THE USEFULNESS OF MANAGEMENT ACCOUNTING INFORMATION: USERS' ATTITUDES

Dr. Zina Gaidienė

International University
of Management and Economics
Traku 9/1, 01132 Vilnius, Lithuania
Phone: +370 682 16407
E-mail: zgaidiene@takas.lt

Dr. Rimvydas Skyrius

Faculty of Economics
Vilnius University
Saulėtekio 9, 10222 Vilnius, Lithuania
Phone: +370 698 71648
E-mail: rimvydas.skyrius@ef.vu.lt

During the years of Lithuanian economic independence, much emphasis is laid on financial accounting and auditing, whereas management accounting has been languishing in the background.

This paper investigates the role and development of management accounting and the usefulness of its information perceived by managers. The management accounting system is characterized in terms of information. These characteristics are: scope, timeliness, the level of aggregation, and information which assists integration.

Empirical support for the relationship between the features of management information and its perceived usefulness is provided using data gathered from questionnaires and interviews. The search for usefulness of management accounting information was guided by the accounting research literature. The goal has been to determine what features of information are recognized by managers and accountants as useful.

The results of analysis have shown that all interviewed managers perceived management accounting (economic and non-economic) information as useful. However, the level of their scores has been higher than that of accountants.

There had been no comprehensive study involving the evaluation of usefulness of accounting information by Lithuanian managers. The present study has been undertaken to learn more about how Lithuanian managers perceive the usefulness of management accounting information. This was the principal objective of this research. Since managers' satisfaction with the accounting system could be highly biased, the next objective was to determine whether accountants perceived the same features of information as useful. The third objective of this study was to review the possibilities for the development of management accounting systems.

Thus, the purpose of this paper was to examine the perception of usefulness of accounting information by its suppliers and users.

The paper proceeds as follows. We describe management accounting, its role and development. We provide a framework for the survey based on a review of the extensive literature on research published by foreign management accounting journals during the period 1980–2005, including Accounting, Organizations and Society, The Accounting Review, Contemporary Accounting Research, Journal of Accounting and Economics, Journal of Management Accounting Research, Strategic Finance, Business and Finance History, Cost Accounting Magazine, Management Accounting Quarterly. A survey and its statistical analysis are presented. The final section contains conclusions.

Key words: *management accounting, perception of accounting information, features of management information.*

Method

The last decade saw significant changes in Lithuanian business accounting. Numerous business companies have adopted international accounting standards and the new financial reporting rules set by the government. There emerged a new information technology industry, whose vendors assist clients with the design and implementation of modern computerized management systems. The issue for accountants is what type of information should be reported and supplied, while the problem for managers is what information should be demanded.

In 2004 and 2005, one of the authors has led a number of training seminars for managers of various companies. A three-page questionnaire was handed out at these seminars, and 74 responses were collected. The respondents included both general managers and accounting/finance managers. Realizing that we do not have a random sample of managers, we are making an assumption that those attending training finance seminars are probably ones that are interested in accounting information topics. This study utilized both face-to-face interviews and the data collection process. A questionnaire for it was developed by modifying similar research tools used by Chenhall and Morris (1986) in the USA and presented by one of the authors to the participants of financial management training seminars during 2004–2005.

The data used in this research are based on questionnaire responses of 74 managers from 25 business companies located in Lithuania. The 74 individuals who participated in this study were classified into three groups. One group consisted of managers responsible for accounting. The second group included functional managers (sales, marketing, production) who used accounting information. The third group of interviewees were middle-level bank managers.

Seventy four managers who participated in the study were distributed as follows: 42% of respondents worked in commercial banks, 25% were accounting experts from small and medium business units (production and services), 33% were executives and senior managers from various companies. This broad of respondents' representation allowed an assumption that a wide range of environmental characteristics, production technologies, and levels of managerial autonomy would be evaluated and analysed.

The data were gathered by interviews based on structured questionnaires (see Appendix A).

A set of questions was used for each of the four information dimensions. The ten-point scale ranged from "not useful at all" to "very useful". The experimental task required each participant to evaluate four accounting information features.

Of 74 respondents, 42% held qualifications at the post-high technical school level and 39% at the past economic and management school level. Not all participants had attended training seminars: 15% of them had never attended a training seminar, but the average seminar attendance was 2 seminars. Managers were asked to indicate whether they had been attending seminars on the basics of management, finance, accounting or other. 47% of those who had attended seminars were interested in seminars on finance and accounting, 20 % in management basics, and the remaining 33% had attended other seminars. The average age of respondents was 37 years (range: 24–49), and the average time spent in the manager's position was 8.3 years (range: 4–17).

Management accounting in foreign literature

Management accounting evolved during the industrial revolution as a tool for measuring and managing resource consumption, output, and productivity at the operational level of a company (Williams, 2004). The primary focus was on providing information for planning and controlling the productivity and efficiency of internal processes. As a whole, the information provided was directly relevant to the task of optimising cost, time, asset utilization.

