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# Financial Reporting Quality Control for Internal Control Implementation

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For the award of

Doctor of Philosophy

27.11.2009

2009

## KEY WORDS

Internal control

Financial reporting

Qualitative characteristics of financial reporting

Quality reporting

Influencing factors

Information filters

Financial reporting quality control

## BIBLIOGRAPHIC CITATION

Gafarov T., Financial reporting quality control for internal control implementation. Brno: Brno University of Technology, Faculty of Business and Management, 2009. 170 p. Ph.D. thesis supervisor Ing. Helena Hanušová, CSc.

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## INTRODUCTION

Today's organizations are operating and competing in an information age. Information has become a key resource of most organizations, economies, and societies. Indeed, an organization's basis for competition has changed from tangible products to intangible information. More and more organizations believe that quality information is critical to their success. However, not many of them have turned this belief into effective action. Poor quality information can have significant social and business impacts. There is strong evidence that data quality problems are becoming increasingly prevalent in practice. Most organizations have experienced the adverse effects of decisions based on information of inferior quality. It is likely that some data stakeholders are not satisfied with the quality of the information delivered in their organizations. In brief, information quality issues have become important for organizations that want to perform well, obtain competitive advantage, or even just survive in the 21st century. In particular, accounting maintains and produces the data used by organizations to plan, evaluate, and diagnose the dynamics of operations and financial circumstances. Providing and assuring qualitative data is an objective of accounting. With the advent of financial reporting quality, the traditional focus on the input and recording of data needs to be offset with recognition that the systems themselves may affect the quality of information. Indeed, empirical evidence suggests that information quality is problematic in financial reporting. Accounting information quality is concerned with detecting the presence or absence of target error classes in accounts.

Still publications on problematics of the reporting quality in the majority are reduced to system of maintenance of standards of the financial reporting. It has been caused by bankruptcies Enron, WorldCom, Parmalat, which distortions of the financial reports have reached the unprecedented size.

Most of the information system researches into data quality focus on the theoretical modeling of controls and measurements. For example, there is a research on the impact and propagation of errors throughout information systems. Other studies focus on editing data and input controls. Many studies in AIS have focused on internal controls and audit. However, few studies have attempted to understand

what causes the difference in information quality outcomes, and what should be done to ensure high quality accounting information and how to measure this quality. Therefore, there is lack of knowledge of the factor's estimations for information quality in Accounting that can assist organizations to ensure and improve accounting information quality.

One of the major directions of accounting and the control development is a problem of the continuous scientifically-proved tracing of current processes at the enterprise, external and internal factors, their estimation and forecasting of influence on the financial reporting quality.

# 1 THESIS TASKS AND PURPOSES

## 1.1 Problem introduction

One of the major condition of economy and its functioning elements such as entities, infrastructure and authorities is a presence of the economic information which satisfies to a number of requirements to make the valid decisions.

It is theoretically and historically proved, that accounting in the form of the accounting reporting (further - the financial reporting) can give such information. Accounting forms information on a financial position of the entity, financial results of its activity and movements of money resources for satisfaction of the information users requirements. Requirements to the accounting information are fixed not only in the international standards and concepts, but also in local legislative, and standards confirmed by the state.

It is generally accepted, that mistrust to the financial reporting brakes market development of investments. Foreign, and also internal investors not always wish to become shareholders of the enterprises. Poor quality of the financial reporting creates a barrier to hit the population money on a securities market. On the one hand, that brakes investment processes in the country, and on the other - increases a inequality, doing the income to be the exclusive privilege of rich people who dispose large share holdings and often have access to the additional information which has been not mentioned in the public financial reporting.

Today accounting systems and the internal control (further - IC) concepts are subjects of constant changes. Continuous reforming of the European, Russian and American systems of the accounting is observed. Especially the Russian accounting worries the difficult period of reforming. Thus usually due value and attention is not given to qualitative characteristics of the financial reporting

The decision of these problems is carried out intuitively without a support on scientifically proved systems, and has a formal character. At such approach it is difficult to estimate objective a condition of accounting process, to define tendencies of its development, and to set up necessary corrective amendments in process of the accounting, reporting and control.

One of the major directions of accounting improvement is a problem of the continuous scientifically-proved tracing of current processes in the enterprise, external and internal factors detection, their estimation and forecasting of influence on the financial reporting quality.

The present dissertational research is devoted to implementation of the financial reporting quality control, as a tool of the managers who will use it for supervision and estimation of the financial reporting quality.

Quality assurance, monitoring and control of quality of the financial reporting - insufficiently known a theoretical and practical field of knowledge. On analogies to financial management and financial monitoring, tax management, quality control has arisen originally in the economic environment, i.e. in practical activities, and only subsequently there were attempts of theoretical generalization and development of this field of knowledge.

At the same time most of the publications targeting on a problematics of report's quality were reduced to systems of maintenance of the financial reporting standards. It was reason of Enron, WorldCom, Parmalat bankruptcies. In the USA reaction to the given scandals was acceptance of the Sarbanes-Oxley Act<sup>1</sup> (further - SOX) in 2002, the exacting control over the financial reporting. The eighth directive of the European union of the corporate law also has undergone to change.

The comparative youth of this theoretical and practical field of knowledge, and also specificity of national legislations and the impossibility of foreign experience transformation in the field of quality of the financial reporting, distinction of experience, and also absence of the fact of wide spread of IFRS explains lack of the economic literature. The uniform approach to this function of intrafirm management in available publications is absent, and there is no still a conceptual device of discipline.

## 1.2 Ph.D. thesis purposes and tasks

At the enterprises the analysis of financial and economic activity showing an available financial condition of the enterprise is periodically carried out, but frequently there is no estimation of the financial reporting quality, the control and

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<sup>1</sup> *Sarbanes-Oxley Act*. 2002. < [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=107\\_cong\\_bills&docid=f:h3763enr.tst.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=107_cong_bills&docid=f:h3763enr.tst.pdf) >



monitoring is not existing. The dissertational work purposes is set: to introduce the parameters of the reporting quality in a control system of the enterprise and to develop a technique of control. For achievement of an object it is necessary: to define the concept of quality of the reporting; to reveal features; to study theoretical bases of the quality estimation; to lead the analysis; to develop recommendations on introduction of qualitative parameters in control system of the enterprise, for its efficiency, to develop the control technique.

Object of the research is managerial activity at the enterprises. Subject of the research is the internal control as a tool of improvement of accounting, analytical and financial economic processes of the industrial enterprise.

The research aims are generalisation of theoretical and practical knowledge, working out of scientifically proved recommendations for organizational-methodical maintenance of quality assurance of the financial reports in the enterprise and creation the concept of the quality control.

According to the purpose following tasks have been defined:

- to specify the definitions of the financial reporting and internal control;
- to show the necessity of the self-control of reporting quality;
- to develop the concept of financial reporting quality control of the enterprise;
- to define a place of the control in structure of operation of business;
- to define factors influencing on the financial reporting quality;
- to specify concept of the financial reporting quality control;
- to reveal sources of a supply with information of the control;
- to create a technique of carrying out the financial reporting quality control of the enterprise and to approve it in the enterprises;
- to formulate generalizations of the control concept and in this connection to develop scientifically-practical recommendations on improvement the managers decisions.

Though the estimation of a financial condition is constantly made, it is also necessary to develop, constantly to improve and estimate the system of the internal control. It is necessary to develop a technique of estimation of the reporting quality

specially for the certain enterprises in view of all features, to take advantage of statistical data and to draw corresponding conclusions, to make constant control.

Thus, reporting quality control can be named as the mechanism of the constant supervision over the major current processes of financial and economic activity, and estimation of their influence on the financial reporting quality in conditions of constantly varying external and internal environment. The purposes of development of the mechanism of control are: constant detection of deviations of data in the reporting from actual results of activity, definition of clauses causing distortion of a real financial condition of the enterprise, revealing of size of influence of the given distortions and quality of the reporting as a whole on decision-making, and also revealing of the reasons causing these deviations and distortions, and recommendation development on corresponding correction for an improvement of the reporting quality.

In addition, three research hypotheses were formed to help answer the research questions. Those hypotheses are listed below:

Hypothesis 1. There are factors influencing on financial reporting quality which are possible to measure

Hypothesis 2. It is possible to measure the financial reporting quality characteristics

Hypothesis 3. The internal control implementation and evaluation can be and should be based on financial reporting quality control.

