

Market Research and Marketing Information Systems

by

Drago Cvijanovic, Branko Mihailovic, Aleksandra Nikolic

Institute of Agricultural Economics Belgrade, Serbia

Institute of Agricultural Economics Belgrade, Serbia

University Business Academy Novi Sad, Serbia

drago_c@iep.bg.ac.rs, brankomih@neobee.net, aleksandranikolic.fimek@gmail.com

Abstract. In modern business terms almost all management decisions based on adequate and timely market information, which provides exactly the market research. The information which assures the market researches help the management-decision-makers to adjust to the market risks and to realize optimal business results simultaneously. In the market economy, the enterprise cannot act ignorantly toward the market research results. What makes the market research necessary is a fact that the risk cannot be ever completely eliminated from the market economy system, but providing the adequate information, the risk in business decision-making becomes less, and in certain cases even eliminates. One of the most efficient ways of the risk reduction is exactly the market research, because the most of the risk comes out from the conditions changes on the market. The market research product is the information, necessary for making the optimal decisions regarding a tactics and a strategy. The market research projects should serve as an analytical-documentation and analytical-projection material for evaluation of some business venture's market propulsion. Consequentially, the primary goals of the market research are: condition analysis of supply and demand on domestic market, determination of consumption assortment structure, over viewing the foreign trade exchange courses, identification of consumers' basic segments, determination of used distribution channels, determination of sales possibilities. In such conditions, the emphasis is on information technology, which changes faster and faster a way in which the firms recognize a significance of the market information systems. New business models represent challenges and new opportunities, because the organizations, in search for the competitive advantage, tend to adopt the "electronic trade" methodology. This pressure is also strong in the marketing sector, where the information technology comes in contact with a consumer and is becoming a key for making greater consumer value.

Key words: market research, marketing information systems, consumers, marketing ethics.

JEL classification: M 31

1 Introduction

The market research provides recognition of dimensions and attractiveness of some markets. Through these analyses enable identification of perspective areas and markets, as well as defining the global directions of economic growth and development. According to know-how and the research information significantly decreases a market risk, which has been continually present. The results of such research projects represents a valuable support for carrying out a macro-economic policy, since there acquire the real basis for defining the macro-economic assumptions of successful transformation of an enterprise. Today, when most of the countries in surroundings tend to solve a problem of institutional infrastructure development, necessary for running the market

economy, strengthening the ability of a state to provide income for financing public services, as well as healthy business conditions, Serbia significantly lags behind. The market economy has basically adjusted to a narrow goods and services market, without capital, enterprises and labour markets. Lack of information and experiences in solving unstructured problems, is additional problem which burdens domestic economy in this phase of transition, for which asserts that it is a central phase, which should signify a radical turn and a real turning point in future development of domestic economy and its actors. In order to achieve this turn, a professional help in knowledge and business information are necessary to domestic organizations and macro-economic policy creators. Researching economic trends and

competitiveness of domestic companies represents a good form of this support.

2 Market research

A purpose of the market research is providing support to employees in production to understand key elements necessary for efficient business management. It also provides introduction to the essential elements which use for creation of business plan and assessment of business ventures profitability.

2.1. Character and significance of the market research

The market research is organized, objective way of getting certain cognition on other people – those who buy products and/or services of an enterprise, or could do it in the future. The companies by which manage the market realize a need to be always informed on what is happening in the market. The buyers' needs change ceaselessly, often in the most incomprehensible way. In some companies, none of the strategic decisions is made without prior market research (Jobber and Fahy, 2006). It can provide the objective answers to questions, as:

- Who will buy a service?
- Which are the consumers' requirements? Which price will be ready to pay for some service? Are there other types of services the people are willing to pay?
- Which are the consumers' characteristics? Who buys a service? What is their average age, sex, income level? Where they live?
- Which attitudes and impressions have the consumers? Do they search for new and different types of services?
- Who also produces the same or similar service – at which price? Can a firm compete with price, quality, etc? If no one else offers such service, what is the reason for that?
- Which advantages can offer that the competition cannot offer?
- Which are the market conditions? Limits? Are there high initial costs? Are there any

regulations which must fulfil regarding a name or a service process?

- Is the market surfeited or there is a space for a service? Will the firm (service) be just one of many which sell such services in specific location?
- Is it an area with developing or declining market? In other words, can profit out of it? Do data on market trends shows increased consumption of some service?
- What is the future of business?

It is not easy to define limits of the marketing research. Common interviews with buyers at exhibitions or during sales visit can provide valuable information on buyers' requirements, competition activities and future ongoing in the activity.

