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HOW MARKET INFORMATION IS TRANSFORMED INTO MARKETING KNOWLEDGE?

T. KESZEY

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In the future, competitors will have more and more opportunities to buy the same information; therefore the companies' competitiveness will not primarily depend on how much information they possess, but rather on *how they can* "translate" it to their own language. This study aims to examine those factors that have the most significant impact on the degree to which market studies are utilised by companies. Most of the work in this area has studied the use of information in strategic decisions *a priori*. This paper – while reflecting on the findings of research on organisational theories of information processing – aims to bridge this gap. It proposes and tests a new conceptual framework that examines the use of managerial market research information in decision-making *and* knowledge creation within one single model. Collected survey data, including *all* the top-income business enterprises in Hungary indicate that market research findings are efficiently incorporated into the marketing information system only if the marketing manager has trust in the researcher, and believes that the market study is of high quality. Decision-makers are more likely to learn from market studies facilitating the resolution of some specific problem than descriptive studies of a more general nature.

Keywords: market research, managerial decision-making, organisational learning, marketing knowledge, interpersonal trust, organisational use of information

JEL classification index: M390

Corresponding address: Faculty of Business Administration, Institute of Marketing and Media, Marketing Department, Corvinus University of Budapest, Fővám tér 8, H-1093 Budapest, Hungary.
E-mail: tamara.keszey@uni-corvinus.hu

1. INTRODUCTION

The global market research turnover in 2008 was US\$ 32 billion with 4.5 % annual growth. Eastern Europe was one of the fastest growing regions (ESOMAR 2009). In spite of the dollar billions spent on market research, managers do not seem to be better informed (Menon – Varadarajan 1992). The *possession* of information *alone* cannot be the source of economic power, as the competitors have the opportunity to buy the same information. In the future, sustainable competitive advantage will depend less on who has information and increasingly on who is able to make the best use of information (Zaltman – Deshpandé 2000). The use of marketing information leads to organisational learning (Sinkula 1994), a greater degree of market orientation (Jaworski – Kohli 1993) and enhanced organisational outcomes (Theoharakis – Hooley 2008). We argue that the ability of information use has become the new battlefield of competition; therefore it is important to understand the nature of the phenomenon and identify the major underlying factors determining the degree of managerial use of market research information. The theme of market information use has appeared with increasing frequency as the topic has grown in importance. Most of the work (Deshpandé 1982; Deshpandé – Zaltman 1982, 1983, 1984, 1987; John – Martin 1984; Lee et al. 1987; Perkins – Rao 1990; Moorman et al. 1992, 1993; Dennis 1996; Lee et al. 1997; Low – Mohr 2001; Young – Denize 2006; Sissonen 2008) in this area studied antecedents of the use of information in strategic decisions. In spite of the academic attention, there is only marginal reflection (Moorman 1995; Fisher – Maltz 1997; Maltz 2000; Maltz – Kohli 2001) upon the use of market research in generating market knowledge. This is why a well-informed understanding of this managerial activity and the relationship between decision-making and knowledge creation based on firm theoretical background remain in need. This paper – while reflecting on the findings of research on organisational theories of information processing – aims to bridge this gap and proposes and tests a new conceptual framework that examines the use of managerial market research information in decision-making and knowledge creation within one single model.

2. THEORETICAL BACKGROUND

In addition to the findings of managerial market information processing theories, we relied on the *market orientation* and *innovation management* literature.

The organisational use of market information is tightly linked to the topic of *market orientation* which has been of central interest over the past twenty years (Kohli – Jaworski 1990; Narver – Slater 1990; Hart – Diamantopoulos 1993;

Jaworski – Kohli 1993; Slater – Narver 1995; Hooley et al. 2000; Beracs 2004). Market orientation is a business approach or philosophy that focuses on identifying the needs or wants of the customer, through its own or acquired products. The concept of market orientation can only be implemented if an organisation pays attention to market intelligence and information generation, intelligence dissemination and organisation-wide responsiveness on the market information and intelligence (Kohli – Jaworski 1990). The topic of our study, the use of market research information is tightly linked to the third criteria of market orientation – the organisation-wide responsiveness on market information.

The formulation of our hypotheses was also supported by the findings of the general *innovation management literature*. The quality and degree of co-operation between the marketing managers, representing the voice of the customer within the organisation, and the R&D managers are important success factors of the innovation processes. Researchers (Gupta et al. 1985, 1999; Gupta – Wilemon 1988; Moenaert – Souder 1990; Gupta 1994; Griffin – Hauser 1996; Van den Bulte – Moenaert 1998; Leenders – Wierenga 2008) were investigating the critical success factors of the co-operation and information-sharing between marketing and R&D professionals. These results might be informative to us, because just like during the innovation processes we are also looking at how marketing managers co-operate and rely on information deriving from professionals with different organisational belongings and different educational background.

3. CONCEPTUAL FRAMEWORK

The central question we wish to answer in this paper is which factors determine primarily the managerial utilisation of commissioned market studies. There is a general consensus that the market research studies might be used in several ways by executives (Caplan et al. 1975; Deshpandé – Zaltman 1982, 1983, 1984, 1987; Diamantopoulos – Souchon 1995, 1998, 1999; Homburg – Karlhaus 1998; Williams 2003). Market research can be used as a mean of decision-making, market knowledge enhancing, supporting internal and external PR activities – e.g. for the demonstration of the daughter companies' performance towards the mother company, or the shareholders; or the legitimisation of a decision – often having been made before the market research became available. In this research, we are focusing on decision-making and on the learning about the market – as important activities and processes from a managerial perspective (Troilo 2006).

In our conceptual framework the first element to determine the use of market studies is the *interpersonal trust* between market researchers and marketing managers, and the second one is the perceived *research quality*. The third and fourth

elements of the model are the *use* of the study in problem solving, and market learning such as the process of drawing abstract conclusions based on the research.