### 1.3 Research approach and methodology

Theoretical and methodological basis, and also information base of research are made by proceedings of the Russian, Czech and foreign scientists on an investigated problem, official documents and legislation of The Russian Federation, The Czech Republic, EU, and The USA.

Empirical base of the thesis includes data got during the research according to the Internal Grant Agency of Business and Management faculty Brno University of Technology N AD179001M2.

Induction and deduction were used to specify the key definitions, the system analysis and synthesis were used for concept formulation, interrogation, supervision, questioning were used for influencing factors study.

The financial reporting quality control technique is developed with use of economic-mathematical methods. In a final part of work modeling and approbation of a technique by creation of imitating model and the system of the quality reporting expert evaluation are made on the base of fuzzy logic, hierarchy analysis and on a base of qualimetry.

And also to make the analysis and synthesis of the received results of experiment the methods of the comparative analysis are used. And to generalize, to compare results of supervision were used statistical and mathematical methods.

The experiment is approbated in an industrial and audit enterprises of Udmurt republic, Russia.

#### 1.4 Scientific novelty

Scientific novelty of research consists in the following:

1. The concept of the financial reporting quality is specified as a category of the economic information which is presented by set of the financial indicators and has quality characteristics

2. The necessity of allocation of such segment as an estimation of the financial reporting on conformity to requirements to qualitative characteristics is shown as an independent direction in system of the internal control and allows to estimate quality of the accounting (financial) reporting of the enterprises.

3. The influencing reporting quality factors were overviewed and their hierarchy were designated.

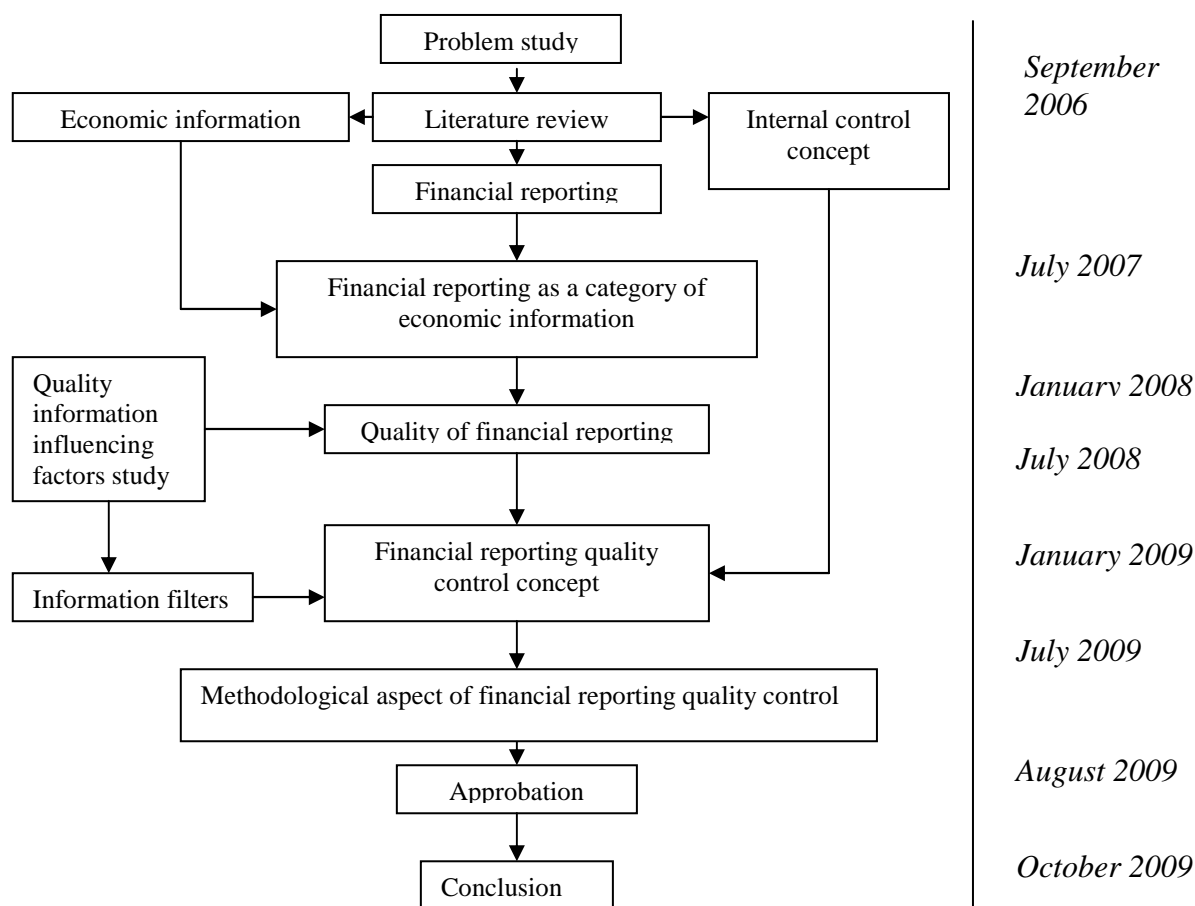
- The major factors influencing quality of the financial reporting are formulated, their hierarchy is designated, qualitative characteristics of the reporting on which there is an influence are defined;

- Necessity of an estimation of internal factors influencing quality of the information - information filters is revealed, filters definitions are given and their essence is shown.

4. Techniques for an estimation of the factors influencing qualitative characteristics of the financial reporting, and also on quality of the reporting as a whole with use of fuzzy logic bases are offered, the documentation for an estimation is developed.

5. The methodical aspect to an estimation of quality of the financial reporting in a kind of the multicriterial characteristic uniting the major qualitative characteristics, giving in to the description by means of qualitative and the quantitative indicators defining the possibility of its use for decision-making, as bases for process of Internal Control construction and constant improvement is worked out.

### 1.5 Time harmonogramm



### 1.6 The theoretical importance

The theoretical importance on the research termination can be that:

Necessity of allocation of such segment as a financial reporting quality estimation on conformity to requests of qualitative characteristics which is an independent

direction in system of the internal control is reasonable and allows to evaluate quality of the accounting (financial) reporting of the enterprises.

Submission is given and the hierarchy of factors influencing quality of the financial reporting is designated.

Techniques for an estimation of the factors influencing qualitative characteristics of the financial reporting, and also on quality of the reporting as a whole with use of bases of fuzzy logic is offered, the documentation for an estimation is developed.

The methodical aspect to the financial reporting quality estimation as a kind of multicriteria characteristic uniting the major qualitative characteristics for its use on decision-making, as bases for process of implementation and constant internal control improvement is offered and can be used in the enterprises.

And also theoretical positions, recommendations and work conclusions can be used for courses “Audit”, “Analysis”, “Operation of business”, “Financial accounting”, “Accounting”, “IFRS”, etc., and also for study-methodical materials.

## 1.7 The practical importance

The practical importance of research consists that identifying the influencing factors could enhance the ability of accounting to gather data, process information and prepare reports. Outcomes of this research will contribute to the body of knowledge both in Accounting Information System and Internal control, and it may benefit other research into these areas. For example, it can help arouse the awareness of data quality issues in AIS field, and to make it possible to establish the linkage of the identified factors with the existing data quality dimensions for outcomes assessment. Thus, understanding how these factors affect financial reporting quality may be useful to practitioners. Focusing on those factors that are more critical than others will lead to efficiency and effectiveness management procedures. In brief, the results from this research are likely to help organizations’ top management, accountants, and IT managers obtain better understanding of financial reporting quality issues.

## 1.8 Approbation and introduction of results of research

Main results of research were reported and discussed on faculty meetings «Accounting and the economic activities analysis» in the Izhevsk State Technical University, at the European international scientifically-practical conference in Brno, on international online-video conference between Izhevsk State Technical University and Technological University of Brno, at annual scientifically-methodical conference MendelNet (2009), and also at carrying out of seminars and a practical training for foreign students. Experiment has been spent in one industrial enterprise and audit company of the Udmurt republic, Russia.

## 1.9 Volume and dissertation structure

The dissertation consists of the introduction, four heads, the conclusion, the list of the used literature and appendices. Total amount of the dissertation pages of the text is 148, including 37 tables, 17 pictures. The literature list consists of 112 names of works of domestic and foreign authors, and also statutory acts.

