

MANAGERIAL DECISION MAKING AND COMPETITIVENESS – THE CASE OF HUNGARY

by Zita Zoltay Paprika, Agnes Wimmer and Richard Szanto

EXECUTIVE SUMMARY

The paper explores three key aspects of managerial decision making. The findings of the Research Program “In Global Competition” suggest that managerial capabilities and skills, and attitudes toward decision making, the information and performance measurement supporting decision making, and companies’ approaches to the management of relationship with their stakeholders have a significant impact on the effectiveness of managerial decision making. We experienced that all these factors play an important role in the competitiveness of the Hungarian companies. After giving a broad view of the management practice of the sample we analyze the differences of different clusters (by company size, dominant ownership, and performance) of companies according to the routines and attitudes of decision making. Beyond summarizing the main experiences we draw up some recommendations for the business community reflecting on the successful companies’ practice. The three factors presented by the paper can constitute a possible framework of managerial decision making which is to be tested by future research using case study methodology.

Keywords: Decision Support, Management Skills, Decision Making Approaches, Information Systems, Performance Measurement, Stakeholder Approach

INTRODUCTION

Our paper is based on a survey carried out during the spring of 2004 by the Competitiveness Research Centre at the Corvinus University of Budapest. The main goal of the survey was to describe the competitiveness of the Hungarian micro sphere at the moment of accession to the European Union. The survey was performed between March and June in a historic moment. It is important to highlight that this was not our first survey on this topic. We performed a similarly structured survey in 1996 - also in the frame of the “In Global Competition” research program - and the survey was repeated in 1999 as well. Consequently we could evaluate the path leading to the current situation and the development of the competitiveness of Hungarian companies based on three similarly structured and sized database. The results of the previous surveys justify the validity of the research methodology. During our analysis we used five-point-Likert scales, and we explored significant relationships

by applying ANOVA-tests comparing means of the evaluations (significance level was 95%). However, we would like to emphasize that the survey and its results reflect the opinion of the executives, not some objective truth (Chikan et al., 2002).

CHARACTERISTICS OF THE SAMPLE

The sample of 1204 executives of 301 companies consists of primarily of medium sized manufacturing companies in mostly domestic ownership. One third of the sample are large companies, almost 42% of the companies are medium sized firms, and a quarter of the sample are small enterprises.

Half of the companies in the sample have Hungarian ownership (or dominant Hungarian ownership), 20% of the firms have dominant foreign ownership. The ratio of the state-owned companies in the sample is relatively high, it is around 30%.

Since one of the main purpose of this study was to analyse the influence of decision making on the competitiveness of

the companies three “performance clusters” were formed. The self-evaluation of companies’ performance compared to the industrial average served as a basis for the separation of the clusters, which have different performance characteristics. It was found that managers generally judge their operating performance (level of technology, management and product and service quality) better, than the market level performance (market share based on sales revenue) and financial performance (return on sales and return on capital).

The group of the most successful firms consists of 94 *leading companies*; all of their performance characteristics are above the industrial average.

Average performers form the largest group (98 companies), characterised by about average performance in almost all aspects. The respondents consider their product quality to be better than the average, but it seems that this is not approved by the market (in this respect the rating is a little bit weaker than the average). Their financial performance can be considered to be average.

The third group (85 companies) consists of companies that are *lagging behind*: quality and management are considered to be above or around the average, but they are also characterised by weaker market performance and the worst financial performance.

RESEARCH MODEL: A NEW INTERPRETATION OF DECISION SUPPORT

Traditional views regard decision support as a technical tool, which backs decision making in different domains. The concept of *decision support system* (DSS) is very broad. A DSS can take many different forms. Minimally we can say that a DSS is a system for making decisions. Supporting a decision means supporting the choice by supporting the estimation, the evaluation and/or the comparison, and choice. In practice references to DSS are usually references to computer applications

that perform such a supporting role. For Keen and Scott Morton (1978), a DSS couples the intellectual resources of individuals with the capabilities of the computer to improve the quality of decisions (“DSSs are computer-based support for management decision makers who are dealing with semi-structured problems”). For Sprague and Carlson (1982), DSSs are “interactive computer-based systems that help decision makers to utilize data and models to solve unstructured problems”.

