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Dimensions of Performance Measurement System in Changes Research

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Research in management accounting and performance measurement is eclectic. None of the conceptual approaches dominate. Some of them, such as contingency, agents, contract theories are popular among management accounting researchers, others are quite new at least in the sense of application in performance measurement studies, namely, complexity and open systems theory. Analysis of performance measurement from different theoretical points of view leads to the formulation of framework with featured theoretical dimensions. Elements of performance measurement systems interpreting it as an open system are presented in this study. Two pure theoretical situations of performance measurement system are determined.

Performance measurement could be objectively based on hard measures and their interpretation (explicit knowledge) or subjectively based on experience, analytical abilities and intuition (tacit knowledge). Both of them could be disclosed in each organization but in different levels. Those aspects could be analyzed according to the featured elements of open system (input, process and output) and forms of perfection level of a particular organization. Dimensions of theoretical framework as well as elements of open system could be the basis constructing instruments of empirical performance measurement researches.

This paper aims to disclose how changes of organizational environment are reflected in performance measurement system.

Experience in this field is unique in each organization. In most cases quantitative research methods have some limitations to disclose and to generalize this experience. Changes of case study organization's performance system's content were analyzed during three periods. Performance systems content were disclosed using research framework based on open systems dimensions. Organizational values were chosen as a measure of organizational environment. Some implications to economic conditions as shaping factors for organizational environment were made.

The main results are findings that economic conditions could be enabling factor for the unique configuration of objective and subjective features of open performance measurement system in each organization. This impact could be analyzed indirectly through organizational values and reflection of them in performance measurement system's perfection level. Interpretations of those results do not lead to generalized conclusions but shed more light on the phenomena of performance measurement system and defines the way it could be diagnosed, interpreted and improved.

Keywords*: performance measurement, open system, dimension of performance measurement, changes.*

Introduction

The problem of performance measurement system's openness and fitness with external environment is not new. Most recent management accounting researches were based on contingency approach. Studies based on this approach were conducted by Hoque and Hopper (1994), Libby and Waterhouse (1996), Alam (1997) Dent (1996), Granlund and Lukka (1998), Laitinen (1999), Anderson and Lannen (1999), Wnuk and Sobanska (2000), Haldma and Laats (2000), Luther and Longden (2001). These studies were based on conceptual contributions by Innes and Mitchell (1990), Kellet and Sweeting (1991), Coates, et al. (1992), Cobb and Helliar (1995), Burns and Scapens (2000), Basti and Bayyurt (2008). Davidaviciene (2008), Markovic (2008), Gimzauskiene and Kloviene (2008, 2009), Strumickas and Valanciene (2009). Findings of that studies demonstrate that the changing environment of organisational performance has a direct impact on changes in performance measurement that in turn are realised in close connection with projects on re-organizing internal management systems (Valanciene, Gimzauskiene, 2007).

Theoretical studies performed let us maintain that performance measurement system as an open system could be recognized according to objective and subjective features, which let us evaluate in what way it fits an environment and meets informational demand of managers. These features measured in particular way could become the set of criteria for recognition of performance measurement as an open system. On the other hand, changes of those systems are impacted by factors of organizational environment. The research question of this paper could be formulated as: *How does changing environment impact performance measurement systems?*

The aim is to disclose how changes of organizational environment are reflected in performance measurement system. The research method is a case study. The case study organisation is a bank, a member of an international group, operating in retail and corporate banking in Lithuania. The choice of the organization was determined by two reasons. One of them is that financial institution is the first which detects changes in economy looks for adequate reaction to them. The second is that this organization has long term experience of the implementation and operation of performance measurement systems.

Three periods were chosen for this study. Those periods represent three different economic conditions that could impact performance measurement system of the organization.

Results of organization's performance and organizational values were used to disclose microenvironment. The main elements of the system namely means used for measurement, analysis and control, planning and decision making were evaluated using particular methodology. This methodology is based on previous theoretical and empirical studies. The essence of this methodology is recognition of subjective and objective features of open system in performance measurement of the particular organization. The tool for prime data collection was the questioner that was used as a starting point for future qualitative analysis and interpretations.

