

Magdalena Kalińska-Kula

University of Łódź  
Faculty of Management  
e-mail: [kalinskam@uni.lodz.pl](mailto:kalinskam@uni.lodz.pl)

## Role of Marketing Research in Acquiring Knowledge for Data-Driven Management

**JEL codes:** O32, M31, M37

**Keywords:** marketing research, knowledge management, data-driven decision making

**Summary.** Knowledge accumulated on the basis of information is currently perceived as a strategic source of organisation and its acquiring becomes an indispensable process and a challenge for modern enterprises. The article attempts to bring closer the concept of data-driven management and answer a question how marketing research, by realizing its fundamental functions, can help in this area. In the course of conducted literature studies the analysis presented how enterprises should fulfill information needs and support data-driven decision making processes through marketing research.

### Introduction

Today, the enormous amount of information is a global phenomenon that affects all market participants around the world. The continuous collecting and processing large amounts of data become a daily reality in business. Most organisations, regardless of their size, business profile and financial resources, take actions in the area of obtaining data necessary in a decision-making process. Information becomes fundamental for business operations, and data processing is often the easiest (and the cheapest) way of solving management problems (Płoszajski, 2013, p. 5). Combining data from multiple sources allows to improve

decision-making and management processes, and helps enterprises predict more accurately customer needs and personalize the offer, which leads to improving the quality of services provided (Wójcik, 2016, pp. 64–65).

Acquisition and interpretation of data is of key importance for enterprises, especially in the field of management, where available and valuable data mean more accurate decisions and a risk reduction. Appropriate use of data allows organisations to grow faster, increase revenues, reduce costs and provide products more efficiently. Against this background, the purpose of the study was to indicate the role of marketing research in providing knowledge for enterprises.

### **Role of Information in Business**

One of the fundamental managerial skills is efficient functioning in market realities. To do it successfully it is necessary to recognize and forecast both long-term tendencies, development trends and current changes observed in the market. What also seems indispensable here is an ability to make appropriate strategic, tactical and operational decisions. In order to accomplish various tasks it is vital to systematically collect, select and verify information about market and its players.

Information in organisation performs a number of functions and the most rudimentary include (Bolesta-Kukułka, 2003, p. 75):

- cognitive function,
- motivating function,
- coordinating function,
- managing – controlling function.

A specific function of information concerns a decision-making process in organizations. Information that is topical, precise, accurate and reliable helps to optimize decision-making and thus, enhances the improvement of results and commercial performance. Lack of adequate information implies a risk of making a wrong and, very often, fatal decision whose consequences can be disastrous. Regardless of the type of sector in which an enterprise operates, the prerequisite for efficient decision-making is having precise information and its proper usage (Hague, 2006, p. 14).

It can be assumed that information is indispensable at every stage of a decision-making process. The initial phase is an identification of a problem, determination of its character and working out alternative solutions through their assessment from a perspective of expected results, up to the moment of decision implementation and the assessment of the results. Marketing problems generally include (Churchill, 2002, p. 24):

- problems related to planning,
- problems related to making marketing decisions,
- problems related to controlling decision making functions.

Taking into consideration a cognitive dimension of information apart from a decision-making dimension, a separate category of a “problem” can be distinguished i.e. enhancement of marketing knowledge by helping in its comprehension (Kędzior, Karcz, 2007, p. 20).

Proportionally to listed marketing problems one can distinguish an instrumental or conceptual use of information by managers (Bartosik-Purgat, Mruk, Schroeder, 2012, pp. 14–15, 32–45). In case of problems strictly connected with decisions information is used in an instrumental way, which means it is used directly to solve a current marketing problem. Then, information can help to make both short and long-term decisions related to elements of marketing mix, e.g. which product design is to be implemented, what price it should have, where and by whom products are to be sold or what combination of media should be used in a promotion campaign.

Similarly, instrumental approach is applied in case of control when information is used e.g. to assess the level of customer satisfaction, to determine organization image in a target market or a total market share as well as to assess the impact of adjustments introduced in the past to the set of marketing means. Instrumental approach concerns also using information in the context of planning e.g. to determine actual market opportunities, trends in markets of products, to forecast changes in market infrastructure or to plan a product.

It must be noted that information does not have to be used exclusively to solve current marketing problems or long-term problems, but it can be collected to obtain a better picture of conditions for running business activity. The example of obtaining information in the context of market knowledge enhancement, getting a general picture or enhancement of managerial knowledge can include the assessment of competition in the market, identification of customers’ needs or the assessment of macroeconomic factors conditioning running business activity, such as legal and political conditions, economic trends or social values. In the context of marketing knowledge enhancement one can mention a conceptual way of using information.

Regardless of the type of marketing problems observed in enterprises and the ways of using information, what proves indispensable is a constant collection and processing of economic information in order to support decision-making processes in an enterprise.

