



## CONSIDERATION REGARDING THE UP-TO-DATE STAGE IN MODELING AND OPTIMIZATION OF ECONOMIC – INDUSTRIAL PROCESSES

Assoc. Prof. Sabina GHERGHEL, Ph.D, University of Oradea, România,  
Assoc. Prof. Mariana PRICHICI, Ph.D, University of Oradea, România,

### *Abstract*

*The paper presents a brief description of the "classical" methods related to modeling and optimizing the processes that characterize the technical-economical systems, providing a presentation of the problem status, as well as a short presentation of non-standard techniques: neuronal networks (RNA), fuzzy techniques (TF) and genetic algorithms (GA).*

*The advantages of using these modern techniques are described, which implies that the operational factor requires a high level of competence and rigor.*

*Key words: modeling, optimizing, neuronal networks, fuzzy techniques, genetic algorithms.*

## CONSIDERATIONS REGARDING THE IMPLEMENTATION AND CERTIFICATION WITHIN AN ORGANIZATION OF AN INFORMATION SECURITY MANAGEMENT SYSTEM

Prof. Eng. Anca-Alexandra Purcărea, Ph.D., Politehnica University of Bucharest, Romania  
Eng. Bogdan Țigănoaia, Ph.D. Candidate, Politehnica University of Bucharest, Romania  
Eng. Gabriel Petrea, Ph.D. Candidate, Politehnica University of Bucharest, Romania

### *Abstract*

*This paper presents aspects regarding the implementation and certification, within an organization, of an Information Security Management System – ISMS based on the international standard ISO 27001:2006. The approach based on processes, the compatibility with other management systems, general requirements (e.g. security risk management, records and documents control, internal audit, continuous improvement) for organizations in order to implement and certify an ISMS are described in this paper. Finally, several conclusions and future work are presented.*

*Keywords: security, management systems, organizations, international standards*

## APPROACHING MARKETING RESEARCH BASED ON THE PROJECT MANAGEMENT PRINCIPLES

Fleaca, Elena, University "Politehnica" of Bucharest, Faculty of Entrepreneurship, Business Engineering and Management, Romania;  
Petrea, Gabriel, University "Politehnica" of Bucharest, Romania

### *Abstract*

*Marketing research comprises one of the most fascinating and important facets of the marketing area. There is a huge array of alternative research designs, but the key is to create a design that enhances the value of the information obtained while reducing the cost of obtaining it. Thus, an effective marketing research approach requires a thoroughly understanding of the importance of project management in developing the marketing research plan.*

*The paper approaches marketing research from a process oriented view and applies the project's triple constraint – scope, time, and budget – on the marketing research projects area.*

*Finally, it has been highlighted the benefits of project management principles within almost every conceivable area.*

## THE METHODOLOGICAL MANAGEMENT SYSTEM IN THE CONSTRUCTION COMPANY

Marina Stoian, Ph.D. Assist. Prof., Technical University of Civil Engineering, Bucharest, Romania

### *Abstract*

*The methodological management system of a construction company represents an assembly of organizational structures having a decisional, operational, organizational, informational and methodological character. All these features are necessary for the different management processes and relations, involved in reaching the proposed objectives and targets with maximum efficiency.*

*The paper is proposing for analysis the methodological management system, as part of the overall management system of the construction company. The management methods can be seen as a group of keys capable to open different doors. Choosing one key or another depends on the criterions (the flair) of each manager of the problems. The necessity of adopting new management methods is determined by the dynamic of events in the company. The main scope of using these methods consists in the efficiency the increase of the managers activities in reaching the proposed objectives.*



## IMPROVING THE CUSTOMER EXPERIENCE THROUGH CRM

Cătălina Monica Alexe, "Politehnica" University of Bucharest, Faculty of Entrepreneurship, Business Engineering and Management, Romania

Cătălin George Alexe, "Politehnica" University of Bucharest, Faculty of Entrepreneurship, Business Engineering and Management, Romania

Mihaela Alexandra Dumitrescu, "Politehnica" University of Bucharest, Faculty of Entrepreneurship, Business Engineering and Management, Romania

### *Abstract*

*Considering the statement of Tom Peters "Customer satisfaction is no longer sufficient for survival in competitive markets. It takes customers happy." and the studies which illustrate the unhappy customer behaviour, the paper wishes to emphasize the importance of getting and using feedback from customers, but also from hired people, in order to improve the customer experience in relation to the economic organization. In this sense, customer relationship management (CRM) through its components: solving complaints, providing feedback, providing guarantees and implementing corrective actions, can monitor and improve the customer experience and can help company to create competitive advantage.*

**Keywords:** customer experience, customer relationship management (CRM), competitive advantage

## EFQM 2010 MODEL– ROAD FOR SUCCESS

Daniel Nicolescu - Ph.D. Candidate, Polytechnic University of Bucharest, Bucharest, Romania,  
daniel.nicolescu@ipsos.com

Bianca Prisecaru - Ph.D. Candidate, Polytechnic University of Bucharest, Bucharest, Romania,  
biancaprisecaru@gmail.com

