

## **QUALITY MANAGEMENT**

- Mikhail Yakovlevich Veselovsky, Marina Alekseevna Izmailova, Aleksei Valentinovich Bogoviz, Svetlana Vladislavlievna Lobova, Yulia Vyacheslavovna Ragulina, *System Approach to achieving New Quality of Corporate Governance in the Context of Innovation Development*

The article analyzes the economic environment of the Russian companies' activity by using the data of Russian and foreign researches. Becoming of the Russian practice of corporate governance is described. Reasons of difficulties and success on the way of acquiring the advanced corporate practice on the Russian market are specified. The comparative analysis of the Western and Russian models of corporate governance is made. Distinctive features of corporate governance in Russian companies are revealed. The negative forecast is given to the increase in the role of the Board of Directors in Russian corporations in the nearest future. The substantiated estimation is given to the low quality of management in Russian companies that cannot be compared to ambitious tasks on the Russian economy's transfer to the model of innovation development. The role of modern tools in achieving new quality of management of business processes in corporate structures is shown. Quality management system and corporate innovation system are considered as such structures. The tasks and advantages of implementing and supporting the working state of the quality management system in the corporation, its structure and role in the system of corporate management are revealed. The need in improving the innovation activity in the corporate sector of the Russian economy is stipulated. The structure of corporate innovation system, its goals and solved tasks, fulfilled functions and expected results, as well as its impact on the improvement of the corporate governance quality and business efficiency are shown. The conclusion about the need to use the system approach when taking strategic management solutions aimed at achieving a new quality of corporate management is made.

**Keywords:** *corporate management, corporate governance, quality management system, corporate innovation system, innovation activity.*

- Vladimir Dmitriyevich Sekerin, Anna Evgenyevna Gorokhova, Mikhail Nikolayevich Dudin, Tamara Petrovna Danko, Nikolay Ivanovich Nikolaykin, *Applying Interactive Marketing Methods to improve the Quality of University Educational Services*

In recent years, marketing communications have become increasingly important, due to objective reasons. New information technologies enhance the quality and level of the technical fulfillment of marketing communications and provide a new direction for improving their propagation methods.

Today, an educational institution acts as a producer, in other words, as an independent entity on the education market. The current competitive situation on the education market makes universities fight for every prospective student, hence there is the need to adopt the most effective tools for promoting educational services, the most relevant being interactive marketing tools.

The present article aims to provide definition of the specific features of interactive marketing, to analyze the use of interactive marketing tools by higher education institutions with a view to improve the quality of educational services.

The article presents the prerequisites to the emergence of interactive marketing as an objective-focused tool, gives the definition of what interactive marketing is and examines the specificities, dissemination channels and main interactive marketing methods. The authors highlighted the opportunities that interactive marketing opens up to enhance the quality of university education, analyzed the application of relevant interactive marketing tools in higher education institutions and determined the interaction between the use of interactive marketing tools and the quality of university educational services.

The study found new practical provisions relative to how the interactive marketing of educational services functions and to the use of its tools in practical work at educational

institutions in order to design an effective marketing strategy directed at enhancing quality of education.

**Keywords:** *marketing activity, interactive marketing, Internet marketing, interactive communication channels, interactive marketing methods, website, social networks.*

- Elizabeta Mitreva, Nako Taskov, Zdravko Krivokapić, Jelena Jovanovic, *Building Partnership with Suppliers of Macedonian Companies*

Procurement of materials and spare parts for the needs of the companies is often a major source of problems for the quality of products and services. This paper shows the results of a larger study of Macedonian companies in terms of planning and implementing the philosophy of Total Quality Management (TQM) and building partnerships with suppliers. The survey results indicate the fact that many of the companies in Macedonia build formal relationship with suppliers that do not deliver the desired results. When there is poor quality of the raw materials, good quality of product is not expected, therefore consistency on the market is not achieved and the requirements of ISO standards are not met. To achieve sustainable development, Macedonian companies need to eliminate old habits and proactively focus on developing long-term partnerships with suppliers, providing technical support for training to improve processes, product quality, productivity, in one word accepting the TQM philosophy.