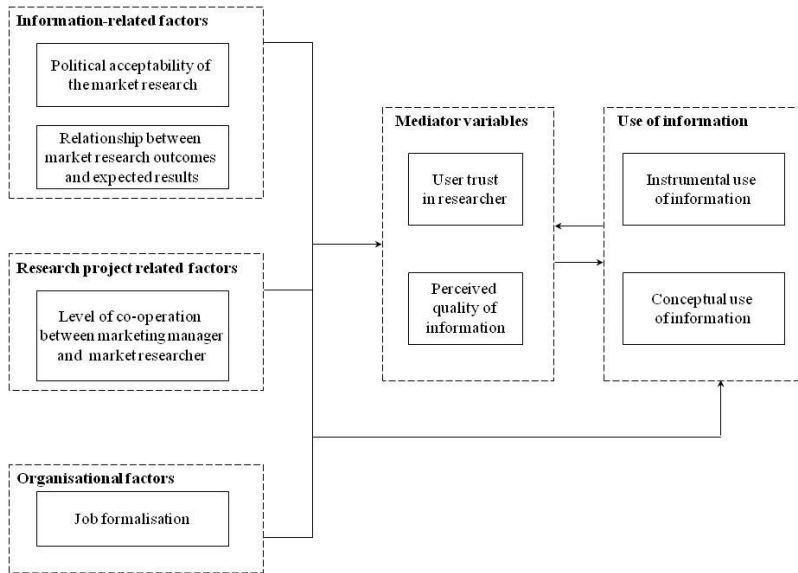


Figure 1. Conceptual framework

We, based on the *meta-analytical* revision of the previous studies and a series of *in-depth interviews*, argue that these elements are the function of variables related to (1) the information, (2) the degree of co-operation and the trust between the marketing manager and the market researcher and (3) the characteristics of the organisation.

During the exploratory phase of the study a series of *in-depth interviews* with 21 professionals from 8 companies were conducted to understand how managers actually rely on commissioned market research. The in-depth interviews revealed that the degree of *trust* between managers and market researchers plays an important role in the process of market information use. Trust is important because the managers make decisions upon market research studies made by another professional working at another organisation. Managers are not able to evaluate the professional quality of the market research. They lack statistical and methodological knowledge, and they were not participating in every phase of the market research project. Another problem is that managers think of themselves as businessmen while market researchers identify themselves as theoretical professionals. According to one of our interviewees “the market researcher did not understand our

business problems, he just provided numbers”. Even though trust seemed to be a central element in the phenomenon of information use; our interviewees suggested that trust in itself does not have a direct impact on the use of market research. As one of our interviewee suggested “if I do not trust 100 percent in the researcher, I do not believe that he is able to deliver a service of high quality. I look much closer to the results, and try to find mistakes.”

Based on these findings we believe that the degree of trust between marketing managers and market researchers has a distinctly important role in the utilisation of market studies. Therefore instead of identifying the construct of trust as a direct antecedent we put this construct as a moderator variable between the antecedents and the information use.

In the literature review we were using *meta-analysis*. Meta-analysis is a statistical procedure that integrates the results of several independent studies considered to be combinable (Bijmolt – Pieters 2001). First we identified every possible empirical research published in the field of managerial use of information (deriving from market research studies, from colleagues working in other departments, from IT systems) in the marketing and in the general innovation literature over the past 30 years. We think that these studies are combinable because of the similar research approach (empirical research) and the comparable set of constructs identified as antecedents in these papers. As a second step we identified seven major groups where the numerous antecedents investigated in the previous research could be categorised. The seven categories were 1) *information-related* (technical and professional quality, cost, perceived usefulness, counter-intuitiveness, etc.), 2) *problem related* (structuredness, complexity, number of those involved in decision-making, importance, etc.), 3) *information user and information provider related* (company and industry specific experience, decision-making style, information providers’ sincerity, compliance to professional standards, etc.), 4) *inter-personal* (level of co-operation, frequency and formalisation of communication, differences in position, etc.), 5) *inter-functional* (separateness and specialisation of departments, existence of multi-departmental teams, rivalry between departments, etc.), 6) *organisational* (formalisation, centralisation, hierarchy, locus of control, consumer orientation, team-building activities, etc.), 7) *environmental* (market stability, technological turbulence, etc.). As the last step we computed an average for each category using the means of the coefficients of regressions of the antecedents belonging to the category.

Based on this procedure we found that ‘information quality’ plays an important role in information utilisation.

In our model we examined the role of *contextual characteristics* – political acceptability, for example – in the phenomenon of information utilisation. These factors are very interesting if we consider that the information is provided by ex-

tra-organisational experts who are not members of the power relations of the organisation and who do not necessarily have the insight to assess inter-organisational political relationships and expectations.

The meta analysis drew our attention to the importance of *interpersonal-type* independent variables in the different studies, such as the difference in the job titles of the supplier and the user of information (Maltz – Kohli 1996), the trust between user and supplier (Moorman et al. 1993); or the common job experience, and joint client visits (Maltz et al. 2001). Amongst these set of variables – supported by the in-depth interviews – we considered the *interpersonal trust* between manager and researcher to be of key importance. In the previous studies – according to our present knowledge – no researcher could verify a direct relationship between trust in the market researcher and the utilisation of information. The model of Moorman et al. (1993) contains trust as a mediator variable through which – and only through which – independent variables can affect the use of information. Maltz – Kohli (1996) also treat the construct of trust in the information supplier as a mediator variable instead of an independent one.

The *organisational factors* proved to be important influencing variables according to the results of our meta-analysis. The role of formalisation in the use of market information have received increased attention (Deshpandé 1982; Deshpandé – Zaltman 1982; John – Martin 1984; Maltz – Kohli 1996; Low – Mohr 2001), however the results are contradictory, therefore we sought for a deeper insight into this relationship.

4. DEFINITION OF THE VARIABLES

4.1. Dependent variables

Though leading academic periodicals specialised in marketing have published a great number of empirical studies concerned with companies' utilisation of market information, *no consensus at all has been reached* on how to measure the use of information. Most authors agree that several ways of utilisation, routines of use are present in company practice – thus the phenomenon of information use is a *multidimensional construct*.

Papers on information use (Deshpandé – Zaltman 1982, 1984, 1987; Diamantopoulos – Souchon 1995; Homburg – Karlhaus 1998; Diamantopoulos – Souchon 1998; Williams 2003) differentiate between *instrumental* and *conceptual* modes of use. According to Caplan et al. (1975), the use of information is *instrumental* if the manager directly uses the information for *solving a well-defined* problem. Thus market knowledge, the results of market research, heavily influ-

ence the outcome of decision-making in some existing management problem. For example, in the scale of Deshpandé – Zaltman (1982/a) aiming at measuring instrumental information use, the following statement appears: without this information, no decision could have been made.

Beyer – Trice (1982) states that in the case of *conceptual* information use, managers utilise the information in order to understand some problem in detail, as a kind of background information. This mode of use, compared to the instrumental way, where information is a decision support tool, is rather *indirect and less specific*. Considering conceptual information use, market knowledge contributes to the expansion of managers' knowledge base and encourages "joint-thinking" within the company.

