

Measuring Performance of Internal Auditing: Empirical Evidence

Rolandas Rupšys, Vytautas Boguslauskas

Kauno technologijos universitetas
Laisvės al. 55, LT-44309, Kaunas

This article summarizes undertaken analysis of the performance measurement in the area of internal auditing. Reasons for choosing the mentioned topic were influenced by two main factors. First of all, performance measurement today is facing a considerable increase of interest in this subject due to a shift from industrial to knowledge economy. Well designed organizational performance measurement system enables effective translation of strategy into actions, multidimensional view of performance, and proper reaction to strategic issues, faced by the organization. Secondly, the role of internal auditing in overall managerial spectrum has significantly increased over the past 10 years. Currently, internal auditing represents not just a detective mean of control focused mainly on financial information and compliance (as it was on the early stages of its appearance), but rather a proactive function in organization, encompassing assurance and consulting services. Internal audit adds value through the usage of structured and systematic approach, enabling to evaluate and improve the effectiveness of risk management, control, and governance processes.

On the other hand, due to its specific position in organization and the nature of internal audit itself, measurement of this activity is a challenging issue. Following a formulated concept of "value added" approach of internal auditing, performance measurement in this area should reveal the effectiveness and the efficiency of internal audit services. Absence of the comprehensive and unified taxonomy has inspired undertaking a particular research in this field.

Results of the survey have highlighted the importance of the measurement of internal audit function to the stakeholders of internal auditing (audit committee, CEOs, other senior management and external auditors). Furthermore, survey results have supported the hypothesis that performance measures could be reasonably integrated into three identified dimensions of internal audit, i.e. input, process and output. Besides, it is worth mentioning that there is a strong correlation between performance measures, which could be / are used to measure particular dimensions of internal audit. This observation justifies the principle of interaction between dimensions and it is consistent with a general concept of cause-effect chain identified in contemporary performance measurement literature.

Keywords: *internal audit, internal audit measures, performance measurement, performance measures, measurement of internal audit activity.*

Introduction

A frequent expression of *what can not be measured, can not be managed* could be traced in the managerial literature. Managing of the performance is the main objective; however, performance measurement also constitutes one of the most important managerial functions. Traditional performance measurement, based on solely financial information, has been often criticized for its short-termism, sub-optimization, disregard of the strategy implementation and other noticeable shortcomings (Tangen, 2003). Considerable interest in performance measurement was associated not only with expressed general dissatisfaction with traditional performance measurement systems based on backward looking accounting information, but also led to the development of *balanced* or *multi-dimensional* performance measurement frameworks (Bourne *et al*, 2000). These changes led to the brand new concept of performance measurement (Mendibil, MacBryde, 2006).

The main reason of such transformations in this area is the shift from material assets to the knowledge based economy. Therefore, in order to avoid being fossilized and outdated process, performance measurement has to reflect the changing needs of organization's stakeholders (customers, suppliers, investors, employees, regulators, etc.) and enable to manage organization's strategic reaction to these challenges (Kennerley *et al*, 2003).

On the other hand, knowledge economy has transformed specialized, positioned and sophisticated contemporary organizations into information-dependant and knowledge-intense systems that critically demand for specific internal controls (Bou-Raad, 2000; Ramamoorti, 2003). Changed internal control landscape requires modern and challenging internal audit activity, which should be the main support function for its stakeholders (management, audit committee, external auditors, regulators, etc.). Furthermore, strong and contemporary internal audit function plays a proactive role in risk management process, which is a critical factor in company's surviving practice (Walker *et al*, 2002). Expanded scope of services, nature and position of internal auditing demand for a new approach of measuring performance in this area. Significant amount of suggested performance measures could be identified at academic and practical literature. However, unstructured appliance of a set of performance measures does not lead to the systematic and disciplined approach of measuring performance of internal audit activity. Therefore, **the main research question** could be formulated as follows: *"What dimensions of internal audit activity should be distinguished, in order to group*

appropriate performance measures?”

The aim of this article is to investigate and analyze performance measurement trends in internal auditing and suggest commonly accepted solution to measure the internal audit activity. **The object of the study** is performance measurement in the area of internal auditing.

In order to realize the aim of this study **comparative analysis of theoretical literature, review of published researches, quantitative data analysis and formulation of conclusions** were employed. Empirical data was gathered through a structured internet survey. MS Excel and SPSS packages were used to analyze the survey data and apply statistical methods.

Performance measurement context

Managerial publications and even some particular sources of performance measurement literature are full with a number of different terms (e.g. performance measures, critical success factors, performance metrics, key performance indicators, etc.) that are used in order to express the idea of performance measurement concept. The *performance measurement*, *performance measures* and *performance measurement system* are the most often cited. Neely et al. (2005) provides the following definition of the mentioned terms:

- *Performance measurement* can be defined as the process of quantifying the efficiency and effectiveness of action.
- A *performance measure* can be defined as a metric used to quantify the efficiency and/or effectiveness of an action.
- A *performance measurement system* can be defined as the set of metrics used to quantify both the efficiency and effectiveness of actions.