Our approach introduces another interpretation of decision support and focuses on the human side of the subject. Technical support seems absolute necessity for managerial decision making in the new millennium, however other “softer” factors are also crucial at effective decision making. Our model contains three domains where different capabilities, resources can support decision making, these are the (1) management skills and decision making approaches, (2) the decision supporting role of the information systems and performance measurement and management practice, and (3) the top managers’ attitudes towards their stakeholders. We believe that these factors can strongly influence managerial decision making and hereby the competitiveness of the firms.

In the centre of our model the management skills and decision making approaches are placed. The existence of these skills and the optimal usage of the appropriate approaches are the basic supporting factors of managerial decision making. These are very personal aspects of decision making they are attached strongly to the decision maker. Into the next level we put the decision supporting role of the information systems and performance measurement and management practice. At this point we emphasize the adequate usage of information in the decision making process. At last on the third level the top managers’ attitudes towards their stakeholders are put. Stakeholder

management approaches state that understanding stakeholders' contribution to the firms' performance and the integration of the stakeholders' views and opinions into the decision making of the firms can produce more effective decision making since it usually increases the pool of alternatives and the legitimacy of the decisions.

MANAGEMENT SKILLS

The quality of the decision making activity and the company's success is considerably influenced by the fact of who makes the decisions, what skills and capabilities they have, what their managerial style is, and also what techniques and methods they use in the course of decision making. Consequently, it is not only the applied decision making approach and the managerial style that leave their mark on decision making, but it is equally important, what level of professional abilities, education and experience the managers have.

What characteristics or individual skills must a management have to be successful? What are the strengths and weaknesses of the Hungarian managers? In order to answer these questions we used as a starting point the outcomes of an international research (Hickson et al., 1986), and investigated how Hungarian managers in our sample met their challenges.

The survey embraced the general abilities of management. What is more we encouraged respondents to make some self-evaluations. We asked them to define their strengths and weaknesses according to the following characteristics and skills by evaluating themselves on a five-point-Likert scale:

- communication skills
- professional expertise
- executive skills
- problem solving skills
- ability to represent ideas
- organising skills

- sense for business
- use of PC and computers
- analytical skills
- practice minded behaviour
- risk taking nature

Considering the evaluations of all respondents (N=1204), the "self-image of the manager" fulfilling all expectations of management was appeared. The given characteristics or skills on the top of the following list are their strengths: practice minded behaviour (4.1), professional expertise (4.09), problem solving skills (3.97), sense for business (3.87), organising skills (3.78), executive skills (3.78), communication skills (3.74), ability to represent ideas (3.69), analytical skills (3.64), risk taking nature (3.46), use of PC and computers (3.17).

Some interesting features are revealed by this ranking. Naturally, the top and the bottom of the list are worth attention, since the skills outline a manager-image frequently mentioned in different interviews with top level managers during the last years. The major task of a manager is to solve problems inside and outside the company while the use of computers at top level is not a must since they can get all necessary IT support whenever they need. The other skills could be divided into two subgroups in the order. Those skills are more important - and happen to be in the upper part of the list among the strengths - which managers can not buy, and those which are available through different channels i.e. consultancy like organising skills, analytical skills or IT knowledge are in the second half of the list among the weaknesses.

As it is widely known modern business executives need to handle a wide variety of activities requiring well developed skills. They have widespread duties, such as meeting with other executives and managers within the company, handling customers, negotiating with investors and partners, struggling with the media, and meeting with employees and staff at every level of the company. Practically

everything that executives do involves interacting with people. During these interactions they communicate ideas and the company's values and try to solve problems. All of these types of activities involve a constant balance between practicality and intuition. Management skills might help to carry out these activities by complementing business knowledge and expertise.

There is a big debate at the present time whether the analytical or the intuitive way of thinking is more powerful in the business arena. Thomas Davenport argued that some companies have built their very businesses on their ability to collect, analyze and act on data. Every company can learn from what these firms do (Davenport, 2006). The popular "head versus formula" controversy that is based mostly on laboratory studies in the past, established the superiority of the rational-analytical approach over the soft judgmental or intuitive approach. The extension of this approach to strategic decision making is problematic, however. This is because strategic decisions are characterized by incomplete knowledge. Consequently, it may be impossible to identify quantitative equations among variables and find numeric values for parameters and initial states. That is why people still use their heads instead of formulas in strategic cases (Khatri – Alvin, 2000). As a conclusion of the very intensive debate by now there is an agreement that intuition is not an irrational process. It is based on a deep understanding of the situation. It is a complex phenomenon that draws from the store of knowledge in our subconscious and is rooted in past experience. It is quick, but not necessarily biased as presumed in previous research on rational decision making (Khatri – Alvin, 2000).