## 2 THE CONCEPT OF THE FINANCIAL REPORTING QUALITY

### 2.1 Financial reporting quality

What is financial reporting quality? What quality characteristics should have financial reporting? In the follow table is shown the differences of quality characteristics between IFRS and U.S. GAAP and GAAP in Russia:

Table 1. Different quality characteristics

Qualitative characteristics (GAAP Russia)	Qualitative characteristics (SFAC 2)	Qualitative characteristics (FASB, 1980)
Primary qualities:		
Requirement of fullness	Relevance	Relevance a. Timeliness b. Usefulness
Prudent	Predictive value	
Representational faithfulness	Feedback value	
Timeliness	Timeliness	
Reliability	Reliability a. Verifiability b. Representational faithfulness c. Neutrality	Reliability a. Measurability b. Verifiability (or objectivity) c. Unbiased
Consistency		
Rationality		
Secondary qualities:		
	Comparability	Comparability
	Constancy	Consistency
Constraining qualities:		
		Materiality considerations
		Cost-benefit considerations

There are many well-travelled roads in the quality management profession. Managers have been implementing quality management in typical manufacturing environments for many years, and the principles for doing it are well known. The big challenge in the future will be to take the same principles have learned so well and apply them to areas not so well travelled. There are many fertile areas that are off the beaten path and haven't had much contact with any formalized quality management system. Appears some questions: what place occupies quality requirements of financial reporting in activity of enterprise? How to measure it? How to manage it? How to control it? In the future works the object is set: introduction of parameters of quality of the reporting in a control system of the enterprise and development of a technique of carrying out of monitoring. And it will

be based on International Standards of Financial Reporting its principles and concepts.

The financial information has a number of more features:

- the majority of economic indicators is measured in quantitative expression (cost, a factory load, profit, etc.);
- recurrence, characteristic for the majority of industrial and economic processes allows to reuse the created program;
- dimensions of informational flows (the detailed information on economic processes allows to apply mathematical models to forecasting and management of them);
- has qualitative characteristics (completeness, reliability, timeliness, utility, etc.);
- possibility of the control over reliability of the information (transfer and processing of the economic information is carried out only on legally issued carrier - the document with the signature, the electronic message with a code, etc.).

In this connection the basic directions of researches in the field of the economic information are: adequate display of economic units and processes; development of economic-mathematical methods and models of processing of the economic information; creation of a system of the economic information, satisfying to requirements of management of modern economy. All directions pay significant attention to quality of the information.

Questions connected to quality are considered in such discipline as quality management. In this work pays attention to the problematic of quality evaluation of the financial reporting and internal control system construction. Application of approaches of the quality management (in particular, requests of standards series ISO 900x) for the improvements purpose of characteristics of quality of accounting is expedient. Different aspects of the concepts of quality, allow to apply the given category to any object, called to meet the requirements of consumers. So, in particular, in standard ISO 8402:1994 «Quality management and quality maintenance» is made following definition: Quality – is a set of characteristics of the object concerning its ability to satisfy established and prospective requirements.<sup>2</sup>

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<sup>2</sup> Chapkevich L. E. *Kachestvo i bezopasnost' potrebitel'skih tovarov: evolyuciya pravovogo regulirovaniya* // Advokat. 2005. № 7.



As an object of quality in thesis is the financial reporting - an information product in an information society acts. Thus established and prospective requirements associated with requirements of groups of accounting information users.

In view of quality definition, and also that circumstance that quality is the complex concept characterizing all structural elements of accounting system, it is necessary to designate following basic aspects of the given category in the reporting:

1. Quality is a satisfaction of queries and expectations of the accounting system users (practical definition). In this sense it is necessary to designate two target areas of the accounting as practical activity – maintenance of users with the necessary information, and also availability of the mediated effects connected with positive consequences of consumption by users of the received information in the course of the activity;

2. Quality is a set of the characteristics realized in a target accounting information and their significances connected with inquiries and expectations of users (technical definition). To similar characteristics of the financial reporting carry reliability, relevance, timeliness, clearness.<sup>3</sup>

Thus, it is necessary to understand set of characteristics of the accounting system concerning its ability to satisfy established and prospective information requirements of groups of users of the registration information as quality of the fiscal accounting.

## 2.2. Qualitative characteristics of financial reporting

The analysis of different quality characteristics and the rapprochement of the Russian and Czech accounting system to IFRS has played the advancing decision in a choice of definitions of qualitative characteristics presented to the financial reporting. Most of national accounting principals are based on IFRS. However the Russian legislation and the Russian practice in this part is the only certain treatment IFRS not always corresponding to the first copy. Therefore acquaintance to positions

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<sup>3</sup> Malyavko A.B. *Aspekty kachestva v mnogocelnykh uchetykh sistemah* Volgograd // Vestnik Volgogradskogo gosudarstvennogo universiteta. Vol. 3. 2005. p.194.

of the international standards requires steadfast consideration and review how do they interpret quality characteristics.<sup>4</sup>

Definitions and treatment to qualitative characteristics are contained by the document entered into the structure of the IFRS carrying the name Framework for the Preparation and Presentation of Financial Statements, (further - "Principles")<sup>5</sup>. The theoretically based main principles are hanged out. They are divided into two groups: basic assumptions and financial reporting qualitative characteristics.

As basic assumptions, that is theoretically designed constructions, which give the base to accounting methodology presented the following principals: the accrual basis and an assumption of a continuity of activity. To reporting qualitative characteristics, that is, according to the text of standards to "the attributes doing the information represented in the financial reporting useful to users", are carried consistency, relevance, reliability and comparability. The classification of characteristics is presented in the picture 1.

It is necessary to pay attention that the role of the accounting information containing in the external financial reporting of an enterprises has little distinction from the Russian and Czech. According to IFRS the accounting information has to be useful to users for decision-making on the basis of the financial reporting analysis. Thus, «according to composers of IFRS, observance of requests and the rules to the qualitative characteristics, does financial reports comprehensible basis for acceptance of administrative decisions concerning the enterprise which reporting is analyzed»<sup>6</sup>.

Further it is necessary to consider each qualitative characteristic and to show its essence and the way of understanding in the given thesis

To satisfy the stated objectives, information should possess certain characteristics. The purpose of standards is to outline the desired qualitative characteristics of accounting information.

Picture 1 indicates these qualitative characteristics, presented in the form of a hierarchy of their perceived importance. Notice that the main focus, as stated in the first concept statement is on decision usefulness - the ability to be useful in decision

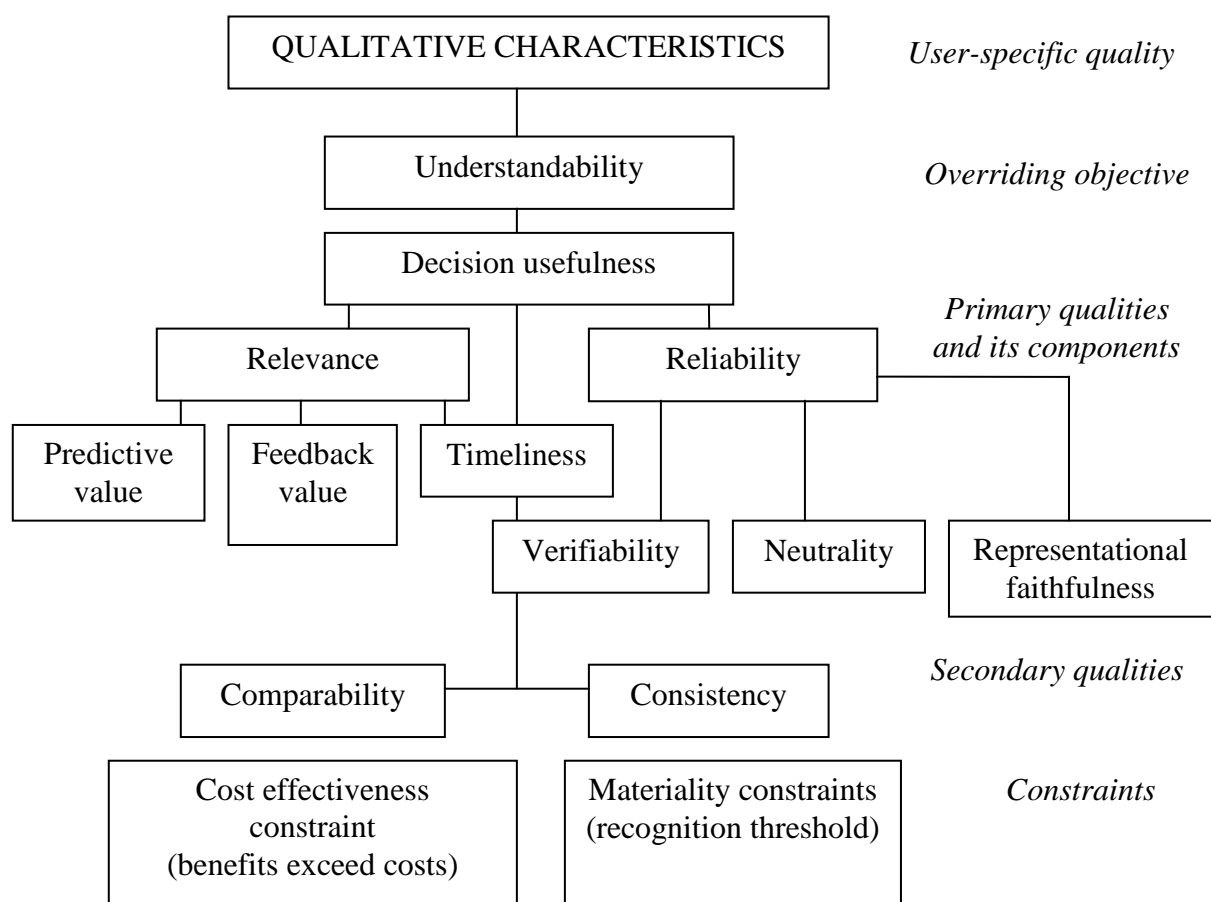
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<sup>4</sup> Pyatov M.L.Smirnova., I.A. *MSFO: Kachestvennye harakteristiki finansovoi otchetnosti* // BУH.1S. 2007. N 9.