Theoretical background, main presumptions and development hypothesis are presented in the first part of the paper. Research method and measures used are grounded in the second one. The third part is for comprehensive analysis and interpretations of the results.

Theoretical background and development of hypothesis

Formation of theoretical presumptions. The most viable methodological approach in the cognition of organizational performance measurement is systems approach. Based on this approach, it could be maintained that performance measurement process under the conditions of knowledge economy could be only functional when it operates as an open system. Performance measurement system as an open system could be defined as functional, continuously improving subsystem of organization's management system which covers three dimensions of performance evaluation (measurement, analysis/ control, planning/ decision making) and leads to adaptability of organization in business environment. Environment of performance measurement system should be defined in two levels: macro and micro level. The macro environment is the conditions of business the adaptation in which must be ensured by the performance measurement system generating information. Microenvironment is organization itself (size, complexity of activities and process, values, etc.). Input of performance measurement system is data about organization's performance, bases of evaluation (benchmarks) and measures. Process of performance measurement could be defined as measurement and control. Output of performance measurement system is the information and knowledge that enables to ground managerial decisions. Performance measurement system's elements and their configuration and conformity with the environment are unique in different organizations. (Valanciene, Gimzauskiene, 2005, 2008; Strumickas, Valanciene, 2006; Alas, 2008, Grundey,2008; Yusof, Azis, 2008; Gudonavicius, Bartoseviciene, Saparnis, 2009).

On the other hand, performance measurement could be objectively based on hard measures and their interpretation (explicit knowledge) or subjectively based on experience, analytical abilities and intuition (tacit knowledge). This objectivity and subjectivity form the unique nature of performance measurement system. Objectivity forms the formal aspect of performance measurement and, accordingly, subjectivity discloses the conceptual one. Those aspects could be analyzed according to the featured elements of open system (input, process and output). Presumption that performance measurement process could be objective and subjective means that measurement process could be based on hard measures and their interpretation, which leads to explicit knowledge. On the other hand, it could be based on intuition and experience which leads to tacit knowledge (see Table 1).

Performance measurement system should be evaluated based on both of those aspects as both of them are significant for the perfection of a performance measurement system. Those objective and subjective open system's features could be a set of criteria diagnosing perfection level of performance measurement system. The level of objective side of performance measurement system could be recognized analyzing the ways and manner of measurement, analysis, control, planning and decision making processes. They could be organized as routines and that means that those processes are objective while ensuring explicit knowledge about organizational performance. On the other hand in some cases harmonization of interests, strategy, goals and operational tasks could be an object of subjective discussion, agreements or power. In future those things will be more shaped by organizational values. The theoretical presumption of this study is that manifestation level of objectivity (formal aspect) and subjectivity (conceptual aspect) of the main performance measurement system's elements determines the perfection level of the system itself.

Table 1

Elements of open system in different types of performance measurement (Valanciene, Gimzauskiene, 2008)

Elements of performance measurement system	Hard (objective)	Soft (subjective)
Input: • Data; • Evaluation basis; • Measures.	Data from different data systems *(HR, CRM, accounting, ERP and etc.)* Clarified strategic plan broken down into clear goals, tasks and budgets; Hard measures such as manufacturing and business performance (physical and financial flows).	Experience, analytical abilities and good business intuition of agent Multidimensional strategic portfolio, emergent strategies. Soft measures such as transaction performance (transactions), commitment fulfillment performance (commitments).
Process: • Measurement; • Control.	Using Hard measures Formal control according to organizational rules and procedures.	Using soft measures Informal based on intuition and experience of agent.
Output: • Information; • Knowledge.	Formal reports about organizational performance. Explicit knowledge such as variances analysis, strategic profit analysis.	Soft evaluations of transactions and fulfillment of commitments. Tacit knowledge such as experience to act in particular situation, to shape organizational decisions matching opportunities of external environment.

This perfection level is shaped by micro environment. Organizational values are the most featured variable as it depends on macro conditions. The competing values model is the most suitable to define the set of values and analyze the perfection level of performance measurement system. Variables of competing values model are predominant characteristics of organization, style of leadership, style of human resource management, glue of organization, strategic orientation of organization, critical success factors (Cameron, Quinn, 1998).