Thus, the simplest form of definition is that "management accounting is the process of providing useful information to managers" (Bruns, William and McKinon, Sharon, 1993). Yet this simple definition does not express the multifunctionality of this term. The term "providing" implies not only communication and reporting functions as typical of accounting. It means also a secondary function including control of the systems and processes by which the information reaches the managers. The other issues incorporated in this definition include the characteristics of the information that accountants claim as their purview. Thus, we think management accounting should be described as a two-sided function, including the managers' and accountants' standpoint.

Management accounting textbooks state that management accounting is a body of knowledge whose understanding is necessary for the success of managers. For example (Horngren et al., 2006; Drury, 1992; Kaplan et al., 2004), the focus on the managers' standpoint is defined as follows: management accounting measures, analyses, and reports financial and non-financial information that *helps managers* to make decisions to fulfil the goals of an organization. Managers use management information to choose, communicate, and implement strategy. They also use management accounting information to coordinate product design, production, and marketing decisions. Management accounting information enhances decision making, guides strategy development and evaluates existing strategies, and focuses efforts related to improving organizational performance and to evaluating the contribution and performance of organizational units and members (Kaplan, 1998).

Many theoreticians (Atkinson et al., 1997) mention scorecard keeping as one of the traditional roles of management accounting. This role evolved to support both the standard engineering control paradigm and the organization control paradigm. The engineering control paradigm consists of setting a target, undertaking a course of action, measuring the result, comparing the result to the target, and responding to the variance between the result and the target.

Thus, management accounting can be viewed as the information support system that best facilitates communication, motivation and performance evaluation within a variety of organizational structures. Internal, managerial or management accounting is responsible for providing information and helps managers make decisions on the efficient and effective use of enterprise resources (Hendrickson, 2001).

From the accountant viewpoint, we follow the definition of the Institute of Management Accountants (1997): "management accounting is a value-adding, continuous improvement process of planning, designing, measuring, and operating non-financial and financial information systems, that guides management action, motivates behaviour, and supports and creates the cultural values necessary to achieve an organization's strategic, tactical and operating objectives."

Accounting researchers (Foster, Young, 1997; Shields, 1997; White, 2004) take a longer-run perspective on the role of management accounting in an organization. From this viewpoint, the definition actually focuses on the management accounting function in the organization. White (2004) points out that management accountants have a unique focus on the work inside organizations and on creating a sustainable operational value; Hendrickson (2001) stresses the cost–benefit consideration of managerial accountants.

Management accounting has often been used as a synonym for cost accounting. The phrase "management accounting" has long since superseded "cost accounting" as the preferred label by professional associations (Foster and Young, 1997). A new set of management accounting logic is emerging, directing attention toward a greater strategic role for management accountants (Sharman, 2003).

Perhaps the most important attitude that recently accountants are recognizing is the shift in management accounting. International Federation of Accountants (IFAC) revised its 1998 International Management Accounting Practice Statement, which now states: "management accounting refers to that part of the management process which is focused on organization resource use. Thus, it refers to managerial processes and technologies that are focused on adding value to organizations by attaining the effective use of resources in dynamic and competitive contexts". In addition, Sarbanes-Oxley Act brings a generous portion of tidings to the profession of management accounting in the USA. It recognizes that the most important part of the accounting profession is the ethical accountant working inside business, exercising effective and efficient decision support, planning, and control over the organization's value-creating operations. Shields (1997) predicts that environmental and organizational changes imply that management accounting will become what it is not and cease to be what it is. The definition, nature and boundaries of management accounting will change. The term of management accounting will increasingly become too limited a concept and will be replaced by *organizational accounting*. This broader concept will enable to incorporate more types of accounting and accountabilities in organizations, organizational subunits, and interorganizational arrangements (Bourguignon, 2005).

There are no original management accounting periodicals in Lithuania. There has not been much research, either, to involve the analysis of perceived usefulness of management accounting systems, published in foreign special literature.

Studies on management accounting can be broadly classified into two categories. The first category of papers predominated earlier in theoretical literature on management accounting. For instance, research in the 1980s and 1990s brought about: (a) the relationship between managers' demand for information and judgement accuracy (Shields, 1983, 1993), (b) motivational effects of management accounting system or (c) effects of organizational factors on management accounting system design (Chenhall, 1986; Gordon, Narayanan, 1984; Gul, Yew, 1994; Mia, Chenhall, 1994).

The second category of research papers focuses on the sources from which managers receive information. The practice of modernization of management accounting systems and development of new systems are the problems which are often discussed in these papers. There is a large body of research on how management accounting systems are changing (White, 2003, 2005; Matteson, 2004; Billings & Capie, 2004; Williams, 2004; Sharman, 2003; Shields, 1995, 1997; Libby, Waterhouse, 1996; Atkinson et. al., 1997; Hemmer, 1996; Anderson, 1995; Swenson, 1995). For instance, Hemmer (1996) notes that after several less eventful decades, managerial accounting has recently become a hotbed of innovation and change. The analysis of factors in changes of cost management systems and in activity-based costing implementation predominates.

In the mid 1980s, Kaplan recognized that management accounting had failed to meet organization requirements. Relevance loss was hailed as the beginning of change for the better in the world of accounting. Significant efforts have been made by organizations around the world to implement new cost and performance management tools. These include Activity-based Costing and Balanced Scorecard. ABC in particular was perceived to be the solution to the management accounting needs of organizations.