**Keywords:** *quality system, supplier management, standards, TQM philosophy.*

- K. Rosaiah, G. Srinivasa Rao, M. Sridhar Babu, *An Attribute Control Chart under Truncated Life Tests for the Exponentiated Fréchet Distribution*

Assuming that the lifetime of the product follows exponentiated Fréchet distribution (EFD), an attribute control chart is proposed under time truncated life test with known shape parameter. The performance evaluation of the proposed control chart is discussed using the average run length (ARL). The tables are presented for various values of shape parameters, sample size, specified ARL and shift constants. A simulation study is given to demonstrate the performance of the proposed control chart for monitoring of non-conforming items in the industries.

**Keywords:** *exponentiated Fréchet distribution, attribute control chart, life test, average run length.*

- Emiliana Sri Pudjiarti, Suharnomo Suharnomo, *Does Institutional Intervention play a Role in Small Business Clustering? An Empirical Evidence from Semarang, Indonesia*

This study examines the effect of relational capability on competitive advantage to support innovation and value co-creation capacity. Five hypotheses were tested by structural equation modeling. The population of this study included 332 small and medium-sized enterprises (SMEs) entrepreneurs united in the Forum for Economic Development and Employment Promotion in Semarang categorized into a milkfish cluster, batik cluster, food processing cluster, and handicrafts cluster. A total of 188 SMEs were selected as the sample through random sampling stratification. The data was tested using AMOS software version 22. The results show that relational capability has a significant effect on innovation capability, value co-creation capacity, and competitive advantage. Furthermore, value co-creation capacity and innovation capability have a positive effect on competitive advantage. In this regard, relational capability and value co-creation capacity allow SMEs to increase their ability to adapt to environmental changes and to create new capability. The conclusion of this study is that SMEs must have capabilities to develop potential, expanding and enriching business networks and make-business development strategies in order to achieve sustained competitive advantage.

**Keywords:** *relational capability, value co-creation, innovation capability, competitive advantage.*

- Ekaterina Vyacheslavovna Boyakova, *Quality Management of Music Education in Modern Kindergarten: Educational Expectations of Families*

The problems of quality management of music education in the modern kindergarten with emphasis on the role of educational expectations and needs of kindergarteners' families are revealed in the paper. These questions are of vital importance for directors of kindergartens, for pedagogues, and for parents (official representatives) of children when drawing up educational programmes and planning the work with preschoolers. Scientific studies and approaches, describing tendencies of quality management in the kindergarten, were considered. The emphasis is put on the influence of culture on development of children and formation of family demands in the field of music education of younger children. The main part of the paper is devoted to empirical study of musical preferences of families and their relation to educational needs. To identify the demands of families for music education in the kindergarten, the survey was conducted, by means of which the musical tastes of the kindergarteners' families, priorities of music education in the family and educational expectations from kindergarten programmes were found out. The material of the study can be fruitfully used in future by the directors of kindergartens and by independent experts for assessing the quality of kindergarten education.

**Keywords:** *kindergarten, education quality, quality management, marketing, music education, music, preschoolers, educational demand, educational standard.*

- Jaroslav Gonos, Veronika Timkova, Martina Kosikova, *Examining Differences in Job Satisfaction in the Slovak Republic*

It is generally known that job satisfaction has a positive impact on the overall performance of the company as it affects the performance and overall success of the company. Satisfied employees are usually more efficient and thus contribute to the organization's productivity. That is why job satisfaction should be one of the top company's goals. The submitted paper examines differences in job satisfaction with respect to different attributes. Examined attributes include the length of employment, business sector in which the company is active and the size of the company. The main objective of the paper is to find out whether there are differences in employee satisfaction with regard to those attributes. We use two tests to analyze the differences between the selected attributes, namely the Kruskal-Wallis test and the Median test. The survey sample consists of 278 respondents – employees of various companies operating in Slovakia. It has been shown that there are differences in the job satisfaction given the field in which the company operates. For the other attributes, namely the length of the employment and the size of the company, there was no statistically significant relationship, but the possibility that there are some differences cannot be ruled out.

**Keywords:** *job satisfaction, employees, company, sector.*

- Irina E. Kashekova, *Building Educational Space of School by Means of Art as a Factor of Improving the Quality of Education*

The article describes the possibilities of improving the quality of education in terms of holistic educational space of the school created with coherent activity of teachers of different subjects, using the cross-cultural pedagogical technology of "ART+". Art and a universal concept "image" are becoming a structural core of the educational process. The integration of knowledge from different educational fields due to their convergence with art makes it possible to compile information, enhance its emotional appeal, reduce the overload of students and significantly increase their interest and motivation for learning. In the article, art is viewed as a universal generator of methods, approaches and effective means of improving the quality of the teaching and educational process. The comparative data of the results of education quality in the standard educational process and educational process carried out by the "ART+" technology, obtained through monitoring, is given.

