2nd Edition

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# CONSUMER MARKET RESEARCH HANDBOOK

Editors in chief Robert M. Worcester John Downham



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2nd edition

Editors: ROBERT M. WORCESTER

JOHN DOWNHAM



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#### Preface to the Second Edition

In the preface to the original edition, I noted that for some years practitioners and users of market research in Great Britain had deplored the lack of a comprehensive summary of consumer research techniques and applications. At the time of writing (1971) there were many books available which treated this or that aspect of the subject, but evidently none that were widely considered to be comprehensive.

Thus, when approached in 1969 by the original publishers to take on the task of such a work, I found widespread appreciation of the need for the book among potential contributors, and an almost universal willingness on the part of the acknowledged experts in the fields who were asked to contribute their experience and thought to set aside time and commercial pressures in order to share their expertise with others. We saw the potential audience for the book in three distinct groups: the general marketing student, as a reference, and as a text for advanced course; practitioners, including those working in research and advertising agencies and on the staffs of manufacturing and service companies; and finally, those executives in agencies and companies who are charged with responsibility for the use and application of research findings.

At the outset, it was clear that the book would necessarily be a large one indeed if it was to have any claim whatsoever to being reasonably comprehensive. For this reason, I first turned to the task of gathering a team of advisory editors together whose functions included both the assumption of responsibility for an individual section of the book and also service as a board of editors. The section editors for the first edition included Liz Nelson, Paul Harris, John Downham and Bert de Vos.

While the focus of the book is British, an effort has been made to include references to work being done in America, Europe and elsewhere. Another decision made early on was that the contributors were to be drawn entirely from the ranks of practising market researchers rather than from academics. It was felt that the annealing process of commercial experience would lend

strength to the fundamental purpose, which is to provide guidance to the efforts of those studying, doing and using commercial market research. In a way, our theme became one of, 'But will it help him to understand the problem tomorrow morning at 9.30?' Obviously, even a work of this size cannot be comprehensive. It is intended to be reasonably instructive in each of the subjects covered, and also to give guidance as to where to extend the search if more information is needed.

The organization of the volume became almost chronological in the process of conducting a study. We felt the overall content could be broken into what has, by sheer magnitude of the contributions, become two parts; the first devoted to the techniques of consumer market research and the second to the use of research. Further, each part, we originally felt, lent itself to further subdivision, the 'techniques' half being split into two sections: 'Collecting the Data' and 'Analysing the Data'. The second half was divided into 'Consumer Research Applications' and 'Media Research'. This, then, was the concept behind the original organization of the book.

In the Second Edition we took into account several suggestions from contributors and many from readers. We dropped the sections as such, as it was felt that the two parts provided enough division. Chapters on desk research and models were added; all chapters were revised, some more than others; several were combined with others, thus enabling them to be somewhat shortened. We corrected some 27 typographical errors, most caught by K. Kitahara, who translated the first edition into Japanese.

Sadly, since the first edition two of our colleagues have died, Gerry Arnott and Mike Burrows. We miss them as contributors and as friends. We have asked Brian Hughes to revise Gerry's chapter on Trade Research, and my colleague Roger Stubbs has updated Mike Burrows' chapter on Financial Relations Research.

Thanks are due to each contributor and especially to John Downham who willingly took up co-editing responsibility for the Second Edition, to McGraw-Hill for the idea in the first place and to Van Nostrand Reinhold Company for carrying the book to the second edition, and I am indebted to the Literary Executor of the late Sir Ronald A. Fisher, FRS, to Dr. Frank Yates, FRS, and to Oliver and Boyd, Edinburgh, for permission to reprint tables from their book, Statistical Tables for biological, agricultural and medical research. Finally, thanks to my wife, Joann Worcester, who did the prodigious job of reading the proofs and compiling the index to the Second Edition.

Robert M. Worcester London, 1978

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### Part I. Techniques of market research



#### Introduction

This section, as in the First Edition, concentrates on marketing research techniques. While the section is aimed principally at practitioners and students of market research, it may also prove useful to the market research user as a guide to the methods by which the answers he seeks are obtained.

The section is written around the time sequence involved in carrying out a market research project. Thus, it starts with defining the problem and gaining the necessary background information before going on to techniques employed to solve marketing problems.

An attempt has been made to cover all of the major research techniques now employed perhaps at the sacrifice of depth in the analysis of the use and limitations of each technique examined. Each contributor has attempted to show the purpose of the technique covered in the chapter, its advantages and disadvantages, how it actually operates and, in each case, where to look for further information.