<sup>5</sup> Askeri publishing. *Mezhdunarodnye standarty finansovoi otchetnosti (IFRS – 2008)*. 2008. p. 1100

<sup>6</sup> Pyatov M.L.Smirnova., I.A. *MSFO: Kachestvennye harakteristiki finansovoi otchetnosti* // BУH.1S. 2007. N 9.

making. Understandability means that users must understand the information within the context of the decision being made. This is a user-specific quality because users will differ in their ability to comprehend any set of information. The first stated financial reporting objective is to provide comprehensible information to those who have a reasonable understanding of business and economic activities and are willing to study the information. To be useful, information must make a difference in the decision process.



Picture 1. Hierarchy of desirable characteristics of accounting information.

Data of the modern financial accounting can tell very much about enterprise, but not everything. There are certain borders of information possibilities of the financial reporting. Their understanding is a necessary condition of the objective analysis of the accounting information (financial reporting).

Principles defines that financial reporting qualitative characteristics have certain restrictions in application which should be considered fully at its preparing.

First of all, restriction in interaction of such characteristics as relevance and reliability: delay in presentation of accounts in most cases leads to increase of its reliability, but simultaneously attracts relevance loss.

Secondly, the balance between benefit and expenses assumes that the benefits extracted from the information, should not exceed an expense for its preparation. The reverse situation in overwhelming majority of cases leads to loss of relevance of the information.

Thirdly, for a compromise establishment between reporting qualitative characteristics in most cases it is necessary to have the professional judgement how to carry out a problem of formation of the financial reporting at preservation of all qualitative characteristics and balance observance between them<sup>7</sup>. The matter is that each of considered above accounting information qualitative characteristics actually represents the independent theoretical construction which forms certain approaches to accounting interpretation of the facts of an economic activity. Here again it is necessary to underline independence of theoretical positions in frameworks of each of them. However the theoretical positions underlying characteristics, can conflict with each other. Each principle as the independent theoretical design has certain borders, and its consecutive application in practice often happens impossible.<sup>8</sup> It is considered that accounting information qualitative characteristics should counterbalance each other. The persons responsible for granting of this information are obliged to care about such a balance. The parity between qualitative characteristics is a subject of professional valuation of the accountant and is subject to a problem of satisfaction of requirements of users of the financial reporting. In the issue the problem of the accountant consists in reaching a corresponding parity between qualitative characteristics of an accounting information for achievement of a main purpose of the financial reporting.<sup>9</sup>

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<sup>7</sup> Konik N.V., Fil'chakova S.O. *Struktura MSFO. Standarty. Interpretacii*// Novaya buhgalteriya. 2006. vol. 11. Godovoi otchet 2006 dlya kreditnyh organizacii.

<sup>8</sup> Pyatov M.L., Smirnova I.A. *Ogranicheniya umestnosti i nadezhnosti buhgalterskoi informacii v traktovke MSFO*. // BУH.1S. 2008. N 3

<sup>9</sup> Suvorov A.V. *Osobennosti principov ucheta i osnovnye harakteristiki finansovoi otchetnosti, sostavlennoi po MSFO* // Mezhdunarodnyi buhgalterskii uchet. 2006. N 10.

At the same time all qualitative characteristics of financial reports should be observed with taking into account "expense-benefit" restrictions, that is benefit from the received information should be more expenses for its reception.<sup>10</sup>

Thus, it is possible to draw a conclusion that in accounting practice quite often happens that it is necessary to find an optimum combination of all qualitative characteristics proceeding from requirements of users of the accounting information and priorities of the development of the enterprise, therefore such characteristics are exposed to professional valuation and judgment of experts with attraction of auditing firms.

The understanding of the considered characteristics of the accounting information has great value for an estimation of the contents of the financial reporting. Knowledge of the restrictions inherent in the accounting information, that is borders of informativeness of the financial reporting, helps objectively perceive the economic information presented in the reporting. In this case only expectations of the user concerning the contents of the information will not surpass their real possibilities in demonstration of a state of the position of the reporting company. Hence, quality of the financial reporting is necessary to understand as set of the characteristics realised in the accounting information and their significances concerning its ability to satisfy established and prospective information requirements of the accounting information user, and also balance between them with taking into attention the restrictions connected with demands and expectations of users.

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<sup>10</sup> Peteneva E.N. *Sravnitel'nyi analiz osnovnykh principov podgotovki finansovoi otchetnosti po MSFO i rossiiskimi PBU // Vnedrenie MSFO v kreditnoi organizacii*. 2006. N 5.

### 3 INTERNAL CONTROL

The internal control is organized on means of the managing subject in any enterprise under the decision of a management for management and accounting efficiency. The information of the intrafirm control is used, as a rule, by a management. All plots and structural divisions of the managing subject are exposed to the intraeconomic control, it covers all financial and economic and enterprise productive activity as a whole.<sup>11</sup>

It is necessary once more to establish that scientists and experts give various definitions to system of the internal control (see table 2).

Table 2. Definitions of system of the intrafirm (internal) control

Definition	Source
Includes techniques and procedures of three basic categories which are developed and used by the management to ensure the sufficient warranty of conformity to the control purposes: the control environment, accounting system, the control moments (procedures).	[4, p. 264]
Includes three basic elements: the control environment, accounting system, control procedures.	[23, p. 47].
It is organized by management in order: to carry out enterprise activity in order and effectively; to ensure management policy observance; to ensure safety of property; to reach qualitative documentation of operations.	[1, p. 128]
Represented by set of organizational structure, techniques and the procedures accepted by chiefs of the organization for the control of efficiency of economic activities. The organization internal control system joins three components: the control environment, accounting system, control procedures.	[10, p. 100]
Includes a complex of the diverse interconnected techniques and procedures which are developed and used by the management to ensure undesirable risk decrease in business and financing activities, and also in the accounting and the reporting.	[72, p. 57 ]
Represented by the set of the management purposes for the employees, and consist of those concepts on the base of which the management proceeds.	[34, p. 165]
It is defined as a set of organizational measures, techniques and the procedures applied by a management of the economic subject for ordered and effective conducting of economic activities. Consists of an accounting system, the control environment, control devices.	[12, p.288-289]
Represented by the set of organizational measures, techniques and the actions applied by a management and workers of the economic subject for successful and effective conducting of economic activities.	[21, p.156]
Includes a proper accounting system, the control environment, separate control devices.	[28, p.143]
Includes a proper accounting system, the control environment, control procedures.	[106, p.4.1]
Represented by the difficult and thin organism which integral parts are all divisions of the enterprise, its all spheres of activity and activity of each worker of the enterprise.	[37, p. 10]
It is defined as a set of organizational structures, techniques and the procedures accepted by a management of the economic subject for ordered and effective conducting of economic activities which is organized in the given economic subject and its forces supervision and check: observance of requests of the legislation; accuracy and completeness of the documentation of accounting; timeliness of preparation of reports; prevention of errors and distortions; performances of orders and charges; maintenance of safety of property of the organization.	[31, p.342]
Can be subdivided into three components: the control environment - a set of characteristics which defines the office mutual relations favorable for the control in the company; a	[31, p.137]

<sup>11</sup> Andreev V.D., Cheremshanov S.V. *Sistema vnutrihozyaystvennogo kontrolya: osnovnye ponyatiya* // Auditorskie vedomosti. 2004. N 2

company accounting system - a policy and the procedures, concerning corresponding record of economic operations; control procedures - the special audits executed by staff of the company.	
Includes three elements: monitoring procedure conditions, an accounting system and control procedures.	[14, p.155].