As aforementioned, modern performance measurement concept significantly differs from the traditional concept of performance measurement, which was used some 20-30 years ago. Traditional performance measurement was mainly associated with financial management in the early 1980s, because it heavily relied on accounting information (Kaplan, Norton, 1996). However, due to the strategy alignment, multi-dimensional view of performance and other futures of modern approach, currently, performance measurement is treated as an interdisciplinary phenomenon that has a closely overlapping subject of interest with other managerial disciplines (strategic management, TQM, performance management, intellectual capital, etc.).

Neely et al. (2003) identify three stages of the development of performance measurement approach. At the first stage of the development of contemporary performance measurement approach in the early 1990s, new performance measurement frameworks, such as the Balanced Scorecard (Kaplan, Norton, 1996), Results and Determinants System (Fitzgerald, Moon, 1996), the Performance Prism (Neely et al., 2002) or Skandia's Navigator (Edvinsson, Marlone, 1997), have appeared. These, such called, first generation (1G) approaches brought an additive of non-financial measures and broadened the perspective of the stakeholders. The second generation (2G)

of performance measurement approach made a step forward by identifying the flow of value creation process and bringing strategy maps (Kaplan, Norton, 2000) or success and risk maps (Neely et al., 2002). Finally, the third generation (3G) approach of performance measurement encompasses requirements for linkage between financial measures to non-financial measures, intangibles and strategic control.

Measures for internal auditing

The development of performance measurement in internal auditing could be likened to overall progress in the organizational performance measurement context. As traditional organizational performance measurement was focused on financial results and accompanying accounting information, usually *hard* performance measures for internal auditing were oriented towards efficiency and effectiveness of internal audit function. However, evolution of organizational performance measurement determined much broader perspective of performance measurement at internal audit. Such transformation included a wider range of internal audit stakeholders and, accordingly, more identifiable dimensions, which required specific measures. Therefore, the number of usable performance measures has increased significantly (Ziegenfuss, 2000a; Burke, 2007; Morgan, 2007). Internal audit performance measures are not limited merely to a number of audit reports issued, duration of audit fieldwork, comparison of audits completed vs. planned, or actual hours spent during the engagement vs. planned, but rather include a set of comprehensive measures, such as average hours spent on trainings, average personnel experience, auditor education and certification levels, overlooked control weaknesses, applied best practice examples, number of management requests, percent of implemented recommendations, number of proposed process improvements, staff satisfaction survey, management and audit committee satisfaction survey, etc. (Haas, 2001; Frigo, 2002; Van Vijk, Holmes, 2006).

On the other hand, in some cases such a broad spectrum of possible performance measures may involve confusion and misunderstanding during the measurement process. For example, some authors (Dudley et al., 1999; Salierno, 2000) state that in many cases auditors' experience and qualifications are obtained before joining the company; therefore, it is more reasonable to measure not the absolute value (e.g. years spend in industry, internal auditing, etc.) of particular dimension, but the efforts (i.e. what was done) towards increasing experience, qualification, competence, etc. Moreover, performance measures should not be analyzed and explored as "stand alone", but integrated into a single performance measurement framework that ensures a multi-dimensional view of measured activity and enables identifying the flow of value creation.

Underlying assumptions for adaptation of measurement frameworks

The main feature of the current performance measurement era is a high number of performance measure-

ment frameworks that illustrate an evolution of performance measurement concept. Although all of them include a focus on non-financial and qualitative dimensions; however, their complexity and sophistication levels are different on a large scale. Such contemporary performance measurement frameworks may vary from simple and unsophisticated, such as Results and Determinants System (Fitzgerald, Moon, 1996; Brignall, Ballantine, 1996) or Performance Measurement Matrix (Keegan et al., 1989) to complex and advanced frameworks, such as the Strategic Measurement and Reporting Technique – SMART (Lynch, Cross, 1991), the Balanced Scorecard (Kaplan, Norton, 1996, 2000) or the Performance Prism (Neely et al., 2002).

Of course there is no doubt that some of them are adopted in practice more often than others. Even though suffered a large portion of criticism, according to D.Rigby (2001), the Balanced Scorecard is the most popular performance measurement framework globally with a 44% adoption rate between organizations worldwide. Due to its flexible profile of four perspectives (learning and growth, internal business process, financial and customer) Balanced Scorecard became the most usable framework globally.

An internal auditing is no exception. A number of authors (Ziegenfuss, 2000b; Frigo, 2002; Cangemi, Singleton, 2003) or accounting companies (KPMG, 2004) claim Balanced Scorecard being the best solution to measure performance of internal auditors. On the other hand, as per survey results of Deloitte Touche Tohmatsu (2003), only a limited number of participants have developed balanced scorecard approach for the measurement of the internal audit activity. Furthermore, lack of other strong empirical evidence indicating the attractiveness of Balanced Scorecard among internal auditors rises discussion on what dimensions of internal audit activity should be measured.