In our opinion top level managers badly need the capability of intuition. We know that some skills and capabilities support more the intuitive way of problem solving than the others. Our research

method also involved interviewing a dozen university professors from Hungary and the United States in an effort to link the management skills involved in this research with the analytical or intuitive way of problem solving. A quick survey was designed and the professors were asked to think about the above mentioned skills and to rate them as to whether they supported analytical or intuitive thinking. They could mark only one answer for each skill. All of the respondents had strong management background since they were teaching either in the field of Organizational Behaviour or Decision Sciences.

Based on the distribution of votes we can make a solid distinction between the two types of capabilities. Based on the professors' answers the investigated skills were split into two groups depending on their role supporting intuitive or analytical problem solving. According to their opinion intuitive thinking and problem solving are best supported by the following skills: willingness to take risks, sense for business, ability to represent ideas, practice minded behaviour and excellent communication skills. On the other hand other skills take precedence when problems require analytical solutions. The skills that most support this approach were determined to be: analytical skills, computer skills, organising skills, professional expertise and problem solving skills. Not surprisingly executive skills are somewhere between these two groups of skills since effective leadership requires a combination of analytical and intuitive approaches.

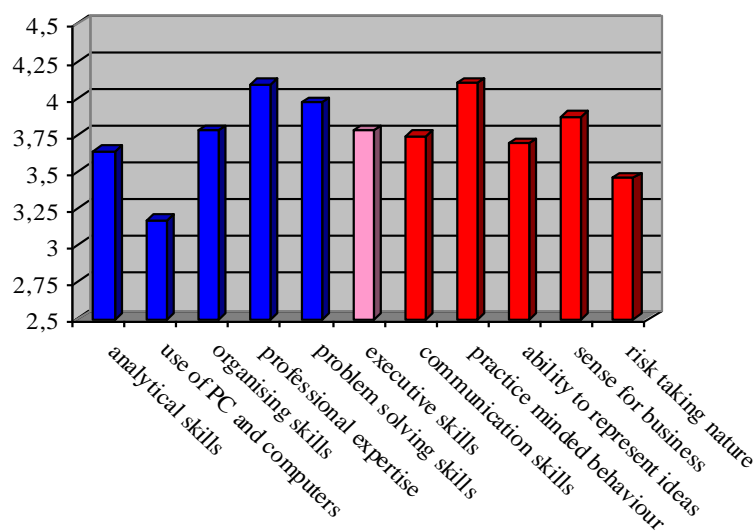
Subsequently we revised this distinction at two points. Most of the authors (Sinclair – Ashkanasy, 2005, Csikszentmihalyi, 1996, Klein, 2004) agree, that intuition is nothing else than experience put into practice. This demystified definition of intuition shows how one can become expert in one's profession through one's cumulative experience or knowledge. Klein argues that intuition is a developed sense helping to

put experience into recognizable patterns for future use. This occurs as we accumulate our professional expertise in a certain field. This pattern recognition capability differentiates the novice from the truly expert. Klein called this capability as “the power to see invisible” (Klein, 1998). In his research he discovered that experts not only know more, but they also observe more. For example, a jeweler needs only a cursory glance to distinguish a diamond from an imitation. Such ability is based on knowledge but also depends on accurate and instantaneous perception. The jeweler’s knowledge coexists with the perceptual acuity needed to distinguish accurately and quickly the genuine from the fake article (Restak, 2001). On the base of these arguments professional expertise was listed among the intuitive skills in the final split of the capabilities. As it is well-known good communication skills often go with good analytical skills, since both are the functions of the left hemisphere of the brain (Browning, 2005). Taking this into consideration in the final split of the skills communication skills were listed among the analytical skills (it is highlighted by

Figure 1). The most positive picture emerged in the area of *professional expertise* and *practice minded behaviour*. Professional expertise leads the rank of the analytical skills while practice minded behaviour is the most important strength among the creative skills. Consequently, for management positions, the greatest emphasis is on practical skills, while professional skills and capabilities fell into the background. Indication of the *sense for business* as an important strength is also promising as Hungary completes its transition to a market economy. Among the weaknesses is the lack of *risk taking nature* which could cause problems in a challenging economic environment when linked to the shortcomings of *representing ideas*. A frequently mentioned shortcoming was the regrettably low level of *computer skills*.