Our paper belongs to the first category in the way that management accounting is analysed by how managers perceive the usefulness of information. The argument is that the key managerial accounting issues, both in the 1980s and today, are similar and relate to the system. However, in contrast to other research of this category, this paper studies the usefulness of accounting information perceived by its users and suppliers working in various areas.

Michael D. Shields (1983) examined empirically the relationship between supply, demand, and judgement accuracy when corporate managers analyse information to make a diagnostic judgement.

The greatest interest for us had the research and the results of the analysis accomplished by Chenhall and Morris. The goal of their research was to determine how organizational factors such as management structures, managers' perception of the changes of the external factors, interdependence of managerial decisions influence the nature and composition of the management accounting system. In other words, these authors analysed the correlation of two variables: organizational and accounting information.

Chenhall and Morris assume that changes in the organization and perception of management accounting as useful are interrelated. How the perception of management information usefulness should be interpreted? Do managers perceive the information needed for decision-making as useful?

The design of management accounting system, as defined by Chenhall and Morris, is influenced by information features that are useful for

Table 1. **Features of accounting information**

Scope	External information Nonfinancial information Future-oriented data
Timeliness	Frequency of reporting Speed of reporting
Aggregation	Aggregated by time period Aggregated by functional area Analytical or decision models
Integration	Precise targets for activities and their interrelationship within sub-units Reporting of intra-sub-unit interactions

Source: Robert H. Chenhall & Deigan Morris (1986).

management decision making. To examine and analyse the usefulness of the information, four features have been selected: 1) scope, nature; 2) timeliness; 3) level of aggregation; 4) the information to assist integration.

The scope of accounting information encompasses its range, quantitative measurement and time period. Traditionally, management accounting purveys the information about activities in a particular company; information is provided in monetary terms and overtakes past periods. In its most extensive meaning, management accounting provides the information related to the external business environment (Gross National Product, product market size, company's market share) or non-economic environment (demographic data, the identification of the customers' needs, competitors' actions, technology innovations). *Thus, the expressions of the various external factors, mostly non-economic, should dominate in management information. Moreover, in the context of management information, the possibility of the future events and their prediction should be estimated.*

The timeliness of the management accounting provides the managers with the possibility to react quickly to the events. Accounting timeliness is defined by the time required to present the information (since it has been ordered) and the frequency of the presentation (periodical reports). *Timeliness of information increases the management accounting possibilities to inform about the latest events and forwards managerial decisions.*

Management accounting may provide information aggregated in various ways: *consummately* raw primary data, aggregated with regard to time or goal. That might be data aggregated with regard to functional subdivisions, responsibility centers, year, quarter, month, and week information. In the same way the information may be aggregated to provide for particular decision making. For example, preparing the budget for the upcoming year, the manager might use the results of analysis of the last year trends of profit and cash flow. One of the most important aspects of the organization is the coordination of activities of its various subdivisions. To help managers, management accounting should provide them with the information on how purposive activities' indicators are influenced by the interrelations of various departments. In the management accounting system there should be information on how decisions in one area might affect the results of performance of the whole department. Managers' activities coordination may become very complicated if there is a significant interdependence of managers in the organizational structure. That is why in this environment integrated management accounting information is more valuable than in the organizations where their departments operate independently. In the same way, along with the growing decentralization the departments' activities become more diverse. In this case, integrated information is more useful in the coordination of management decision diversity.

Chenhall and Morris (1986) have performed a thorough research on the usefulness of the management accounting system. Applying the regression analysis method, they have determined not only direct, but also indirect factors influencing the perceived usefulness of the management accounting information. Chenhall and Morris (1986) came to the conclusion that the most important factor determining the management accounting system is the interdependence of managerial decisions. The aggregated accounting data, integrated information are perceived as useful by those managers whose activity results are dependent on other managers' performance. Aggregated and integrated information is valued by the managers from companies with a decentralized organizational structure. The financial responsibility accounting system, which contains various aggregated and integrated information, functions only in decentralized organizations. Decentralized management increases managers' responsibilities for the control of their plans and operations. This increases the opportunity to obtain the information which is not provided by financial accounting.

Results

Summarizing the data received by the interviews, all the answers have been grouped into four groups:

- useless information
- useful information
- very useful information
- cannot evaluate.

Respondents were selected on purpose and grouped into three groups:

- executives and senior managers from various companies (departments) (group A);
- managers in financial institutions (group B);
- accounting managers in business units (group C).

Comparative shares of the answers for each group were calculated and provided in Table 2.

The line of question 1 depicts the group items comprising the perceived usefulness of information about the probability of future events and the average responses. Data in this line show that with no exception all the respondents perceived the information related to the future events as useful, and 71% even pointed it out as very useful. While analyzing the answers of different respondent groups one can see that mostly this kind of information is valued by executives and managers.

The line of question 2 summarizes the perceived usefulness of information on the probability of the coming events to occur. Just 69% of the total number of respondents perceive this kind of information as very useful, mostly by respondents from group A (company / department executives).