In order to identify the dimensions of internal audit, fundamental design pattern Input-Process-Output was applied. Such approach was chosen not only because it perfectly reflects the concept of internal audit activity, but also enables employing the perception of cause-effect path, widely escalated in the context of contemporary performance measurement (Figure).

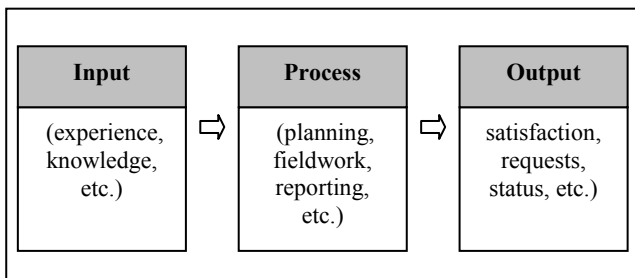


Figure. Dimensions of internal auditing

Research methodology

The research was designed to address the latter assumptions. The purpose of this research was to explore, investigate and analyze performance measurement trends

in internal auditing and suggest commonly accepted solution to measure the internal audit activity. Structured online survey was used to obtain the empirical data. Invitations to participate in the survey were sent through the member exchange link on the web site of the Institute of Internal Auditors (www.theiia.org).

The measurement of internal auditing (and especially the added value, created by this function) is complex and multifaceted, since the internal auditing is somewhat diverse and different from company to company. Therefore, a research should reveal the general and common tendencies within the performance measurement at internal audit activity. It should also enable to justify the selection of particular performance measures and their integration into a single set that allows getting a picture of activity from a multi-dimensional perspective. Furthermore, the research should also comprise questioning the need for measuring internal audit as well; hence, background of measuring this activity should be also addressed.

Therefore, the first hypothesis was formulated as follows:

H1: Stakeholders of the internal auditing find the measurement of internal audit activity to be important.

In case the hypothesis is supported, the justification of performance measurement in internal auditing is obtained.

A diversity of performance measures used at internal auditing may be impressive, hence there should be an option of integrating them into specific dimensions. Conversely, such integration of measures should be supported by the statistical methods. Therefore, the second hypothesis was formulated accordingly:

H2: Performance measures could be reasonably integrated into particular dimensions of internal audit activity.

Performance measurement approach of the second generation (Balanced Scorecard, Performance Prism, etc.) implies identification the flow of added value throughout the measured activity. Consequently, the third hypothesis was formulated as:

H3: There is a correlation between dimensions of internal audit activity and their performance measures.

In order to test the abovementioned hypotheses, internal audit practitioners were surveyed about their perceptions, general conditions and practice, as well as their status of internal audit function at organization. Design of the employed survey included general and specific questions aimed to target common performance measurement trends in the area of internal auditing. Design of the survey is summarized in Table 1.

Descriptive statistics

In total, 113 respondents from a number of countries have replied, representing a global diverse community of internal audit professionals by location (*North America – 71%, Europe – 15%, South/Latin America – 6%, Asia – 6%, Middle East – 2%*), organization type (*national –*

50%, international -32%, global - 18%) and industry sector (financial services - 24%, energy - 21%, manufacturing - 12%, accounting and consulting - 9%, other - 34%). 102 surveys were suitable for further processing and analysis.

Table 1

Design of the survey	
Group	Questions
Organization (general)	Type of organization, location, industry sector, number of FTE, financial figures, performance measurement framework used by the organization
Internal Audit Function (general)	Type of internal audit function, number of auditors at organization
Performance Measurement of Internal Audit (general)	Performance measurement framework applied for internal audit activity, reasons for measuring internal audit activity, importance of measurement viewed by the stakeholders, authority for directing performance measurement process
Performance Measurement of Internal Audit (specific)	Practical usage and evaluation of represented internal audit function according to the listed performance measures

The major part (i.e. 87%) of surveyed internal auditors represents an in-sourced function, while the rest of them (13% of respondents) from time to time use outside consultants and engage into co-sourced audits.

According to the survey results, 44% of respondents simply utilize KPIs, 31% of them use internally developed framework, 12% apply Balanced Scorecard, 3% employ Value for Money / Business Process Model, 10% use other frameworks (such as Six Sigma and others). The mentioned results also support the idea that although the adoption of Balanced Scorecard is widely recommended, it is not very popular between internal auditors.

Primary reasons for using performance measures within internal audit activity are summarized in Table 2.

As we can see from the table above, the main reason (52.94%) of using performance measures within internal auditing is to assure that internal audit activity will be managed and controlled efficiently and effectively. Other major reasons include ensuring compliance with International Standards for the Professional Practice of Internal Auditing (that require ongoing supervision and monitoring of activity) and intention to demonstrate value of internal auditing.