### *Abstract*

*Managing organizations in today's rapidly changing business environment is both art and science. In order to react in a timely manner and properly respond to the environmental changes, an organization must identify the areas which, if improved, would bring important results for all the stakeholders. The authors intended to identify the technological changes in an organization, necessary for harmonizing the organization's interests with the ones of the interested parties. The paper starts from the idea that implementing a new management system in an organization involves a number of changes and by default, resources. Using the enabling factors of the EFQM's excellence model, the authors will define a method for identifying the changes needed for implementing a total quality management system and assuring the organization's road for success. As a consequence of using the method presented in this paper the technological changes generated by the implementation of a total quality management system will be made with minimal resources*

## DISTRIBUTED INTELLIGENT AGENTS IN THE HOLONIC CONTROL OF ADAPTIVE INDUSTRIAL MANUFACTURING SYSTEMS

Ilie POPA,

Electronics and Computers Department, University of Pitesti,

e-mail: [ilie.popa@upit.ro](mailto:ilie.popa@upit.ro), [www.upit.ro](http://www.upit.ro)

### *Abstract*

*The paper presents some considerations and concepts regarding on using of distributed intelligent agents in holonic control of adaptive industrial manufacturing systems perspective. Unlike the classical manufacturing control systems, holonic manufacturing control systems can provide a high agility and adaptability to the environment changes, and robustness against the occurrence of disturbances, bringing the advantages of modularity, decentralization, autonomy and scalability. Nowadays, holonic architectures combine the Function Block based programming, for the low-level real-time control, and the Multiagent technologies, for the decision-making level. The distributed control concept allow the manufacturing systems reconfiguring for their adapting at the variable environment.*



## **ANALYSIS OF DIFFERENCES IN PURCHASING BEHAVIOR OF INDIVIDUALS AND LEGAL ENTITIES AND THE FACTORS THAT INFLUENCE THE PURCHASING BEHAVIOR OF INDUSTRIAL ORGANIZATIONS**

Anca Alexandra Purcarea Politehnica University of Bucarest Faculty of Entrepreneurship, Business Engineering and Management, Romania,  
Marin Rusanescu Politehnica University of Bucarest Faculty of Entrepreneurship, Business Engineering and Management, Romania

### *Abstract*

*In this paper, we made a classification of types of shopping, we defined that are buyers, we made a comparison between buying behavior of individuals and legal persons. We determined the essential factors underlying the behavior of buying and we made a comparison between the factors that influence the purchasing behavior of individuals and among factors that influence buying businesses factors. We established the factors that influence the purchasing behavior of industrial organizations.*

*Keywords: buying behavior, factors that influence the purchasing behavior of individuals and legal persons*

## **ON THE COSTS OF QUALITY ASSURANCE**

Sorin Ionescu, Polytechnic University of Bucharest, Romania

### *Abstract*

*There are several models of cost management, most notably PAF model. But this model has been questioned in the recent years. This article proposes a different view of quality costs. It is therefore necessary to consider the cost of investment in the quality system and the cost of procedures, depending on the time needed.*

*The analysis necessary to quality assurance activities, adopted by different companies or suggested by some papers, lead to distinguish the following functions: build of quality, quality inspection, quality improvement, guarantee of quality and staff training. To determine the costs related to quality, we should take into consideration two types of costs: costs for system implementation (design and implementation), which can be viewed as an investment. and costs related to the use of systems, to the procedures necessary to achieve a batch of products.*

## **A METHOD TO DETERMINE THE TECHNICAL LEVEL (TLE) OF EQUIPAMENT IN APPAREL INDUSTRY**

Ifrim Liliana, University of Politehnica Bucharest, Romania  
Purcarea Anca Alexandra, University of Politehnica Bucharest, Romania  
Micu Daniel Marian, University of Politehnica Bucharest

### *Abstract*

*The apparel production involves a large number of companies, from small, private firms to large multinational corporations, throughout the world. Pre-production activities are carried out by these companies in developed countries which have access to modern technology and production is left to be done in developing countries where the labor cost is lower. The objective of this paper is to develop a method to determine the TLE of organizations from apparel industry. The method aims to identify the relevant activities in terms of technical level of equipment, allocation coefficients for each activity and related notes of their endowment. Determination of TLE for the apparel industry required by organizations along with the price level, helps buyers to decide where the production orders will be placed (buyer driven chain). The suggested method is developed by the authors and can be applied in operational management and as a basis for scientific and academic learning.*

*Key words: Technical level of equipments, operational management, apparel industry, buyer driven commodity chain.*

## **THEORIES THAT LIE BEHIND CORPORATE GOVERNANCE**

Assist. Crişan, Emil, Ph.D., Graduate MSc. Turdean, Ana-Maria; Babeş-Bolyai University, Faculty of Economics and Business Administration, Romania

### *Abstract*

*Today's complex business world is characterized by the concept of "corporate governance". Corporations have now the power to decide the fate of individuals and how the scarce resources of the planet are exploited. The goal of this article is to explain the concept of "corporate governance", to*



present the main theories that lie behind it (agency, stewardship, stakeholder, resource dependency, transaction cost, political, cultural, power theories, the simple finance model, cybernetic analysis and ethics theories) and to express the sustainability of this business concept.