A surprising attitude of accountants was observed. The majority of them (89%) recognized this kind of information as useful, but 11% could not evaluate it at all. Approximately the same evaluation was given by respondents from all groups to the information on probable future events. Data on the probability for the future events to occur is mostly valued by executives, whereas the opinion of accounting managers is more moderate.

Non-economic information is perceived as useful by 96% of the total number of respondents; 4% of respondents from bank and accounting managers did not value this kind of information at all. From the analysis of different groups' answers we see (question 3) that the worst evaluation of the non-economic information was given by accounting managers. The opposite opinion was expressed by company and department executives. Even 83.4% of them perceived this kind of information as very useful. *Managers perceive as useful information that does not appear to be in the same metric used for management accounting and financial reports. Such contradictory valuation of the usefulness of non-economic data questions the existence of partnership between the users and suppliers of accounting information.*

Information on economic business conditions (birth rate, level of technology development) is perceived as useful by 98% of the total number of respondents; 56% of the respondents, mostly from financial institutions, perceive this information as very useful (question 4).

Table 2. **Respondent answers to the survey questions (% from total number of answers)**

Answers	**Useless**				**Useful**				**Very useful**				**Cannot evaluate**			
User groups / Questions	A	B	C	Mean	A	B	C	Mean	A	B	C	Mean	A	B	C	Mean
I. Scope of information system																
1. Information related to probable future events	0	0	0	0	25.0	33.0	33.0	29.0	75.0	67.0	67.0	71.0	0	0	0	0
2. Evaluation of probability of events to occur	0	0	0	0	8.3	33.0	44.4	29.0	91.7	67.0	44.6	69.0	0	0	11.0	2.0
3. Non-economic information – customers' expectations, employees' attitudes, operating relations	0	6.7	11.1	4.0	16.6	33.0	66.7	36.0	83.4	67.0	22.2	60.0	0	0	0	0
4. Information on economic business conditions (birth rate, level of technology development)	0	0	0	0	50.0	33.3	55.5	42.0	50.0	62.9	44.5	56.0	0	3.8	0	2.0
5. Production-related non-financial information (spoilage, throughput)	8.3	18.5	0	6.0	23.3	25.8	66.7	38.0	68.4	51.9	33.3	54	0	3.8	0	2.0
6. Market information – market size, market segment growth	8.3	0	0	4.0	41.6	29.6	22.2	29.0	50.1	70.4	44.5	61.0	0	0	33.3	6.0
II. Timeliness of management accounting information																
7. Requested information to arrive immediately upon request	0	11.1	11.0	8.3	16.7	33.3	44.6	31.3	83.3	55.6	44.4	60.4	0	0	0	0
8. Information supplied to managers upon its receipt by the information system	0	0	22.2	4.2	16.7	37,0	44.5	33.3	83.3	59.3	44.5	60.4	0	3.7	0	2.1
9. Reports are provided frequently on a systematic, regular basis	0	7.4	77.8	18.8	25.0	37.0	22.2	31.3	75.0	48.1	0	45.8	0	7.5	0	4.1
10. Information supplied as an event occurs	0	11.1	33.3	12.5	8.3	29.6	44.4	25.0	91.7	51.9	22.3	56.3	0	7.4	0	6.2

Answers	**Useless**				**Useful**				**Very useful**				**Cannot evaluate**			
Questions / User groups	A	B	C	Mean	A	B	C	Mean	A	B	C	Mean	A	B	C	Mean
III. Aggregation																
11. Information provided on every section or department in your organization	0	11.1	33.3	12.5	25.0	25.9	44.4	29.2	75.0	63.0	22.3	58.3	0	0	0	0
12. Information on the effect of events on particular time period	0	11.1	44.4	14.6	8.3	44.4	33.2	35.4	91.7	44.5	22.3	50.0	0	0	0	0
13. Information which has been processed to show the influence of events on different functions	0	22.2	44.4	20.8	8.3	55.6	44.4	41.7	83.4	18.5	0	31.2	8.3	3.7	0	6.3
14. Information on the effect of different departments' activities on your financial statements	0	7.4	0	4.2	8.3	33.3	0	37.0	91.7	51.9	0	35.9	0	7.4	100.0	22.9
15. Information on the effect of different departments' activities on summary financial statements	0	11.1	0	6.2	8.3	37.0	0	12.5	91.7	51.9	0	58.4	0	0	100.0	22.9
16. Information which enables you to conduct "what-if" analysis	8.3	3.7	0	2.8	0	13.4	0	5.6	91.7	79.9	0	63.6	0	6.7	100.0	25.0
17. Information relevant for input into decision models using discounted cash flow analysis	0	18.5	0	10.4	16.7	40.7	0	27.1	75.0	22.3	0	31.3	8.3	18.0	100.0	31.2
18. Information relevant for input into decision models using incremental revenue and cost	0	7.4	0	4.2	8.3	37.0	0	18.8	91.7	40.8	0	52.1	0	14.8	100.0	24.9
19. Information relevant for inventory analysis	0	18.5	0	10.4	8.3	40.7	0	25.0	91.7	22.3	0	35.4	0	18.5	100.0	29.2
20. Information relevant for credit policy analysis	0	11.1	0	6.3	8.3	22.2	0	16.7	91.7	51.9	0	50.0	0	14.8	100.0	27.0
21. Information about fixed and variable costs	0	11.1	0	6.3	24.9	37.0	0	27.1	75.1	48.2	0	45.8	0	3.7	100.0	20.8