Findings

The measurement of internal auditing should be important not only from the perspective of internal audit itself, but also seen as a key subject of interest among its stakeholders. Besides, such inspiration is justified by the survey results, summarized in Table 2.

Table 2

Primary reasons for using performance measures		
Reason	Percent, %	Response, total
To ensure compliance with Standards on Internal Auditing	43.14	44
To align operations with strategy	9.80	10
To comply with organizational policy, procedures, etc.	9.80	10
To assure that internal audit activity will be managed and controlled efficiently and effectively	52.94	54
To demonstrate the value of internal audit activity	40.20	41
To assure the quality of internal audit activity	36.27	37
To motivate employees of Internal Audit Unit	6.86	7
To support accountability	19.61	20
Other	26.47	27

In fact, answers of the respondents (Table 3) enable to state that, in general, stakeholders of internal audit activity find important the performance measurement within internal auditing.

Table 3

Importance of internal audit measurement viewed by the stakeholders of internal auditing, as per surveyed internal auditors (cumulative frequencies, %)					
Importance*	Board / Audit comm.	CEO	Other senior mngmt.	External audit	Other stakehold.
1				2.9	2.9
2		5.9	5.9	14.7	11.7
3	18.6	11.8	32.4	29.4	23.5
4	69.1	54.8	73.5	52.9	58.7
5	90.1	93.0	86.3	70.6	67.6
N/A	100.0	100.0	100.0	100.0	100.0

* Where 1 means absolutely not important and 5 means very important.

Since the major part of internal audit clients (except other stakeholders) find the measurement of internal audit performance more or less important, *Hypothesis 1* is supported. This means that internal auditors feel that the measurement of their performance is a subject of interest not only them, but also to a broad range of their stakeholders. Relatively low rate of importance among other stakeholders could be explained by the superficial interaction between internal auditors and other stakeholders (such as clients, suppliers, regulators, etc.).

In order to structure the population of performance measures used within internal audit, a comparative analysis of published sources (Ziegenfuss, 2000a, 2000b; Frigo, 2002; Haas, 2001; Van Vijk, Holmes, 2006), bulletins of accounting companies (KPMG, PriceWaterhouse-Coopers, Deloitte Touche) and other databases (e.g. Global Audit Information Network – GAIN) was used. Such analysis allowed creating a comprehensive list of most internal audit measures that could be used within internal audit, eliminate duplicates and group them by appropriate dimensions. In total 30 performance measures were listed in the survey.

Possible performance measures, obtained through a comparative literature analysis, were grouped according to the identified dimensions of internal auditing. Respondents were asked to evaluate their internal audit shops (units) according to the given performance measures. Cronbach's alpha (Cronbach α) coefficient was applied in order to test the reliability of performance measures for each dimension. Results of these statistics are summarized in Table 4.

Table 4

Calculated Cronbach α by identified dimensions of internal auditing

Dimension (α)	Performance measures
Input ($\alpha = 0.7233$)	Average trainings per auditor, percentage of certified auditors, experience in internal auditing, experience in industry, level of modern technologies used, level of best practice applied
Process ($\alpha = 0.8403$)	Spectrum of internal audit services, time to address management requests, deviations from engagement plan, completed vs. planned audits, chargeability rate, average duration of the audit, number of audit reports per year, number of process reengineering
Output ($\alpha = 0.7254$)	Number of management requests, auditee satisfaction level, percentage of recommendations implemented, role of internal auditing viewed by the audit committee and senior management

The table above statistically proves the reliability of chosen integration scenario and supports the hypothesis that performance measures could be reasonably integrated into particular dimensions of internal audit activity.

Finally, the correlation analysis was performed at this phase of the research. The phrase that “correlation does not imply or mean the causation” is often used in many sciences; however, saying that “correlation does not suggest causation” is also false. Due to this reason we might assume that a strong correlation often suggests or increases the probability of causal relationships between variables (Tuftte, 2006). Although survey results have revealed correlations between the measures assigned to different dimensions as well as correlations within a single dimension, only the former correlations will be discussed further, considering the 3rd hypothesis.

The usage of Pearson's correlation revealed a strong correlation ($R = 0.743$, $p < 0.001$) between the auditors training hours and applied best practice examples during the audit process. Auditors training hours also correlate with audit process innovations ($R = 0.709$, $p < 0.001$) and applied modern technologies ($R = 0.789$, $p < 0.001$). Since the percentage of certified auditors is influenced by their knowledge and experience, which is required to obtain professional certification, a strong correlation was identified between this measure and deviations from engagement deadlines ($R = 0.737$, $p < 0.001$) as well as number of audit reports issued during the year ($R = 0.704$, $p < 0.001$). Besides, average personnel industry experience directly correlates ($R = 0.786$, $p < 0.001$) with a number of process reengineering proposed by internal auditors.