Those types of systems are extreme points of performance measurement. There are no pure types in real organizations. The implications for future research are to disclose the level of objectivity and subjectivity in organizations' performance measurement systems as theoretical prepositions listed in this study let to construct a research instrument based on the framework of performance measurement and elements of open system. Perfection level of performance measurement system could be expressed as a point ***(P)*** the coordinates of which is manifestation level of objective and subjective features (Gimzauskiene, 2007):

$$P(X, Y) = (OS, SS)$$
$$\text{here} \qquad (1)$$
$$OS : \langle x_1, x_2 \dots x_7 \rangle$$
$$SS : \langle x_1, x_2 \dots x_4 \rangle$$

here:
P–perfection level
OS –manifestation level of objective features
SS – manifestation level of objective features
x_n *–sighs of systems features*

Manifestation level of objectivity and subjectivity depends on character of performance measurement in different management levels, namely strategy creation, strategy implementation and tactical- operational. In order to determine coordinates performance measurement systems state of perfection objective ***(OS)*** and subjective ***(SS)*** features should be expressed as additive function.

$$y_{os} = \sum_{i=1}^{7} ax_i \qquad (2)$$

$$y_{ss} = \sum_{j=1}^{4} ax_j \qquad (3)$$

here:
y_{os} *– objective features of performance measurement*
y_{ss} *– subjective features of performance measurement*
x_i *– sigh of objective system's feature*
x_j *– sigh of subjective system's feature*
a – weight of system's feature

Development of hypothesis. Based on theoretical presumptions listed above, following hypotheses could be formulated:

Performance measurement system reflects organization's values as an organizational environment factor.

- Demand for new performance measurement instruments adoption is most presumptive in conditions of economic growth. Conditions of economic growth determine a set of featured values that are orientated to market and external and internal competition. The main character of organizational goals is orientation to customers and redistribution of market for larger market share.
- Mature stage of economic cycle marks continuous improvement and harmonization of performance measurement system and experience of using it. This stage of economic cycle characterises a set of values that are orientated to human recourse development. The main character of goals is orientation to wellness of organization security and development of human resources.
- Conditions of economic downturn are time to use advantages experience of the performance measurement system for an effective management of recourses and processes as one of the means to survive. This stage challenges values which are featured as disposition to uncertainties from one side and effective coordination and control of internal processes and recourses from the other.

The measures of organizational environment and method of performance system evaluation would be presented in the next part.

Research method

Changes of performance measurement system in changing environment might be disclosed measuring and analyzing relation of such variables: changes of micro environment by evaluating organizational values and performance measurement system by diagnosing its perfection according to the manifestation level of objective (formal) and subjective (conceptual) aspect.

- **Measures of micro environment.** Type of values might be determined according to the competing values model and standard questionnaire developed by Cameron & Quinn (1998).

Measurement of the perfection level of performance measurement system. Hypothetical model presented in the previous chapter was chosen as a methodological basis determining the perfection level organizational performance measurement process. The questionnaire technique is offered to ascertain the perfection level of organizational performance measurement.

This technique will research (a) the management accounting methods, which are currently utilized in the organizational performance measurement process, (b) their interrelationship on all three levels of information integration, and (c) currently performed functions in the measurement process. The research tool should evaluate the nature and degree of concrete system attributes manifesting themselves in the organizational measurement process. According to the proposed methodology, the perfection of the measurement system is evaluated by the conformity degree of objective and subjective attributes in the measurement system to the established values of criteria (system attributes).

Data for the perfection level of performance measurement system evaluation will be accumulated with the help of the questioner which helps to identify such variables as: (1) planning process in different management levels (knowledge basis for strategy formation, content of strategic goals, and operational tasks); (2) routines of

harmonization of interests, goals and operational tasks; (3) routines for strategy and strategic goals dissemination; (4) measures and measurement process in different management levels; (5) determination of principles of responsibility; (6) routines of pre-evaluation of strategy, strategic goals and plans; (7) routines of strategic achievements, progress and performance results control. Those data are variables of systems attributes (*complexity, hierarchy, integration degree, and orientation)* and cover either formal or conceptual aspect of performance measurement and will be systemised according to three dimensions of performance evaluation measurement control and planning (see Table 2).