Answers	Useless				Useful				Very useful				Cannot evaluate			
User groups / Questions	A	B	C	Mean	A	B	C	Mean	A	B	C	Mean	A	B	C	Mean
IV. Integrative information																
22. Information on the impact that your decision will have through your department, and the influence of other managers' decisions on your area of responsibility	0	11.1	0	6.3	16.6	33.3	0	22.9	83.4	55.6	0	52.0	0	0	100.0	18.8
23. Precise targets for the activities of all sections within your department	0	7.4	0	4.2	0	40.7	0	18.8	100	51.9	0	58.3	0	0	100.0	18.7
24. Information that relates to the impact your decisions have on the performance of your department	0	7.4	0	4.2	16.6	29.6	0	20.8	83.4	63.0	0	56.3	0	0	100.0	18.7

Internal business non-financial information was perceived by respondents as less useful than external non financial information. This conclusion comes from the data in the row of question 5. On average, 92% of the respondents perceive this information as useful. However, the average of 6 percent of the interviewees pointed out this kind of information as not useful, and the average of 2% could not evaluate it at all. Of special note is that only non-financial information related to the production is a single most important priority of usefulness by the accountants surveyed. Comparing these results with responses to question 3, we can see quite a different accountants' attitude considering the usefulness of external and internal information. This finding is not surprising, since production data are the cost-accounting topic and interest of financial accountants and lower level managers.

The usefulness of information on market size and growth was evaluated similarly (question 6). This kind of information received the highest scores from bank managers and company executives. Notably, accountants considered it less useful. Certainly senior managers view market share to be of high priority, and it remains an area where management accountants could contribute substantial help. Several factors could explain why one third of accountants cannot evaluate the usefulness of market information. Therefore, if accountants have expertise in an area, they will better understand and be able to evaluate the usefulness of market information.

Summarizing the managers' view on the scope and nature of management accounting information, it is possible to state that not all of the interviewees gave the same evaluation. Accounting managers evaluated future and non-financial information significantly worse than other respondents. At the same time, executives and managers from financial institutions perceived information on future events as rather useful and necessary (financial and non-financial, internal and external). This conclusion is quite in line with studies performed in other countries. Most authors (Williams, 2004) agree that management information derived from the financial accounting system is obsolete.

The previous research has stated that this kind of information is valued better in the decentralized organizations and in cases managers' decisions are interrelated (they cannot make autonomous decisions) and the future of the company is indefinite. These conditions stimulate the scope of management information and information characteristics to grow. Managers rely on the management accounting system to identify and communicate the important external and internal information that they need to recognize and adopt to environmental changes.

In addition, the financial reporting mentality dominates accounting in Lithuanian firms to the detriment of the modern management accounting.

The generalized answers on the perceived usefulness of the timeliness of the information are provided in the lines of questions 7–24. As research results show, all the information timeliness characteristics are perceived as very useful for the management. It is not surprising that managers prefer sources of information that provide the most timely, accurate information. Unless the management accounting system can provide information in the required format and on the timely basis that the managers demand, they use other sources of information. However, the data also show that the promptness of presenting the information is more useful than frequency. Reports presented to the managers periodically are the feature of decentralized management in an organization. That is why this kind of information may not be valued by managers who do not have autonomy and financial responsibility. Some types of management information may be more relevant at different times and depending on the tasks being undertaken by managers. If managers concentrate on specific tasks rather than on global strategy, immediate specific data on finite, concrete operations may be more useful than aggregate information.

The aggregated management accounting helps managers to plan and organize future events. The need for this kind of information is increasing along with the growing competition and changes. Aggregated data are an instrument to measure overall performance. As a rule, aggregated information is mostly used by managers from decentralized organizations. The results of our research have shown that more than a half of respondents perceive the aggregated information characteristics as useful. Therefore, evaluating some of the characteristics, rather numerous managers (even 20.8%) perceive them as not useful, and the greater part of respondents (up to 31%) cannot evaluate them at all. Data in appendix B show that information perceived as the most useful is management accounting information presented for each department (87.5%). Chenhall and Morris (1986) have found that this information is useful for the managers in decentralized organizations bearing financial responsibility. Our research results have confirmed this statement as well. Information aggregated by departments was not perceived as useful by one third of the business units' accounting specialists. In small and medium Lithuanian business units the management structure is mostly centralized, and managers are not provided with information aggregated by departments. This conclusion is supported by the sceptical attitude of business unit accountants to the information needed for making managerial decisions. These respondents either could not evaluate the usefulness of this kind of information or perceived it as useless. The assumption (but not conclusion) could be made that there is no well-developed management accounting system in small and medium business units in Lithuania, and managers are not using accounting information when making managerial decisions. This assumption is supported by the answers of department and company executives: they perceive all characteristics of aggregated information as useful. Therefore, our results support a simple logic: aggregated accounting information is perceived as useful by those employees who have rights to make decisions and take financial responsibility.