Further analysis disclosed correlation ($R = 0.758$, $p < 0.001$) between applied best practice examples and percentage of implemented recommendations. This relationship could be explained through a positive influence of applied best practice examples as well as the auditors' ability to marketing them.

Needed to say that spectrum of internal audit services correlates with a number of management requests ($R = 0.725$, $p < 0.001$). For this reason we might say that management is prone to involve internal auditors more often when the latter have a broader spectrum of proposed services. Accordingly, the status of internal audit at organization viewed by the senior management correlates with percentage of implemented recommendations ($R = 0.769$, $p < 0.001$). Furthermore, also the status of internal audit viewed by the senior management and the audit committee correlates considerably ($R = 0.740$, $p < 0.001$).

The abovementioned correlations support the 3rd hypothesis. This means that there is a strong correlation between the measures allocated to different dimensions of internal audit activity. Accordingly, this implies identification of the value creation flow at different phases of activity, i.e. auditors are trained properly and gain experience, and this positively influences the audit process (work is done more effectively, auditors provide more reasonable recommendations etc.), satisfaction of audit stakeholders, and, finally, the status of internal audit function.

Conclusions

The following conclusions could be drawn from the performed research:

- Performance measurement has crossed the borders of financial management and became an inter-

disciplinary subject that is on the radar of business practitioners as well as academic scholars.

- Performance measurement in internal auditing is no exemption. The importance of soft measures in overall measurement process has increased significantly.
- Due to the lack of a strong evidence favorable to adaptation of certain performance measurement framework (e.g. balanced Scorecard), fundamental design pattern Input-Process-Output was proposed to measure performance of internal auditors.
- An internet survey was performed among internal auditors, in order to explore, investigate and analyze performance measurement trends in internal auditing and suggest commonly accepted solution to measure the internal audit activity. Three hypotheses were formulated in order to address the aim of the survey.
- Results of the survey support the 1st hypothesis that stakeholders of internal audit activity (audit committee members, CEOs, other senior management, external auditors) find measurement of the mentioned activity more or less important. Fairly low rate of importance among other stakeholders (such as regulators etc.) could be explained by the superficial interaction between them and internal auditors.
- The reliability of chosen integration scenario, when performance measures were grouped according to the identified dimensions of internal audit activity, was statistically proved by the values obtained through a usage of Cronbach α . Calculated values of Cronbach α (0.7233, 0.8403 and 0.7254 accordingly) support the 2nd hypothesis.
- A strong correlation ($0.725 \leq R \leq 0.789$; $p = 0.001$) between performance measures assigned to different dimensions of internal audit indicate that there is a certain relationship between the identified measures. This also supports the 3rd formulated hypothesis.