### **Data-Driven Decision Management**

These days instinct is no longer enough if a company wants to remain competitive. From a management perspective, making decisions based on data is the only way to win. Data-informed decision making and the culture change inherent therein is a disruptive action, displacing prior norms (Bladt, Filbin, 2014). Most

organizations realize that data should lie at the heart of an organization's decision making, whether they are huge multinationals or small family-run operations. They are moving away from acting solely on hunches and instinct and acquiring data that would improve decision-making process. A data-driven organization stands to gain several advantages, such as remaining competitive forward-thinking companies, more customer focused and enjoying a deeper insight into the customer. Data-driven companies become more agile and able to respond to markets better, to innovate and detect new, or missed opportunities, helping company grow and improve regularly (Roth, 2017).

Data-driven decision management is an approach to business governance that values decisions which can be backed up with verifiable data. The success of the data-driven approach is reliant upon the quality of the data gathered and the effectiveness of its analysis and interpretation (Rouse, 2016). Data can provide insights that help entrepreneurs answer key business questions and lead to insights, which business owners and managers can turn into decisions and actions that improve their business (Marr, 2016). In the view of research carried out by Brynjolfsson, Hitt and Kim on the business practices and information technology investments of 179 large publicly traded firms, enterprises that emphasize decision making based on data and business analytics show higher performance. The key finding of the survey was that firms that adopt data-driven decision making approach have output and productivity 5–6% higher than what would be expected given their other investments and information technology usage. Furthermore, the relationship between data-driven decision making and performance also appears in other performance measures such as asset utilization, return on equity and market value (Brynjolfsson, Hitt, Kim, 2011).

Data-driven decision making exists at the intersection of data quality and decision quality, where quality data supports quality business decisions. Although business insight is most often envisioned as the strategic and tactical decision made from the mountain top of executive management, business insight also comes from base camps where operational decisions are being made at all levels of the organization on a daily basis (Harris 2013, p. 1). Data-driven decision making refers to the practice of basing decisions on the analysis of data rather than purely on intuition. It is not all-or-nothing practice, and different firms engage this conception to greater or lesser degrees. Different industries have adopted data-driven decision making at different rates. The finance and telecommunications industries were early adopters, next automated decision making changed the banking and consumer-credit industries. In the 1990s, banks and telecommunications companies implemented massive-scale systems for managing data-driven fraud control decisions. As retail systems were increasingly computerized, merchandising decisions were automated. Currently we are seeing a revolution in advertising largely due to a huge increase in the amount of time consumers spend online and due to

the ability to make split-second advertising decisions online (Provost, Fawcett, 2013, pp. 53–54).

Looking at the process for applying data to decision making, enterprises should start with strategy. They ought to work out what their business is looking to achieve and identify, which business areas are most important to achieve the overall strategy. For most businesses, the customer, finance and operations areas are key ones to look at. Starting with strategy helps entrepreneurs to ignore the hype surrounding data and not to get lost in a flood of information (Marr, 2016). Having identified strategic objectives, managers can work out what they exactly need to know, and focus on the data that are really needed and that should be accessed or acquired. The first question a data-driven organization asks itself is not “What do we think?” but “What do we know?” (McAfee, Brynjolfsson, 2012, p. 8). It is important to identify internal data and information that has earlier been collected and is available in organization, before setting up the processes and people who will gather and manage needed data.

In the view of informational gap entrepreneurs may buy access to an analysis-ready data set, or collect data through marketing research. Then, to extract meaningful and useful business insights, collected data need to be analyzed. The insights gained from data should be presented to the right people at the right time in order to inform decision making and improve performance. Nowadays there are available various ways to present data as well as helpful tools. Business managers can customize dashboards to display the data they want to see and run custom reports right away. Those changes – in how data can be mined and visualized – allow managers to be able to work with analytics tools and make data-driven decisions. Decision makers would outright turn data into action, transforming the business for the better (Marr, 2016).

### **Knowledge as the Quintessential Effect of Marketing Research**

One of the ways to obtain precise data needful for a data-driven decision making is conducting market research. The enterprises, in the course of market development and with the increase of competition, have increasingly bigger expectations and information needs. The objectives for the achievement of which marketing research is conducted are related to the definition of research itself. They can include solving marketing problems (Green, Tull, Albaum, 1985, p. 2), support in making marketing decisions in enterprises through limiting the range of subjective presumptions of making a decision as well as marketing management dependence on impartial and precise assumptions (i.e. results of research conducted according to strictly defined methodological rules) (Grzegorzcyk, 2002, p. 11). Another objective is also providing help for management in understanding the environment, identification of potential problems and favorable situations

and thus ensuring development and help in running effective actions in individual markets (Kaczmarczyk, 2002, p. 15). The major part of definition emphasizes a decision making aspect, viewing marketing research as a “systematic process of collecting information, its processing, analysis and presentation for the needs of making decisions in an enterprise” (Hajduk, Karaś, Szostek, 2008, pp. 21–24). In the context of indicated functions marketing research has primarily two objectives: to reduce uncertainty in decision-making processes and while planning marketing activities, and then control conducted projects.