#### **Definition of Problems and Client Involvement**

Marketing research is characterized by its use of orderly scientific procedure. A discussion of techniques, therefore, must begin with the first step of that procedure, i.e. define the problem. There is a saying that, 'when your marketing problems are known, they are half solved'. The role of the researcher in helping to define problems is crucial. When the researcher is properly involved, he will be able to suggest not only which technique is most applicable but what data need to be gathered. He can separate out the essential data from 'interesting information'. He can also say when market research cannot assist in the solution of the problem. Proper involvement by the researcher can overcome the common pitfall of expecting too much from research.

Marketing research data can be helpful in predicting the future, but as yet not with any degree of accuracy. Marketing research cannot yet make decisions. The marketing man must still operate in the area of uncertainty.

Thus, looking ahead, market researchers will become more involved in making decisions; they will become more involved in clients' problems both before research is carried out and afterwards. There will be more of a continuous relationship between researchers and marketing men. The more that the continuous relationship concept develops, the more researchers will be asked to solve problems which are not of the bushfire type. Much problem solving will then be not of the 'outright difficulty' type. Research should be involved in the recognition of hitherto unnoticed opportunities and, often, research can provide the most profitable type of problem solving.

A chapter new to the Handbook, on desk research, begins to define the problem. Chapter 2 is concerned with qualitative and psychological techniques. Having defined the parameters of the problem from the research point of view, chapter 3 goes on to experimental design and models. Models are included in this section, but only briefly discussed, since this subject is more thoroughly treated in Part II of this book. Chapter 4 provides a 'short course' on sampling, chapter 5 covers survey questionnaire design using personal interviews. It seemed necessary to cover interviewing and field control in chapter 6 before discussing other widely-used techniques, audits (chapter 7), consumer panels (chapter 8) and omnibus surveys (chapter 9). The point of view that retailer research is closer in its techniques to consumer rather than industrial research has been taken. Thus, trade research as well as retail audits is covered in chapter 7.

The previous near total dependence on the personal interview is already becoming less marked and is likely to diminish further in the future. There are already signs of a greater inclination to postal, telephone, or self-completion techniques. Thus, chapter 10 deals with mail surveys and other techniques such as telephone surveys and observation.

Certainly, large users of research do not rely upon one technique alone. They use a combination of panels and audits, panels and surveys, audits and surveys. If any general point can be made out about choice of techniques, it is that if the client does not know much about his market or indeed much about a particular problem, he is best advised to use desk research and qualitative research and to proceed from that stage learning more and more about his market as he proceeds.

The stage has now been reached when the data have been collected by using the techniques described. What the user requires now is that the data are analysed quickly and efficiently so that the maximum amount of usable information is obtained. He also wishes to know how accurate the results are and whether the results are 'real' or can just be explained as random fluctuations. In addition, the user needs to be told of the complex inter-relationships of various parts of the data. Only when he has been given all these things is he able to use the research results with confidence, and be sure that they can profitably assist in the marketing decisions. Of course, any analysis of the data is only as good as the data that have been collected. No amount of 'playing with numbers' can get over such problems as questions asked in a

biased way, questions missing from the questionnaire and incorrect measuring techniques.

In the last two decades tremendous advances have been seen in the analysis of market research surveys. Most of this has been due to the advent of the computer, which has brought speed and flexibility to the handling of data. This advance, though bringing obvious advantages, is not without its drawbacks. Previously, the researcher had, because of time and cost considerations, to limit the number of tables produced from any survey, and thus it forced him to think objectively about the analysis. It was necessary to consider only the most important hypotheses about the data, and this had the effect of disciplining the researcher in his approach to survey analysis.

Now, as the on-cost of producing a large amount of survey tabulations or extra analyses is small, there is a tendency to analyse 'everything by everything' and just 'see what comes up'. In some cases, where a new topic is being investigated, for example, this may pay dividends; but as has been pointed out! this testing of a large number of hypotheses simultaneously has to be handled carefully to avoid incorrect conclusions being drawn from the data. With this reservation, however, it must be stated that the increasing technological nature of survey analysis methods has mainly had a good influence on the analysis and interpretation of market surveys. Nowhere is this more true than in the use of advanced statistical techniques to discover important and complicated relationships in the data that have been collected (see chapter 14).

Chapter 12 describes what happens to a batch of questionnaires that have been completed. It tells how the questionnaires are checked, and how the data are transferred to a medium, such as punched cards or paper tape, which is used as input to an electronic computer. The methods of analysis given are mainly in terms of a general 'one off' quantitative survey. The temptation was resisted to include the special problems and methods of specific types of surveys such as qualitative surveys or panels and audits. Details of the analysis of data from such sources are given in the chapters devoted to them or in the references given in those chapters.