References

1. Bou-Raad, G. Internal auditors and value-added approach: the new business regime // *Managerial Auditing Journal*, 2000, Vol.15, No. 4, 182-186.
2. Bourne, M. Designing, implementing and updating performance measurement systems / M.Bourne, J.Mills, M.Wilcox // *International Journal of Operations, Production Management*, 2000, Vol. 20, No 7, p.754-771.
3. Brignall, S. Performance Measurement in Service Businesses Revisited / S.Brignall, J.Ballantine // *International Journal of Service Industry Management*, 1996, Vol. 7, Issue 1, p. 6-31.
4. Burke, M.A. 12 Key Success Factors for Today's Internal Auditors // *Proceeding of the International Conference of the Institute of Internal Auditors*. Amsterdam, 2007, 8-11 July.
5. Cangemi, M.P. Managing the audit function: a corporate audit department procedures guide 3rd ed. Hoboken / M.P.Cangemi, P.Singleton. New Jersey: John Wiley and Sons Inc., 2003.
6. Deloitte Touche Tohmatsu. Global internal audit the new reality, 2003.
7. Dudley, E.M. How do you measure Success? / E.M.Dudley, M.R.Plumpy, M.C.Knobloch // *Internal auditor*, 1999, April, V. 56, p. 58-63.
8. Edvinsson, L. Intellectual Capital: The Proven Way to Establish Your Company's Real Value By Measuring Its Hidden Values / L.Edvinsson, M.S.Malone. London, 1997.
9. Fitzgerald, L. Performance Measurement in Service Businesses / L.Fitzgerald, P. Moon. London: CIMA, 1996.
10. Frigo, M.L. A Balanced Scorecard Framework for Internal Auditing Departments Altamonte Springs Florida: Institute of Internal Auditors Research Foundation, 2002.
11. Haas, L.D. The Bottom Line – value of internal audit department to firms // *Internal Auditor*, 2001, June, p.40-41.
12. Kaplan, R.S. The Balanced Scorecard – Translating Strategy into Action / R.S.Kaplan, D.P.Norton. Boston, Mass: Harvard Business School Press, 1996.
13. Kaplan, R.S. The Strategy Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment / R.S.Kaplan, D.P.Norton. Harvard Business School Press, Boston, MA, 2000.
14. Keegan, D.P. Are Your Performance Measures Obsolete? / D.P. Keegan, R.G.Eiler, C.R.Jones // *Management Accounting*, 1989, June, p. 45-50.
15. Kennerley, M. Survival of the fittest: measuring performance in a changing business environment / M.Kennerley, A.Neely, C.Adams // *Measuring Business Excellence*, 2003, Vol.7, No.4, p.37-43.
16. KPMG. Building a success model for internal audit: The balanced scorecard. Singapore, 2004.
17. Lynch, R.L. Measure Up – Yardsticks for Continuous Improvement / R.L.Lynch, K.F.Cross. Cambridge MA: Blackwell Publishers, 1991.
18. Mendibil, K. Factors that affect the design and implementation of team-based performance measurement systems / K.Mendibil, J.MacBryde // *International Journal of Productivity and Performance Management*, 2006, Vol. 55, No 2, p. 118-142.
19. Morgan, S.L. Performance Measurement in Public Sector Auditing // *Proceeding of the International Conference of the Institute of Internal Auditors*. Amsterdam, 2007, 8-11 July.
20. Neely, A. Performance measurement system design: a literature review and research agenda / A.Neely, M.Gregory, K.Platts // *International Journal of Operations, Production Management*, 2005, Vol. 25, No 12, p.1228-1263.
21. Neely, A. The Performance Prism: The Scorecard for Measuring and Managing Business Success / A.Neely, C.Adams, M.Kennerley, London: Prentice Hall, 2002.
22. Neely, A. Towards the Third Generation of Performance Measurement / A.Neely, B.Marr, G.Roos, S.Pike, O.Gupta // *Controlling*, 2003, Heft 3/4, März/April, p. 129-135.
23. Ramamoorti, S. Research opportunities in internal auditing. Chapter 3: Internal auditing: history, evolution, and prospects. Altamonte Springs, FL.: The Institute of Internal Auditors. 2003.
24. Rigby, D. Management tools and techniques: a survey // *California Management Review*, 2001, Vol. 43(2), p. 139-160.
25. Salierno, D. The Right Measures // *Internal auditor*, 2000, February, p. 41-44.
26. Tangen, S. Performance measurement: from philosophy to practice // *International Journal of Productivity and Performance Management*, 2004, Vol. 53, No 8, p. 726-737.
27. Tuftte, E. R. The Cognitive Style of PowerPoint: Pitching Out Corrupts Within. Cheshire, Connecticut: Graphics Press, 5, 2006.
28. Van Wijk, E.R. Collecting performance data: a CAE seeks a new benchmarking strategy to gauge his audit shop's effectiveness / E.R.Van Wijk, T.R.Holmes // *Internal Auditor*, 2006, October, p. 30-32.
29. Walker, P.L. Enterprise Risk Management: Pulling it All Together / P.L.Walker, W.G. Shenkir, and T.L. Barton. Altamonte Springs, FL: The Institute of Internal Auditors Research Foundation, 2002.
30. Ziegenfuss, D.E. Measuring Performance // *The Internal Auditor*, 2000a, Vol. 57, Issue 1, p. 36-40.
31. Ziegenfuss, D.E. Developing an internal auditing department balanced scorecard // *Managerial Auditing Journal*, 2000b, Vol. 15, Issue 1, p. 36-40.

Vidaus audito veiklos vertinimas: empiriniai įrodymai

Santrauka

Šiame straipsnyje pateikiama atlikta veiklos vertinimo vidaus audito srityje analizė. Straipsnio temos pasirinkimą nulėmė keli veiksniai. Pirmiausia, postūmis žinių ekonomikos link sąlygojo reikšmingą susidėmėjimą veiklos vertinimo fenomenu, kadangi tinkamai organizuotas ir atliekamas veiklos vertinimo procesas įgalina užtikrinti strategijos transformavimą į konkrečius veiksmus, daugiamatį veiklos vaizdo generavimą ir tinkamą organizacijų reakciją į strateginius iššūkius. Antra, vidaus audito vaidmuo valdymo sprendimų spektre per pastaruosius dešimt metų reikšmingai išaugo. Pastaruoju metu vidaus auditas nebetapatinamas vien su finansinės informacijos bei atitikties tikrinimu (kas buvo pastebima pirmosiose vidaus audito atsiradimo stadijose), bet veikiau apibrėžiamas kaip aktyvi funkcija organizacijos viduje, apimanti tikrinimo bei konsultavimo paslaugas. Kartu vidaus auditoriai kuria pridėtinę vertę naudodami struktūrizuotą ir sisteminių požiūrį, įgalinantį vertinti ir tobulinti organizacijos rizikos valdymo, kontrolės ir priežiūros procesų efektyvumą.