**Keywords:** *culture, art, science, educational space, educational process, pedagogical technology, activity of teacher, functions of art, integration, convergence, interdisciplinarity, image.*

- Asad Abbas, Anders Avdic, Peng Xiaobao, Shu Liang Zhao, Ren Chong, *Strategic Framework of Collaboration in Knowledge Transfer of High-tech Industries*

The concept of Triple Helix relates to collaboration between universities, governments and industry. Such collaboration can take different forms in different countries. This paper examines collaboration between universities and industry in China, specifically in the city of Hefei in Anhui province, one of the most rapidly developing regions in the country. In so doing, it seeks to address the research question: How does industry collaborate with universities in order to acquire commercialized knowledge?

The study is qualitative, based on interviews with experts in R & D, and Intellectual Property Rights from twenty high-tech companies based in Hefei industrial zone of Anhui province. We analyzed our findings using a conceptual framework that focuses on Knowledge Transfer and Innovation Diffusion (Liyanage et al, 2012). Our study describes and discusses the entire process, from an initial awareness of new knowledge to its eventual acquisition. We conclude that Chinese high-tech companies design comprehensive strategies for the acquisition of knowledge generated from external sources. These strategies are based on local, provincial and state government industrial policies that aim to support collaboration with universities and implement external knowledge in existing systems. Commercialized knowledge can then be put into practice by companies for their own innovation and commercial purposes.

**Keywords:** *strategy, knowledge transfer, collaboration, acquisition, industry, high-tech companies, China.*

- Tatyana Andreeva Elena Zhulina, Lola Popova, Nikolay Yashin,  
*Integration of Strategic and Quality Management in Oil and Gas Companies of Russia*

Background/objectives: Some of the key problems of oil and gas industry are under this study. The article highlights the necessity of strategy and quality management integration.

Methods: This research is based on studying of strategic and quality management practice of leading oil and gas companies of Russia. The paper represents the results of the interview of managers and specialist Russian oil and gas companies. The contemporary standards' requirements to quality management systems have been analyzed.

Findings: The paper represents significant challenges faced by oil and gas companies in Russia. Many problems of the industry observed arise from the insufficient attention of enterprises' top management and specialists to the strategy implementation and quality management. The necessity of strategy and quality management implementation is shown. The authors define the integration opportunities of strategic management and quality management and present a model of their correlations.

Application: to improve management system of contemporary companies due to strategic and quality management implementation.

**Keywords:** *quality management, strategic management, integration, quality management system, QMS.*

- Marbawi, Prihatin Lumbanraja, Arlina Nurbaity Lubis, Elisabeth Siahaan,  
*The Influence of Organizational Culture, Individual Characteristics, and Transformational Leadership Style on the Job Satisfaction and Performance of Employees in Indonesia*

The purpose of this quantitative descriptive explanatory survey study was to analyze the influence individual characteristics, transformational leaders, organization culture and job satisfaction on performance of employees on PT. Bank Aceh. The research was conducted at the Bank Aceh employees located at Jalan Darussalam, Banda Aceh. The population in this research are all members of the employees at the Bank Aceh 881 employees, the samples of this research 200 employees at Bank Aceh. The tool of analysis was SEM (Structural equation modeling) using AMOS, the method of data analysis with confirmatory factor analysis and structure model analysis. The test results showed that simultaneous that the individual characteristic and transformational leaders effect on the organization culture and then individual characteristic, transformational leaders, organization culture and job satisfaction effect on performance of employees on Bank Aceh, otherwise characteristic individual and transformational leaders are not effect on job satisfaction of employees on Bank Aceh.

**Keywords:** *individual characteristics, transformational leaders, organizational culture, job satisfaction and employee performance.*

- Nurhaida Pohan, Badaruddin, Ritha F Dalimunthe, Agus Purwoko, Iskandar Muda, *The Effects of Human Resource Development and Institutional Arrangements on Performance, Service Quality and Area Development in Indonesia*

This research aims to determine the effects of human resource development and institutional arrangements on performance, service quality and area development in North Sumatera. The type of this research is a quantitative explanatory approach. In this research, the independent variables consisted of human resource development and institutional arrangements while the dependent variables consisted of performance, service quality and area development. The research population consisted of public servants of North Sumatera Province with a total of 191 officers. The research sample was 119 people collected using the census method. Findings suggest that the human resource development and institutional arrangements variables affect directly and indirectly the variables of performance, service quality and area development of North Sumatera.

