Research and Analysis	16
National Market Analysis and Wholesale or Retail Market Analysis, 16. Industrial Market Analysis and Consumer Market Analysis, 17. Qualitative and Quantitative Analysis, 18. Types of Market Analysis, 19— Qualitative Market Analysis, 19. Quantitative Market Analysis, 31. Product Analysis, 33. Market Trend Analysis,	
39. Sales Analysis, 43. Dealer Analysis, 47. Advertising and Sales Promotion Analysis, 49. Other Types of Market Analyses, 57.	
CHAPTER 3	
Scientific Method	58
What is Scientific Method, 59. The Basic Methods of Science, 63—The Historical Method, 63. The Inductive Method, 66. The Deductive Method, 68. The Analytical Method, 71. The Experimental Method, 73. The General Techniques of Special Scientific Fields, 75—Statistics, 75. Accounting, 76. Engineering, 79. Psychology, 80. Sociology, 82.	
Chapter 4	
Basic Market Analysis Methods	84
The Survey Method, 85. Factual Surveys, 86. Opinion Surveys, 87. Interpretive Surveys, 89. The Observational Method, 96. vii	,

1 *	PAGE
The Experimental Method in Market Analysis, 98. The Accuracy of Market Analysis Methods, 104. The Alternative Use of Market Analysis Methods, 109. The Combination of Methods, 110.	
CHAPTER 5	
Market Analysis Procedure	112
The Situation Analysis, 117. The Informal Investigation, 120. Planning the Analysis, 123. Gathering Data, 131. Tabulation and Analysis, 133. Interpretation, 140. Presentation of the Results, 141. Follow-Up, 142.	*
CHAPTER 6	
The Situation Analysis	144
How the Situation Analysis is Made, 146. Distinction Between the Situation Analysis and the Data-Gathering Step, 147. The Use of Standard Outlines, 148. Nature of Information Obtained in the Situation Analysis, 149 — The Product, 149. The Company, Industry, and Competition, 153. The Market, 155. Channels of Distribution, 156. The Sales Organization, 160. Advertising and Sales Promotion, 162.	
CHAPTER 7	
THE INFORMAL INVESTIGATION	165
Purpose, 165. How the Informal Investigation is Made, 167. Informal Consumer Interviews, 173. Informal Dealer Interviews, 180. Informal Key Interviews, 188.	9.
CHAPTER 8	
PLANNING THE INVESTIGATION—DETERMINING PURPOSES; Types and Sources of Data	194
Determining the Purposes of the Analysis, 194. Steps in Stating the Purposes of the Investigation, 196. Determining the Types and Sources of Data, 199. How to Determine the Types and Sources of Data to Be Used, 202.	

	Page
_	

#### CHAPTER 9

F	PLANNING	THE	INVES	TIGATIO	ом —	PREP	ARAT	ION	OF	TI	HE	
	Forms	то І	Be Used	IN GA	THER	ING D	ATA					207
		_				9.5	- 100					

Types of Questionnaires, 208. The Elements of the Questionnaire, 214. General Rules for Constructing Questionnaires, 222. Preparation of Forms for Observations and Experiments, 243.

#### CHAPTER 10

# PLANNING THE INVESTIGATION—PLANNING THE SAMPLE; DETERMINING OPERATING PLANS AND COSTS . . . . 247

Planning the Sample, 247. The General Theory of Sampling, 248. The Major and Minor Universe; Gross and Sub-Samples, 250. The Difficulty of Obtaining Random Samples, 252. Determining the Nature of the Major Universe, 254. Determining the Nature of the Minor Universes, 256. Determining the Number of Interviews Necessary for Reliability, 257. Determining the Distribution of Interviews Necessary for Proportionality, 260. Limitations of Statistical Formulæ and Tables Used in Planning and Testing Samples for a Market Analysis, 261. Effect of the Size of a Sample on Its Soundness, 264. Determining Operating Plans and Costs, 265.

#### CHAPTER 11

#### 

Gathering Secondary Data, 268—The Sources of Secondary Data, 268. Appraising Secondary Data, 273. Gathering Primary Data, 279—The Test Investigation, 279. Gathering Data by Mail Questionnaires, 280. Gathering Data by Personal Interviews, 282—Supervision, 282. Selecting Investigators, 284. Training Field Investigators, 287. Instructions to Persons Gathering Data, 289. Interviews with Executives and Other Important Persons, 294. Checking the Field Force, 295. Handling the Observational Work, 296. Handling Experiments, 298.

#### CHAPTER 12

TABULATION .	AND	Aı	VAL	YS.	IS-	-E	DIT	INC	ιI	DAT	Ά	AND	, '	TES	TIN	I G	
THE SAM	PLE										y•1	٠.					303

Editing Data, 303. Testing the Validity of the Sample, 310. Testing for Reliability, 311. The Cumulative Frequency Method,

