Is Marketing Research Still Necessary in the Digital World?



Marek Prymon

Abstract Traditional methodology of marketing research evolved in the first part of the twentieth century. It was perfectly adjusted to current market conditions and to market information systems. Later on, an era of computer technology meant big support for market researchers. However, there were no still reasons to change general research logic in the light of evolving data-gathering opportunities. Evolving at the end of the twentieth century and the beginning of the twenty-first century, new digital media have solved a lot of problems that market research methodology used to solve before. First of all, the link between a company and its consumers started to be shorter and more direct. It started to seem that decision-making can be supported by data available within easy reach. However, the use of new decisionsupporting software has led to take-it-easy approach to consumers' problems in the market.

The purpose of an article is to show to what extent new media objectively necessitate changes in marketing research logic and what risk can be associated with total use of new digital information.

First part of an article shows the nature of traditional data-gathering methodology. In the next part, directions of an influence of digital media on marketing research methodology are identified.

The article is a conceptual framework supported by long-run research experience of the author.

Keywords Marketing research • Data gathering • Communication methods • Observation methods • Digital media

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1 Introduction

Marketing research as a special academic discipline and professional function of a company evolved at the beginning of the twentieth century. It was a response to changing conditions in the market. Through most of the century, they developed well-founded marketing research methodology. New information technologies, available in the market during the second part of the century, have created new realities in the market, including new relations between companies and customers. So it seems essential to check an influence of new realities on marketing research scope and procedures.

2 Traditional Marketing Research Realities

Immediate result of the big industrial revolution was the growth of scale of production and the growth of size of companies. Companies started to deal with more customers and bigger geographical markets. Finally, traditional, direct links between companies and their customers were cut. In the past a company used to have some knowledge about customers, knowledge coming from direct contacts with customers and from spontaneous observation. In new realities, because of growing uncertainty of market decisions, there appeared the need to get a lot of market information. New task required companies to use professional support from outside research agencies.

Growing complexity of market realities required not only to get more data but also to develop well-founded research process to get data. The most universal research process offered by Churchill (1987), Dodge et al. (1982), Kotler et al. (2009) and many others is shown at Fig. 1.

It should be noted that other proposals concerned with the above overall process are proposals to include surveys and sampling as obligatory steps in any research plan (Dillon et al. 1987).

Characteristic of the research process is, first of all, its problem-solving orientation. The logic of stages of the process is that, at the beginning, it is not known what data can be necessary. To identify desired data, researcher needs to identify potential research problem, arrange for some exploratory research, propose hypotheses and precisely plan research project.

From the very beginning of marketing research development, the most needed information about unknown customers was demand and other specific demandrelated data like preferences, opinions, etc. Such data were expected to come from qualitative methods, basically interviews. The focus of research methodology was on improvements of interviews and techniques of sampling.

Later, what was supportive for marketing research were new opportunities of adopting quantitative techniques: mathematics, statistics and econometrics. Evolving new methods helped to conduct more precise research, to relate different data about customers and to develop market forecasting, as a special field of research. Whole group of quantitative methods was based on quantitative data—mostly secondary data.

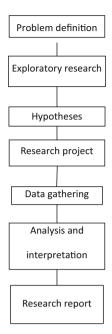


Fig. 1 Market research process. Source: Based on Dodge et al. (1982). *Marketing Research*. Bell & Howell. Co. Columbus. Churchill (1987). *Marketing Research. Methodological Foundations*. The Dryden Press. Chicago. p. 25, Kotler et al. (2009). *Marketing Management*. Pearson. Harlow. p. 191

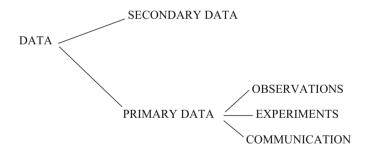


Fig. 2 Structure of data-gathering methods. Source: Churchill (1987). Marketing Research. Methodological Foundations. The Dryden Press. Chicago. p. 224

The development of quantitative methods was challenged by growing influence of behavioural marketing. What was demanded for were new kinds of data primary data. Alongside with quantitative, there evolved group of methods coming from psychology and sociology: observations and experiments.

Finally, in marketing research discipline, there appeared clear structure of methods of data gathering (see Fig. 2).

3 Influence of Computer Technology

Historically taking, computer technology made revolution concerned with new possibilities of data gathering and data processing. For marketing research, it meant new potential. It was primarily potentially concerned with secondary data: collecting, processing and using mass data. More interesting, however, was the appearing new opportunity to generate brand-new sources of data. The most remarkable was an influence of introducing Universal Product Codes (UPC) on retailing and logistic operations. It suddenly occurred possible to gain real-time control over sales and stocks in many places. Before scanning of codes was possible, research companies, like A.C. Nielsen, had to survey thousands of outlets to have some insights into changes in sales and to calculate market shares. New wave of data created good ground for many kinds of research concerned with market situation and market trends. New possibilities concerned with data on consumer inspired to form what is called database marketing-the process of building, maintaining and using customer databases and other databases for the purpose of contacting, transacting and building customer relationships (Kotler et al. 2009, p. 863). Computer technology was helpful in solving problems with secondary data but also was supportive for the use of primary data. It is especially new observation techniques that should be mentioned. They, to the extent, replaced very simple observations used by research companies, observations like counting the stock of products on the shelf or informal observing of people in pubs (Hague et al. 2005). Borowiecki identifies following methods of technically supported observations (Borowiecki 2011, p. 87):

- fMRI—Functional magnetic resonance imaging
- ECG-Electrocardiography
- fNIR—Functional near-infrared spectroscopy
- MEG-Magnetoencephalography
- EEG-Electroencephalography
- VPA—Voice-pitch analysis
- GSR-Galvanic skin response
- TARA—Time antagonistic response alethiometer
- fEMG—Facial electromyography
- Eye tracking
- IAT-Implicit association test

In addition to new opportunities for observations, there appeared new opportunities concerned with experiments and communication methods.