Our work investigates both dimensions of information use, thereby outperforming previous studies (Deshpandé 1982; Deshpandé – Zaltman 1982, 1983, 1984, 1987; John – Martin 1984; Lee et al. 1987, 1997; Perkins – Rao 1990; Moorman et al. 1992; Mott 1993; Dennis 1996; Low – Mohr 2001) on market research having only concentrated on instrumental use.

4.2. Mediator variables

Trust is defined as a belief that a trustor is concerned with a trustee's welfare (benevolence); will reliably fulfil its commitments (integrity) and has the skills, competencies and knowledge to fulfil its obligations (expertise) (Moorman et al. 1992, 1993). *The perceived quality of market research information* stands for managers' views on the accuracy, comprehensibility, relevancy and transparency of information (Deshpandé – Zaltman 1982; Gupta – Wilemon 1988; Maltz – Kohli 1996).

4.3. Independent variables

Considering the *political acceptability* of the market research, we examine whether the factual statements and the recommendations of the market study cause discomfort or difficulties to any persons or groups in the company (Deshpandé 1982). The *expected result* variable means that research results are not counter-intuitive or surprising, but rather confirm preliminary expectations and assumptions.

By the *level of co-operation with the market researcher*, according to Moorman et al. (1992) we measure the intensity of co-operation between the marketing executive and the external market researcher in each stage of the research

process (the formulation of the research problem, research design, data analysis, the formulation and discussion of conclusions / recommendations and continuous counselling were examined). *Job formalisation*, on the other hand, tells us how far the marketing professional's work activities are limited by written routines and procedures (Deshpandé – Zaltman 1982).

5. HYPOTHESES

How managers' trust market researchers is affected by the fact whether observations of a study confirm preliminary hypotheses, has not yet been looked at by previous studies. Moorman (1993) suggested that researchers' (or their studies') ability to reduce uncertainty largely contributes to managers' trust in them. In spite of having treated researchers' ability to reduce uncertainty as a concept overlapping with creativity and the ability to create value added, the hypothesis validated in Moorman's study may be of use in our research, too.

5.1. Antecedents of user's trust in the researcher

Hypothesis 1. (H_1) *The better market research results fit users' preliminary expectations, the greater the trust users have in the researcher.*

If the results of the marketing research do not fit the preliminary expectations or the findings of the study are surprising and counter-intuitive, the manager becomes uncertain and confused. He must make a decision whether to accept the surprising results or not. If he accepts the results he has to review his own point of view and his beliefs about the market deriving from his personal job experiences. Based on the findings of the in-depth interview one single market research is not enough to overwrite the strongly imprinted managerial mental schemes about the market. Instead, if the manager has doubts about the correctness of the counter-intuitive results, an obvious reaction is to question the skills, competencies, knowledge of the market researcher, which ultimately leads to loss of trust in the researcher.

Hypothesis 2. (H_2) *The closer the co-operation between the marketing executive and the market researcher during the research process, the greater the trust of the marketing executive in the researcher.*

Close co-operation during the problem definition, research design, data analysis, and the discussion of the results provide opportunities to the market researcher to demonstrate his skills, competencies and commitment to the marketing execu-

tive. Common meetings between the parties leads to better understanding of the client's needs, common understanding of customers, competitors and products, mutual sharing of information, deploying the same routines and develop common ground, which ultimately facilitates and builds trust-based relationship between the parties. It is our supposition that mutual understanding between the two parties (market researchers and marketing executives) and their development of a common language leads to trust. Previously, Moorman et al. (1992) found a positive relationship between the level of co-operation with the researcher and the level of trust in them. Information exchange norms have the greatest (positive) association with the level of trust. These norms emerge as part of the long-term co-production of the relationship itself (Denize – Young 2007). The impacts of extensive co-operation (intensive and functioning for a longer time) on professional trust were mentioned during the in-depth interviews, as well.

Hypothesis 3. (H_3): *The better the quality of the study prepared by the market researcher as perceived by the marketing leader, the greater the trust of the marketing leader in the market researcher.*

When examining inter-departmental share of information, Maltz – Kohli (1996) found that what facilitated most the development of professional trust in a colleague from another department was the accurate and unbiased information provided by them. We believe that the relationship between perceived information quality leads to interpersonal trust in case of the co-operation of marketing leaders and market research professionals. The formulation of interpersonal trust is a longer process, which actually starts with the beginning of the co-operation and ends after the delivery of the information product. The supreme quality of the market research strengthens the positive opinion about the professional skills of the market researcher, which is a cornerstone of a trust-based relationship between the parties.

5.2. Antecedents of perceived research quality

Hypothesis 4. (H_4) *The more acceptable the market study within the company's political field, the better its quality in the eyes of the marketing manager.*

Though this relationship had not been dealt with in previous studies (Zaltman – Moorman 1988) proposed that market researchers do not typically tend to be “naive” about their customers' internal relations), primarily concerned with the American business environment, it did seem worth investigating to us. Namely because our preliminary in-depth interviews revealed that the reasons of purchasing market studies are manifold and that they often remain hidden; like the out-

standing success of some division or the opportunity to represent more effectively the Hungarian subsidiary's interests with the parent company. Market studies, consequently, are not only intended to remedy the lack of information in marketing decisions but also serve as the vehicle of internal and external PR activities. According to our hypothesis, in order for a market study to be considered of good quality it must not only meet professional standards but should also be acceptable within the company's "political field". It is not very favourable if, for example, the research report paints a dark picture of some corporate department.

Hypothesis 5. (H_5) *The more the findings of the market research fit preliminary expectations, the better its quality in the eyes of the marketing manager.*

Analysis of our in-depth interviews suggests that the more results confirm preliminary expectations and the more they fit the hypotheses, the better is the professional quality of the research in the eyes of the manager, and vice versa. That is, if a study reports unexpected and counter-intuitive results, marketing managers tend to question the quality of the research rather than reconsider their own ideas. The quality and the value of information is mainly determined by the degree of uncertainty it is able to eliminate (Shannon – Weaver 1949). We assume that the opposite holds true, as well: any piece of information is doomed to drop in value if it does not reduce but increases uncertainty, if it does not confirm preliminary expectations.

Hypothesis 6. (H_6) *The more the marketing executive trusts the market researcher, the better the quality of the market study in their eyes.*

Hereinafter we suppose that the perceived quality of market studies is not only affected by the already mentioned characteristics (unexpectedness, political acceptability) of the study itself but by the *trust* between the marketing executive and the researcher, as well. The conditions under which a given research was completed are often unknown to the user. Furthermore, the difference in their knowledge of research methodology and statistics also encumbers the objective judgment of research quality. Researchers (Lee et al. 1987) investigated whether there is a difference in the perception of the quality of market studies when research methodology meets professional standards and when it does not. They found that the methodology applied did not influence perceived quality; neither the sampling method, nor the sample size affected quality perception. Trust between the parties, in our opinion, is key to quality perception because marketing managers make decisions based on such studies that they only have limited knowledge of due to the *information asymmetry* between the parties. In a sense, this is an exposed situation in which preliminary assumptions and expectations about the re-

searcher's professional capabilities do have an impact on the perceived quality of the research report.