Kita vertus, dėl vidaus audito specifiškumo bei išskirtinės padėties organizacijoje, vidaus audito veiklos vertinimas yra išsūkių reikalaujantis uždavinys. Suformuluotos „pridėtinės vertės“ koncepcijos kontekste vidaus audito veiklos vertinimas turėtų atskleisti vidaus audito paslaugų efektyvumą bei efektingumą. Todėl pagrindinį straipsnio tyrimo klausimą galima formuluoti taip: *kokias vidaus audito veiklos vertinimo dimensijas vertėtų išskirti, kurioms būtų galima parinkti atitinkamus veiklos vertinimo rodiklius?*

Šio straipsnio tikslas – iširti bei išanalizuoti veiklos vertinimo tendencijas vidaus audito srityje ir pasiūlyti bendrai priimtina sprendimą vidaus audito veiklai vertinti. Straipsnio tyrimas realizuotas, pasitelkus lyginamosios teorinės literatūros analizę, publikuotų tyrimų apžvalgą, kiekybinės duomenų analizės bei išvadų formulavimo metodus. Empiriniams duomenims gauti panaudota struktūrizuota anketa iš interneto. MS Excel bei SPSS programos panaudotos apklausos duomenų analizei bei statistiniams metodams pritaikyti.

Pažymėtina, kad veiklos vertinimo koncepcija reikšmingai pasikeitė per pastaruosius 20–30 metų. Tradicinis veiklos vertinimas iki pat XX amžiaus 9-ojo dešimtmečio buvo asocijuojamas vien su finansų valdymu, kadangi veiklos vertinimui daugiausia buvo naudojama apskaitos informacija. Tačiau, pakitus materialijų išteklių bei žinių svarbai vertės kūrimo procese, veiklos vertinimo koncepcija reikšmingai transformavosi. Dėl šių pokyčių identifikuotini tokie pagrindiniai šiuolaikinės veiklos vertinimo koncepcijos skiriamieji bruožai kaip orientacija į strategijos įgyvendinimą, daugiamatis vertinamos veiklos vaizdas ir t.t.

Šiuolaikinės veiklos vertinimo koncepcijos raidą sąlygiškai galima skirstyti į tris etapus (Neely ir kt., 2003). Pirmosios kartos veiklos vertinimo principai traktuotini kaip tam tikras adityvas finansiniams rodikliams, kuris įgalina susidaryti išsamesnį vaizdą apie suinteresuotąsias šalis. Su antrąja veiklos vertinimo principų karta pasirodo vadinamieji strateginiai žemėlapiai (Kaplan, Norton, 2000) bei sėkmės ir rizikos žemėlapiai (Neely ir kt., 2002), įgalinantys identifikuoti kuriamos vertės pobūdį ir kryptį. Galiausiai, pasirodė trečiosios kartos veiklos vertinimo principai suponuoją tam tikrus reikalavimus finansinių ir nefinansinių rodiklių sąsajai bei strategijos įgyvendinimo kontrolei.

Kartu su veiklos vertinimo transformacijomis organizacijos lygyje pastebimi reikšmingi pokyčiai vidaus audito veiklos vertinimo srityje. Jei tradiciškai veiklos vertinimas organizacijos lygyje buvo atliekamas per finansinio rezultato pasikeitimo prizmę, tai vidaus audito veikla tradiciškai vertinta naudojant vadinamuosius kietuosius veiklos vertinimo rodiklius, kuriuos pasitelkus buvo vertinamas veiklos efektyvumas ir efektingumas. Tačiau organizacijos veiklos vertinimo evoliucija taip pat paskatino platesnės naudotinių vidaus audito veiklos vertinimo rodiklių amplitudės atsiradimą. Pastaruoju metu šie rodikliai nebeapsiriboja vien audito ataskaitų skaičiumi, audito atlikimo trukme, planuotų ir faktiškai atliktų auditų palyginimu ar nuokrypių nuo plano analize. Tarp šiuo metu vidaus audito veiklos verti-

nimo praktikoje taikomų rodiklių minimi tokie rodikliai kaip auditorių mokymams skirtas laikas, personalo patirtis, auditorių išsilavinimo bei atestavimo skalės, taikomi geriausios praktikos pavyzdžiai, įgyvendintų rekomendacijų dalis, vadovybės pavedimų skaičius, pasitenkinimas audito paslaugomis ir kt. (Haas, 2001; Frigo, 2002; Van Vijk, Holmes, 2006).