The accumulated information should be applied for the determination of state of performance measurement system at different moments and for the evaluation of the character of performance measurement system changes in relation with changes of organizational environment.

Table 2

Structure of the questioner (Gimzauskiene, 2007)

Part of the questioner	**Questions**		
Performance level	***Planning***	***Measurement***	***Control***
Perfection of performance measurement system in strategy creation level.	Process of strategic planning: • Content of informational basis. *(complexity)* • Routines of interests harmonization *(horizontal integrity)* Routines of strategy dissemination *(vertical integrity)*	Measures for strategy and long term plans expression *(complexity)*	Determination of principals of responsibility for strategy implementation *(hierarchy)*
Perfection of performance measurement system in strategy implementation level	Process of strategy implementation: • Content of strategic goals *(complexity)* • Routines of goals harmonization *(horizontal integrity)* • Routines of goals dissemination *(vertical integrity)*	Measures of strategic goals expression and achievements measurement *(complexity)*	Determination of principals of responsibility for strategic achievements *(hierarchy)*
Perfection of performance measurement system in tactical and operational levels	Process of tactical and operational planning: • Content of operational tasks *(complexity)* • Routines of operational tasks harmonization *(horizontal integrity)*	Performance measurement in value chain *(complexity)*	Determination of principals of responsibility for performance *(hierarchy)*

Results

Researches of the performance measurement system were performed in 2003, 2006 and 2008. In all cases four respondents of different management levels were interviewed *(manager of customer service centre; experts of financial analysis and planning department; CEO of region and top level manager).* This choice was determined by a presumption that the objective situation could only be revealed summarizing information and opinion from different management levels. Respondents of lower management level were interviewed using a structured questionnaire (the same that was used for the values analysed and was presented in the previous section). Top managers answered the same questions and made comments, which let us better understand the situation and make interpretations and conclusions.

Analysis of organizational values. Based on the qualitative research results, it could be maintained that organizations values have changed in analyzed periods of time (see Table 3). The external environment could be one of the factors empowering those processes. The dominating sets of values in 2003 (3.13) and 2006 are rational goal. The first time period marks the starting year of economic growth after Russian crisis impact and orientation to external opportunities while attempting to get the larger market share, to attract customer and ensuring development and growth of the organization. Those goals could be achieved through internal competition and rational control. That is the character of rational goal set of values. In 2006 the dominated values remain the same (2.75).

Table 3

Changes of dominating values

Values	**2003**	**2006**	**2008**
Human relations	2.38	2.38	2.46
Open system	2.83	2.17	2.88
Rational goal	3.13	2.75	2.17
Internal process	1.75	2.42	2.50
Dominated set of values	Rational goal	Rational goal	Open system

On the other hand, at this time the organization became more balanced as manifestation level of all types of values is quite similar. The featured result of this time is that next to rational goal set of values is human relations values (2.38).

The goals of people's development could be noticed in annual report of that time. The organization attempted to become a better employer. 2006 was the year of mature economic growth and the year when wellness of the organization enlarged. It seems logical that organization took care of its employees. 2008 marks the starting point of economic downturn. Though the results presented in previous section do not show dramatic changes, but the organization itself has prepared to react to indefinite external conditions. Open system's values (2.88) characterize organization as unpredictable and dynamic looking for and testing new opportunities as crisis is good time for the new start.

On the other hand, next to open systems score is internal process values (2.50) score. It could be noticed that in 2008 the manifestation level of bureaucracy is the biggest during the period analyzed. This quite different set of values is readiness to manage organizations internal potential ensuring effectiveness of existing business.