Why should the market research? It is impossible to sell to the people something they do not want, as well as there is no simpler thing than to sell a service the consumers are looking for. The market research is essentially important matter which can help to reveal what are the consumers' desires. The market research provides information on services and the market, so there can design effective market and business strategies.

Who should deal with the market research? All firms, big and small, new and old, must, from time to time, to do the market research, in which they do business. A common position among small business is that they must not work the market research, but they know what their users are looking for, in regard to a long experience in business. However, the experience, although useful, can lead to false sense of knowing matters, because a demand of users is continuously changeable, even illogical, unpredictable and incomprehensible.

When should do the market research? The market research is not a “disposable” activity. It must be done continually, in times of making important business decisions. Often must do: 1) before starting a new business, 2) when introduces a new product or a service, 3) when makes an effort to keep the existing business.

Before starting a new business. Innovative ideas and business “instincts” are not sufficient when

it is about predicting a success of some product or a service. Therefore, the following must know: Is there a need for this service? Who will be a possible user of a service? Are there a lot of people on the local market, in the market on which a firm plans to do business? How to find those consumers?

Introduction of a new product or a service. A good idea and intuition are not sufficient when it is about market success anticipation. Of course, without the market research can achieve a complete business failure in this business phase. The market comprises an instant and planned analysis of the market condition. A time projection is most often done for the next three years. In this part must define buyers or, if possible, to name three biggest buyers. Also should explain how to plan a distribution on the market, as well as the reasons for which will buyers buy a product from the project. At the same time, there have to identify leading competitors on the market and their products' prices.

Keeping the existing business. A success which realizes today is not a guarantee of success in the future. Changes on the market, among competition, advancing technologies and attitudes among consumers means that must constantly keep pace with these changes. It is necessary to know what the consumers think of a service company's supply. Clear answers to the following questions are inevitable: Is there any new-founded market? Are the existing consumers ready for a new service? Are the prices adjusted to the competitors' prices? Is there any new technology, providing changes or alterations of existing services? Are competitors introducing new services?

2.2. Approach and method of market research

The market research projects should serve as analytically-documentation and analytically-projection material for evaluation of market propulsiveness of some business venture. Consequentially, primary goals of the market research are: analysis of supply-demand

condition on domestic market, determination of assortment consumption structure, recognition of foreign trade exchange courses, identification of basic segments of consumers, determination of used distribution channels, determination of sale possibilities. A primary place has personal interviews, interviews by telephone, consumer panel and focus groups, where internet interviews have a negligible contribution. *On the picture 1* is described a typical process of marketing research. Each of the phases was fully considered.

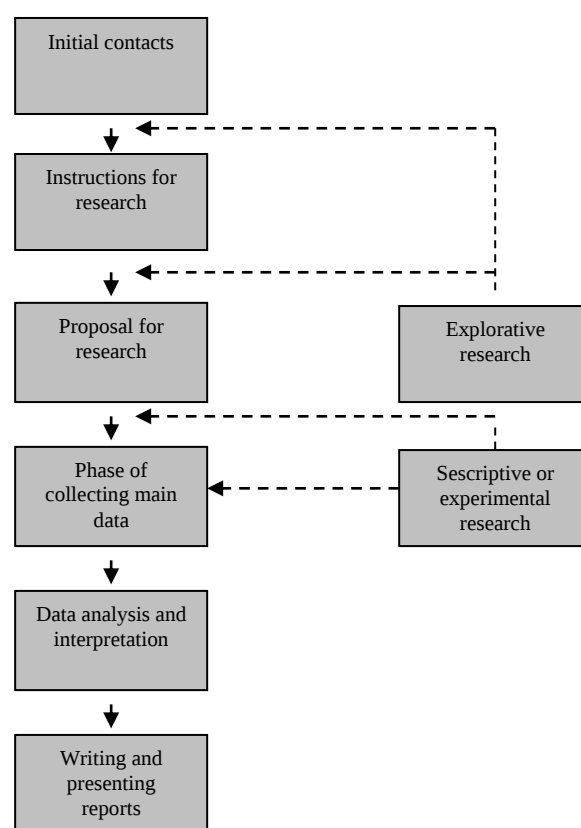


Figure 1: Marketing research process
Source: (Jobber, D. and Fahy, J., 2006)

Initial contact. A process usually starts when the company finds if it needs necessary information for solving some marketing problem. The marketing management can contact internal staff in charge for marketing researches or external agency. Starting from an assumption that research requires an agency for market research's help. There arranges a meeting in which considers the problems essence and clients needs regarding

the research. A relation between managers, clients and researchers is similar to an attorney-client relation (Hanić, 2001).