The next chapter (13) is concerned with elementary statistics obtained from survey tabulations and the testing of statistical hypotheses using a group of testing procedures which comes under the general heading of significance tests. These are used to explain whether observed differences in the data are due to the errors of sampling. It is well known, however, that the total error in any survey result comes from non-sampling errors, e.g. non-response and measurement errors, as well as sampling errors. Market researchers have paid too little attention in the past to estimating these non-sampling errors. Attempts have been made to quantify such errors<sup>2</sup> and to build them into a framework for estimating total survey error<sup>3</sup>, but not much of this work has passed into current practice. The results of surveys are sometimes used as input to market forecasting exercises, especially when a survey has been repeated over a number of years. There is a body of statistical

techniques subsumed under the heading of time series analysis, which can assist the researcher whose statistical analyses of surveys include future projections of market size, etc. Details are not included in this section's chapters as this would have taken too much space, and it was thought that such techniques were more often used by the statistical specialists in marketing departments than by the average market researcher. For those who wish to read about such techniques three references<sup>4,5,6</sup> are given at the end of the book.

Chapter 14 deals with the more advanced statistical techniques used to analyse market research data. The techniques go under the general heading of multivariate analysis. In most cases no single thing determines what makes consumers buy the products they buy or makes them behave in a certain way. The influences on consumers are many and varied, including such things as past behaviour and attitudes to the product. It is not surprising, therefore, that multivariate statistical methods, i.e. those which examine a large number of survey characteristics simultaneously, are widely used by survey analysts. The methods used are mathematically complicated but the description of them in this chapter involves only simple algebra.

Finally, I would like to again draw the reader's attention to the contribution of Liz Nelson and Paul Harris, section editors in Part One of the First Edition, whose original thoughts and contribution were so substantial and who did the substantial and significant job of collating the chapters which for the most part comprise the chapters that follow.

Robert M. Worcester

#### 1. Desk research

#### Nigel Newson-Smith

Desk research is not the exclusive activity of market researchers. In a monograph on desk research written for the Incorporated Society of British Advertisers, Peter Anderson remarked that 'all business executives tend to be desk researchers'. More and more, business management is concerned with sifting, absorbing, and interpreting information to aid business decisions. However, while market researchers do not have proprietorial rights over desk research, they do reckon to have special talents in undertaking it; their skills are in collecting data, organizing it, and interpreting it against a brief; these are the primary skills required in desk research.

Desk research usually yields different data from those generated by field research, but on those occasions when it covers the same ground, desk research is very significantly cheaper. It avoids the main cost element in fieldwork, relying heavily on data other people have already collated.

Normally grouped with desk research are sales statistics, sales forecasting, and some forms of telephone surveys. For the purpose of this chapter, the first two are omitted as specialist techniques which often find their way into the market researcher's province, simply because they may suit the researcher's numerical and analytical skills. Analysis of one's own sales data, and forecasting, are, of course, relevant elements in many desk research projects. Telephone survey methods (as opposed to using the telephone to obtain expert assistance or factual data) are discussed in chapter 10.

Desk research is that which can be conducted from behind one's desk or by interviewing experts to obtain data; to this extent it is the antithesis of field research. The raw material for desk research is other people's data, not original data generated by a first-time survey or other original research techniques. Because of this, desk research is often referred to as the use of 'secondary data'. This is rejected here because the raw material for much desk research is *primary* in the sense that an original survey generates primary data and also because, within desk work, there are primary and secondary sources: sources which produce their own data (a survey organization, trade associa-

tion, etc.) and those which quote information generated by others (typically the national and trade press).

One of the essential differences between desk research and most field research is in the prior assumptions made. Implicit at the start of a field survey is the assumption that the answer does not already exist in an available form. There is no point in indulging in relatively expensive sample survey interviewing to discover the level of tape-recorder ownership if the answer already exists somewhere other than in the secure hands of one's competitor. In contrast, a desk research project assumes at the outset that such information is available somewhere. The field researcher's skill is in knowing how to ask which sample of people the right questions. The desk researcher's skill is in knowing which information sources are likely to be the best starting points for the search. The common skills follow: that of organizing the resultant data and of interpreting them in such a way that they becomes useful, not just interesting, to the client.

A later section entitled 'Integration of Results with Field Studies' raises the issue of the relative status of desk and field research in consumer—and industrial—marketing contexts. The points to be made here are:

- (a) While many (rightly or wrongly) feel that industrial market research has much to learn from consumer research in the conduct of sample surveys, it is probably true that those concerned with consumer research matters have more to learn from their industrial colleagues about the use and practices of desk research.
- (b) If this is so, the common practice of relying on junior researchers to 'do a quick desk study' whilst their seniors get on with the (frequently) more interesting tasks of conducting a field survey needs to be severely questioned.