Hypothesis 7. (H_7) is therefore: *The more marketing managers rely on market study in making decisions, the higher the research quality in their eyes.*

It was our assumption that research quality as perceived by the marketing executive is higher if the market research in question indeed facilitates the making of marketing decisions than if its findings do not aid in resolving problems and dilemmas. People tend to only take into account information which justifies their earlier decisions, and to ignore pieces of information which might suggest that the decision was wrong (Frey – Rosch 1984). We think that it is a self-justification mechanism (though not necessarily a conscious one) which prevails here; thus marketing managers' perception of research quality tends to be more favourable if they actually rely on the study when making a decision, and less favourable if the information conveyed is ignored.

5.3. Antecedents of instrumental use of market studies

Hypothesis 8. (H_8) *The more formalised the job of the marketing manager, the more extensive their instrumental use of market studies.*

The more exact the job description of a marketing manager, the less he or she will rely on market research in decision-making (Deshpandé 1982). The examination of the instrumental use of marketing plans (John – Martin 1984) arrived at findings opposite to those of Deshpandé – Zaltman. According to their results, the more formalised the job, the larger the extent to which the plan will be utilised in marketing management activities (John – Martin 1984). Maltz – Kohli (1996), when analysing the formalisation of inter-departmental information-sharing, found that the more formalised the communication of information, the larger the extent to which information from other departments is utilised in the marketing department. A positive relationship between formalisation and utilisation of information was observed by Low – Mohr (2001), as well. Kohli – Jaworski (1990), however, could not detect any significant relationship between job formalisation and organisational market orientation. Our assumption suggests that the more formalised the job description of a marketing manager, the more he will utilise market studies in decision-making. Job formalisation brings a kind of order, routine and rigor to marketing management activities. This is why in the case of formal work processes and well-defined duties, the probability of “neglecting” the conclusions of a market research is much smaller.

Hypothesis 9. (H_9): *The better the quality of the market research in the eyes of the manager, the more extensive the instrumental use of that.*

Several earlier research projects (Deshpandé 1982; Deshpandé – Zaltman 1982, 1984, 1987; Hu 1986; Lee et al. 1987, 1997; Menon – Varadarajan 1992; Diamantopoulos – Souchon 1995; Maltz – Kohli 1996; Homburg – Karlhaus 1998; Maltz et al. 2001; Toften – Olsen 2003; White et al. 2003; Ottesen – Gronhaug 2004; Harmancigolu et al. 2010) proved that the higher the perceived quality of a given piece of information, the more marketing managers rely on it. Information which is relevant, which provides answers to marketing managers' problems and which seems accurate and up-to-date will be relied on to a greater extent by the manager. The relationship between information quality and information use appears to be both positive and significant in the case of market studies, just as well as marketing planning and inter-departmental sharing of scattered information.

Hypothesis 10. (H_{10}) *The more extensive the conceptual use of a market study, the more extensive its instrumental use will be.*

Although the relations of conceptual and instrumental information use have not yet been studied, we assume that if the marketing manager becomes thoughtful about some market study and concludes some more abstract piece of market information from that, then (having acquired in-depth knowledge of the study's contents and relations) he will rely on it more during decision-making than on a study they have only shallow knowledge of.

5.4. Antecedents of conceptual use of market studies

Hypotheses 11. (H_{11}): *The more extensive the co-operation between marketing manager and market researcher in the research process, the more extensive the conceptual use of the study by the manager will be.*

Our assumption was that the closer the co-operation between the market researcher and the marketing manager during the various phases of the research project, the more the manager learns from the findings of the study. Though this relationship has not been examined previously, we still believe that if there is close co-operation between the market researcher and the corporate executive in the exact formulation of the research question, in understanding the true nature of the problem and in formulating and interpreting the conclusions (and if the research project is supported by continuous counselling) then the marketing manager is certainly going to learn from the findings of the study. Due to their close and intensive co-operation with the researcher, marketing executives are forced to sys-

tematise their knowledge about the research problem. By working with a researcher who necessarily applies a different approach to the research problem, the marketing manager cannot choose but to change his/her approach, as well. It is particularly characteristic of value-added market research projects supported by counselling services to offer such an opportunity.

Hypothesis 12. (H_{12}) is therefore: *The more extensive the instrumental use of the market research by the marketing manager, the more extensive its conceptual use will be.*

Ours being the first research to look into the relations between market studies and the phenomenon of information use as related to decision-making and market learning, the literature base we could rely on when formulating the hypotheses was obviously smaller. According to our assumption, the positive relationship between the conceptual and instrumental uses of information is a bi-directional one, thus we assume that the more extensive the instrumental use of a market study, the more extensive its conceptual use will be. Our assumption is, once again, based on the in-depth interviews. We believe that in a complex decision situation, in resolving a marketing problem, the decision-maker is motivated to study the research report in detail, thoughtfully consider its findings and hence learn from the study.

6. METHODOLOGY

6.1. Samples and data collection procedure

The quarterly database Cégkódtár (Business Information Database) of KSH (Hungarian Central Statistical Office) was used as the sampling frame. Large scale businesses were defined on the basis of yearly sales revenue. Organisations with sales revenues above HUF 4 billion were counted as large-scale businesses. We completed a census survey of the potential sample of 972 large-scale enterprises, with 254 responses received, corresponding to a response rate of 26 per cent (returned sample). Companies which had not commissioned any market studies in any of the five years preceding our survey were excluded from the analysis, thus the number of responses to be processed was 154 (subsample relevant to market research).

In the relevant sample, the ratio of companies in private ownership was 88.8 percent, most of them majority-owned by the foreign private sector. The proportion of firms majority-owned by the foreign private sector was larger than that in the returned sample, yet according to our surveys, there is a significant relationship between the use of market researches and ownership structure (companies in

foreign ownership rely more on market studies than the average) – consequently, this did not cause any difficulties in our research. Self-report questionnaires, delivered by mail, were used for data collection.