Neatsiejamas šiuolaikinės veiklos vertinimo koncepcijos bruožas yra palyginti gausūs veiklos vertinimo modeliai (angl. – *frameworks*). Nors visi šie siūlomi veiklos vertinimo modeliai apima ne finansinius bei kokybinius rodiklius, tačiau jie skiriasi sudėtingumu: pradedant nuo nesudėtingų ir gana paprastų modelių (tokių kaip Rezultatų ir lemiamų veiksmų sistema ar Veiklos vertinimo matrica) ir baigiant sudėtingais ir kompleksiniais veiklos vertinimo modeliais (tokiais kaip SMART, Subalansuotų rodiklių sistema ar Veiklos prizmę). Be abejo, šių modelių universalus adaptavimo galimybės ir praktinio pritaikymo populiarumas yra skirtingi. Publikacijos įgalina teigti, kad subalansuotų rodiklių sistema yra, ko gero, dažniausiai taikoma organizacijų praktikoje. Būtent subalansuotų rodiklių sistema daugelis autorių (Ziegenfuss, 2000b; Frigo, 2002; Cangemi, Singleton, 2003) siūlo naudoti vidaus audito veiklai vertinti. Kita vertus, Deloitte Touche Tohmatsu (2003) atlikti tyrimai leidžia teigti, kad minėtas veiklos vertinimo modelis nėra itin populiarus tarp vidaus auditorių. Be to, nėra ir kitų svarių empirinių įrodymų, kad minėtas veiklos vertinimo modelis būtų plačiai adaptuojamas ir taikomas vidaus audito veiklai vertinti.

Minėtos priežastys paskatino atlikti empirinius tyrimus vidaus audito veiklos vertinimo srityje. Empiriniai duomenys buvo renkami apklausiant respondentus, panaudojus struktūrizuotą anketą. Pakvietimai dalyvauti apklausoje buvo siunčiami naudojantis JAV Vidaus auditorių instituto narių sąveikos prieiga. Iš viso gauta 113 užpildytų anketų, iš kurių toliau apdoroti bei analizuoti tiko 102.

Tyrimu buvo siekiama nustatyti bendras vidaus audito veiklos vertinimo tendencijas ir atitinkamai suformuluoti apibendrintas išvadas, kurios įgalintų pagrįsti siūlomą vidaus audito veiklos dimensijų išskyrimą bei atitinkamą veiklos vertinimo rodiklių grupavimą. Be to, tyrimu buvo siekiama pagrįsti ir paties vidaus audito veiklos vertinimo tikslingumą ir reikalingumą. Atsižvelgiant į tyrimo tikslus, suformuluotos trys hipotezės, kurias siekta pagrįsti arba atmesti pagal gautus tyrimo rezultatus.

Kadangi veiklos vertinimas neturėtų būti savitiksliis ir turėtų bent iš dalies būti paremtas suinteresuotųjų šalių interesais, pirmąją suformuluotą hipotezę siekta patvirtinti vidaus audito veiklos vertinimo svarbą suinteresuotųjų šalių požiūriu. Kitaip tariant, buvo siekiama pagrįsti, kad vidaus audito veiklos vertinimas yra svarbus ne tik patiems vidaus auditoriams, bet ir audito klientams. Atsakymų rezultatai įgalina teigti, kad vidaus audito veiklos vertinimas yra daugiau ar mažiau svarbus didžiajai daliai vidaus audito klientų.

Siekiant realizuoti straipsnio tikslą, pasiūlytos trys vidaus audito dimensijos: įeiga, procesas ir išeiga. Antrąją hipotezę buvo suponuojama, kad veiklos vertinimo rodikliai gali būti suskirstyti į tam tikras grupes pagal išskirtas vidaus audito veiklos dimensijas. Respondentams buvo pateikti galimi vidaus audito veiklos vertinimo rodikliai, kurių reikšmes jie turėjo įvertinti pagal atstovaujamo vidaus audito padalinio charakteristikas. Dažniausiai naudojami vidaus audito veiklos vertinimo rodikliai buvo sugrupuoti pagal anksčiau išvardytas vidaus audito dimensijas. Apskaičiuotos Kronbacho alfa koeficiento reikšmės įgalina teigti, kad pagal identifikuotas dimensijas sugrupuoti vidaus audito veiklos vertinimo rodikliai patikimai matuoja duotąsias dimensijas. Vadinasi, antrąją hipotezę galima laikyti patvirtinta.

Kadangi veiklos vertinimo rodiklių rinkinio pasirinkimas nėra efektyvus, jei yra abstrahuojamasi nuo vertės grandinės identifikavimo veiklos vykdymo procese, todėl trečiąją hipotezę buvo bandoma pagrįsti sąryšio tarp atskiras veiklos dimensijas matuojančių rodiklių egzistavimą. Gautas Pirsono koreliacijos koeficiento reikšmės įgalina teigti, kad tarp atskiras dimensijas matuojančių veiklos vertinimo rodiklių egzistuoja stiprus koreliacinis ryšys.

Raktažodžiai: *vidaus auditas, vidaus audito veiklos rodikliai, veiklos vertinimas, veiklos vertinimo rodikliai, vidaus audito veiklos vertinimas.*

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