Instructions for research. At the meeting in which decides what will be the research form, a client explains his marketing problem and envisages the basic research goals. The client should deliver in written form the instructions for research to the agency. They can deliver before the meeting, on which it can be changed. However, in any case, the instructions should be reported to the agency before it comes out with the research proposal.

Proposal for research. The same as the instruction for the research, the proposal should be written in a way not to make any misunderstandings. The client expects the following items to be included in the proposal: formulating the goals, description of the research project, time frame and costs. During the proposal evaluation, the client should assure that the proposal was precisely exposed, without incomprehensible expressions and to comprise all important issues. Before a phase in which collect main qualitative data, there conducts an explorative research, which goal is to make a preliminary research of the research area. In the project can be involved all or some of the activities of the explorative research: secondary research, qualitative research (group discussions and in-depth interviews), observation.

Data collection phase. After done the explorative research, there realizes planning the procedures for collecting the main data. This approach implies realization of the research which goal is to describe beliefs, attitudes, aptitudes and behaviour of consumers. The research plan should be based on: sampling process; sampling method and a questionnaire creation. In the picture 2 was given a description of sampling process. The process starts with defining population – i.e. a group which represents a research subject in specific research. The research goal is to provide results, characteristic for the group. While choosing the research method, the most often are available four options: personal interview, telephone interview, a query by post and internet query.

As for the questionnaire creation, it is necessary to fulfil three conditions in order to get a real answer to a question: respondents must understand a question; they have to be able to give the required information and to be ready to give them.

Analysis and interpretation of data. In this phase of marketing research use computers, almost without exception, for making the quantitative data analysis, got by the questionnaires filling. A basic marketing analysis can conduct by using software packages for the analysis, as SNAP and MARQUIS on personal computers.

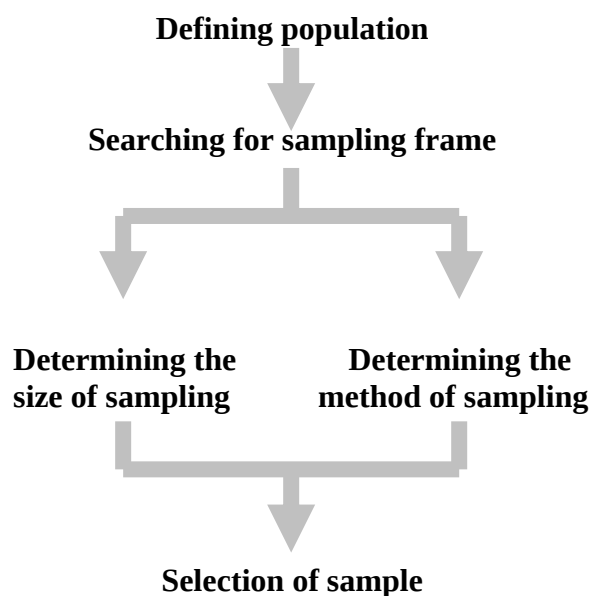


Figure 2: Sampling process
Source: (Jobber, D. and Fahy, J., 2006)

Writing and presenting reports. In literature points out that the main elements in the report are (Crouch, 1992): front page, contents, introduction – description of arranged instructions, goals, scopes and research methods, short review of conclusions and references, prior similar researches; how the previous researches have affected this research, research method, research results, conclusions, additions. The conducted research report should be written in a way understandable for a reader, avoiding a jargon. In such research venture, the researchers must plan and structure the research. According to know-how and information

provided by the marketing research, there decreases the market risk, continuously present. The information on the market trends help companies to redefine the existing market, to perceive a possibility of return to lost markets, as well as to assess attractiveness of winning new ones.

2.3 Marketing research ethics

The marketing research aims to bring benefit to a service company and its services users. However, in spite of these good intentions, there are four ethical dilemmas concerning marketing research: invasion of privacy, abuse of marketing research results, collection of competitive information, using marketing research as an excuse for sale (Jobber and Fahy, 2006).

Intrusive nature of the marketing research annoys many consumers, whether it is about the people who ask questions regarding their age and income, stop them on the street to participate in a personal questioning, or to be called by a phone in a bad time. According to the same source, there points out that an individual's right to privacy is an integral part of many research associations' norms. For example, a code of moral ethics of the European Society for Opinion and Market Research (ESOMAR, www.esomar.org), orders that, under any circumstances, should not give to a third party information got by an address/telephone number of a respondent.