From table 2 it is visible that the majority of experts agree in opinion that all variety of the actions which are carried out for the organization of the internal control is conditionally possible to group on three blocks:

- a proper accounting system;
- the control environment;
- separate control devices.

The analysis of documents from practice [80, 81, 82, 83, 84, 86, 88, 89, 98, 100], and also the report<sup>12</sup> shows that in essential aspects modern definition of subsystems of the internal control (in particular, in the document of Basel committee "the Internal control in banks: organisation bases", in standards SAS 55/78/94) is based on the definition formulated COSO (1992)<sup>13</sup> in which following subsystems of the internal control are allocated:

- Management of risks;
- The internal environment;
- Control procedures or control devices;
- The information and communications;
- Monitoring.

<sup>12</sup> Janet L. Colbert, Paul L. Bowen *Comparison of Internal Controls: COBIT, SAC, COSO and SAS 55/78*. // IS Audit and Control Journal. 1996. № IV, p. 26-35

<sup>13</sup> Committee of Sponsoring Organizations of the Treadway Commission *Internal Control —Integrated Framework. Guidance on Monitoring Internal Control Systems*. Discussion Document. September 2007. <www.coso.org>

## 4 INFLUENCING FACTORS

One of factors influencing on the financial reporting quality and the perception of the financial information are information filters. It is clear that managerial decisions quality depends on the decision-maker's qualification as well as the information quality which is available for the decision-making. Accountants are responsible for granting of the financial information which is necessary for acceptance of administrative decisions, concerning position and activity of the enterprise in the market. The administrative decision of the top manager or the proprietor on with positive, or negative consequences essentially surpasses the importance of the decisions accepted by the low or middle management.

Certainly, maintenance on an accessory as much as possible qualitative information of all users of the financial reporting would be an ideal variant, but the specific of national tax, audit and accounting legislation, distinction with European economic activity experience, business making style, features of shareholders capital, top management education and structure (top manager is an owner, state control), and the accounts departments specific which are still being in a stage of formation at Russian enterprises caused the impossibility of direct transformation of foreign experience in the field of the financial reporting quality.

In this connection it looks actual to consider factors limiting or deforming the financial information arriving to the top management of the enterprise. The given factors or situations will be named information filters. As it is known from the signalling theory, the filter is a device definitely limiting (reformative) a stream proceeding through it. Thus, the information filter limits a stream of the information proceeding through it. The understanding of the information streams restriction nature at the enterprise allows to compensate in certain degree their negative influence on decision-making process. So, the research purpose is to determine and to list the information filters, which are quite typical for the Russian enterprises, without dependence from their size and a pattern of ownership, limiting quality of the financial information at its receipt to users.

Discussion



The given list has been made as a result of interrogation and conversations with heads of different levels of management of the enterprises of all patterns of ownership. The research is made thanks to Internal Grant Agency of Business and Management faculty Brno University of Technology N AD 179001M2

1. The filter “ORGANIZATIONAL IMPERFECTION” is shown in absence at the enterprise of the uniform centre of processing and the analysis of the financial information arriving to the director from a number of divisions (various commercial and economic services), presented in various execution (format). It can be the report both the oral message and the data shown in the tables.

Thus the problem of reduction and the comparative analysis of data entirely lays down on the boss, which is overloaded with administrative problems. It often means, that by the most valuable analytical information, is lost.

Comparison of the financial information from divisions on reliability is not also organized, that reduces quality of a management information supply.

Negative influence of the given filter can be reduced by system engineering of the indicative information for the head. The bookkeepers reduce the diverse information intended for the director in a uniform format, containing the limited number of the indicators representing dynamics most of the general indicators of work of the enterprise and regularly enter it into the computer of the chief in the form of schedules, diagrams and etc. in a uniform format.

2. The filter “LOW qualification-1” is shown in absence at the enterprises of good experts in the field of representation of the financial information, so quality of carrying out of these works as a rule is low.

The effective, but the expensive method of struggle against this filter is the invitation of outside experts. In conditions of a total lack of money it is necessary to hope for fast "growing" of the accounting at the enterprises.

3. The filter “LOW qualification-2” is shown in inability of the top management to work with the information. Many bosses do not like to admit misunderstanding or ignorance something, being afraid to drop the authority before subordinates and therefore tear away obscure information.

Accountants, considering this situation should present, first of all, the material as much as possible by simple language, and, secondly, to try to find out, what form of

representation of the information is most comprehensible to the given head and gradually to "tame" the head to consumption of the information, for example, by giving of the important information by other way.

4. The filter "METHOD of PROCESSING of the INFORMATION" is shown in introduction of limiting conditions, that are normal for mathematical method applied to processing of the information. The important information can be lost because of incorrectly chosen method of processing.

If the method of processing of the data received during researches is chosen correctly and limiting condition characteristic for methods are put correctly therefore firm representation about an environment will correspond to the validity.

If the data processing method is chosen incorrectly firm representation about an environment will be deformed and therefore its strategic behaviour will be inadequately to market realities.

In order to avoid it, for processing of data it is possible to recommend a method of expert estimations which is more soft even for the most valuable intuitive information.

5. The filter "SUCCESSFUL INSTALLATIONS" is shown in aspiration of managers to use standard methods of the decision of the arising problems, already fulfilled earlier on similar problems (experience of the manager).

Any manager in his activity, develops sooner or later model of successful actions in the conditions of a constant set of factors and dependences between them in the given environment. The skilled manager with use of such a model during receiving difficult information, is capable to analyse it and choose quickly an optimum line of conduct.

But with increase of uncertainty and variability of an environment the same model, that based only on experience of the past, ceases to work and becomes a brake interfering reorganization of consciousness of the manager.

The head has a temptation to tear away inconvenient, not connected with last experience, information. Especially often it occurs to the financial information made according to new standards for example IFRS which as well as the idea of ISA has not got accustomed at many Russian enterprises.

Degree of this filter can be measured and definitely characterises "ageing" of the administrative personnel at the enterprise.

6. The filter "REAL POWER" is shown in aversion of the information by the managers having the real power at the enterprise if this information threatens their position.

At any enterprise, without dependence from its sizes and a pattern of ownership there are groups of people or divisions which combat among themselves for the power at the enterprise which can be expressed in the control over financial streams, or in prevailing influence on the head of company, that finally allows the won group to define a policy of the enterprise.

If the thinking of "winners" is based on experience of the past and mismatches a modern situation, the enterprise inevitably loses the positions in the market and enters into a crisis zone because the basic resources of the enterprise are distributed in favour of in the leading group, is frequent to the detriment of interests of firm as a whole.

For many Russian firms redistribution of the real power between industrial, having the power and commercial departments, gaining in strength now. Therefore the financial information testifying to the growing importance of a commercial component of management is turning away by "production workers" actively.

Effective instrument for reduction of influence of this filter is to increase economic and financial qualification of heads of all levels at the enterprise.

7. The filter "RESISTANCE of a middle MANAGEMENT" is shown in tearing away by middle management of operating influences from the top management as middle management sometimes does not understand all essence of an event and perceives it as threat to their position.

Resistance of middle management is shown in "pushing out" of "linear" problems to top management level (questions of supply, manufacture and so on).

This effect is a consequence of insufficient knowledge of middle management about motives of decision-making by the top management, and also that the middle manager as a rule has no necessary information for decision-making of optimum decisions within the limits of the competence.

Therefore it is important, that the chief besides delivery of instructions not only "share" the information with subordinates, but also in every possible way supported regular increase of financial qualification of management at the enterprise.

Thereby the effect of "resistance" by middle management decreases at realization of actions.

Thus, knowledge of the factors that influence data quality in Accounting will assist organizations to improve their accounting information systems' data quality. While many Accounting Information System studies have looked at internal control and audit, Data Quality (DQ) studies have focused on the measurement of DQ outcomes. It appears that there have been very few attempts to identify the Critical Success Factors for data quality in AIS and to measure the financial reporting quality. Thus, there is a need for research to identify the factors that affect financial reporting. Quality information is critical to organizations' success in today's highly competitive environment. Accounting information require high quality data. However, empirical evidence suggests that data quality is problematic in accounting sphere. Therefore, knowledge of factors influencing on the financial reporting quality, factor's evaluation that are important in ensuring data quality in accounting information systems is desirable.