The generalized interview data provided in the last lines of Table 2 present the managers' view on the information aggregated by various aspects. On the average, all the respondents perceive the information strictly related to their responsibilities as more useful. The high demand for information that includes causal relations is consistent with the earlier works by American researchers. This assumption is supported by the information provided in lines of questions 22–24. We noted that accounting specialists could not evaluate the usefulness of all the accounting integration features.

Bank managers evaluate these features worse than do executives of business companies.

In our interviews, we asked managers whether data were available from other than accounting sources. We found two major sources of information: interpersonal communications and personal sources, or oral communication. All the managers in our study had personal computers and had been using them for gathering information.

Conclusions

Management accounting is a value-adding, continuous improvement process of planning, designing, measuring, and operating financial and non-financial information systems. This process guides management action, motivates behaviour, and supports and creates the cultural values necessary to achieve an organization's strategic, tactical and operating objectives.

However, financial reporting mentality dominates in accounting activities in Lithuania to the detriment of modern management accounting. Every quarter, the accountants are obliged to prepare and deliver reports to external parties. There is no equivalent legal requirement for accountants to provide managers with proper information. A manager's need for relevant information is the driving force for changing the practice of accounting.

We have examined four groups of accounting characteristics to investigate whether Lithuanian managers perceive the usefulness of management accounting information. The results of the study have shown that Lithuanian company managers perceive the accounting information as useful in the same way as did American managers in the ninth decade of the past century. They seek information from every source available to them.

We can conclude that Lithuanian managers require relevant accounting information to support their work. Managers prefer sources of information that can provide the most timely, accurate and relevant data. Unless a management accounting system can provide information in the required format and on the timely basis that managers demand, they develop and use other sources of information.

The level of usefulness of information perceived by functional managers has been higher than by accountants. Accounting specialists value the information needed for the decision making less than do other respondents. This drives to the conclusion that accountants may be blocking the implementation of the new and modern accounting systems. This may be proved by two extremities: 1) senior managers perceive future and non-financial information as more useful; 2) accounting specialists perceive this information as less valuable. In total, accounting specialists underestimated the usefulness of management information. This means that conflicts of interest between managers and accountants occur in many organizations. This is very important and confirms the presumption about the necessity to restate the role of management accounting (White, 2004).

If it is possible to state that there is a relationship between the structure of business organizations and changes in the accounting systems (Jensen, 1983), then it means that management accounting systems in Lithuania should be changed accordingly. This assumption is a serious challenge for the accounting specialists. Lately the accounting systems in our country have undergone significant changes from lowbrow accounting to very modern computerized systems. Organizations grow, merge, acquire other firms and continuously adapt to changes in their environment. Management accounting information should help organizations change. Yet, actually nothing is known about the rate of changes in the accounting systems after the initial wave of computerization has passed. Nothing even is known about the forces that induce or impede changes in management accounting systems. This is a challenge for accounting researchers.

Recognizing the impact of organizational change on management accounting in Eastern European countries, Atkinson et al. (1997) note that these changes will have a profound effect on the way organizations do collect, process and use management accounting information. Yet, we know little on the way of systematic inquiry as to what the changes are, what features facilitate or impede the change process, and the consequences of it not changing rapidly enough. This is an extremely fertile area for inquiry.

In our opinion, the process of creating and reforming the management accounting systems in Lithuania should be intensified. As many firms have adopted total quality management and teamwork practices for their operations, accountants must become fully aware of the changes that are occurring in operations if they wish to preserve their position as the primary source of management information. The continued influence of computing and communication technologies is driving the need for more knowledgeable and professional management accountants. The increase in the demand for information is pushing accounting to new frontiers of information system design and operation. Managers are not content to merely rely on standardized financial statements, they prefer customized reports. An implication is that accounting information will increasingly become integrated with non-accounting data. We think the future studies should include firms that have attempted to implement modern computerized systems. These studies may highlight the differences in accounting information, the intensity of changes in management accounting.

Appendix A

Scope of information system

1. Information related to the probable future events.
2. Evaluation of the coming events' probability to occur.
3. Non-economic information.
4. Information on external business conditions.
5. Non-financial information: a) related to the production, b) market information.

Timeliness of management accounting information

1. Requested information to arrive immediately upon request.
2. Information supplied to managers upon its receipt into information systems.
3. Reports are provided frequently on a systematic, regular basis.
4. Information supplied as an event is occurring.

Aggregation

1. Information provided on every section or department in the organization.
2. Information on the effect of events on a particular time period.
3. Information that has been processed to show the influence of events on different functions.
4. Information on the effect of different departments' activities on summary financial statements.
5. Information which enables "what-if" analysis.
6. Information relevant for input into decision models: a) discounted cash flow analysis, b) incremental analysis, c) inventory analysis, d) credit policy analysis.
7. Information on fixed and variable costs.

Integrative information

1. Information on the impact that your decision will have throughout your department and on the influence of other managers' decisions on your area of responsibility.
2. Precise targets for the activities of all sections within your department.
3. Information that relates to the impact that your decisions have on the performance of your department.