**Keywords:** *human resource development, institutional arrangements, performance, service quality and area development.*

- Olga Vadimovna Stukalova, *Quality of Continuing Education: Specific Features and Conditions for Objective Expertise, Factors of Improvement*

In the present study, quality education is considered from the standpoint of the integrity of content, teaching technologies, methods of monitoring and evaluation of results in terms of the correspondence of personal development to the life self-determination of the subject and the requirements of society in the new socio-economic conditions. Quality education is one of the most important characteristics that determine the competitiveness of individual educational institutions and national education systems in general. In this regard, the education quality is viewed as a concept reflecting the ability of the educational system to make possible the achievement of the goals and objectives set in education, to meet the needs of a particular individual in obtaining education, to ensure that it meets the demands of society and the economy; i.e., it is determined by its socio-economic adequacy. The creation of a system for assessing the quality of education is connected with the need to obtain objective information about the results of training in accordance with educational standards for making well-founded decisions concerning optimization. In the present paper, the main directions are singled out for assessing the quality of continuing education in the context of its conformance to the requirements of modernization. The conditions for an adequate objective examination are considered. Some factors of improving the quality of continuing education are presented.

**Keywords:** *quality of education, educational standards, competitiveness, socio-economic conditions, adequacy of expertise, social request, continuing education, criteria.*

- Andrey Sergeevich Mikhaylov, Anna Alekseevna Mikhaylova, *University Rankings in the Quality Assessment of Higher Education Institutions*

Tertiary education worldwide is a highly competitive market with higher education institutions (HEIs) endeavoring to attract most talented matriculants, honorable professors, excellent researchers, and demanded guest lecturers. The advancement of a particular institution highly depends on its reputation for quality. The quality evaluators are numerous stakeholders, from students and their families to employers and state authorities, whose perceptions of quality differ significantly. University rankings presented in a form of league tables are said to be the universal approach to display HEIs performance in a simple multipurpose manner. The study is set to assess this proposition by analyzing a list of 61 national ranking systems applied in 36 countries around the globe. Research results provide an insight into the distribution of national rankings by the year and the origin of establishment, by ranking compilers and the target groups of stakeholders, by the level of comparison. Special attention is paid to the quality dimensions used in ranking systems. The paper concludes with a discussion on the identified regularities.

**Keywords:** *service quality, education quality, university ranking, league table, HEI.*

- Doina Popescu, *Social Responsibility and Business Ethics VII. Circular Economy and the Role of Corporate Social Marketing*

The article presents the concepts of corporate social marketing and circular economy and the role of corporate social marketing initiatives in promoting and spreading the use of the circular business model. The authors showcase the need to enhance corporate social marketing initiatives in the context of using the circular economy model which generates synergies between social returns (attitude and behavioural benefits for consumers) and business returns (attitude and behavioural benefits for companies), in order to achieve a direct impact of the social element over business. This article presents legal initiatives which provide assistance in the implementation of the circular economy business model, and also the advantages of this model in terms of resource efficiency and the population's health and safety.

**Keywords:** *circular economy, corporate social marketing, emotional durability, intelligent fabrics and interactive textiles (Smart Fabrics and Interactive Textiles – SFIT).*

- Alexandra Ioana Marian, Constantin Militaru, *Quality Assurance in the Procurement of Products destined for the Romanian Ministry of Defense*

The challenges faced by one of the most important public institutions in Romania, namely the Ministry of Defense, in the context of budget allocations of almost 2% of GDP, indicate the need for a complex approach in an integrated vision of the entire procurement system, as well as the development of cooperation relations between the main strategic factors, namely the national defense industry, suppliers of defense products or services and procurement structures within the Ministry of National Defense.

The potential suppliers of the Ministry of Defense may feel discouraged in competing with the major companies in the industry, and also they may feel discouraged by the bureaucratic excess existing in the system, but through a careful study of the issues of quality assurance and quality standards in the field – the AQAP 2000 series (similar to the ISO 9000 standards) but also of the legal framework and the provisions governing the procurement of products and services in the field of defense, shall understand the flow of activities and will be able to develop their capabilities to demonstrate that they operate in an efficient quality management system, being able to deliver quality products or services in accordance with the contractual requirements.