	_
	PAGE
312. The Group Rotation Method, 319. Calculation of the Probable Error of the Sample, 323. Testing for Proportionality, 325. Adjustment for Proportionality, 327.	-,,
CHAPTER 13	
Times involved the Assistance Times involved Delivering	, 1
TABULATION AND ANALYSIS—TABULATING AND DRAWING STATISTICAL CONCLUSIONS	330
Tabulation, 331. Rules for Obtaining Accuracy in Tabulation, 334. Obtaining the Most Significant Meaning from the Data, 340. Machine versus Hand Tabulation, 342. Advantages of Machine Tabulation, 342. Disadvantages of Machine Tabulation, 345. Drawing Statistical Conclusions, 347.	
CHAPTER 14	
Interpretation	3.54
How Far the Market Analyst Should Go in Interpreting His Findings into Business Policy, 354. The Problem of Interpretation, 356. Making Logical Interpretations, 357. Standards for Interpretation, 359. Making Policy Interpretations That Will Be Followed, 366.	
CHAPTER 15	g 10
Presentation of the Results	373
Importance of the Reports, 373. Primary Principles of Presentation, 374. The Technical Report, 376. The Popular Report, 379. Forms for Popular Reports, 380. How to Write a Popular Report, 383. How to Make a Popular Presentation Dramatic, 386. Standards in Graphic Presentation, 393. Checking the Reports, 399. The Follow-Up, 400.	**
CHAPTER 16	
7. 7. 7.	
QUANTITATIVE MARKET ANALYSIS: ITS USES AND LIMITA-	402
I am a final	
Importance of Quantitative Analysis, 403. The Uses of Quantitative Analysis, 403 — Total Sales Quotas, 404. Territorial Sales	

	PAGE
Quotas, 404. Quotas for Individuals, 405. Boundaries of Sales Territories, 406. Concentration of Sales Efforts, 407. Distribution of Sales Force, 407. Distribution of Advertising, 408. Appraisal of Efficiency, 410. Limitations of Quantitative Market Analysis, 412.	
712.	
CHAPTER 17	v.
QUANTITATIVE MARKET ANALYSIS—METHODS OF QUANTITATIVE ANALYSIS	421
The Direct Data Method, 421. The Corollary Data Method, 426. The Single Index Method, 427—The Batten, Barton, Durstine and Osborn Index, 430. The Curtis Index, 431. The Crowell Index, 432. The International Magazine Company Index, 433. The McCann Index, 434. The Retail Sales Index, 435. The Arbitrary Factors Method, 437. The Family Budget Method, 441. The Consumption Rate Method, 442. The Multiple Correlation Method, 444.	
Chapter 18	
CHAPTER 10	
The Rôle of Market Analysis in Business and Economics	449
The Part Market Analysis Plays in the Theory and Practice of Marketing, 449. Some Economic Aspects of Market Analysis, 454. The Organization of Market Analysis Work, 456—The Individual Firm, 456. Organizations Specializing in Market Analysis, 459. Advertising Agency Research, 460. Research by Advertising Media and Other Organizations, 462. The Limitations of Market Research and Analysis, 464.	
SELECTED READINGS	467
Index	475

## MARKET RESEARCH AND ANALYSIS

"There is one person wiser than Anybody and that is Everybody"

—TALLEYRAND

#### CHAPTER 1

#### INTRODUCTION

In a mid-western city a young lady owned and operated a very successful restaurant. Its many customers knew that the best food and service in a large metropolitan area could be obtained at her dining room. They knew that there was such a demand for this food and service that the restaurant was always crowded and that people were usually willing to wait their turn, although this particular city contained many restaurants of excellent quality. The customers knew that she obtained a better price for her food. They also knew that the young lady was making a large profit out of this highly successful business venture.

What the customers did not know was that this young lady had an unnoticed but very interesting habit. During the luncheon and dinner hours she personally made it a point to refill the water glasses at all tables. She would move from table to table and observe the food her guests relished, the comments that were made on food and service, but more especially the food which was left on the plate by the diner. If the spinach, for example, at a particular meal was being pushed aside by the guests, the owner immediately went to the kitchen to see the head chef to find what was wrong.

What neither the customers nor the young lady proprietor understood was that she was a market analyst. In her habit of refilling the water glasses she had developed her own method which was just as scientific and as important to her business as the most complicated market analysis ever made. Of course, thousands of restaurant proprietors or managers wander about their restaurants during meal time. The difference which made the procedure of the young lady proprietor scientific was that

3

instead of aimlessly wandering about, she had a specific objective and a definite procedure. The fact that she had no laboratory equipment, no corps of assistants, no magnificent report is beside the point. The fact that she chose the most direct, economical, logical, scientific, and simple method of determining what her market wanted gave her the fundamental characteristic of the market analyst.

Market analysis is like that. It is nothing more than a study of markets and marketing methods so that a company will sell its product effectively. Of course, to accomplish this aim the market must be studied intelligently. One must constantly bear in mind that market analysis is never anything more than an intelligent way of studying a market and that the most intelligent way is usually comparatively simple. Naturally, the approach must be scientific and the various methods which have proved themselves in the field of science must be employed.

If the cook is too far away from the diners in a medium-sized restaurant, what of the national manufacturer? Instead of one person with a very few assistants producing his product, he may have more than a hundred thousand employes scattered in fifty cities throughout the world engaged in making the product. Instead of fifteen or twenty waitresses, he may have thousands of salesmen and dealers in four or five thousand cities and towns in the United States and others in foreign countries. Instead of five hundred customers a day, gathered together in one room, he may have literally millions of buyers and users scattered all over the globe. The sheer size of modern business demands scientific methods to keep in touch with its markets.

Nearly everyone who plays a part, great or small, in the operation or control of business has a direct interest in the rapidly increasing application of scientific method in the field of marketing. The business executive is constantly confronted with the burdens of waste and the high cost involved in the selling of his products or services. Manufacturers, wholesalers, retailers, financiers, accountants, and business consultants find that more and more of their time is devoted to marketing prob-