Source: Chenhall and Morris (1983)

REFERENCES

1. Anderson, S. (1995). A framework for assessing cost management system changes: the case of ABC implementation at General Motors. *Journal of Management Accounting Research* (7). P. 21–61.

2. Atkinson, A., Balakrishnan, R., Booth, P.,Cote, J., Groot, T., Malmi, T., Uliana, E., Wu, A.(1997): New directions in management accounting research. *Journal of Management Accounting Research.* (Vol. 9). P. 79–109.

3. Atkinson, A., Banker, R., Kaplan, R., Mark Young S. (2004): *Management Accounting*. 3 ed. Prentice Hall, p. 741.

4. Baiman, S., Sivaramakrishnan, K. (1991): The value of private pre-decision information in a principal-agent context. *The Accounting Review* . October. P. 747–766.

5. Bourguiguon, A.(2005): Management accounting and value creation: the profit and loss of reification. In: *Critical Perspectives on Accounting*. May. P. 353–389.

6. Bruns J., Williams J., McKinnon.(1993): *Information and managers: a field study*. *Journal of Management Accounting Research. Fall*; (Vol. 5). P. 22.

7. Chenhall, R., Morris, D.(1986): The impact of structure , environment, and interdependence on the perceived usefulness of management accounting systems. *The Accounting Review.* January. p.16–35.

8. Cooper, R., Kaplan, R. (1988). How Cost Accounting distorts product cost. *Management Accounting.* April. P. 109–119.

9. Dilla, W. (1989): Information evaluation in a competitive environment: context and task effects. *The Accounting Review*. July. P. 404–432.

10. Drury, C. (1992). *Management and cost accounting*. 3rd ed. Chapman & Hall. 874 p.

11. Foster, G.,Young, S. (1997). *Frontiers on management accounting research*. Journal of Management Accounting Research. Vol. 9. p. 63–78.

12. Gul, F., Yew, M. (1994). The effects of management accounting systems, perceived environmental uncertainty and decentralization on managerial performance: a test of three-way interaction. *Accounting, Organization and Society.* May/July. P. 413–426.

13. Gordon, L., Narayanan, V. (1984): Management accounting, perceived environmental uncertainty and organization structure: an empirical investigation. *Accounting Organization and Society*. No 1. P. 33–47.

14. Hemmer T. (1996): On the design and choice of modern management accounting measures. *Journal of Management Accounting Research.* Vol. 8. P. 14–16.

15. Hendrickson, H. (2001). Accounting. In: *Encyclopedia of Business and Finance*. Eds. Burton S., Kaliski. Vol.1. Macmillan. http://find.galegroup.com

16. Horngren, Ch., Datar, S., Foster, G. (2006). *Cost Accounting: A Managerial Emphasis.* 12th ed. Prentice-Hall, 868 p.

17. Jensen, M. (1983). Organization theory and methodology. *The Accounting Review.* April. P. 319–339.

18. Kaplan, R. (1984). The evolution of management accounting. *The Accounting Review.* July/August. P. 95–101.

19. Kaplan, R., Atkinson, A. (1998). *Advanced Management Accounting*. 3rd ed. Prentice Hall, p. 798.

20. Libby, T., Waterhouse, J. (1996). Predicting change in management accounting system. *Journal of Management Accounting Research.* Vol. 8. P. 137–151.

21. Matteson, D.(2004). You must understand the process. *Strategic Finance.* Dec. P. 18–20.

22. Merchant, K. (1981). The design of the corporate budgeting system: influences on managerial behaviour and performance. *The Accounting Review.* October. P. 813–829.

23. Mia, L., Chenhall, R. (1994): The usefulness of management accounting systems, functional differentiation and management effectiveness. *Accounting, Organizations and Society*. Jan. P.1–13.

24. Sharman, P. (2005): The case for management accounting. *Strategic Finance*. Oct. P. 32–39.

25. Shaub, M., Collins, F., Holzmann, O., Lowensohn, S. (2005). Self-interest vs. concerns for others. *Strategic Finance*. March. P. 41–48.

26. Shields, M. (1995): An empirical analysis of firms' implementation experiences with activity-based costing. *Journal of Management Accounting Research.* Fall. P. 148–167.

27. Shields, M. (1983). Effects of information supply and demand on judgement accuracy: evidence from corporate managers. *The Accounting Review*. April. P. 284–303.

28. Shields, M. (1997). Research in management accounting by North Americans in the 1990s. *Journal of Management Accounting Research.* Vol. 9. P. 48–109.

29. Swenson, D.(1995). The benefits of activity-based cost management to the manufacturing industry. *Journal of Management Accounting Research.* Fall. P.167–181.

30. Waterhouse, J., Tiessen, P. (1978). A contingency framework for management accounting systems research. *Accounting, Organization and Society.* No 1. P. 65–76.

31. White, L. (2003). Let's reinvigorate management accounting. *Strategic Finance*. July. P. 1–7.

32. White, L. (2004). Let's move management accounting to the forefront. *Strategic Finance.* July. P. 1–6.

33. White, L. (2005). Does internal control enhance or impede. *Strategic Finance.* February. P. 6.

34. Williams, S. (2004). Business intelligence can help management accounting reclaim its relevance and rightful role. *Strategic Finance*. Aug. P. 41–49.

