

QUALITY MANAGEMENT

- Valentin Dzedik, Alex Ezrakhovich, *Analysis of Quality Management Systems with the Use of Machine Learning Methods*

The article addresses the main issues of development of data analysis methods within quality management systems. It indicates their weaknesses such as unpreparedness for acquisition of low quality data, inability to process arrays of data of different formats in an integrated manner and impossibility to discover undetected correlations between material and information flows. To provide a system solution for this target the process model which transfers input flows into outputs identified with the influence of impacting variables on the goal variable has been developed. Methodology for application of machine learning methods in quality management system process analysis is developed based on this model. It offers both organizational and analytical methods for improvement of input data quality, conversion of various data formats and a complex of machine learning methods to identify the degree to which certain process input flows impact on their net fluxes, identify linearly dependent and consequently redundant data arrays, and find insights in processes. This, in turn, provides for modelling of processes behavior under different conditions and thus ensures the required framework for optimization and improvement of quality management systems.

Keywords: *quality management system, data mining, data analysis, machine learning.*

- Lola Faritovna Popova, Marina Nikolaevna Yashina, Sofia Vladimirovna Bocharova, Roman Yu Cherkashnev, *Development of Methodology of Identification of the Quality Management System Processes*

The contemporary economical environment requires from companies continuous improvement the quality of their products. The background of enterprises' capability to produce qualitative product is provided by effective quality management system (QMS). The rapidly changing consumer demand and increasing competition require continuous improvement of enterprises' quality management system. The managers of many national companies understand that a well-designed QMS is an opportunity to improve product quality and optimize business processes. Quality management consists of interrelated processes called the QMS processes. The application of process approach in quality management is a necessary demand of contemporary standards such ISO 9001, ISO 9004.

The article observes the issue of development of the methodology of the QMS processes' identification. The article presents different approaches to processes classification and the results of studying of the QMS process models of Russian companies. The authors have elaborated their own approach which complements the previous studies. The authors highlight the role of the specific processes providing the high performance of the whole quality management system.

The presented approach is based on the requirements of ISO 9001:2015 Standard and can be adaptively implied in practice.

Keywords: *processes, business-processes, process approach, quality management system, QMS.*

- Achilleas Kontogeorgos, Nikolaos Giannakopoulos, Fotios Chatzitheodoridis, *Exploring the Quality Management Systems on Cooperatives' Performance before the Economic Crisis*

The implementation of quality management systems is a business strategy that can assist companies, to improve their operational efficiency and consequently their financial performance. The paper uses the Structure-Conduct-Performance paradigm to identify how quality management systems have resulted in the financial performance of the Greek agricultural cooperatives before the economic crisis. This is an alternative

approach to the research related to these systems impact on companies' financial performance and the first attempt to investigate if the Greek agricultural cooperatives have benefited from the implementation of quality management systems as a broader strategic orientation that focuses on quality and diversification. Nevertheless, the estimation results cannot support that quality management systems have resulted in better financial results. On the contrary, their association proved to be negative. However, these results are not surprising and more arguments and proofs are provided to support this in the paper.

Keywords: *quality management systems, financial performance, panel data, Greek cooperatives.*

- Adriana Csikósová, Mária Janošková, Katarína Čulková, *Increasing of Customer Satisfaction Quality in Relation to the Assessment of Processes Efficiency – Case Study*

Evaluation of customer's satisfaction quality is a relatively new concept for many companies, aiming to gain a competitive advantage in the market. Evaluation does not focus only on customers but also on competition, when results are accessible to all staff. Customers are informed of the changes that have occurred due to their needs. Goal of the paper is to analyse the way of measuring customers' satisfaction in relation to the performance evaluation of processes in metallurgical company. It includes identifying its strengths and weaknesses and processes suggestions of influence of chosen indexes monitoring for evaluation of effectiveness of whole production process. The purpose is to contribute to more efficient relationship of analysed company and its customers, with an emphasis on maintaining its stable position in the market. Important conclusion obtained by research is finding that increasing of process efficiency of customer's satisfaction depends on choice of proper methodology, measure of base elaboration and evaluation, qualitative technical solution, as well as timely and specialized communication with customer. According results for improving of satisfaction evaluation for the subject of research we recommend re-evaluating weights coefficients with emphasize to the evaluation of customers' satisfaction, as well as to extend indexes for other so far not evaluated processes.