It is necessary to make an effort that the research results do not be abused. There happens that individuals in organization can have a personal interest regarding the research result. Accordingly, there is a possibility that the most favourable result be reported to the research agency. If such individuals have influence on the agency's selection, the agency can realize that announcing bad news to a client can lead to mutual relations get cool and to jeopardize future cooperation. Regardless that the most of marketing researchers accept a need for an objective research, when it has a manoeuvre for more than one interpretation of

the research results, it is hard to overcome temptation to present more favourable interpretation (Jobber and Fahy, 2006).

Also, methods which use in order to get to competitive marketing continuous information can provoke ethical dilemmas. Such practice examples are: when someone uses student projects for collecting information, where the students do not cover identity of the research sponsor; when an interviewer presents as a potential supplier who conducts a telephone query or as a potential buyer on an exhibition; when a questioner bribes some of employees in competitive firm to get some confidential information; when spies a competitor by using, for example, candid cameras. Although, collecting the competitive information does not depend only from such methods, since a lot of useful information can collect by reading business journals and newspapers, by searching the internet, etc.

At the end, a practice of selling under the marketing research represents a real danger for marketing research activity. The most often starts with naïve questions, and then gradually moves to a real goal realization. A goal is to mostly determine potential buyers and to put them a question if they are interested in buying some product. The researchers associations have practice codes which strictly forbid such behaviour (Jobber and Fahy, 2006).

3 Marketing information systems

Information technology changes faster and faster a way in which business firms perceives a significance of information systems. New business models represent challenges and new opportunities while organizations, while looking for the competitive advantage, tend to adopt methodologies of "electronic trade". All sizes organizations feel overall influence of internet users, supply chains and competition. This pressure is extremely strong in marketing sector where information technology gets in contact with a user and substantially becomes a key for making higher consumer value. A significance of marketing information is especially visible in

those economies based on knowledge and information, in which an accent was put on services, as a primary value source.

The services are mostly dependable on information. The information becomes services by themselves. Even in economic branches which primarily deal with production, the information content of final products is increasing. A mass customization (adjustment to users), which often describes as “one on one” marketing or adjustment of products and services to individual users, is dependable on overall and timely information on consumers.

3.1 Concept of marketing information system

The marketing information systems (MIS) is simply a computerized system, projected to provide an arranged flow of information, in order to enable and support the organization's marketing activities. The MIS tends to satisfy cooperative, analytical and business needs. Regarding the cooperation, the MIS enables managers to share information and to cooperate virtually. Besides, the MIS provides to employees in marketing to cooperate with users on products projection and own satisfaction.

In literature, the marketing information system is often defined as...a system in which marketing information formally collects, keeps, analyses and distributes to managers in accordance with their needs for information, regularly and according to the plan (Jobber and Rainbow, 1977).

This system has been based on comprehension of marketing management needs for information and it delivers information to the managers when, where and in a form they need them. Thereby, an analytical function is done by applications which represent a support to decision-making, which provides to employees in marketing to analyze the marketing data on users, competition, technology and common conditions on the market. This insight starts to be a base for development of marketing strategies and plans. The MIS satisfies the business needs by the users' management system, which focuses on daily transactions

processing with the users, from the initial sale to the customer service. The MIS systems are projected to be comprehensive and flexible and to mutually connect functionally. They are formal, turned to the future events and the firm's ability to make the competitive advantage. The MIS is “a window to the world” of the firm and increasingly a primary connection with the users.

3.2 Marketing information system and its functional components

The MIS consists of four main components: (1) interface with the consumers; (2) software; (3) data base; (4) system support (Robert, 2003).

1. *Consumers interface*. An essential element of the MIS is managers, who use the system in a way they contact the consumers, in order to analyse them efficiently and where they must use the marketing information. The system projection will depend on type of decision which the managers have to make. The interface refers to the type of hardware which will use, a way in which the information analyses, formats and shows and how reports collect and share. Characteristic issues which are here considered are ease of implementation, safety, costs and approach.

2. *Application software*. Those are programs which use decision-makers in marketing in order to collect, analyze and manage by data, for the purpose of developing information necessary during the marketing decisions-making. The examples which relate on software support in marketing decision-making and the consumers manager software regarding online sale and consumers serving.

3. *Marketing data base*. The marketing data base is a system in which marketing data arrange and protect. The data can be collected from internal and external resources. The internal resources are mostly originating from transactions. They provide the data on electronic trade, sale results, transport, stocks and profitability of services.

The external resources relate on the market research, competition intelligence, crediting department and other financial institutions.

4. *System support*. This component consists of the systematic managers, who manage with the system and maintain their elements, including software and hardware networks, track their activities, etc. This function can also comprise the consumers' service support.