## 5 METHODOLOGICAL ASPECTS OF QUALITY CONTROL OF THE FINANCIAL REPORTING

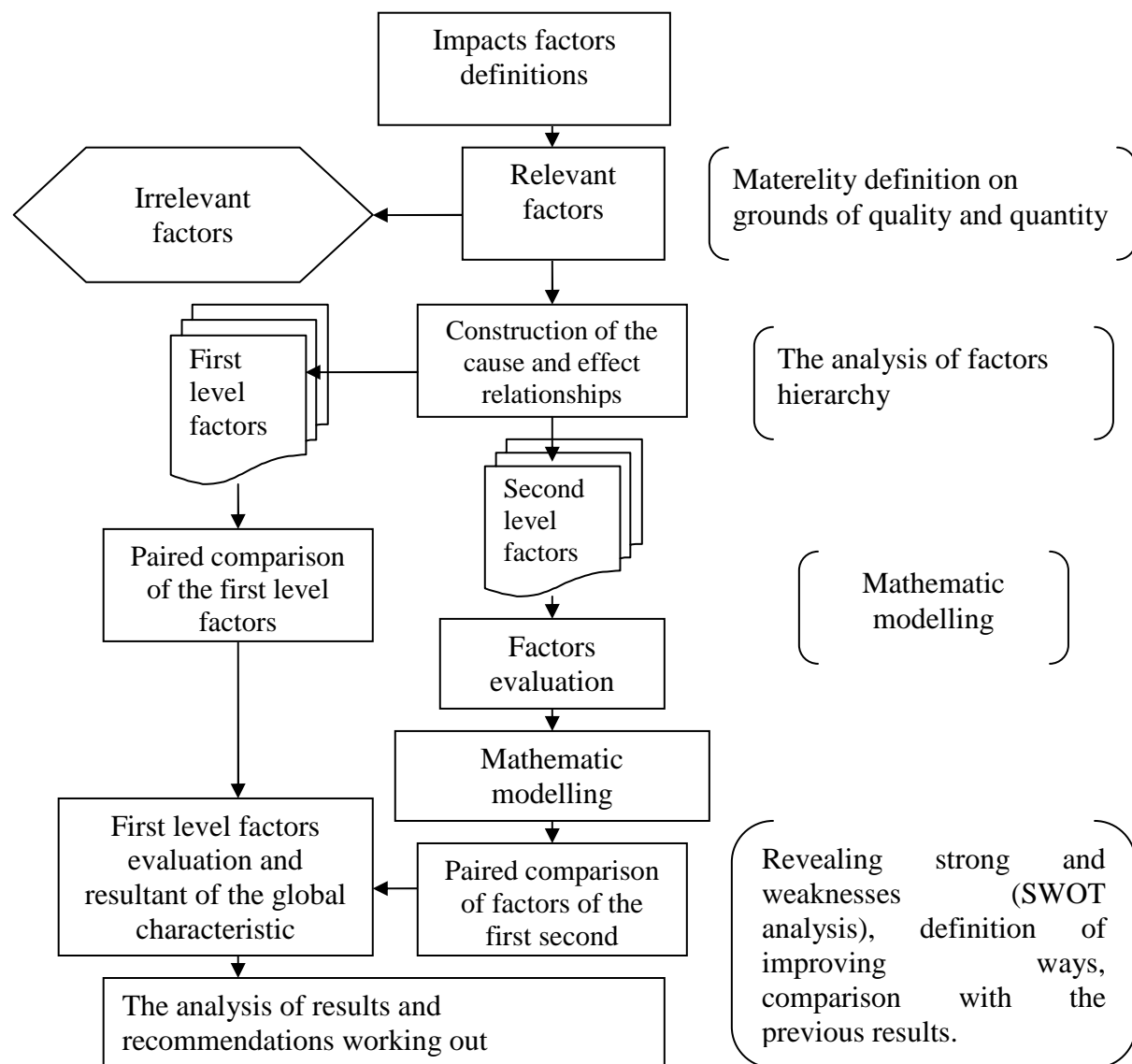
Features of quality control of the financial reporting make certain demands to structure, designated purpose and quality of used mathematical and tool models. Reporting quality control as complete system of continuous supervision, and the analysis of processes should become a necessary link during reporting preparation, and also at making and control of decisions at the enterprise. Thus deeper studying of a question of construction and control implementation has shown that for avoidance of difficulties and errors it is necessary to consider following requests:

- the impartial assessment of work volumes (underestimation frequently takes place);
- special attention to processes and their description;
- implementation just «for the sake of appearance» which will not be effective;
- compulsory use as control procedures and analysis of risks;
- availability of training;
- desirable use by IT decisions in the field;
- use of differentiation of authorities (including in information systems);
- perception of works not as a project, but as a process of the internal control.

Implementation of quality control of the financial reporting as internal control system element is a complex problem and is connected with essential expenses. It is necessary to perceive works on construction of quality control of the reporting and an internal control system as regular business process. As the relation to the given problem as to the single project will not bring required result – the qualitative financial reporting. In picture 2 the process block diagramme of quality control of the financial reporting is presented.

Use of the process focused approach at control system construction in aggregate allows to construct process of the internal control which besides conformity to various standards, will bring huge advantage and will bring an enterprise to qualitatively new level of management.

The control should be made in follow stages:



Picture 2. Block-scheme of the financial reporting quality control

**Stage 1.** Revealing of all the factors influencing on the reporting quality. It is necessary for a commission of experts using the method of “brain storm” to make the list of all possible internal and external factors influencing on the financial reporting quality. It is necessary to be guided by factors which influence directly on separate qualitative characteristics or on the reporting as a whole.

**Stage 2.** Allocation of the most significant factors. At the given stage conducting the control it is necessary for group of experts to make the analysis and ranging of the allocated factors for definition of the most essential. The level of relevant should be taken in not just like quantitative characteristic but first of all as a qualitative.

Thus, importance of the factor is understood as a possibility of its influence on the financial reporting in such a manner that the given influence can lead to the change of information user opinion. The received results can be presented as the following table 3:

Table 3. Relevant factors

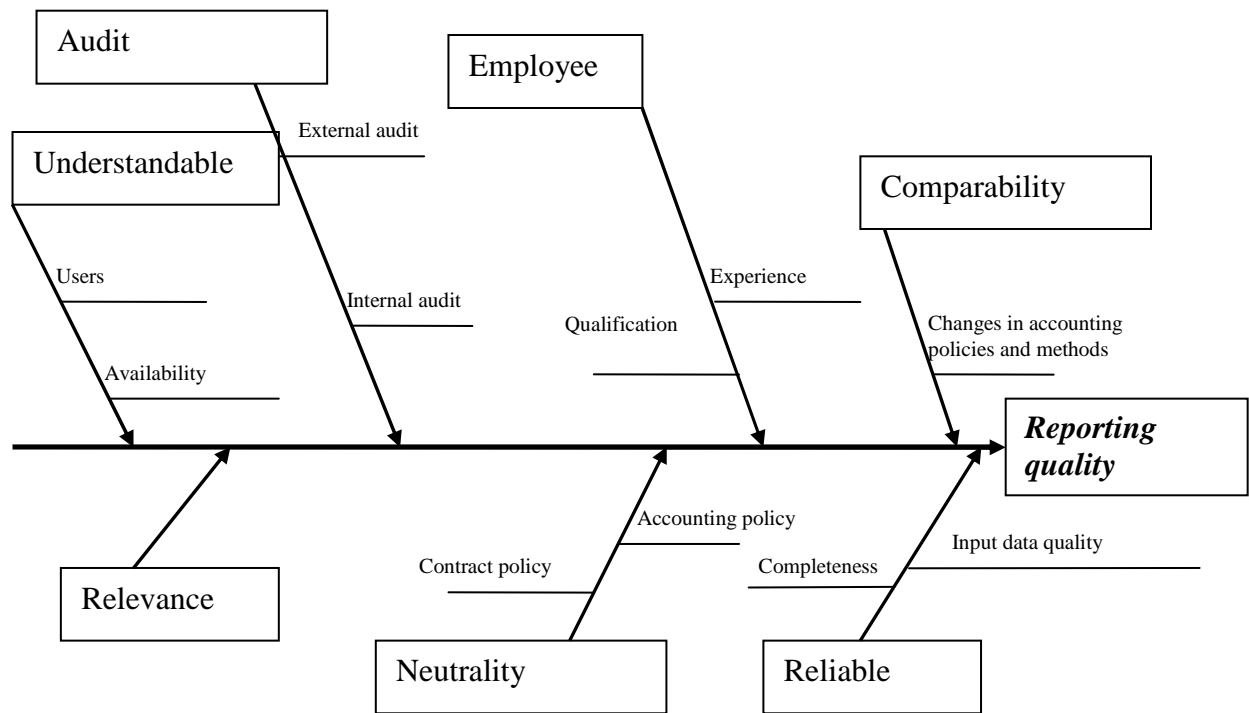
First level factors	Second level factor
Neutrality	Contract policy
	Accounting policy
Relevant	relevance
	materiality
Understandable	Users attainments
	availability
Audit quality	External audit quality
	Internal control quality
Employee	Qualification
	Experience
Comparability	Changes in accounting policy
	Changes in accounting methods
Reliability	Risks
	Distortion indicators
	Reports intercommunication
Completeness	Completeness of all activities
Organizational culture	Top and middle managers reporting quality understanding
	Personal responsibility