Following this introduction the chapter is split into two sections: the first dealing with the uses and practices of desk research—what is desk research, what it can do, who undertakes it and in what circumstances; the second covering the all-important question of sources of information—with no sources there can be no desk research. The chapter deals with the British scene, with a small sub-section devoted to considering overseas data sources. This is because, while the practice is broadly similar the world over, the sources used vary not only in title, but in origin, from country to country.

#### Uses and Methods of Desk Research

The process of desk research involves the receipt and (sometimes) translation of a question, the reference to internal or published source material and/or contact with a human source, the organization and evaluation of the resultant information, and its synthesis and interpretation. In everyday terms, you

look up the answer or ask someone; the principle is simple. The practice, however, can be involved and time-consuming.

#### The uses of desk research

If we accept that desk research is an all-embracing information gathering and using process, then the uses are almost endless. It can be applied to any aspect of a commercial problem from the seeking of planning permissions to the examining of wage differentials.

Most lecturers and writers on the subject will point to three clear applications within the narrower aspect of consumer market research:

- (a) to provide a background for a field study or other marketing activity;
- (b) as a substitute for a field study;
- (c) as a technique in its own right;

A fourth application is important, namely:

(d) acquisition studies.

#### To Provide a Background

Many consumer research proposals open with a statement suggesting that, prior to a field study, a search of the existing literature on the subject will be undertaken. The rationale will either be to orientate and educate the research executive or to avoid unnecessary repetition where research might have already been done. The learning application is of self-evident value: an informed executive is more likely to achieve a relevant field study than an uninformed one. In this context, desk research would take the form of checking out news reports, statistics, published surveys, etc., which together would provide a reasonably balanced picture of the market under study. This would be an informal process which would not necessarily have to be structured.

Probably the most frequent background usage of desk research is in its sampling application; the most obvious example would be the case of a field study of owners of a particular consumer durable item owned by a minority of the population. Data showing the level of ownership would be an essential prerequisite of efficient sampling which would be further helped if these data also described the type and location of such owners.

The scene-setting, or background sketching, facility of the desk research function is also frequently used by New Product Development management. A manager can resort to desk research for comparative descriptions of potential markets, or for a detailed analysis of a particular market as a first step to judge whether investment in prototype production, concept creation, field research, brainstorming, etc. (whichever is considered the right starting point) is likely to be worthwhile. Such questions as:

how big is the market? is it expanding? is it a concentrated or fragmented market? is advertising heavy? are nearly always capable of speedy answer (see also 'Acquisition Studies' below).

Similarly, many an annual marketing plan is preceded by a desk research review of a market, a reappraisal of all that is known about the market situation, to judge whether assumptions and conventional wisdom still have a factual basis.

#### As a Substitute for a Field Study

Desk research cannot, of course, fulfil the field research role of putting supplier in direct touch with consumer. Indeed it would be as wrong to infer knowledge of consumer behaviour from a study of production statistics as it would from a single group discussion. Direct contact with the consumer, however, is not always necessary: vide the retail audit technique.

Where desk research can be a useful substitute is on the occasion when a serious study, or perhaps re-analysis of existing research data, can lead to perfectly valid conclusions about the market. Many a New Product Development executive has discovered that a bank of product test results will reveal fundamental truths about how the consuming public looks at a product, and their attitudes to it. The interpretation of a campaign evaluation survey can be helped by a fresh look at the results of the copy test, avoiding a further survey designed to discover why the campaign appeared to have a specific effect. Here, then, is the role of desk research as a re-user of field research data, trying to ensure that new research is not undertaken if the answer can be shown to exist already.

#### As a Technique in its Own Right

As distinct from occasions where desk research can adequately substitute for a field research project, there are cases where desk research is, in fact, an improvement on the field alternative. To many in the business consumer market research can be weak when it comes to an accurate description of market parameters. The first two questions potential new entrants to a market will ask are: how big is the market? and at what rate it is growing? Sampling and question technique difficulties with consumer panels and other consumer surveys can, on occasion, render them inefficient when it comes to estimating the total size of a market. Practical difficulties in the coverage of retail audits can similarly render them inefficient devices for measuring a total market. Where the market is diffused between different types of retail outlet or different types of consumer, the measurement problem intensifies. The best example of these difficulties is seen in the food market, where significant consumption occurs in the catering sector, which is notoriously difficult to measure.

In difficulties such as these, desk research frequently produces not just better data, but probably 'correct data', lacking the disadvantage of inbuilt sampling error. Published statistics are generally freely available to describe