This is reconfirmed by the research. If we compare the results of the past three competitiveness surveys (1996, 1999, 2004) both are headed by the same skills: practice minded behaviour, the high level of professional expertise, problem solving skills and sense for business.

FIGURE 1
Self-assessments according to the management skills



These strengths outline a highly able and pragmatic management that adapted the new conditions but still lacked the risk taking nature and the ability to represent ideas whereas both were necessary for creative problem solving.

Analysing the self-assessments by their analytical or intuitive nature, we find that the managers compared in the four management groups (executives, financial managers, commercial managers, operations managers) statistically have more strengths in the field of intuitive thinking. That is especially true in the case of commercial managers. Surprisingly CEOs evaluated their intuitive skills to be the lowest, which totally contradicts the management literature in which CEOs are usually considered to be the most intuitive thinkers within the company. However, in our sample there were no big differences in this respect and the tendencies were rather similar in the four groups of managers.

It was found that the *leading companies* usually have managers with better capabilities. They show higher figures at every managerial skill that was observed. They have significant advantage at expertise and problem solving skills which capabilities are directly connected to decision making activities.

DECISION MAKING APPROACHES

In the literature of decision theory, several models of organizational decision making can be identified. These differ from each other in a sense that they use other prerequisites of decision makers and also refer to the organizational connections of decision makers. The core question of this research was whether Hungarian managers in the sample could be considered to be more rational or more intuitive decision makers, depending upon their nature. Therefore the focus of the study was on their preferences for analytical and intuitive problem solving approaches. Clarification was sought on Hungarian peculiarities. With the use of

well-known decision taxonomies, we tried to map out the occurrence ratio of different decision making approaches at Hungarian companies, and which approaches were typical.

Hungarian executives were asked to indicate their decision making styles by responding to statements in a questionnaire. The items were carefully worded to avoid negative connotations that might influence their answers. Responses were given on a five-point-Likert scale with 5 being the most characteristic of their company and 1 being the least characteristic.

The rational (analytical) approach assumed one-man decision making, where the decision maker uses a classical economic approach to reach the optimal solution. This is a normative model that focuses on analysis. It assumes that all necessary information is available or can be obtained. All possible alternatives can be revealed along with reasonable costs and its consequences can be precisely measured. With the use of appropriate quantitative methods, usually the optimal profit-maximizing decision can be made

The model of behavioral science (intuitive) decision theory investigates decision makers who are not able to rationalize and make decisions that enable them to win time and somehow “muddle through”. This approach requires sound preparedness in the phase of problem identification. Usually, an environment that is changeable and highly uncertain dominates the strategic decisions of the organization. Decision makers do not have enough time and resources for a comprehensive problem analysis. Solutions mostly rely on previously acquired experience and the detailed analysis is frequently replaced by intuitive solutions.

The rational (analytical) approach characterizes analytical thinkers while the model of behavioral science characterizes intuitive thinkers. Managers in the sample expressed the frequency of usage of these two approaches.

It is evident from the short introduction of the major characteristics of the two models that an organization which can create its decision making mechanism according to the optimizing (analytical) model of the normative decision theory can gain a competitive edge over other organizations. However, descriptive decision theory points out that in real decision making situations, especially in case of complex company decisions that are accompanied by a high level of uncertainty, several factors can hinder the surfacing of the normative model in its clear form. Important causes of differences between the ideal and the real are eliminated by other models. The results of this survey show that Hungarian managers hesitated to rely on their intuition when making decisions. This failure could ultimately have negative impact on the performance of the company.