6.2. Measures

Prior to conducting the survey, instrumentation was tested (Curchill 1979). In developing the final form of the questionnaire, we relied on previously applied scales and questions found in literature – which proved to be reliable mainly in the American business environment. Some further, self-developed statements were also added to the questionnaire based on the lessons learned from our series of qualitative studies. Instrumentation was pre-tested in two stages (interviews with academic professionals and pre-tests with MBA students).

As *Table 1* indicates, each variable was measured by more than one statement. *Table 2* shows that the value of Cronbach's Alpha, representing scales' reliability, was acceptable for all scales, exceeding 0.6 (Malhotra – Simon 2009) in each case.

6.3. Evaluation of non-response errors

Prior to conducting the survey, we evaluated potential non-response errors. We followed a process (Armstrong – Overton 1977) suggesting that the significant *correlations* between response “speed” and descriptive variables (type of products / services provided by the company, division, number of employees, ownership structure) or other variables included in the model might indicate systemic errors.

When contacting the non-responding companies via phone, it turned out that the most frequent reasons for refusal were related to the length of the questionnaire and respondents being pressed for time.

6.4. Data entry, data cleaning and analysis

The model was tested by linear regression. Database coding was performed by a professional service provider.

The reliability of the constructs in the model was tested by the method generally applied in international marketing research (Gerbing – Anderson 1988). First of all, the unidimensionality of our scales was assessed, that is, we checked

Table 1
Constructs and scale items

Constructs	Scale items
Instrumental use of information	<p>The majority of the research information from this project was not used (R)*</p> <p>One or more findings of the study had a significant direct impact on the decision</p> <p>It was worth waiting for the research results because some of them materially influenced the decision</p>
Conceptual use of information	<p>The study results gave fresh perspectives and were used to start discussion about an issue</p> <p>The study results were used to provide new insights</p> <p>Doing the study was educational and we learned from the results</p> <p>It is possible that without the research results, a different concept would have been created</p>
Perceived research quality	<p>The language of the research study and presentation was clear</p> <p>There were too many tables / graphics / statistics</p> <p>The conclusions / recommendations of the presentation followed from the data</p> <p>The quality of the management summary was high</p> <p>The information provided was worth the money spent on it</p> <p>The way the information was gathered was appropriate</p> <p>The professional quality of the research was high</p> <p>There were many contradictory statements or findings</p>
User trust in the researcher	<p>My researcher is creative and he / she is able to provide added value</p> <p>My researcher usually accommodates my last minute requests</p> <p>The information we share with my researcher will not be shared with competitors</p> <p>My researcher reflects on his / her experience to fill in the gaps left by</p> <p>Conflicts with the researcher were solved together</p> <p>My researcher is punctual in meeting deadlines</p> <p>I am convinced that my researcher deeply understands how things are done around here</p>
Political acceptability of the market research	<p>The implications of the findings were politically unacceptable to others in the organisation</p> <p>The recommendations challenged the budget or resource allocations of the department</p>

Table 1 (cont.)

Relationship between market research outcomes and expected results	<p>The results from this research study supported decisions made on other grounds</p> <p>The results were what we anticipated</p> <p>The study validated or confirmed our understanding of something</p> <p>The research study was used to promote awareness and appreciation for</p>
Job formalisation	<p>There is a complete written job description for doing things around here</p> <p>Everyone has a specific job to do, based on strict operational procedures</p>
Level of co-operation with the researcher	<p>Continuous consulting</p> <p>Problem definition</p> <p>Designing the research</p> <p>Data analysis, development and implementation of recommendations</p>

Notes: * Reverse coded that is 5 s given by respondents were entered into the database as 1s and vice versa.

whether each of the statements (items) in the scales actually relate to the relevant latent constructs. Thereafter, factor analysis was used to verify that the items theoretically belonging to the same construct indeed constitute a single factor. Afterwards, a confirmatory factor analysis was completed. Before developing the estimates for the regression equations, the issue of multi-collinearity was examined (Mason – Perreault 1991). SPSS 9.0 statistical software was used for all calculations.

7. RESULTS

Having formulated the hypotheses, we may produce the following equations to be tested:

1. $F_TRUS = \beta_{1.1} (F_VE) + \beta_{1.2} (F_CM) + \beta_{1.3} (F_RQ) + e_1$;
2. $F_RQ = \beta_{2.1} (F_PA) + \beta_{2.2} (F_VE) + \beta_{2.3} (F_TRUS) + \beta_{2.4} (F_INSTR) + e_2$
3. $F_INSTR = \beta_{3.1} (F_FOR) + \beta_{3.2} (F_RQ) + \beta_{3.3} (F_CONC) + e_3$
4. $F_CONC = \beta_{4.1} (F_CM) + \beta_{4.2} (F_INSTR) + e_4$

where:

- F_TRUS: user trust in the researcher,
- F_RQ: perceived research quality,
- F_INSTR: instrumental use of market research,
- F_CONC: conceptual use of market research,
- F_PA: political acceptability of the market research,

Table 2
Descriptive statistics: Number of items, range, mean, standard deviation, Cronbach's Alpha and correlation coefficients

Scale	Number of items	Range	Mean	Std. Deviation	Cronbach's Alpha	1	2	3	4	5	6	7	8
1. Instrumental use of information	3	1-5	3.4	.922	.75	1.00							
2. Conceptual use of information	4	1-5	3.5	1.02	.65	.48***	1.00						
						(143)							
3. Perceived research quality	8	1-5	3.62	.88	.74	.49***	.30***	1.00					
						(139)	(139)						
4. User trust in the researcher	5	1-5	3.4	1.32	.84	.21**	.21***	.46***	1.00				
						(136)	(136)	(134)					
5. Political acceptability of the market research	2	1-5	3.4	.88	.62	.07	.13	-.14***	.14	1.00			
						(141)	(141)	(139)	(136)				
6. Relationship of market research findings to expected results	2	1-5	3.5	1.0	.76	.37***	.17***	.47***	.49***	.17*	1.00		
						(140)	(140)	(136)	(134)	(139)			
7. Job formalisation	2	1-5	3.1	1.0	.73	.27***	.18*	.12	.02	.21**	.23**	1.00	
						(141)	(141)	(139)	(136)	(141)	(139)		
8. Level of co-operation with the researcher	4	1-5	3.5	1.3	.89	.28***	.27***	.39***	.56***	.11	.45***	.16	1.00
						(139)	(139)	(136)	(135)	(138)	(136)	(138)	

Notes: * p < .05; ** p < .01; *** p < 0.001.