Keywords: *customer satisfaction, industry, measurement, assessment, Slovakia.*

- Safia Zouhir, Hassan Bouaouine, *Correspondence among the Principles of ISO 9001:2015, ISO 9004:2009 and TQM Principles*

In current situation, Moroccan companies, especially SMEs are committed to providing products and services which respect and satisfy all expectations of customers and concern parties, in order to survive in a competitive environment. And to achieve this, the company should adopt a total quality concept through TQM approach. This concept is new and less adopted in Morocco, Objective of the current article, to present a roadmap for an SME company from certification of ISO 9001-2015 to implementation of TQM.

This article explores a comparison between ISO 9001 and ISO 9004 with TQM principles, and also verify using ISO 9004 version 2009 as a tool of sustainable performance & establishment of TQM approach.

Keywords: *TQM, SME, comparison, standard, approach.*

- Igor V. Denisov, Mikhail V. Khachatryan, Maria G. Umnova, *Corporate Social Responsibility in Russian Companies: Introduction of Social Audit as Assurance of Quality*

The concept of corporate social responsibility (CSR) has been under constant development since the beginning of 20th century. Of special interest is its influence on the quality of management and possible ways to increase the efficiency of social ties to the stakeholders. **The objective** is to determine how social audit impacts quality of CSR management on both micro and macro level.

The paper is divided into three primary parts in addition to introduction and conclusion. The first part is dedicated to the literature overview of the concept, development and

interrelation of social audit and CSR as well as their impact on quality of management. The second part is focused on the history and current condition of social partnership in Russia. Finally, in the last part the authors determine key problematic areas and offer practical solutions to resolve them.

Methods/Analysis: the research includes analysis of social, CSR, and sustainable development reports of the top Russian corporations operating in various industries; it offers analysis of national legislative base and its comparison to the international sources. **Findings:** the paper confirmed considerable underdevelopment of social audit as the joining link between CSR management in companies and stakeholders with identification of the key issues. **Application/Improvements:** the research is useful to both government agencies and business managers in identification of existing gaps in social partnership and their negative influence on the quality of communications between stakeholders.

Keywords: *corporate social responsibility, social audit, Russia, the Russian Federation, quality of management system, social partnership, interaction with concerned parties.*

- Larisa Leonidovna Alekseeva, *Assessing the Quality of Art Education in Present-Day Schools*

This paper addresses one of the most topical issues in general art education – assessing its quality in present-day schools. The author examines the historical experience (the 5-point and “no-grading” systems), touches upon the “differing view” of composer and pedagogue D.B. Kabalevskii, and describes some of the federal state educational standards for primary and basic general education.

The paper briefly touches upon a set of requirements for student mastery of the core curriculum for primary general education (for students with a concentration on Music) and shares the findings of an analysis of a set of relevant theoretical and practical materials, including those from the All-Russian Congress of Representatives of Associations of Music, Visual Arts, and World Art Instructors (August 12, 2016). The author formulates a definition of the term ‘quality of general art education’, proposes a novel model for achieving it based on the effectuation of the core principles of art pedagogics (associativity, improvisatoriness, variability, and figurativeness), and describes a set of criteria for assessing the quality of general art education (being in the know about art, engaging in theoretical and practical learning activities, etc.). Special attention is devoted to instructional potential for achieving high quality general art education that may be offered in terms of teaching the Music and Visual Arts academic disciplines (the method of actualization of children’s artistic/creative potential, the method of artistic/figurative associations, etc.).

Keywords: *art education, teaching art, music, visual arts, present-day school, assessing quality, intended learning outcomes, federal state educational standard.*

- Corneliu Maior, Virgilia Markert, *The University Television Station TV Goldiș-Net, Support Structure in Strengthening the Culture of Quality*

The “Vasile Goldiș” Western University of Arad, private university accredited by the Law 240/2002, member of the European Universities Association (EUA), promotes an integrated system of quality assurance of the education. The system is ISO 9001:2015 certified by the SRAC and IQNet certificates of the number RO-9983, valid until 2020. The authors identify the benefits and the contribution of the academic television station TVGoldiș-Net as support structure in strengthening the institutional quality.