3.3 Strategic role of marketing information systems

Historically observed, the role of marketing function was to support the business strategies of *production and sale*, which emphasize increase of market share opposite to making long-term costumer value. Such point of view started to change after the World War II, together with comprehension that satisfying desires and needs of customers must be in focus of all business activities of a company. An accent put on a customer has increased a significance of marketing, as a basic business function, i.e. equal with research and development (R&D) and production.

A strategic function of marketing was additionally emphasized with new technology apply, based on the internet. It has started to change radically sale principle, while the information technology, for the first time, has made a contact with the customers and has enabled new methods of marketing information collection. In economy, which has been substantially dependent on knowledge, an ability to collect and analyze the information and, based on these, to act effectively faster than competition, has been a substantial skill which has brought to the competitive advantage creation. The marketing information systems (MIS) provide an information-technological ground in strategic marketing activities of the company.

Broadly speaking, the MIS provides organized and timely flow of information, necessary in work of decision-maker in marketing. When it finds, it does not imply just the equipment, software, data bases, but also to procedures,

methodologies and people, as inevitable elements for the system success in fulfilling their organizational goals. The MIS encircles wider set of activities: from a simple transactions processing to a complex strategic decision-making in the field of marketing.

4 Conclusions

In modern business conditions almost all management decisions base on adequate and timely market information, which enables exactly the market research. The information which provides the market research helps management decision-makers to adjust to market risk and to simultaneously realize optimal business results. That is to say, in the market economy, the enterprise cannot relate ignorantly to the market research results. What makes the market research inevitable is a fact that the risk cannot ever eliminate from the market economy system, but, by obtaining specific information the risk in business decision-making starts being less, and in certain cases eliminate. One of the most efficient ways of risk reduction is exactly the market research, while the most risk originates from changes of conditions on the market. A product of the market research is information necessary for making the optimal decisions regarding tactics and strategy of an enterprise.

Acknowledgment

The paper represents a part of the research on the project III - 46006 – *Sustainable agriculture and rural development in terms of the Republic of Serbia strategic goals' realization within the Danube region*, funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

References

- Crouch, S. (1992), *Marketing Research for Managers*, Oxford: Buterworth Heinemann.
- Hanić, H. (2001), *Istraživanje marketinga i marketing informacijski sistem*, Ekonomski fakultet, Beograd.

Jobber, D., Rainbow, C. (1977), A Study of the Development and Implementation of Marketing Information Systems in British Industry, *Journal of the Marketing Research Society*, 19 (3): 104-111.

Jobber, D., Fahy, J. (2006), *Osnovi marketinga*, Redaktor srpskog izdanja: Prof. dr Hasan Hanić, Beogradska bankarska akademija, Data status, Beograd.

Mihailović, B. (2007), *Uloga konsaltinga u restrukturiranju preduzeća u tranziciji*, monografija, Institut za ekonomiku poljoprivrede, Beograd.

Robert, R.R. (2003), Marketing Information Systems, *Encyclopedia of Information Systems*, Elsevier Science (USA), Vol. 3: 137-151.

Authors description

Prof. Drago Cvijanovic, Ph.D., Scientific Adviser and Director of the Institute of Agricultural Economics, Belgrade. The master thesis, PhD thesis, monographs and papers published in national and international journals and presented at conferences of national and international importance, dealing with market and marketing of agricultural and food products, tourism products, agricultural economics, multifunctional agriculture and rural development, management in agriculture and tourism, investments in agriculture, both at macro and micro level, as well as other topics related to agro and economy.

Branko Mihailovic, Ph.D., Scientific Associate of the Institute of Agricultural Economics, Belgrade. In his scientific research work deals with consulting, restructuring, transition and the agrarian economy. He was engaged in research work on multiple projects as a member of research teams. In fact, he participated in projects in the following areas: financial analysis; implementation of various types of market research; valuation of companies and privatization programs, preparation of business plans; formulation and implementation of development strategies for municipalities in Serbia.

Aleksandra Nikolic, Ph.D., Professor of the University Business Academy Novi Sad, Serbia. Key scientific interests: Finance, Banking, Macroeconomics. Doctoral dissertation topic is: "European public finances and the budget of the EU with special reference to the budget of the Republic of Serbia". Teaches the following areas: Financial Markets and Institutions, Investment Management and International Finance. Some of the major publications are: Monetary policy and insolvency of economic sector, *Industry* No1/2012; The influence of business information systems on Serbian companies' business performances, *Economics of Agriculture* 2012 (59)2; Sources of investment financing and their impact on economic growth of the Republic of Serbia", *Economics of Agriculture*, Vol.LX No2(217-463), 2013 Belgrade, pp. 403-417.