F_VE: relationship between market research outcomes and expected results,
 F_FOR: job formalisation,
 F_CM: level of co-operation with the researcher.
 e : error term

Table 3 contains the standardised β coefficients, in parenthesis the t-values, the F -values with their significance levels and the R -squared values for all four regression equations. As evidenced by the data, three out of the four equations (those related to trust in the researcher, perceived quality of information and instrumental use of information) show a very good fit. The fit of the fourth equation, related to conceptual use of information, is somewhat worse; however, if we compare our R -squared value to those of the regression models associated with conceptual use of information in international studies (Moorman: $R^2 = .273$; Maltz – Kohli: $R^2 = .250$) we see that our model does not lag behind.

Results of the empirical survey validated 11 out of the 12 hypotheses formulated in the study (see *Table 3*). Results *do not support* the *eleventh hypothesis* (H_{11}) ($\beta_{4.1} = .138$, $p = \text{n.s.}$), as though there is a positive relationship between the two factors, significance level is not acceptable.

8. DISCUSSION

8.1. Implications

According to our findings, one of the key factors of the utilisation of market studies is marketing managers' trust in the market researcher. Trust between the marketing executive and the market researcher is a necessary but not sufficient condition for the commissioned market research to become a truly useful tool of marketing management. Previous studies were unable to confirm a direct relationship between information use and trust in the researcher (Moorman et al. 1992). Thus the statement that the more the marketing managers trust the researcher, the more they relies on the market study, does not hold true. Nonetheless, trust is, though indirectly, one of the most important elements of the value chain from market information to market knowledge.

Marketing executives at large-scale businesses typically do trust market researchers, yet researchers might improve the level of trust through value-added services backed by counselling activities. Co-operation has the primary role in developing trust between the market researcher and the marketing manager. The more opportunities the manager has to meet the researcher during the various phases of the study, the more he will trust the researcher.

Table 3

Standardised β coefficients of the regression equations

Independent variables	Dependent variables			
	F_TRUS	F_RQ	F_INSTR	F_CONC
Constant value	2.162E-02 (.353)	-2.61E-03 (-.040)	2.161E-02 (.325)	3.805E-03 (.052)
F_PA	–	.223** (3.357)	–	–
F_VE	.158* (2.033)	.218** (2.768)	–	–
F_FOR	–	–	.165** (2.434)	–
F_CM	.469*** (6.222)	–	–	.138 (1.814)
F_TRUS	–	.329*** (4.429)	–	–
F_RQ	.204** (2.674)	–	.366*** (5.235)	–
F_INSTR	–	.346*** (4.871)	–	.468*** (6.164)
F_CONC	–	–	.358*** (5.062)	–
F-value	36.704 ***	26.246***	30.812***	25.784***
R ²	.464	.451	.408	.273

Notes: * $p < .05$; ** $p < .01$; *** $p < 0.001$.

The reason for trust being an important element of the value chain from market research to marketing knowledge is that it is the key factor determining research quality as perceived by the decision-maker. Managers make decisions based on studies, the professional quality and the conditions of which they only have limited knowledge of due to the *information asymmetry* between the parties (as they lack the methodological skills needed to “objectively” assess the quality of a research study). Our measurements yielded the result that trust is more significant to the perception of research quality than some methodological characteristics of the research study itself. Even though the marketing executives of Hungarian large-scale enterprises are generally satisfied with the professional quality of market studies, quite a number of them still feel to be unnecessarily overwhelmed by heavy statistics; beyond the fair and unbiased but often quasi-mechanical analysis of data, they would like to see some tailor-made results providing direct answers to their dilemmas (Keszey 2007). We also found that perceived market research quality is affected by whether the study had caused discomfort or difficulties for

some colleagues or departments. In order for a market study to be considered of good quality by the marketing manager, it must not only meet professional requirements but it has to be acceptable within the “political field” of the company, as well. Thus market researchers had better not only be equipped with professional skills but with client knowledge, too.

An interesting, and previously undetected, relationship is that marketing managers’ professional trust in the researcher is deteriorated by unexpected results. This, in turn, draws attention to the conclusion that market researchers should be taught how to efficiently communicate results which might seem surprising to decision-makers in order to avoid a loss of confidence in them. Market researchers are typically clear about the internal relations of their clients, they are not “naive” about preliminary expectations (Zaltman – Moorman 1988); thus the anticipation of clients’ reactions to research findings shall not constitute a problem for researchers.

Perceived quality, as shown by our study, is also influenced by whether there were decisions made on the basis of the study in question, and whether the findings of the study were incorporated into marketing management work. This relationship points out that the perception of research quality is a long process rather than an event. The process practically begins with developing an image of and a fiduciary relationship with the researcher – in time, this is related to the beginning of the research project whilst the output of the research (the study) has not been completed yet. Nevertheless, the process does not finish with the preparation of the market study and the closure of the research project, as the utilisation of information in decision-making also “retroacts” on the perception of quality. This, in turn, underlines that market researchers should be “tracking” what happens to their studies later on.

Our findings proved that research quality as perceived by the manager is the most important factor determining whether the marketing manager relies on research findings in their work later. Studies commissioned by enterprises with formalised, written job routines tend to be incorporated into decision-making to a larger extent. Marketing executives learn primarily from market studies the factual results of which they have reviewed in detail during specific problem solving or decision-making efforts. Executives are, paradoxically, less likely to learn and draw abstract conclusions from longitudinal, more general market studies than from results actually utilised in resolving some specific problem. We might as well assume that marketing decision-makers are neither motivated nor forced to review and thoughtfully consider the details of studies which have not much to do with specific managerial problems and in the background of which there is no real shortage of information. It is interesting to note that background research predom-

inates over decision research as a research activity, yet is regarded as less useful by managers (Ganeshasundaram – Henley 2006).

In the field of management, several researchers (Haeckel 1987; Ackhoff 1989; Barabba – Zaltman 1991) tried to analyse how, through which mechanisms and along which value chain elemental data can be converted into market knowledge. Their models delineate a hierarchical relationship between market data, information and knowledge and wisdom. Thus the authors agree that market information is a necessary but not sufficient condition for the development of market knowledge and certitude. The model of Haeckel (1987) and Ackhoff (1989) depicts the data–information–intelligence–knowledge–wisdom chain hierarchically, in a pyramid-like form. Proceeding from the data towards wisdom, their value for the company is increasing while their volume is decreasing. The model actually formulates the idea that there is an indirect relation between elemental data and wisdom. A series of processes – like contextualisation, synthesis, drawing of conclusions – constitutes the path from data to wisdom. Our present study also suggests that the path to market knowledge is through market information, more exactly through the direct utilisation (contextualisation) of market information.