Changes of organizations performance measurement system. In order to evaluate out the objective (formal) side of the system types of measures, set of goals and plans were analyzed in strategic and operational levels first of all. Those variables form the complexity of the system. The more goals and plans are formulated and prepared, the more measures should be used, and the more complex is the system. This feature composes 40% of additive measure of systems objectivity. Besides this principle of responsibility and an accountability were handled as an objective side of the system (20% of additive measure of systems objectivity). From subjective (conceptual) point of view the orientation of the system was analyzed. Orientation shows weather the organizational values are reflected in organizations strategy and goals, to what level they are measured and evaluated. This feature composes the 60% of additive measure of systems subjectivity. The connecting link between objectivity and subjectivity is systems horizontal and vertical integration. The first one marks the way organization succeeds to harmonize different interests, goals and tasks. The second one discloses how organization ensures dissemination of strategy and goals to lower management levels and everyday life of employees. Those features compose 20% each in both objective and subjective measure. If an organization has routines and procedures for those activities, it was handled that it is an objective feature. If managers harmonization and integration ensure by personal agreements with the help of experience or power, it is handled as subjective side of the system. The objective integrity means that it is based in conceptual level as well.

Results of the survey (see table 4) let us prove that new performance measurement instruments adoption is order in fast economic growth conditions, as the perfection level of the system according to objective and subjective features is at the highest score (OS 1137 and SS 1354). On the other hand, the difference between the objective and subjective features is at the highest expressed score as well. This means that at that time organization tried to apply the great number of different measurement tools from one side but part of them was left at conceptual level. The score of systems complexity is 508. This feature lets us disclose the content *(strategies, goals, measures)* of the system. Horizontal and vertical integrity of the system shows the way organization ensures harmonization of interests, goals, tasks and dissemination of them through management levels. The score of horizontal integrity shows that harmonization activity at that time was more conceptual than formal (175, 275). Situation with vertical integrity is different and this means that organization had routines for goals and tasks dissemination but they were not proved conceptually. Those interpretations based on quantitative analysis could be proved in aqualitative way. Application of modern performance measurement system balanced scorecard (BSC) was at the starting point and most of BSC tools worked either not as routines or were rejected as useless. Based on qualitative observations and interviews, it could be noticed that great attention is paid to financial, market and customers goals and measures. This is in line with features of rational goal values. Analysis of performance measurement system in 2006 period disclosed the character of performance measurement system in mature stage of economic cycle. Lower level of organizations perfection level and lower level of difference between objective and subjective features disclosed the character of performance measurement system's changes. It was the time of the improvement and harmonization the of system when experience of systems application grew up, the most informative useful tools were accepted and inadequate were rejected (score of systems complexity is lower 445).

Horizontal and vertical integrity became more perfected in formal and conceptual basis. From interviews and qualitative observation it could be added that main attention was put on employees and their development. Besides this was the time when balanced scorecard and activity based costing systems became routines in the organization.

Growing manifestation level of objective systems features could be handled as organization's reaction to economic downturn conditions. It could be explained as systems orientation to effective management of recourses and processes. And this is in line with changing organizational values when organization is at the particular level of external uncertainties and looks for harder control and coordination of activities. The lower difference between objective and subjective features shows the system as harmonized and balanced applying its experience of performance measurement into management process.

Table 4

Changes of dominating values

Features	2003	2006	2008
Objective features (OS):	**1137**	**1079**	**1083**
Complexity (content of strategies, goal and measures)	508	445	424
Hierarchy (principals of responsibility and accountability)	238	290	258
Horizontal integrity (routines for interest, goals and tasks harmonization)	175	200	225
Vertical integrity (routines for values, strategy and goals dissemination)	216	144	176
Subjective features (SS):	**1354**	**1194**	**1176**
Orientation (conceptual basis for measurement)	900	800	775
Horizontal integrity (subjective ways for interest, goals and tasks harmonization)	275	225	225
Vertical integrity (subjective ways for values, strategy and goals dissemination)	179	169	176
Difference between subjective and objective features	**217**	**115**	**93,5**

Summarizing the results of the research, it could be maintained that identified changes of the performance measurement system are not drastic and get evolutional character. The main reason is that the analyzed system was

at high perfection level from the first time period observed. But on the other hand, the character of changes is in line with changes of economic conditions. However, those relations could not be observed directly as macro environment impacts organizational factors (values) which are reflected in organization's performance measurement system.