Keywords: *culture of quality, quality of the educational services, internal and external stakeholders.*

- Lyubov G. Savenkova, Elena P. Olesina, *Strategic Planning as a Factor of Improvement of Contemporary Education Quality Management*

The relevance of the paper is due to the importance of improving the education quality for the society development and the training of graduates ready for self-actualization in the modern information space. The paper describes the principles of strategic planning

and the vector of its implementation. The results of a long-term study on the integration of recommendations to improve the education quality management level in institutions of higher, basic and additional education are presented. The study was conducted on the basis of the developed criteria. The dynamics of improving the education quality management level is shown. The paper also describes the system of strategic planning. The importance of organizing the interaction of all subjects of the educational process is proved, and the recommendations are given on the introduction of the strategic planning system. Some issues were revealed regarding the implementation of these recommendations; it was determined that the greatest issues arise in the higher education. This is due to the overly centralized system of university management. The study concluded that strategic planning allows combining tactical goals and objectives with the requirements of the new education paradigm, encouraging the educational institution decentralization, self-management, and delegation of authority to representatives of different departments of the institution, support for pedagogical initiatives, as well as self-development and cognitive interests and responsibility of students.

Keywords: *contemporary education, education management, education quality, strategic planning, goal-setting, cross-department interaction.*

- Zoya Oganosovna Ghukasyan, Raisa Levonovna Aghabekian, Galina Levonovna Bayanduryan, *Identification the Quality of Corporate Governance Concept*

The article discusses the methodological approach to the evaluation of corporate governance. The authors propose a system of indicators to quantify the quality of corporate governance. In addition, the article shows the relationship considered parameters and algorithm of their impact on the objective function of corporations – capitalization. The authors have revealed the causal relationships between the indicators of the economic interests of businesses in the company, which must be in a state of equilibrium. Data from large, vertically-integrated oil and gas companies in Russia are used as the information base. These statistics and estimates suggest that quantitative assessment of the quality of corporate governance is very real and necessary.

Keywords: *corporation, management, quality, system of indicators, economic interests of efficiency, financial condition, algorithm concept, rating, capitalization, dividends, contradictions, sanctions.*

- Muammar Khaddafi, Wahyuddin, Mohd. Heikal, Falahuddin, Rahmatul Maulida, *Effect of Corporate Governance Mechanism, Independence and Management of Earnings Integrity of Financial Statements*

This study aims to analyze and obtain empirical evidence about the effect of corporate governance mechanisms (independent commissioners, managerial ownership, institutional ownership, audit committees), Independence and earnings management for the integrity of financial statements in manufacturing companies in Indonesia. Integrity of financial statements is defined as the extent to which the financial statements show a true and honest information. Independent variables used in this study is the corporate governance mechanisms are analyzed by independent commissioners, managerial ownership, institutional ownership, audit committees, independence and earnings management. Dependent variable used in this study is the integrity of financial statements analyzed by conservatism, in observation from 2013-2015.

This study uses 14 manufacturing companies listed on the Stock Exchange in 2013 through 2015. Samples obtained using a purposive sampling method. The research data were analyzed with multiple linear regression analysis.

The study is an independent commissioner, audit committee did not significantly affect the integrity of financial statements. As for managerial ownership, institutional ownership, independence and earnings management significantly affect the integrity of the financial statements.

Keywords: *Corporate Governance, an independent commissioner, Managerial Ownership,*

Institutional Ownership, and the audit committee, independence, earnings management, and integrity of financial statements.

- Elisabeth Siahaan, Prihatin Lumbaraja, Yasmin Chairunisa Muchtar, *Confirming Career Success Model of Consultants in Direct Selling Companies through Entrepreneurial Competency, Commitment and Motivation Trainings*

The purpose of this research is to study and analyze the condition of the hypothesized model was that career success was affected by the entrepreneurial competency and entrepreneurial commitment, moderated by entrepreneurial motivation. Based on in-depth interviews, focus group discussion, and training that have been conducted, the results from qualitative analysis were able to confirm the model of career success tested, that career success could be achieved if it was possessed sufficient entrepreneurial competency, high entrepreneurial commitment, as well as high entrepreneurial motivation. The research results confirmed that commitment significantly affected the formation of consultants career success in direct selling companies.

Keywords: *career success, entrepreneurial competency, entrepreneurial commitment, entrepreneurial motivation.*

- A.E. Gorokhova, Lyutsiya Mugtabarovna Gaisina, Eduard Sagidullovič Gareev, Nikolai Vladimirovič Shutov, Elvira Venerovna Shakirova, *Application of Coaching Methods at Agricultural and Industrial Enterprises to improve the Quality of Young Specialists' Adaptation*

Now there are a lot of different managerial tools that allow improving the human resources management efficiency of enterprises of various forms and types of activity. One of such modern tools is coaching that is especially recognized in foreign companies. In the article, the possibilities of ensuring human resources development and the quality improvement of young specialists' adaptation are analyzed by means of introduction of coaching tools; the essence of coaching as a categorical notion and its distinctive features differentiating it from the mentoring process are studied; the main types and models of coaching, their elements and perspectives of application in the practice of human resources management of domestic enterprises are considered.