REFERENCES

- Ackhoff, R. L. (1989): From Data to Wisdom. *Journal of Applied Systems Analysis*, 15(June): 3–9.
- Armstrong, J. S. – Overton, T. S. (1977): Estimating Non-response bias in Mail Surveys. *Journal of Marketing Research*, 14(August): 396–402.
- Barabba, V. P. – Zaltman, G. (1991): *Hearing the Voice of the Market: Competitive Advantage through Creative Use of Market Information*. Boston: Harvard University Press.
- Berács, J. (2004): Market Orientation from a Hungarian Perspective. In: Bilkin, F. Z. – Sriram, V. – Wuhler, G. A. (eds): *Drivers of Global Business Success: Lessons from Emerging Markets*. London: Palgrave Macmillan, pp. 41–54.
- Berács, J. – Keszey, T. et al. (2001): A magyarországi vállalatok marketing megközelítése, stratégiája és teljesítménye (Marketing Approach Strategy and Performance of the Hungarian Companies – Report of Scientific Research Fund (OTKA), No. T030028). Budapest: BKÁE Marketing Tanszék – Budapest University of Economic Sciences Department of Marketing. *Study*.
- Bijmolt, T. H. A. – Pieters, R. G. M. (2001): Meta-analysis in Marketing when Studies Contain Multiple Measurements. *Marketing Letters*, 12(2): 157–169.
- Bulte, C. van den – Moenaert, R. K. (1998): The Effects of R&D Team Co-location on Communication Patterns among R&D, Marketing, and Manufacturing. *Management Science*, 44(11): S1–S18.
- Caplan, N. A. – Morisson, et al. (1975): *The Use of Social Science in Public Policy Decisions at the National Level*. Michigan: Institute for Social Research.
- Curchill, G. A. (1979): A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16(February): 64–73.
- Denize, S. – Young, L. (2007): Concerning Trust and Information. *Industrial Marketing Management*, 36(7): 968–982.

- Dennis, A. R. (1996): Information Exchange and Use in Group Decision Making: You can Lead a Group to Information, but You can't Make it Think. *MIS Quarterly*, 20(4): 433–457.
- Deshpandé, R. (1982): The Organizational Context of Market Research Use. *Journal of Marketing*, 46 (Fall): 91–101.
- Deshpandé, R. – Zaltman, G. (1982): Factors Affecting the Use of Market Research Information: A Path Analysis. *Journal of Marketing Research*, 19(February): 14–31.
- Deshpandé, R. – Zaltman, G. (1983): Patterns of Research Use in Private and Public Sectors. *Knowledge: Creation, Diffusion, Utilization*, 4(June): 561–75.
- Deshpandé, R. – Zaltman, G. (1984): A Comparison of Factors Affecting Researcher and Manager Perceptions of Market Research Use. *Journal of Marketing Research*, 21(February): 32–38.
- Deshpandé, R. – Zaltman, G. (1987): A Comparison of Factors Affecting Use of Marketing Information in Consumer and Industrial Firms. *Journal of Marketing Research*, 24(February): 117–127.
- Diamantopoulos, A. – Souchon, A. L. (1995): *Instrumental, Conceptual and Symbolic Use of Export Information – An Exploratory Study of U.K. Firms*. Conference Proceedings of the Academy of International Business: University of Bradford Management Centre, 7–8th of April 1995.
- Diamantopoulos, A. – Souchon, A. L. (1998): Information Utilization by Exporting Firms: Conceptualization, Measurement, and Impact in Export Performance. In: Urban, S – Nanopoulos, C. (eds): *Information and Management*. Wiesbaden: Gabler, pp. 18–33.
- Diamantopoulos, A. – Souchon, A. L. (1999): Measuring Export Information Use: Scale Development and Validation. *Journal of Business Research*, 46(1): 1–14.
- ESOMAR (2009): Global Market Research 2009, ESOMAR Industry Report, www.esomar.org
- Fisher, R. J. – Maltz, E. (1997): Enhancing Communication between Marketing and Engineering: The Moderating Role of Relative Functional Identification. *Journal of Marketing*, 61(3): 54–71.
- Frey, D. – Rosch, M. (1984): Information Seeking after Decisions. *Personality and Social Psychology Bulletin*, 10(1): 91–98.
- Ganeshasundaram, R. – Henley, N. (2006): The Prevalence and Usefulness of Market Research – An Empirical Investigation into ‘Background’ versus ‘Decision’ Research. *International Journal of Market Research*, 48(5): 525–550.
- Gerbing, D. – Anderson, J. (1988): An Updated Paradigm for Scale Development Incorporating Unidimensionality and its Assessment. *Journal of Marketing Research*, 25(May): 186–192.
- Griffin, A. – Hauser, J. R. (1996): Integrating R&D and Marketing: A Review and Analysis of the Literature. *Journal of Product Innovation Management*, 13(3): 191–215.
- Gupta, A. K. – Wilemon, D. (1988): Why R&D Resists Using Marketing Information. *Research Technology Management*, 31(November – December): 36–41.
- Gupta, A. K. et al. (1985): The R&D-marketing Interface in High-tech Firms. *Journal of Product Innovation Management*, 2(March): 12–24.
- Gupta, S. (1994): Managerial Judgment and Forecast Combination: An Experimental Study. *Marketing Letters*, 5(1): 5–17.
- Gupta, S. et al. (1999): Modeling the Evolution of Markets with Indirect Network Externalities: An Application to Digital Television. *Marketing Science*, 18(3): 396–416.
- Haeckel, S. H. (1987): *Presentation to the Information Planning Steering Group*. Cambridge, M.A.: Marketing Science Institute.
- Harmancigolu, N. et al. (2010): Innovation and Performance Outcomes of Market Information Collection Efforts: The Role of Top Management Team Involvement. *International Journal of Research in Marketing*, 27(1): 33–43.