Conclusions

Performance measurement system as open an system could be defined as functional, continuously improving subsystem of organization's management system which covers three dimensions of performance evaluation (measurement, analysis / control, planning / decision making) and leads to adaptability of an organization in business environment.

- Environment of a performance measurement system should be defined in two levels: macro and micro level. The macro environment is the conditions of business the adaptation in which must be ensured by the performance measurement system generating information. Microenvironment is the organization itself. Organizational values are the most featured variable as it depends on macro conditions and covered such dimensions as size, complexity of activities and process, values, etc.).
- Input of performance measurement system is data about organization's performance, bases of evaluation (benchmarks) and measures.
- Process of performance measurement could be defined as measurement and control.
- Output of performance measurement system is the information and knowledge that enables to ground managerial decisions.

Economic conditions are enabling factor for unique configuration of objective and subjective features of open performance measurement system in each organization.

- Configuration level of subjective and objective features defines the level of systems perfection. They could be measured identifying such variables as complexity (content of strategies, goal and measures); hierarchy (principals of responsibility and accountability) horizontal integrity (routines or other subjective ways for interest, goals and tasks harmonization); vertical integrity (routines or subjective ways for values, strategy and goals dissemination).
- Economic growth determines a set of rational goal values. That was proved objectively (3.13) by the research results and subjectively based on declaration in annual report. The perfection level of that time is in the highest level and this could be explained by growing demand for new performance measurement instruments adoption that is orientated to market and external and internal competition. On the other hand, the difference between objective and subjective features is the largest and this means that the system is underbalanced yet.
- Mature stage of economic cycle determines rational goal set of values (2.75), but it is less expressed than in a previous period. More balanced values and expressed human relations values is in line with declaration in annual report. A little bit lower perfection level and twice lower difference between objective and subjective features could be explained as well as the improvement and harmonization of the system and experience of its application.
- Conditions of economic downturn determine an open system (2.88) set of values which express the growing environmental uncertainties' level. The growing score of an internal process set of values (2.50) marks attempt for control of internal processes and recourses.

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Veiklos vertinimo sistemos dimensijos pokyčių tyrimuose

Santrauka

Tyrimai valdymo apskaitos ir veiklos vertinimo srityje yra eklektiški. Išskirti vieną konceptualų požiūrį būtų sudėtinga. Todėl vertinant šio pobūdžio tyrimus ir jiems skirtas teorines koncepcijas galima pastebėti, kad kai kurios teorijos, pavyzdžiui, atsitiktinumų, agento, kontrakto, yra populiarios tarp valdymo apskaitos ir veiklos vertinimo sistemų tyrėjų. Kitas, pavyzdžiui, atvirų sistemų arba kompleksiškumo teorijas galima laikyti naujovėmis dėl dviejų priežasčių: (1) jos pačios yra naujos; (2) nebuvo taikytos šios srities tyrimuose.

Šio straipsnio **tikslas** – atskleisti, kaip veiklos vertinimo sistema reaguoja į organizacijos aplinkos pokyčius. Tyrime taikytas atvejo analizės metodas. Veiklos vertinimo sistema šiame straipsnyje yra aptariama kaip atvira sistema su jai būdingais elementais, apibrėžiant dvi būdingas teorines situacijas. Pateiktos ir tyrimui naudojamos teorinės prieigos pagrindą sudaro veiklos vertinimo sistemai būdingos savybės, argumentuotos skirtingais teoriniais požiūriais. Pagrindinė teorinė prielaida yra ta, kad kiekvienoje organizacijoje veiklos vertinimas gali vykti (1) objektyviai, remiantis rodikliais ir jų interpretavimu, vadinasi, išreikšta informacija ir žiniomis ir (arba) (2) subjektyviai, remiantis intuicija ir patirtimi, t. y. labiau neišreikšto pobūdžio žiniomis. Abu šie aspektai būdingi kiekvienai organizacijai ir yra vienodai reikšmingi. Vadinasi, jie sudaro savito pobūdžio vertinimo sistemą kaip visumą. Straipsnyje remiamasi prielaidomis, kad veiklos vertinimo sistemos išbaigtumo lygis turėtų būti įvertintas pagal objektyvių ir subjektyvių savybių reiškimosi laipsnį. Veiklos vertinimo išbaigtumą galima išreikšti kaip tašką, kurio koordinatės – išmatuotosios objektyvios ir subjektyvios vertinimo sistemos savybės. Veiklos vertinimo proceso kaip išbaigtos sistemos nustatymo kriterijus atitinka atviros sistemos savybes. Kiekviena iš jų yra objektyvi arba subjektyvi ir gali būti interpretuojama pagal skirtingo lygio veiklos vertinimo specifiką. Todėl objektyvių ir subjektyvių vertinimo savybių reiškimosi laipsnį kaip vertinimo sistemos pokyčių vektoriaus koordinates galima išreikšti taikant adityvinę funkciją.