Experiments started to be easier. For instance, experiments conducted in researcher's premises can be substituted by new forms of field experiments. Reactions of Internet users to pictures on a monitor can be traced using camera built in desktops (fEMG). New research opportunities encourage new field called neuromarketing.

Finally, traditional communication methods that are used to be time-, cost- and labour-consuming started to be more available thanks to computers and other digital devices. Compared with all kinds of interviews, Internet interview represents distinct advantages. Apart from providing savings on time, labour and costs, Internet interview offers versatility and more honest answers (Kotler et al. 2009, p. 206).

4 Consequences of New Media for Marketing Research

Probably the most visible changes to be seen on contemporary markets are stronger links between companies and clients, even on global clients. So combining data on consumers and various marketing decisions within the framework of relationship management is an answer to turbulence in an environment. In part, data from individual clients can directly serve as base for production or distribution decisions. It would mean reducing some traditional market research jobs. It may seem that part of research activities is not necessary any longer. Simply in the past, on mass markets, it was not possible to get data on consumer needs asking them directly about their needs. So they developed indirect ways to identify consumer needs. It was popular research logic to identify factors influencing consumer demand (for instance, age, income, etc.) and then to try to evaluate an impact of such factors on consumers' demand. Now, when consumers can be reached directly, it may be useless to use indirect ways of getting knowledge about needs. It may be, however, only partly true. In many situations, even short distance to consumers is not enough to know their needs. What barrier can appear here? First of all, consumers may have little knowledge about what marketers can really offer. Next, to high extent, it is already offer that has an impact on people's needs. Also what matters is that consumer demand is resultant of many factors other than concrete consumer's problems. Finally, marketers and especially producers are not perfectly elastic, so what will be demanded for by consumers have to be anticipated well ahead. It can be accepted that data coming from direct touch with consumers is more helpful for daily decisions rather than for long-range strategies.

New technologies, to an extent, not only reduce the role of traditional marketing research activities but also the very role of marketers. Systems like EDI (Electronic Data Interchange) or ECR (Efficient Customer Response), to high extent, are substitutions for simple sales analysis as a researcher's job. Even if consumer data require some processing, it is possible to standardize processing procedure and matching customers' demand through automated processes. Another problem is if strategic decisions can be deducted from simple actual or historical data. So probably, database marketing can serve mainly daily and short-term decisions. It is observed on global markets that companies focused on daily operations are very likely to go bankrupt. Good examples are traditional worldly airliners.

Use of database marketing and any automated information systems may bring essential risks concerned with overall research process. Primary risk concerns ignoring hypotheses building. Next risk is concerned with adoption of ready-to-use data sources and processing procedures. Finally there is a risk that problems of interpretation of research results are ignored.

Growing popularity of Internet interviews, as research tools, is concerned with standardization of questionnaire plans. What the risk here is the "take-it-easy" approach to questionnaires. Traditionally, planning the survey was a creative process preceded by exploratory research, hypotheses building based on modelling of researched phenomenon. Automatic surveys can lead to deeply biased results. Easy access to questionnaires may prevent users from some basic considerations. As Kotler says, because online research is relatively new, many market researchers have not got survey design rights, and others overuse technology, concentrating on bells, whistles and graphics while ignoring basic survey design guidelines (Kotler et al. 2009, p. 206).

Questions that are likely to be ignored are if the topic of interview qualifies for open standardized communication, if respondent will be capable of precise answering, etc. Another thing is that new opportunities to reach many respondents with one Internet interview may lead to ignoring the problem of reliable sampling.

It seems that, after all, both data-based marketing and Internet interview reduce, to an extent, the need for traditional marketing research. New technologies help to advance marketing research, and they change the general approach to data.

One of the consequences of adopting new technologies is possibility to replace costly primary data by secondary data. The use of primary data is necessitated by the fact that some subjects are not covered by secondary data, as an example could be opinions and consumer attitudes. Today it is becoming easy to get information about consumers opinions not using primary but secondary data. Furthermore, it may occur that research based on secondary data are more reliable that individual direct research. For instance, traditionally the research problem was concerned with consumers' attitudes. To get data on attitudes, they conducted research on opinions (in the hope of getting the knowledge about attitudes). Now, on the ground of mass secondary data, it is possible to get the description of consumers' attitudes (Prymon 2015).

The value of communication methods was in the past heavily dependent on intellectual or emotional characteristic of respondents. For instance, reliability of respondents' answers was dependent on people's willingness to articulate frank answers or on their memory needed to recall some facts. Today, methods of tracking behaviour of consumers in the Internet provide a lot of precise data. So it may be predicted that, in part at least, risky communication methods will be substituted by digital observations.

5 Conclusion

This paper is a conceptual framework. Its practical use is to provide some inspiration for managers responsible for the flow of marketing data. Conclusions can be formulated in two points:

- No doubt that new technologies reduce a lot of traditional marketing research job. Creativity of researchers can, to high extent, be replaced by automated or at least standardized marketing information systems. It is common tendency that any marketing research activity sooner or later subjects to routine. However, the main role of standardized systems is and probably will be to serve daily managerial needs of marketers. Changing market environment and the need to plan effective marketing strategies should leave enough room for creative marketing research.
- If the general role of marketing research should remain important, a lot of change can be expected within the framework of marketing research processes. Probably the bigger role will play secondary sources. Secondary sources can partly substitute primary research. As for primary research, what can be expected, on one side, are the partial replacement traditional reviews by digital reviews. On the other side, it can be the partial replacement of communication methods by digital observations and experiments.

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