The way of using information obtained as a result of research can be viewed as a criterion for a division of marketing research, namely, research conducted in order to solve marketing problems related to planning, research conducted to support current marketing decisions as well as research conducted to gather information that will help to understand a market reality and thus enables to enhance widely understood marketing knowledge, although this knowledge is not acquired in order to solve specific marketing problems.

Regardless of divisions or accepted typology, marketing research, while generating information about company environment, provides presumptions for enterprise marketing management and, in a wider context, broadens knowledge of managers. Organization of processes of acquiring knowledge, ways of its distribution and effective use are today a key element of management. The knowledge currently becomes one of the main resources of organization, which is essential for its functioning and development. The role the knowledge plays in an aspect of enterprise management is extremely vital due to the fact that its resources:

- are the source of creating values and achievement of competitive advantage,
- provide managers with answers to questions concerning objectives and direction of enterprise activity,
- enable current management of enterprise and shape its future
- condition the efficiency of channels of communication and thus, making pertinent decisions and the increase of organisation effectiveness,
- are the basis for developing innovative processes in organization
- enable to set up key business processes
- support development of key competencies of competitiveness (Kaczmarek, Walczak, 2009, pp. 13–17).

The knowledge, apart from other effects of marketing research is one of the most valuable advantages achieved by an enterprise as a result of research. The primary effects of marketing research include raw data that is transformed into information in the course of its processing as well as analysis processes (Duliniec, 2002, pp. 13–15). Data and information included in the report are a direct effect of research, whereas, the other one is knowledge generated by information. So, the knowledge has a supreme position in relation to data and information that are its

basis (Grudzewski, Hejduk, 2004, p. 73). Knowledge can be defined as a source of useful information containing also general values, experiences and rules which enable their interpretation (Kozmiński, 2005, p. 94). Knowledge means also understanding the importance and usefulness of currently acquired information, which is reflected in its application in practice. Factors of creating knowledge are also people, so building knowledge is conditioned by collected information as well as their skills, analytical predispositions and abilities for learning (Kaczmarek, Walczak, 2009, pp. 51–54).

It must be stressed that knowledge is to give answers for specific questions, to solve specific problems and to enhance the achievement of a specific objective or task. So knowledge is reflected in a practical use of collected information and crucial for a given problem. Results and conclusions from the marketing research by enhancing marketing knowledge of managers contribute to making pertinent marketing data-driven decisions. These decisions should then bring specific results. So, an effect of appropriate use of information and knowledge acquired in the course of marketing research is the situation when an enterprise can achieve striking results of market actions, which brings ultimate benefits and is a gratuity for efforts and costs related to realization of research processes.

## **Conclusions**

Knowledge collected on the basis of information is nowadays perceived as a strategic resource of an organization and data-driven management is a key factor of gaining a competitive advantage and in a further perspective, the survival of enterprise. Acquiring data that would improve decision-making process becomes an indispensable process and a challenge for modern enterprises and marketing research, through the realization of its basic functions, can be really helpful in this area. Research enables to gain resources of knowledge indispensable for making decisions, preparing plans, control and a better understanding of the environment and observed changes. Information obtained from a marketing research has not only a decision making function but also a cognitive one, broadening knowledge about phenomena and processes observed in a market. The enterprises should notice this value and try to build knowledge resources indispensable in the context of support of management processes on the basis of data collected in the research. This process generates information about a company environment and provides presumptions for marketing enterprise management and, in a broad sense, the knowledge of managers.