The article studies the problems of coaching application at agricultural and industrial enterprises. The work offers methodological tools allowing identifying the level of possibility to apply the coaching at an enterprise. The author systematized and summarized the classification of coaching types.

Keywords: *coaching, mentoring, coach, enterprise, identification, coaching tools, classification, coaching models.*

- Alexey Karpovich, Alexander Rymanov, *Boards of Directors: The Case of Emerging Banking Systems*

The study examines the Russian and Belarusian Board of Directors development in. The study benchmarks remuneration systems of international best practices, international industry recommendations, and internal Corporate governance code's provisions. The Russian Boards of Directors have limited control over the executive bodies. The Russian Bank Boards vary from 5 to 15 Directors. The largest Belarusian Boards vary from 8 to 15 Directors. Best practices show that some jurisdictions provide CEOs with the limitation of their participation in the Board of Directors in accordance with the system of checks and balances. In the world's top-100 largest banks the number of meetings of the Board of Directors varies from 7.6 to 16.2 per year. Russian Boards of Directors schedule meetings far more frequently in order to comply with the legislative requirement to approve transactions with affiliates. Some banks pay only to the Independent Directors, others – do not have remuneration payments at all. Sberbank has effective speed scale additional remuneration of Directors, depending on the extra features. Gazprombank introduced a system of long-term and short-term rewards. The study also estimates the remuneration systems in Russian banks to comply with the revised national Corporate

governance code.

Keywords: *corporate governance, commercial bank, remuneration.*

- Mahirun Mahirun, Andi Kushermanto, *Capital Structure, Investment Opportunity Set, Growth Sales, Firm Size and Firm Value: R&D Intensity as Mediating*

This research aimed to develop a theoretical approach as a mean to improve company value. The effort done were involving capital structure, investment opportunity set, sales growth, and company size, also proposing a research and development as an intervening variable so that to build a grand theoretical model. The population of this research was manufacture companies registered in Indonesia Stock Exchange during observation period from 2007 to 2015. Path analysis was used as a mean of analysis helped by AMOS program. The main finding was R&D intensity which is the mediation between the effect of debt to equity ratio and capital expenditure to book value of assets to to tobin's q value. Debt equity ratio ot shown to have indirect influence on to tobin's q positive value through R&D intensity. While R&D intensity did not mediate the effect of capital expenditure to book value of assets, and sales growth rate against to tobin's q. The result showed R&D intensity and sales growth gave positive and no significant effect on to tobin's q value, while debt to equity ratio gave negative and significant effect on to tobin's q value, capital expenditure to book value of assets gave negative ang no significant effect to tobin's q value. Meanwhile, debt to equity ratio gave positive and no significant effect on R&D intensity, and capital expenditure to book value of assets and sales growth did not influence the R&D intensity.

Keywords: *firm value, firm size, sales growth, Investment opportunity set, capital structure, research and development.*

- Ion Verboncu, Cătălin Codreanu, *Health Status of Public Hospital Management*

Gaining knowledge about the health status of the Romanian medical system and especially about the management of hospitals which provide medical assistance to the population requires specific instruments of investigation, analysis and interpretation, such as SWOT (Strengths, Weaknesses Opportunities, Threats) analysis and diagnostics. Since a scientific article cannot exhaustively approach this problem, we limited the analysis to 11 public hospitals coordinated by the Bucharest City Hall (BCH). In this sense, we made use of the managerial programs presented by the winners of the managerial selection contest held between November 2017 and January 2018 and published on the official website of the Bucharest Administration of Hospitals and Medical Services. The chosen managerial method is the diagnosis (or diagnostic analysis) which, compared to the SWOT analysis, is more complex and suggestive, since it is based on a cause-and-effect analysis which is decisive in pertinently "diagnosing" and "treating" the causes, not the effects ("symptoms"). The managerial plans and programs, which have provided data from the last 3 years regarding the activity and management of the investigated hospitals, are very synthetic, failing to capture the detailed complexity of the problems faced by these public institutions. In this context, the SWOT matrix finalizes the analysis and offers relevant information regarding the advantages and the constructive dysfunctions of the investigated hospital, but also regarding the opportunities and the vulnerabilities of its national and international environment. The diagnostic analysis performed on these 11 hospitals from Bucharest is based on a rigorous scientific method, which was tested on a large number of socioeconomic entities.