That can explain why they are afraid of using the intuitive model and rely on the analytical approach more heavily. After finding that they are equipped with the necessary skills to be intuitive this is an unexpected research result. The figures also show their shortcomings in analytical skills. So why are they still reluctant to rely on their intuition? Probably they are biased culturally. In Hungary, if someone is considered to be rational it implies that he or she is careful, reliable and responsible, while intuition is still considered to be a negative trait – something unjustifiable, uncertain, and unreliable.

DECISION SUPPORTING ROLE OF THE INFORMATION SYSTEMS

Another factor of decision making background examined in our research is concerned with the information side. What are the strengths and weaknesses of the information systems of the Hungarian firms? What kinds of activities are supported by their information systems? First, we asked top managers to evaluate to what extent the information system of their

company does support certain managerial activities like planning, making business decisions, communication inside the company and with business partners, control activities, finding costs reduction opportunities, performance evaluation at company level, evaluation of functional activities, evaluation of business partners and employees, measuring customer satisfaction, and employee satisfaction, improving internal business processes, and also cooperation with business partners. Evaluations were given in a five-point-Likert scale.

The answers suggest that the information systems are relatively effective when supporting

- monitoring (3.79)
- profitability analysis (3.66)
- planning (3.58)
- costs reduction (3.52)
- pricing decisions (3.44)

while are relatively less effective when supporting

- distribution channels profitability (2.44)
- customer service level evaluation (2.54)
- make-or-buy decisions (2.46)
- outsourcing decisions (2.57)
- product development decisions (2.62)

These results suggest that traditional managerial activities such as performance evaluation, control activities, planning or business decision making are the most in focus of the information systems. However, activities that measure the external stakeholders' (business partners and customers) and the employees' performance and satisfaction are less supported. Aiding of decisions related directly to financial goals (pricing and cost management activities, profitability) is evaluated better than support of operational and marketing decisions. Although these findings are not unexpected at all, we must stress that measuring customer satisfaction surprisingly proved to be one of the less supported activity, which completely

contradicts the growing importance of the customer satisfaction measure emphasized in the other parts of the survey.

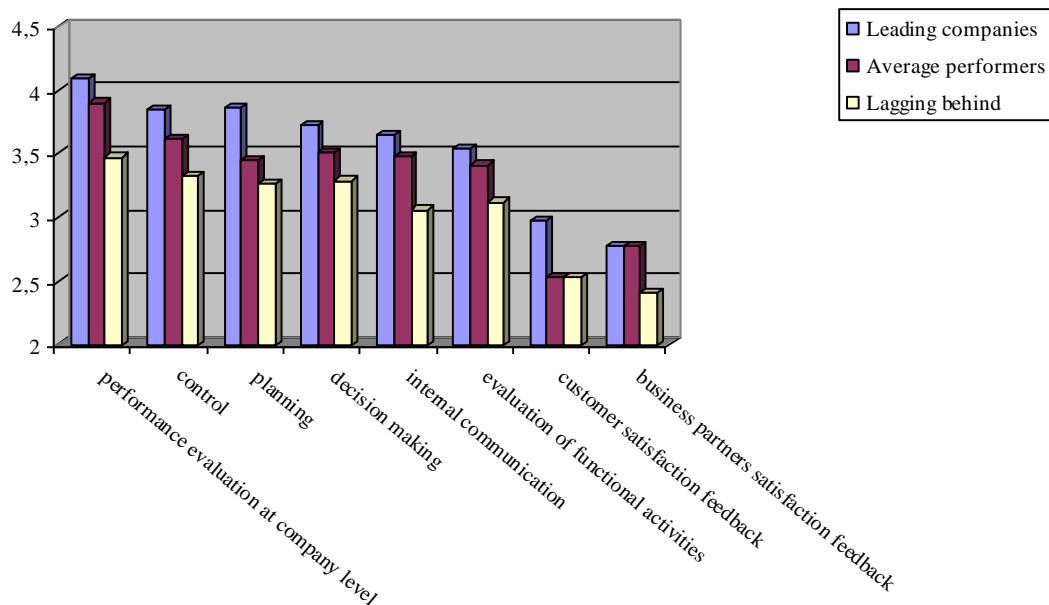
Executives and three functional (financial, operational and commercial/marketing) managers also evaluated the effectiveness of the information systems. These results generally do not deviate significantly from the executives' answers, but in case of certain activities we experienced small differences. According to the financial managers activities such as performance measurement, control, and costs reduction effort are more heavily supported by the information systems than in other managers' opinion. We suggest that since the financial managers use these supporting modules of the IS likely on a daily basis, it is expected that they would over evaluate the effectiveness of these components. Similarly the communication with business partners according to communication managers is supported

more effectively than according to the other managers.