Siekiant atsakyti į klausimą, kas formuoja subjektyvių ir objektyvių sistemos savybių reiškimąsi ir tam tikrą derinį, buvo keliama pagrindinė šio tyrimo **hipotezė** - organizacijos vertybės kaip vienas organizacinės iš aplinkos veiksnių yra atspindėtos veiklos vertinimo sistemoje panaudojant objektyvias ir subjektyvias dimensijas ir jų reiškimosi laipsnį. Naujų veiklos vertinimo instrumentų poreikis yra labiau tikėtinas ekonominio augimo sąlygomis. Ekonominio augimo sąlygos formuoja organizacinių vertybių, susijusių su rinka ir išorine bei vidine konkurencija visumą. Tikslų pobūdis atspindi orientaciją į vartotoją ir rinkos dalies augimą. Ekonominio ciklo brandos stadija apima nuolatinį veiklos vertinimo sistemos tobulinimą, derinimą bei naudojimo patirties kaupimą. Šiai stadijai būdingos vertybės, susijusios su žmogiškaisiais ištekliais ir jų plėtojimu. Būdingi tikslai susiję su organizacijos turtinimu intelektinių išteklių plėtojimu. Ekonominio nuosmukio sąlygos tai laikas, kada reikia naudotis veiklos vertinimo sistemos pranašumais ir sukaupta patirtimi, siekiant efektyviai valdyti išteklius ir procesus. Tai būtina sąlyga išlikti. Šioje stadijoje formuojama dvejopa vertybių visuma. Viena vertus, šios vertybės rodo reakciją į veiklos neapibrėžtumus. Kita vertus, tai galima apibūdinti kaip siekį efektyviai koordinuoti ir kontroliuoti vidinį veiklos procesą.

Norint patvirtinti ar paneigti teorines prielaidas bei keltas hipotezes buvo atliktas tyrimas. Anketine apklausa ir kokybiniu interviu buvo matuojami du kintamieji: organizacijos vertybės ir veiklos vertinimo sistemos išbaigtumas. Dominuojančioms vertybėms nustatyti buvo pasirinktas teorinis R. E. Quin, J. Rohrbaough (1983) konkuruojančių vertybių modelis. Vertinant veiklos vertinimo sistemos išbaigtumą, reikia atskleisti sistemų savybių požymius skirtingais veiklos lygiais pagal vertinimui būdingas dedamąsias (matavimą, planavimą ir kontrolę). Pagrindiniai požymiai, įvertinantys sistemos savybes, yra šie (1) planavimo procesas skirtingais valdymo lygiais (žinių bazė formuojant strategiją, strateginių tikslų ir operatyvinių užduočių turinys; (2) interesų, strateginių tikslų ir operatyvinių užduočių suderinimo procedūros; (3) strategijos ir strateginių tikslų suderinimo procedūros; (4) matavimo priemonių, vertinimo bazių aibės; (5) atsakomybės ir atskaitomybės nustatymo principai, (6) išankstinio vertinimo procedūros (7) veiklos kontrolės procedūros. Šie kintamieji yra sistemos savybių (kompleksiškumo, hierarchijos, integruotumo ir tikslingumo) požymiai ir kuri nors viena rodo arba formalią arba konceptualią vertinimo sistemos dimensiją pagal tris vertinimo dedamąsias: matavimo, kontrolės bei planavimo procesus .