Keywords: *diagnosis, SWOT analysis, cascade diagnosis, viability potential, strategic and tactical recommendations.*

FOOD SAFETY MANAGEMENT

- Cristina-Anca Danciu, Anca Tulbure, *The Need to keep the Flour Manufacturing Process under Control, the Determination of Potential Contaminants, as well as of the Factors influencing Product Quality*

The advanced grinding of grains has increased the vulnerability of flour to factors such as microbiological contamination, contamination with allergens and the presence of foreign bodies. There are at least three technological stages in which the product can be contaminated with substances or microorganisms which do not originate from wheat. conditioning of grains, when the wheat is mixed with water to the purpose of achieving the optimal humidity for grinding, the dosing of additives used for the correction of flour and packaging, when the product comes into contact with the walls of the bulk transport tanks or with the packaging walls.

This work deals with the management of these hazards at the level of pre-operational and operational programmes, by designing, implementing, and certifying a Quality and Food Safety Management System and the use of specific documentation. The use of instruments that are extremely useful in the milling industry, customer orientation and continual improvement are key to obtaining products that meet the customers' and consumers' expectations.

Keywords: *flour, food safety, hazard analysis, contaminants, alerts, process flow, system documentation, process matrix.*

- Giovanni Peira, Moreno Soster, Alessandro Bonadonna, *The Italian Public Policies for the Economy of Taste: The Regional Point of View*

This study aimed at the analysis of the public tools for promotion and information implemented by all the Italian Regions to develop the local Economy of Taste. The Economy of Taste is made up of foodstuffs and drinks characterized by European and national quality schemes for agricultural products and foodstuffs i.e. designations of origin and geographical indications (GIs) and traditional agri-food production (Italian national rules). All the managers for the promotion of the Departments of Agriculture of the twenty Italian Regions were involved, through semi-structured interviews, at two different time frames. The activities allowed for the grouping of the development tools into two food assets: "Food Quality Systems" i.e. important tools for the dissemination of information and promotion of products, ensuring high quality standards and guaranteeing visibility for consumers, which involves company accredited certification, and "Other promotional tools" i.e. such as quality systems that either still to be implemented, or have already been implemented without any company accredited certification. The results evidenced the proliferation of enhancement of promotion tools for quality foodstuff, which, although can be useful, both for the transfer of information and for their diffusion in commercial terms, it may also can disorient and confuse the consumer.

Keywords: *economy of taste, food quality schemes, Italy, public policies, information and promotion tools, geographical indications.*

- Sonia Prestamburgo, Filippo Sgroi, *Agro-food Markets' Functional Efficiency, Products' Quality and Information's Role*

Nowadays agro-food productions' quality and markets' economic efficiency are strictly connected and related to the increasing information's role that is no doubt simplify by the global presence of the World Wide Web system. It is possible to assert that this kind of situation does not always safeguard information's safety and propriety and at the same time consumers' aware and complete choice capability. From a production markets' economic efficiency point of view these elements contribute to create some kind of functional distortions able to prevent their proper working system under the economic theory profile and supply misunderstandings and informational asymmetries. These specific conditions seem to be able to produce disadvantages all at once to producers and consumers in terms of the natural relationship contest between demand and supply both in short and long term markets' equilibrium oriented.

As a consequence, the paper wants to highlight how the modern information' role analysis and the agro-food productions' quality value evaluation can contribute to the agro-food production markets' functional efficiency improvement and also can reduce demand-side information asymmetries' operative conditions.

Keywords: *agro-food productions' quality, production economic efficiency, information' role, markets' functional distortions, consumer approach.*

ENERGY MANAGEMENT

- Doina Popescu, *Social Responsibility and Business Ethics VIII. Bioenergy and the Transition to a Sustainable Economy with Reduced Carbon Emissions*

The article presents the EU strategy on energy and climate change, namely the main objectives established for EU countries to this respect. The energetic potential of biomass in Romania is presented, serving as premise for sustainable development and ensuring energetic security. The article presents the results of the latest report on the progress registered by Romania in fulfilling the EU 2020 objectives on renewable energy. In addition, the Romanian legal framework for the promotion of renewable energy obtained from biomass is presented, with a focus on promoting the cultivation of energetic non-agricultural plants.

Keywords: *biomass, sustainable economy, greenhouse gases, energetic plants.*