VALDYMO APSKAITOS INFORMACIJOS NAUDINGUMAS: VARTOTOJŲ POŽIŪRIAI

Zina Gaidienė, Rimvydas Skyrius

S a n t r a u k a

Straipsnyje yra nagrinėjamas valdymo informacijos tinkamumas vadybiniams sprendimams. Šio straipsnio tikslas – nustatyti, kokią apskaitos informaciją vadybininkai ir apskaitininkai mano esant naudingą savo darbe. Buvo atlikta įvairių Lietuvos įmonių ir organizacijų vadybininkų ir apskaitos specialistų (buhalterių) apklausa, kurios tikslas – įvertinti tokius valdymo apskaitos aspektus: apimtį ir pobūdį, savalaikiškumą, informacijos agregavimo laipsnį ir jos integravimo galimybes.

Apklausos rezultatai parodė, kad visas apskaitos informacijos savybes vadybininkai mano esant naudingas. Ypač vertinama nefinansinė ir ateities informacija. Įmonių vadovai būsimųjų įvykių atsiradimo prognozes pripažįsta ypač naudinga informacija.

Apklausoje dalyvavę apskaitos specialistai mano, kad tik vadybiniams sprendimams reikalinga informacija nėra naudinga. Jie geriau vertina finansinę informaciją. Analizės rezultatai parodė, kad skeptiškas apskaitininkų požiūris į tinkamą sprendimams informaciją yra daugelio organizacinių ir vidinių veiksnių padarinys. Daroma prielaida, kad informacijos rengėjų ir jos naudotojų interesų neatitiktis stabdo valdymo apskaitos raidą mūsų šalyje. Apskaitoje vyrauja reglamentuojamų finansinių ataskaitų informacijos prioritetas, o ši informacija tinka tik kontrolei, bet ne vadybininkų sprendimams priimti.

Straipsnyje pateikiama išsami valdymo apskaitos ir jos raidos užsienio literatūroje studija. Išryškinami modernios valdymo apskaitos bruožai, jos pokyčius lemiantys veiksniai, aprašomas mokslinių tyrimų pobūdis. Nurodoma, kas skatina valdymo informacijos apimties ir kitų savybių įvairovės didėjimą. Pabrėžiama, kad valdymo apskaita yra nuolat tobulinama finansinės ir nefinansinės informacijos sistema, padedanti vadybininkams planuoti ir vertinti savo veiksmus, skatinanti siekti strateginių tikslų ir motyvuojanti juos.

Valdymo apskaitos pradžia yra siejama su kaštų apskaita. Dabar siūloma dar daugiau išplėsti valdymo apskaitos ribas ir įgyvendinti organizacijos apskaitos (angl. *Organizational accounting*) principus.

Labai svarbu, kad valdymo apskaita būtų verslo vertę didinanti veikla. Tai reiškia, kad valdymo apskaita turi nuolat teikti reikiamą informaciją atitinkamiems žmonėms reikalingos apimties, tinkamu laiku ir minimaliais kaštais.

Straipsnyje siūloma atlikti išsamius valdymo apskaitos raidos Lietuvos įmonėse tyrimus.

THE USEFULNESS OF MANAGEMENT ACCOUNTING INFORMATION: USERS' ATTITUDES

Zina Gaidienė, Rimvydas Skyrius

S u m m a r y

This paper investigates the role and development of management accounting and the usefulness of its information perceived by managers. The management accounting system is characterized in terms of information. These characteristics are scope, timeliness, level of aggregation, and information which assists integration.

Empirical support for the relationship between the features of management information and its perceived usefulness is provided using the data gathered from questionnaires and interviews. The search for the usefulness of management accounting information is based on the accounting research literature. The goal was to determine what features of information are recognized by managers and accountants as useful.

The results of analysis show that all interviewed managers perceive the management accounting (economic and non-economic) information as useful. However, the level of their scores has been higher than that of accountants.

There has not been a comprehensive study involving the evaluation of the usefulness of accounting information by Lithuanian managers. The present study has been undertaken to learn more about how Lithuanian managers perceive the usefulness of management accounting information. This was the principal objective of the research. Since managers' satisfaction with the accounting system could be highly biased, the next objective was to determine whether accountants perceived the same features of information as useful. The third objective of the study was to review the opportunities for the development of management accounting systems. It is pointed out that management accounting is a perma-

nently upgraded information system for financial and non-financial information that supports managers in planning and evaluating their actions and motivates the achievement of strategic goals.

The beginning of management accounting is connected with cost accounting. Management accounting is supposed to provide relevant information for relevant individuals in required volumes, on time and at minimal cost. There are recent proposals to expand the boundaries of management accounting by implementing the principles of organizational accounting. The paper also proposes to perform an in-depth research of the development of management accounting in Lithuanian organizations.

Įteikta 2005 m. lapkričio mėn.
Po pataisymo 2006 m. gegužės mėn.
Priimta spausdinti 2006 m.birželio mėn.