## Bibliography

- Bartosik-Purgat, M., Mruk, H., Schroeder, J. (2012). *Dostępność i wykorzystanie informacji o rynkach i partnerach zagranicznych w procesie internacjonalizacji polskich przedsiębiorstw*. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu.
- Bladt, J., Filbin, B. (2014). Who's afraid of data-driven management? *Harvard Business Review*, May 16. Retrieved from: <https://hbr.org/2014/05/whos-afraid-of-data-driven-management>.
- Bolesta-Kukulka, K. (2003). *Decyzje menadżerskie*. Warsaw: Polskie Wydawnictwo Ekonomiczne.
- Brynjolfsson, E., Hitt, L.M., Kim, H.H. (2011). *Strength in numbers; How does data-driven decisionmaking affect firm performance?* Retrieved from: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1819486](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1819486).
- Churchill, G. (2002). *Badania marketingowe. Podstawy metodologiczne*. Warsaw: Wydawnictwo Naukowe PWN.
- Duliniec, E. (2002). *Badania marketingowe w zarządzaniu przedsiębiorstwem*. Warsaw: Wydawnictwo Naukowe PWN.
- Green, P., Tull D., Albaum, D. (1985). *Research for marketing decisions*. New York: Prentice Hall.
- Grudzewski, W., Hejduk, I. (2004). *Zarządzanie wiedzą w przedsiębiorstwach*. Warsaw: Difin.
- Grzegorzczak, W. (2002). *Strategie marketingowe przedsiębiorstw na rynkach zagranicznych*. Warsaw: Biblioteka Menadżera i Bankowca.
- Hague, P. (2006). *Badania marketingowe. Planowanie, metodologia i ocena wyników*. Gliwice: Wydawnictwo Helion.
- Hajduk, E., Karaś, D., Szostek, D. (2008). Badania marketingowe w praktyce firm i badaczy. *Marketing i Rynek*, 9, 21–24.
- Harris, J. (2013). *Decision-Driven Data Management. A Strategy for better decisions with better data*. SAS White Paper. Retrieved from: [www.statistique-2013.fr/pdf/wp\\_50192.pdf](http://www.statistique-2013.fr/pdf/wp_50192.pdf).
- Kaczmarczyk, S. (2002). *Badania marketingowe. Metody i techniki*. Warsaw: Wydawnictwo Naukowe PWN.
- Kaczmarek, B., Walczak, W. (2009). *Zarządzanie wiedzą we współczesnych przedsiębiorstwach*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Kędzior, K., Karcz, K. (2007). *Badania marketingowe w praktyce*. Warsaw: Polskie Wydawnictwo Ekonomiczne.
- Koźmiński, A. (2005). *Zarządzanie w warunkach niepewności*. Warsaw: Wydawnictwo Naukowe PWN.
- Marr, B. (2016). Data-Driven Decision Making: 10 Simple Steps For Any Business. *Forbes*, 14.06. Retrieved from: <https://www.forbes.com/sites/juniper/2017/11/01/cybersecurity-in-the-age-of-quantum-computing/#47405304423c>.
- McAfee, A., Brynjolfsson, E. (2012). Big Data: The management revolution. *Harvard Business Review*, 10, 9. Retrieved from: <http://tarjomefa.com/wp-content/uploads/2017/04/6539-English-TarjomeFa-1.pdf>.
- Płoszajski, P. (2013). Big data: nowe źródło przewag i wzrostu firm. *E-mentor*, 3 (50), 5–10.
- Provost, F., Fawcett, T. (2013). Data science and its relationship to big data and data-driven decision making. *Big Data*, 1 (1), 51–59. Retrieved from: <http://online.liebertpub.com/doi/pdf/10.1089/big.2013.1508>.



- Roth, E. (2017). *5 Steps to Data-Driven Business Decisions*. Retrieved from: <https://www.sisense.com/blog/5-steps-to-data-driven-business-decisions/>.
- Rouse, M. (2016). *Data-driven decision management (DDDM)*. Retrieved from: <http://whatis.techtarget.com/definition/data-driven-decision-management-DDDM>.
- Wójcik, M. (2016). Big data w zarządzaniu informacją – przegląd wybranych zagadnień. In: S. Cisek (ed.), *Inspiracje i innowacje: zarządzanie informacją w perspektywie bibliologii i informatologii*. Cracow: Biblioteka Jagiellońska.

### **Rola badań marketingowych w pozyskiwaniu wiedzy na użytek zarządzania opartego na danych**

**Słowa kluczowe:** badania marketingowe, zarządzanie wiedzą, podejmowanie decyzji, dane

**Streszczenie.** Wiedza powstająca na bazie informacji jest obecnie postrzegana jako strategiczny zasób organizacji, a jej pozyskiwanie staje się nieodzownym procesem oraz wyzwaniem dla współczesnych przedsiębiorstw. W artykule starano się przybliżyć koncepcję zarządzania opartego na danych i odpowiedzieć na pytanie, w jaki sposób badania marketingowe przez realizację swoich podstawowych funkcji mogą stanowić pomoc w tym zakresie. W trakcie przeprowadzonych studiów literaturowych przeanalizowano, jak przedsiębiorstwa zaspokajają potrzeby informacyjne, wspierając procesy decyzyjne bazując na danych oraz jakie miejsce w tym procesie zajmują badania marketingowe.

#### **Citation**

Kalińska-Kula, M. (2017). Role of Marketing Research in Acquiring Knowledge for Data-Driven Management. *Marketing i Zarządzanie*, 4 (50), 15–23. DOI: 10.18276/pzfm.2017.50-02.