Apibendrinant **teorinius rezultatus** galima teigti, kad veiklos vertinimo sistemą - atvirą sistemą - galima apibrėžti kaip funkcionalią, periodiškai atsinaujinančią organizacijos vadybos posistemę, kuri apima tris vertinimo dedamąsias: organizacijos veiklos rezultatų matavimą, kontrolę/ analizę bei planavimą/ sprendimų priėmimą, ir užtikrina vertės kūrimo procesų valdymą ir dėl to organizacijos adaptyvumą aplinkoje. Veiklos vertinimo sistemos aplinką galima apibrėžti dviem lygiais. Makroaplinką atspindi dinamiškos verslo sąlygos, kuriomis veiklos vertinimo sistema gali padėti adaptuotis.

Mikroaplinka yra pati organizacija, jos dydis, veiklos ir procesų sudėtingumas, vertybės. Vertinimo sistemos įeiga – tai: (1) duomenys apie sistemoje vertinamus objektus (faktinę veiklą, išorinės aplinkos veiksnius ir riziką), (2) vertinimo bazės (veiklos tikslai, rizikos tolerancijos ribos); (3) matavimo priemonės.

Veiklos vertinimo proceso dedamosios yra matavimas ir kontrolė. Veiklos vertinimo sistemos išeiga yra informacija ir žinios, kurias panaudojus galima pagrįsti valdymo sprendimus.

Tirtoji organizacija yra bankas - tarptautinės grupės narys, - savo veiklą plėtojantis Lietuvos bankininkystės rinkoje. Šios organizacijos pasirinkimą sąlygojo dvi priežastys. Pirmoji - finansinės institucijos pirmosios pajunta ekonominius pokyčius ir ieško adekvačios reakcijos į juos. Antroji - tirtoji organizacija turi ilgalaikę vertinimo sistemų diegimo ir naudojimo patirtį.

Empiriniai atvejo analizės rezultatai pagrindžia teorines prielaidas, kad ekonominės sąlygos yra veiksnys, darantis poveikį unikaliai objektyvių ir subjektyvių atviros veiklos vertinimo savybių konfigūracijai kiekvienoje organizacijoje. Objektyvių ir subjektyvių konfigūravimo lygis formuoja veiklos vertinimo sistemos išbaigtumą. Šios savybės gali būti išmatuotos identifikuojant kompleksiškumo, hierarchijos, horizontaliojo ir vertikaliojo integruotumo savybių požymius. Ekonominis augimas apibrėžia racionalaus tikslo vertybes. Objektyviai šis rezultatas yra pagrįstas anketinio tyrimo rezultatais ir subjektyviai patvirtintas remiantis metinio pranešimo teiginiais. Išbaigtumo lygis yra aukštas. Tai gali būti paaiškinta tuo, kad didėja naujų veiklos vertinimo priemonių, orientuotų į rinką ir vidinę bei išorinę konkurenciją, adaptavimo poreikis. Kita vertus, skirtumas tarp objektyvių ir subjektyvių savybių yra didžiausias. Vadinasi, sistema tuo laikotarpiu buvo nesubalansuota. Ekonominio ciklo brandos stadijoje taip pat formuojama racionalaus ciklo vertybių sistema, tačiau ji yra išreikšta mažiau nei ankstesniame periode. Apklausos metu pastebėta didesnė vertybių suderinamumo ir žmogiškųjų santykių vertybių raiška, atitinkanti metinio pranešimo teiginius. Žemesnis išbaigtumo lygis ir dvigubai mažesnis skirtumas tarp objektyvių ir subjektyvių savybių gali būti paaiškintas sistemos harmonizavimu, tobulinimu ir praktinio taikymo patirtimi. Ekonominio nuosmukio sąlygos apibrėžia atviros sistemos vertybių visumą, kurį rodo aplinkos neapibrėžtumus. Dėl didėjančios vidinio proceso vertybių raiškos susidariusią situaciją reikia valdyti procesų ir išteklių požiūriu.

Raktažodžiai: *veiklos vertinimas, atvira sistema, veiklos vertinimo dimensijos, pokyčiai.*

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