**Stage 3.** Construction of the factors relationship. Construction of the factors relationship “fish” reflecting which shows influence of factors on quality of the reporting (the analysis of hierarchy).

Further it is necessary to construct a relationship of cause and effect reflecting interrelations and influence of factors on the reporting quality. For a task solution of working out of a technique experts consider expedient use of the cause and effect diagramme (“fish”), offered the Japanese scientist Kaom Ishikava<sup>14</sup>. On its basis the structure of a problem emerges and base interrelations between factors of the first and second order can be defined. Next, for each paramount factor of the second and third usages influencing factors of the first order should be defined.

In picture 3 the example with some factors is presented. The constructed cause and effect diagramme allows to see structural interrelation of the basic and minor factors, hallmarking the reporting, and their effect on an end result.

<sup>14</sup> Ishikava K. *Yaponskie metody upravleniya kachestvom*. 1988. p. 103



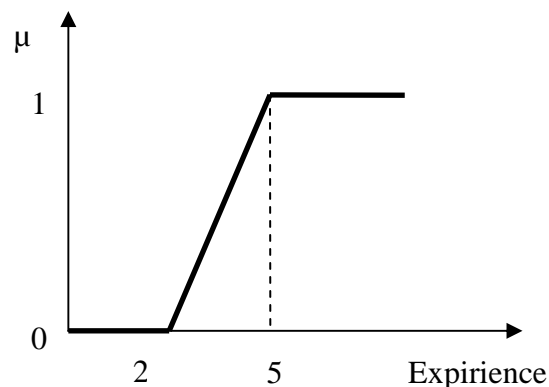
Picture 3. Hierarchy of quality influencing factors

**Stage 4. An estimation of minor factors.** At the given stage it is necessary for experts to estimate all factors of the second order. For an example, the criterion "Experience" relied corresponding to term of work. We count, that an operational experience on a site of work or as a whole in accounts department smaller, than two years it is undesirable. As much as possible experience is got for five years.

**Stage 5. Mathematical model of an estimation of factors of the second order.**

Modeling is offered to be carried out with use of desirability functions.

For an example factor "Experience". Corresponding function of desirability of criterion "Experience" is resulted in picture 4.



Picture 4. Function of desirability for the factor "Experience"



The formula of function of desirability can be deduced using any mathematical tool for this purpose, and also with help of MS Excel.

Function of desirability for the factor "Experience" will look as follows:

$$\mu \begin{cases} \mu = 0, (0 \leq x < 2) \\ \mu = 1/3x - 2/3, (2 \leq x < 5) \\ \mu = 1, (x \geq 5) \end{cases} \quad (1)$$

Solving simple system of the equation it is possible to determine  $\mu$ . By results of an estimation it is necessary to construct under all factors of the second level the table with the received results of function of desirability.

Table 4. Function of desirability for factor "Experience"

Factor	Meaning	$\mu$
Experience	3 years	1/3 or 0,333(3)

**Stage 6. Construction of matrixes of factors paired comparisons.** Construction of the factors paired comparisons matrixes is built on the method of T. Saaty<sup>15</sup>. An example of comparisons is resulted in table 6 (an example for criterion "Personnel").

A technique of the ranks finding of second level criteria on the basis of a pair comparisons matrix. A - the matrix of the pair comparisons constructed on the basis of values determined by experts of elements of a matrix  $a_{ij}$ . Through  $\alpha_1, \alpha_2, \dots, \alpha_n$  is designated required values of factors of the relative importance of factors.  $W = (\alpha_1, \alpha_2, \dots, \alpha_n)$  - a vector of factors of relative importance (ranks); n - amount of second level criteria.

For each element of a pair comparisons matrix fairly  $a_{ij} = a_i/a_j$ . On substantial sense ranks  $\alpha_i$  are values of contributions of corresponding second level factors, differently factors of importance of these criteria.

The wide circulation for search of ranks of factors on the basis of a matrix of pair comparisons was received with the approached method suggested by T. Saaty.

$$\alpha'_i = \sqrt[n]{\prod_{j=1}^n \alpha_{ij}}, \quad \alpha_i = \alpha'_i / \sum_{i=1}^n \alpha'_i \quad (2)$$

Approached method T. Saaty<sup>16</sup> has received a wide circulation thanks to its simplicity.

<sup>15</sup> Saati T. *Prinyatie resheniya. Metod analiza ierarhii*. 1993. p. 278.

<sup>16</sup> Saati T., Kerns K. *Analiticheskoe planirovanie. Organizaciya sistem*. 1991. 224 p

Thus, a matrix of paired comparisons of the factor "Personnel", and also ranks it is possible to present as table 5.

Table 5. Matrix of paired comparisons for the factor "Personnel"

Personnel	Qualification	Experience	Rank
Qualification	1	1/3	0,366
Experience	3	1	0,634

The given table is a result of ranking and shows on how many these or that factor, according to experts estimation, is more important than other.

**Stage 7. Construction of a paired comparisons matrix for the first level factors.** At this stage a matrix of pair comparisons should be constructed for the first level factors and their ranks are designed. Construction of a matrix of paired comparisons and calculation of ranks is carried out similarly to a way submitted in the fifth stage.

For example the experts are needed to construct a paired comparisons matrix for factors of the first level. They have defined, that a neutrality is almost equivalent to the personnel and it is a little bit more preferable than quality of audit, and quality of audit is a little bit more preferable than the personnel. Having constructed a matrix, experts have defined ranks under the formula 2. The received result is submitted in table 6.

Table 6. Matrix of paired comparisons of factors of the first order

Reporting quality	Employee	Neutrality	Audit quality	Rank
Employee	1	1/2	1/3	0,1634
Neutrality	2	1	3	0,5396
Audit quality	3	1/3	1	0,297

**Stage 8. Convolution of the first level factors and an estimation of a global parameter of quality of the financial reporting.** At the given stage it is carried out (in view of the found ranks) curtailing of the second level factors in factors of the first, then factors of the first level in the uniform global criterion describing the general quality of the reporting.

Calculation of the first level factors value is made under the following formula

$$D(C_1, C_2 \dots C_n) = \frac{(a_1 \mu(C_1) + a_2 \mu_2(C_2) + \dots + a_n \mu(C_n))}{n}, \quad (3)$$

where  $D$  - an estimation of the factor of the first level;

$C$  - factors of the second level which are included in the considered first level factor;

$\alpha$  - a rank of the corresponding factor of the second level;

$\mu$  - value of desirability function for corresponding the second level factors;

$n$  - quantity of factors of the second level.

The received results should be fixed in the summary table.