One of the main findings suggests that companies with different business performance and dissimilar responsiveness significantly differ in their decision support background. We found that firms with better information systems supporting managerial decision making show better business performance and react more effectively to market changes and new challenges.

We experienced significant differences across performance clusters in the practice of the firms. Information systems of the proactive companies and firms with good responsiveness support the majority of the analysed activities (planning, decision making on different levels, communication, etc.) more than in case of the companies demonstrating weak responsiveness.

FIGURE 2
Activities supported by information systems in different performance clusters



The managers of the good performers feel this support stronger than the managers of the average performers or the companies lagging behind (see Figure 2). The biggest discrepancies were found at the traditional managerial activities (performance evaluation on company level, planning, control, and business decision making), but there are significant dissimilarities in case of measuring customer satisfaction and evaluation of business partners. The information systems of the leading firms support much better the evaluation on every level (functional activities, overall performance, and even across the boundaries of the firm) which can be a key factor of the overall success.

PERFORMANCE MEASUREMENT AND MANAGEMENT PRACTICE

Performance measurement and management practice is a key supporting mechanism for managerial decision making. Our main research question concerning performance measurement was whether the firms' performance measurement practice is consistent with the firms' strategy and it gives useful information about the most important competitiveness factors. Decision supporting role of performance measurement practice could be evaluated by comparing usefulness (importance) and usage of different performance metrics and methods. The idea of Performance measurement questionnaire (Dixon et al., 1990) provides help in the development. There are two common errors in the process: using wrong measures, so that spending time improving something less important/useful for the company, and failing to use the right measure, so that something that is important for the company is neglected. The first has been labelled a *false alarm*, the second, a *gap* (Schmenner – Vollmann, 1994, Schmenner, 1997).

Performance measurement literature suggests that “gaps” are often associated

with non-financial measures (customer satisfaction, introduction of new products, employees' involvement, etc.), while “false alarms” (or “over measurement”) is more typical at cost-based and productivity measures (machine and labour productivity, direct costs reduction, etc.). (Schmenner, 1997) The harmony between usage and perceived importance of performance measures was one of the main issues of our examination.

Based on our earlier research the performance measurement practice of Hungarian firms is characterised by the dominance of traditional accounting, financial and cost-based methods. Managers usually understand the importance of non-financial performance elements (quality, customer service level, flexibility, etc.), and consider tracking of these factors inevitable; however, they rarely use the connecting measures of performance. Based on the results of the Competitiveness research survey in 1996, the largest “gap” characterised the product (service) quality: managers found it as one of the most useful factor (4.8 points in average in a five-point-Likert scale), but relatively few of them (52%) have used systematically the measures connected. In the last years the quality came to the front in the business practice. According to our survey results in 1999, the product quality became the most widely used performance measure (82%), and was considered the most useful (4.8).

Similar inconsistency emerged in 1999, but that one characterized the measures of customer service. Managers gave them high importance (4.5), but few of them (49%) tracked these measures regularly. This experience is keeping with the results of other research findings (e.g. Dixon et al. 1990; Schmenner – Vollmann 1994), which conclude that the measures of customer services are rarely used compared to the evaluation of their importance, however certain “traditional” performance measures (e.g. labour or machine productivity, direct costs

reduction) are not considered too important but are relatively widely used.

In 2004 performance measures/tools which are widely used: financial ratios (88.1%), cash-flow statement (85.8%), number of customer complaints (77.9%), productivity (77.7%), product and/or service quality (77.2%). Whereas performance measures/tools evaluated as most useful are product and/or service quality (4.62), customer satisfaction (4.50), productivity (4.32), order fulfilment punctuality (4.32) and suppliers' service quality (4.28). (All these figures are based on the evaluation of financial and operational managers). Our latest survey results suggest that the gap regarding customer service is narrowing (4.5 and 65% respectively). Regarding false alarms, there are no remarkable changes in the three surveys: financial performance measures are widely used, but evaluated relatively less useful. This is totally consistent with the international findings (Schmenner, 1997).