- Hart, S. – Diamantopoulos, A. (1993): Linking Market Orientation and Company Performance: Preliminary Work on Kohli and Jaworski's Framework. *Journal of Strategic Marketing*, 1(2): 93–121.
- Homburg, C. – Karlhaus, J. T. (1998): *Marketing Managers Use of Accounting Information: Determinants and Performance Implications*. Presentation on 27th EMAC Conference. Stockholm, Sweden, 20–23 May, 1998.
- Hooley, G. – et al. (2000): Market Orientation in the Transition Economies of Central Europe: Tests of the Narver and Slater Market Orientation Scales. *Journal of Business Research*, 50(3): 273–285.
- Hu, M. Y. (1986): An Experimental Study of Managers' and Researchers' Use of Consumer Market Research. *Journal of the Academy of Marketing Science*, 14(3): 44–51.
- Jaworski, B. J – Kohli, A. K. (1993): Market Orientation: Antecedents and Consequences. *Journal of Marketing*, 57(July): 53–70.
- John, G. – Martin, J. (1984): Effects of Organizational Structure of Marketing Planning on Credibility and Utilization of Plan Output. *Journal of Marketing Research*, 21(May): 170–183.
- Keszezy, T. (2007): Hogyan lesz a piackutatásból piaci tudás? (How Does Market Research Turns into Market Knowledge?) *Statisztikai Szemle*, 85(4): 332–358.
- Kohli, A. K. – Jaworski, B. J. (1990): Market Orientation: The Construct, Research Propositions and Managerial Implications. *Journal of Marketing*, 54(April): 1–18.
- Lee, H. et al. (1987): Evaluation and Use of Marketing Research by Decision Makers: A Behavioral Simulation. *Journal of Marketing Research*, 24(May): 187–196.
- Lee, H. et al. (1997): Managers' Evaluation of Research Design and its Impact on the Use of Research: An Experimental Approach. *Journal of Business Research*, 39(July): 231–240.
- Leenders, M. A. – Wierenga, B. (2008): The Effect of Marketing – R&D Interface on New Product Performance: The Critical Role of Resources and Scope. *International Journal of Research in Marketing*, 25(1): 56–68.
- Low, G. S. – Mohr, J. J. (2001): Factors Affecting the Use of Information in the Evaluation of Marketing Communications Productivity. *Journal of the Academy of Marketing Science*, 29(Winter): 70–88.
- Malhotra, N. K. – Simon, J. (2009): *Marketingkutatás (Marketing Research)*. Budapest: Akadémiai Kiadó.
- Maltz, E. (2000): Is All Communication Created Equal? An Investigation into the Effect of Communication Mode on Perceived Information Quality. *Journal of Product Innovation Management*, 17(2): 110–127.
- Maltz, E. – Kohli, A.K. (1996): Market Intelligence Dissemination Across Functional Boundaries. *Journal of Market Research*, 33(February): 47–61.
- Maltz, E. – Kohli, A. K (2001): Market Intelligence Dissemination across Functional Boundaries. In: Deshpandé, R. (ed.): *Using Market Knowledge*. London: Sage Publications, pp. 273–314.
- Maltz, E. et al. (2001): Influencing R&D/Marketing Integration and the Use of Market Information by R&D Managers: Intended and Unintended Effects of Managerial Actions. *Journal of Business Research*, 52(1): 69–82.
- Mason, C. H. – Perreault, W. D. J (1991): Collinearity, Power and Interpretation of Multiple Regression Analysis. *Journal of Marketing Research*, 28(August): 268–280.
- Menon, A. – Varadarajan, R. (1992): A Model of Marketing Knowledge Use within Firms. *Journal of Marketing*, 56(4): 53–72.
- Moenaert, R. K. – Souder, W. E. (1990): An Analysis of the Use of Extrafunctional Information by R&D and Marketing Personnel: Review and Model. *Journal of Product Innovation Management*, 7(3): 213–229.

- Moorman, C. (1995): Organizational Market Information Processes: Cultural Antecedents and New Product Outcomes. *Journal of Marketing Research*, 32(August): 318–335.
- Moorman, C. et al. (1992): Relationships between Providers and Users of Market Research: The Dynamics of Trust within and between Organizations. *Journal of Marketing Research*, 24(August): 314–328.
- Moorman, C. et al. (1993): Factors Affecting Trust in Market Research Relationships. *Journal of Marketing*, 57(January): 81–101.
- Mott, S. (1993): Case-based Reasoning: Market, Applications and Fit with other Technologies. *Expert Systems with Applications*, 6(1): 97–104.
- Narver, J. C. – Slater, S. F. (1990): The Effect of Market Orientation on Business Profitability. *Journal of Marketing*, 54(October): 20–35.
- Ottesen, G. G. – Gronhaug, K. (2004): Barriers to Practical Use of Academic Marketing Knowledge. *Marketing Intelligence & Planning*, 22(5): 520–530.
- Perkins, W. S. – Rao, R. C. (1990): The Role of Experience in Information Use and Decision Making by Marketing Managers. *Journal of Marketing Research*, 27(February): 1–10.
- Shannon, C. – Weaver, W. (1949): *The Mathematical Theory of Communication*. Urbana, IL: The University of Illinois Press.
- Sinkula, J. M. (1994): Market Information Processing and Organizational Learning. *Journal of Marketing*, 58(January): 35–45.
- Sissonen, H. S. (2008): *Information Sharing as a Network Activity. Case of R&D Collaboration in the ICT Sector*. Conference Proceeding of the 24th Industrial Marketing and Purchasing (IMP) Group. Uppsala, Sweden, IMP, 4–6th of September, 2008.
- Slater, S. F. – Narver, J. C. (1995): Market Orientation and the Learning Organization. *Journal of Marketing*, 59(July): 63–74.
- Theoharakis, V. – Hooley, G. (2008): Customer Orientation and Innovativeness: Differing Roles in New and Old Europe. *International Journal of Research in Marketing*, 25(1): 69–79.
- Toften, K. – Olsen, S. O (2003): Export Market Information Use, Organizational Knowledge, and Firm Performance: A Conceptual Framework. *International Marketing Review*, 20(1): 95–110.
- Troilo, G.. (2006): *Marketing Knowledge Management: Managing Knowledge in Market Oriented Companies*. Cheltenham: Edward Elgar.
- White, C. J. et al. (2003): Market Situation Interpretation and Response: The Role of Cognitive Style, Organizational Culture, and Information Use. *Journal of Marketing*, 67(3): 363–79.
- Williams, J. E. M. (2003): Export Information Use in Small and Medium-sized Industrial Companies. An Application of Diamantopoulos' and Souchon's Scale. *International Marketing Review*, 20(1): 44–66.
- Young, L. – Denize, S. (2006): *Concerning Trust and Information*. Conference Proceedings of the 22nd IMP Conference. Milan, Italy, 7–9th of September, 2006.
- Zaltman, G. – Deshpandé, R. (2000): The Use of Market Research – An Exploratory Study of Manager and Researcher Perspectives. In: Deshpandé, R. (ed.): *Using Market Knowledge*. Thousand Oaks: Sage Publications, pp. 31–81.
- Zaltman, G. R. – Moorman, C. (1988): The Importance of Personal Trust in the Use of Research. *Journal of Advertising Research*, 28(3): 16–24
- Zaltman, G. R. et al. (1973): *Innovations and Organizations*. New York: John Wiley&Sons.