Keywords: governance, governance theories, sustainability

## A MANAGEMENT SYSTEM FOR SUSTAINED SUCCESS

Răzvan Constantinescu, M.Sc., Sebastian SRL, Bucharest, ROMANIA  
Doina Constantinescu, Ph.D., Politehnica University of Bucharest, ROMANIA

*In a dynamic economic environment the companies have to focus themselves towards the achievement of sustained success, which includes the satisfaction of all the interested parties' requirements and expectations. In our opinion, the achievement of this objective is possible by implementing a complex management system which combines the TQM and Strategic Management principles and in the current paper we are introducing the conceptual model we have developed for it.*

## ANALYZING THE ORGANIZATIONAL LIFECYCLE SOME STRATEGIC ISSUES

Ceașu, Ioana, Polytechnic University Bucharest, Romania

### *Abstract*

*The organizational life cycle is an important model in the study area of organizational growth and development. This paper reviews several key aspects of this model throughout its evolution and suggests a match between the phases of the model and basic business strategies.*

*The article initiates a study of the implications of whether crisis could be avoided at the thresholds between the phases of the organizational model by linking the organizational life cycle to business strategies.*

## HOW TO USE EFQM FOR EXPLAINING IMPROVEMENT PROJECTS AND PROVIDING ROAD MAP

Kambiz Shahroudi, Industrial Management Department, Islamic Azad University- Rasht branch-Rasht, Iran  
shahroudi@iaurasht.ac.ir

Nazanin Zaeimkohan, Mathematics and Management Researcher; Administration  
of Education Guilan;Iran

[Nazanin.zaeim@yahoo.com](mailto:Nazanin.zaeim@yahoo.com)

### *Abstract*

*Surveying casual relationship among EFQM excellence model sub criteria could be a great help for managers to develop and explain improve routs in order to develop strategies so that they could provide the best road map. The main goal of this research is to identify causal relationships among sub criteriaemphasising on human resources. Human resource is the most effective factor in operation of companies and Automotive industry of Iran. To improve the key results of operation, the causal direction must be known in EFQM business excellence model. This job has done in 2001 by Eskildsen. The main problem of Eskildsen's research is that he just identified the causal relationships between criteria while to define improvement projects causal relationships among sub criteria must be studied. After conceptual models explainedand hypotheses of the research defined, data related to latent and observed variables werecollected through a questionnaire survey including 450 expertsin Director excellence and evaluators of Excellence Award in the automotive industry in Iran. For data analysis, we use a powerful technique like structural equation models. Research results and various goodness of fit indicators showed that the model has been fitted well.*

## USING THE MARKOV CHAINS WITHIN THE “DATA MINING” PROCESS

Nicoleta Liliana, Frățilă, Training Center in Informatics  
Bucharest, România

Mihaela Alexandra, Dumitrescu, University POLITEHNICA Of Bucharest, România

### *Abstract*

*A number of concepts are presented regarding the Markov chains and their functionality. The information discovery processes are the ones who help obtaining predictions. There are many techniques to extract knowledge from databases.*

*In the present paper are highlighted the possibilities of application of the Markov processes for the foreign exchange market forecast.*



## **CUSTOMER RELATIONSHIP MANAGEMENT - A FRAMEWORK FOR ROBUST BUSINESSES**

Dan Dumitriu, Politehnica University of Bucharest, Faculty of Entrepreneurship, Business Engineering and Management, Romania

### *Abstract*

*Today's economy intensifies the ongoing battle to acquire and retain customers, while at the same time, customers are capturing mind share and are paying more attention to their shopping. The cost for obtaining new customers also continues to be extremely high, with costs estimated to be five to ten times greater to acquire a new customer than to keep an existing one. Unsatisfied customers are also much more likely to share their problems with others than a satisfied one. That's why maintaining and increasing customer loyalty has never been so important. Loyal, satisfied customers buy more over their lifetime and are willing to pay more to do business with a vendor that is trustworthy. CRM strategies and enabling technologies are designed to capitalize on these insights by providing a holistic approach that balances the targeting of prospects with satisfying current customers, thus creating a framework for robust businesses.*

## **LOGISTICS SYSTEM FUNCTIONS COSTS ANALISYS – A STEP FORWARD TO CUSTOMER SATISFACTION**

Claudiu Adrian Purdescu, Politehnica University of Bucharest, Romania  
Anca Alexandra Purcarea, Politehnica University of Bucharest, Romania  
Cristian Niculescu, Politehnica University of Bucharest, Romania

### *Abstract*

*The magic formula for business success could simply mean to offer products or services at almost the same quality and at lower prices than the competitors but from logistics costs point of view this could also mean the formula for a big fail. Why? The paper tries to give the best possible answer to this and to many other questions, having as main objective of the research to identify the correlations between the logistics system functions costs and the utility that they provide to the customer, knowing that it's biggest satisfaction is achieved when the ratio between utility and cost has the maximum value.*

*Keywords: cost, utility, logistics system*