Table 7. Criteria of quality of factors of the second order

First level factor	Second level factors	$\mu$	Second level factor rank	First level factor estimation	First level factor rank
Employee	Experience	0,33	0,366	0,308	0,1634
	Qualification	0,78	0,634		

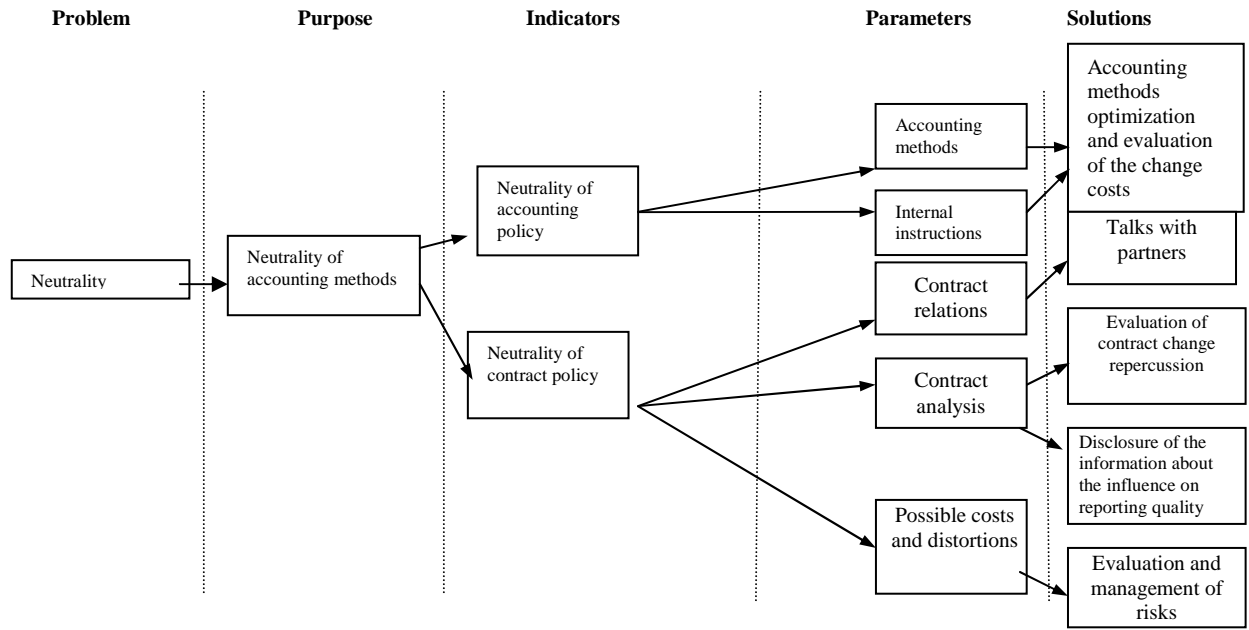
According to the offered table it is possible to estimate factors of the first level, balance between qualitative characteristics, to see weak and strengths of the financial reporting, etc. In an analyzed situation it is visible, that for improvement of quality of the financial reporting it is necessary to lead training of the personnel or to replace with more qualified and skilled staff.

For definition of a global parameter of the financial reporting it is necessary using the formula 3 to carry out convolution of all factors of the first level to global criterion of quality of the financial reporting.

**Stage 9 Analyses of results and recommendations.** At the final stage the estimation of reporting quality which, in a consequence, will allow to make improvement of system of the internal control and control procedures is given.

Typical recommendations can be made on a base of the following example scheme presented in the picture 5.

It would be desirable to note, that process of an estimation and perfection of the internal control system should occur continuously and its revision should be made constantly, instead of results of annual audit. Thus, results of quality assurance of the financial reporting are the entrance information for construction and continuous improvement of the internal control system process.



Picture 5. Recommendation working out scheme

## CONCLUSIONS

In conclusion it is necessary to mention that though at the enterprises the estimation of a financial condition is annually, it is necessary to develop, constantly to improve and estimate system of the internal control, necessary to develop a technique of an estimation of quality of the reporting of the enterprise specially for the certain enterprise in view of all features, to take advantage of statistical data and to draw corresponding conclusions, to make constant monitoring.

Thus, reporting quality control can be named the mechanism of realization of constant supervision over the major current processes of financial and economic activity, and an estimation of their influence on quality of the financial reporting in conditions of constantly varying external and internal environment. The purpose of development of the mechanism - detection of deviations of data in the reporting from actual results of activity, definition of clauses causing distortion of a real financial condition of the enterprise, revealing of size of influence of the given distortions and qualities of the reporting as a whole on making of administrative decisions, and also revealing of the reasons causing these deviations and distortions, and development of offers on corresponding correction separate directions for improvement of quality of the reporting.

How can high reporting quality and internal control create an advantage? In an Ernst and Young survey of institutional investors, *Investors on Risk*, E&Y reported that investors apply a penalty if they believe a company's internal control to be insufficient. Sixty-one percent of respondents said they had avoided investing in companies and 48% had de-invested in companies where internal control was considered inadequate. As additional support, they study went on to report that 82% of respondents agreed that good internal control was worth a premium on share price. These institutional investors are pushing for greater transparency on risk issues and related internal control efforts. Simply put, an organization's ability to implement and maintain a leading-class control framework can create competitive advantage in today's market (according to report *The Future of Internal Control and Risk*. [www.ye.com](http://www.ye.com)).

A system of the financial reporting conducting with strong management, quality control and good legislative base is the key factor of economic development. The trust of investors in the financial and not financial information is based on strong Internal Control, high-quality standards of the financial reporting, audit and ethics, thus, standards and Internal Control play the leading part in assistance of economic growth and financial stability in the country. Nevertheless, every company meets the problems of implementation of The Internal Control. Among them there can be problems in labor qualification, legislation and so on. It is also necessary to examine the successful experience at the micro level.

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### 1. Personal information

Birth place: Izhevsk, Russia  
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### 2. Education.

2006-2009 Brno University of Technologies, Faculty of Business and Management. PhD study. Field - Quality of financial reporting.  
2005-2008 Izhevsk State Technical University, faculty "Management and Marketing". Post-graduated course.  
2000-2005 Izhevsk State Technical University, faculty "Management and Marketing", chair "Accounting, audit and analysis of economic activity", obtained a distinction.  
2002 Course accountant-user 1C:Buhgalteria 7.7. LLC «Kedr-FB».  
1998-2000 Course of Business English language. Yekaterinburg, Russia.

### 3. Professional experience.

09.2004 – 10.2005 Interregional Inspection of Russian Federal Tax Service №9 of Udmurt Republic, tax officer, department of export/import.

- control of tax rate 0% application of tax-payers
- control of tax discounts
- currency exchange regulation control

05.2003 – 09.2004 Company "Demos-Stroy", book-keeper of company.

- checking up of commodity reports
- organization of document circulations
- automation of managerial accounting
- introduction of a discount system

08.2002 – 02.2003 Company "Kedr-FA (Finances, Accounting)", consultant of sales department (office automation).

- teaching accountants
- software installation
- business proposal making

### 4. Information

2002 Certificate in «1C:Professional», 1C Moscow.  
2003 Winner of competition «100 best students of ISTU».

### 5. Additional information

Attentive, energetic, communicative, responsible, hard-working. Good computer skills. Knowledge of English (upper level), Czech (intermediate level) and Russian (native language) languages. Experience in meeting foreign delegations and on-line video international conference. Up to date driving license and second class of tennis.

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2. Company "Demos-Stroy".



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## **ABSTRACT**

Though at the enterprises the estimation of a financial condition is annually, it is necessary to develop, to improve constantly and to evaluate the system of the internal control, necessary to develop a technique of the reporting quality estimation of the enterprise specially for the certain enterprise in view of all features, to take advantage of statistical data and to draw corresponding conclusions, to make constant monitoring. The purpose of development of the mechanism - detection of deviations of data in the reporting from actual results of activity, definition of clauses causing distortion of a real financial condition of the enterprise, revealing of size of influence of the given distortions and qualities of the reporting as a whole on decision-making, and also revealing of the reasons causing these deviations and distortions, and development of recommendations on corresponding correction separate directions for improvement of quality of the reporting.

How can high reporting quality and internal control create an advantage? In survey of institutional investors is reported that investors apply a penalty if they believe a company's internal control to be insufficient. Sixty-one percent of respondents said they had avoided investing in companies and 48% had de-invested in companies where internal control was considered inadequate. As additional support, they study went on to report that 82% of respondents agreed that good internal control was worth a premium on share price. These institutional investors are pushing for greater transparency on risk issues and related internal control efforts. Simply put, an organization's ability to implement and maintain a leading-class control framework can create competitive advantage in today's market.

A system of the financial reporting conducting with strong management, quality control and good legislative base is the key factor of economic development. The trust of investors in the financial and not financial information is based on strong Internal Control, high-quality standards of the financial reporting, audit and ethics, thus, standards and Internal Control play the leading part in assistance of economic growth and financial stability in the country. Nevertheless, every company meets the problems of implementation of the internal control. Among them there can be problems in labor qualification, legislation and so on. It is also necessary to examine the successful experience at the micro level.