**Keywords:** *AQAP2000 Series Standards, Romania – Ministry of National Defense – Armaments Department, DA-9/2016 Disposition, Risk, Supplier Quality Assurance.*

## **ENERGY MANAGEMENT**

- Ioana Diaconescu, Roxana Pătrașcu, Eduard Minciuc, Diana Anghelache, *Monitoring Energy Consumption in Innovative Technological Processes of Plant Biostimulators Production*

Energy management aims at optimal valorization of energy resources within an analyzed contour. Energy management and increasing of energy efficiency imply systematic implementation of different energy efficiency techniques and procedures developed and improved during the several years of activity. In the paper the authors have presented two methods for measuring/monitoring energy flows, a theoretical one and another based on direct measurements. The analysis of two methods shows that the difference between them is very small, the error being about 0.3%. In the case of the experimental stand of biostimulators production the organizational measures and especially technical ones by implementing an automation solution for the entire technological process can lead to increasing energy efficiency and reducing energy bills.

**Keywords:** *energy efficiency, energy management, energy audit, monitoring energy flows.*

## **FOOD SAFETY MANAGEMENT**

- Șerbancea Floarea, Nastasia Belc, Aurelia Stănescu, *Risk Factors in the Assessment of the Conformity of Falsified Dairy Products*

The aim of this paper is to identify and highlight the risk factors in assessing the conformity of foodstuffs with specific references and the authors proposes a risk reduction tool for dairy products expertise through the LACTATFALS Protocol (PLF). Once identified,

the suspected fraudulent food product is sent to the authorized laboratories for analysis, optional accompanied by information on the nature of fraud. Laboratory testing of the falsified product requires a special assessment, the risk associated with this activity being directly dependent on the existence of specific testing procedures. PLF is a set of procedures, databases and information flow that enables stakeholders involved in assessing conformity of dairy products to reduce the risk on the level of this activity. The paper details the risk factors identified in the conformity assessment of the dairy product suspected of being falsified.

**Keywords:** *dairy products, compliance assessment, risk factors, falsification monitoring.*

- Maria Valentina Lasorella, Dario Siggia, *Sustainable Solutions to Food Insecurity: Europe and Emerging Markets*

The main challenge of agriculture due to current population growth and changing in food preferences is to guarantee food access. The agricultural intensification in the last 20 years have led to soil degradation, water pollution and food insecurity. Worldwide, the unsustainable use of raw material and fossil energy has exploded during the past 50 years, with dreadful consequences for the global environment. Enterprises have embraced a variety of environmental, social and economic initiatives at all levels of their operations. Most of enterprises that have moved their operations toward developing markets, embraced Corporate Social Responsibility as a key factor in business growth and environmental social and economic strategies. To date, the current global situation led to few questions such as: can we produce enough food to feed growing human numbers that is expected to be 9 billion projected for 2050? How can Corporate Social Responsibility refer to enterprises moving to developing markets, taking responsibility for their impact on society and environment and guarantee food production? What is the role of business in facing the critical issues of human development and environmental sustainability in developing countries? In this context, possible research priorities on CSR are to increase competitiveness of enterprises through sustainable agriculture intensification, quality of life, new improved technologies and innovation capacity with a different modus operandi in Europe and in developing markets such as Asia, Africa, Latin America, without forgetting the fundamental role of the sustainable development that constitutes one of the biggest opportunities in the history of commerce.

**Keywords:** *food security, sustainability development, emerging markets, corporate social responsibility, Europe.*

- Giuseppina Migliore, Vittorio Farina, Giovanni Dara Guccione, Giorgio Schifani, *Quality Determinants of Avocado Fruit Consumption in Italy. Implications for Small Farms*

In recent years there has been an increasing consumer interest towards tropical fruits due to the desire of consumers for healthy eating while experiencing new and exotic flavours. Within this consumer trend avocado fruit presents great potential in order to meet requirements desired by consumers due to its high nutritional value and particular quality characteristics. The aim of the present study is to understand which quality determinants influence consumers' decision making to consume avocado fruit in Italy. In the literature, avocado is a fruit few investigate from a consumers' quality perception perspective. Therefore, understanding consumer preference for avocado fruit may be considered important both for small farms and for those producers who intend to start the avocado cultivation in Mediterranean area.

**Keywords:** *quality attributes, consumer choice, perception, fresh food, exotic fruits.*