The largest gaps in 2004 relate to the effective and efficient information flows with business partners and employees. The recognition of the importance of these factors suggests that companies would like to give more attention to communication with their stakeholders but they miss the adequate tools to manage these relationships.

ATTITUDES TOWARDS STAKEHOLDERS

Among the influencing factors of decision making background, we have examined the top managers' attitudes towards their stakeholders. During the last decades the stakeholder management approach became widespread both in academic research and business practice. Clement (2005) states that companies have to face increasing pressure from their stakeholders, and they also have thriving legal basis to take their opinions and interests into account during decision making. Complying with these

expectations of different stakeholder groups firms can improve the financial performance according to several studies.

In our sample three stakeholder groups excelled regarding the influence and pressure on the firms' decision making. These groups are the owners (investors), the customers and the managers themselves. The managers reported that the interests of the employees, the regulatory agencies and the suppliers are regarded less significant and environmental considerations have similar modest emphasis during decision making. The expectations of local communities and the media are taken into account in the most moderate way; their voice usually does not gain a hearing by the management.

We used the stakeholder-focused approach to performance management of the Cranfield Centre for Business Performance. The Performance Prism approach (Neely et al., 2002) emphasises both directions of these relationships: the expectations of the stakeholders are taken into account, so do the expectations from the company's side. We analysed how the firms perceive and express the expectations and needs of their stakeholders, and to what extent this expectations influence their decision making. We assumed that companies also raise expectations to their stakeholders, and they evaluate the contribution of the different stakeholder groups to the firm's activity. Regarding these expectations we could also depict how management information systems, performance measurement and management practice and other management tools support the maintenance and development of the relationship with the stakeholders. Beyond the general picture we wanted to differentiate among certain company clusters and explore the differences among these groups.

Concerning expectations of certain stakeholder groups, top managers are mostly agreed that:

- workers expect stability

- customers expects high service level
- owners (investors) expect stability and security
- workers expect high salaries
- customers expect stable and calculable relations
- and local communities expect stable employment.

Regarding expectations from certain stakeholder groups top managers are mostly agreed that they expect:

- high level work from employees
- high service level from suppliers
- stable and calculable relations from suppliers
- reliable relationships and good communication with customers
- sincere opinions and suggestions from stakeholders
- guaranteed profitability from customers

- loyalty from employees.

It was experienced that companies with eminent performance are aware of their stakeholders' expectations in general, but there are two groups from which good performers perceive significantly higher expectations than the other firms in our sample (see Table 1). They realize that the owners (investors) expect high level profitability, stability, and security. Although these expectations seem trivial, companies with average performance or lagging behind agreed on these statements less vehemently than their successful counterparts. The case is similar when analysing the companies' relationship with the suppliers. Firms doing well often states that suppliers expect reliable relationship and good communication, while the less successful companies do not recognise this pressure so strongly.

TABLE 1
Expectation from and perceived expectation of the stakeholders in different performance clusters

	Leading companies	Average performers	Lagging behind
Our owners (investors) expect stability and security	4.29	4.07	3.96
Our suppliers expect reliable relationships and good communication from our suppliers	3.91	3.58	3.64
Our owners (investors) expect high level profitability	3.51	2.91	3.06
We expect high level work from our employees	4.84	4.71	4.66
We expect high service level from our suppliers	4.45	4.14	4.12
We expect positive atmosphere from our local communities	3.73	3.69	3.38
We expect informal and market, non financial support from our owners (investors)	3.45	3.04	3.09
We expect low prices	3.09	3.33	3.54

The survey also detected the expectations raised by the companies themselves. These expectations are usually higher than the ones are put by the stakeholders in the same relationship (the only exception is the perceived expectations from the customers). The successful companies in several cases raise significantly higher expectations than the others: they expect strong non-financial support from the owners, high level work from the employees, high service level from the suppliers, and positive atmosphere from the local communities. Although average performers and firms lagging behind also require some cooperation from the stakeholders around the company, these expectations are significantly lower than the ones of the leading firms. According to Table 1 in one case the bad performers have greater expectations than the leading firms. They expect low prices which can be explained by their strong focus on costs reduction as a critical competitive advantage on the market.

CONCLUSIONS AND RECOMMENDATIONS

Our research revealed that different human factors supporting managerial decision making strongly influence company performance and competitiveness of the firms. We discussed three domains in our study; these were the (1) decision management skills and decision making approaches, (2) the supporting role of the information systems and the performance measurement and management practice, and the (3) attitudes toward stakeholders. It was demonstrated that managers strive to make rational decisions, and this approach has a positive meaning to the Hungarian managers. However, rational decision making does not trigger always higher performance in a dynamic environment; therefore the adequate application of different decision making approaches would be desirable. Management skills positively correlated with responsiveness

and company performance, which indicates that the existence of these skills and capabilities discussed earlier has significant influence on these company performance.

Information systems rather support control, than decision making among the companies in our sample which testifies that Hungarian managers do not exploit the opportunities provided by management information systems. Promising finding is that although financial measures still dominate performance measurement practice, operational measures more and more widely used. However, it is problematic, that companies usually measure that is easily can be done, instead of concentrating on important factors. Since successful companies have a more balanced performance management systems firms should create customized performance management practices focusing on their own success factors.

Good performers usually communicate more actively with their stakeholders, and they rely on these groups trying to integrate their opinions and interests into the decision making of the company.

REFERENCES

- Browning, G. (2005). *Emergenetics: Tap into the New Science of Success*. New York: Harper Collins.
- Chikan, A. et al. (eds.). (2002). *National Competitiveness in Global Economy: the Case of Hungary*. Budapest: Akademiai Kiado.
- Clement, Ronald W. (2005). The Lessons from Stakeholder Theory for U.S. Business Leaders. *Business Horizons, (Indiana University Kelley School of Business)*, 48, 255-264.
- Csikszentmihalyi, M. (1996). *The Work and Lives of 91 Eminent People*. New York: Harper Collins.

- Davenport, T. H. (2006). Competing on analytics. *Harvard Business Review*, January, 99-107.
- Dixon, J. R., Nanni, A.J., and Vollmann, T.E. (1990). *The New Performance Challenge – Measuring Operations for World Class Competition*. Homewood: Dow Jones-Irwin.
- Hickson, D., Butler, R., Cray, D., Mallory, G., and Wilson, D. (1986). *Top Decisions: Strategic Decision Making in Organizations*. San Francisco: Jossey-Bass.
- Keen, P. G. W. and M. S. Scott Morton (1978). *Decision support systems: an organizational perspective*. Reading: Addison-Wesley Pub. Co.
- Khatri, N. and Alvin, H. N. (2000). The role of intuition in strategic decision making, *Human Relations*, 53(1), 57-86.
- Klein, G. (1998). *Sources of Power: How People Make Decisions*. Cambridge: MIT Press.
- Klein, G. (2004). *The Power of Intuition. How to Use Your Gut Feelings to Make Better Decisions at Work*. New York: Random House.
- Neely, A., Kennerley, M., and Adams, Ch. (2002). *The Performance Prism – The Scorecard for Measuring and Managing Business Success*. London: FT – Prentice Hall.
- Restak, R. (2001): *Mozart's Brain and the Fighter Pilot. Unleashing your brain's potential*. New York: Harmony Books.
- Sinclair, M. and Ashkanasy, N. M. (2005). Intuition. *Management Learning*, 36(3), 353-370.
- Schmenner, R. W. (1997). Some Measures of Concern, In Dickson, T. (ed.), *Mastering Management* (pp. 302-306). London: Pitman Publishing, IMD International, London Business School, The Wharton School of the University of Pennsylvania.
- Schmenner, R. W. and Vollmann, T. E. (1994): Performance Measures: Gaps, False Alarms and "Usual Suspects". *International Journal of Operations & Production Management*, 14(12), 58-69.
- Sprague, R. H. and Carlson, E. D. (1982). *Building effective decision support systems*. Englewood Cliffs: Prentice-Hall.
-
- Zita Zoltay Paprika**
Zita Zoltay Paprika is an associate professor at Corvinus University of Budapest.
- Agnes Wimmer**
Agnes Wimmer is an associate professor at Corvinus University of Budapest.
- Richard Szanto**
Richard Szanto is a professor assistant at Corvinus University of Budapest.