



EKONOMICKÁ UNIVERZITA V BRATISLAVE
FAKULTA HOSPODÁRSKEJ INFORMATIKY

UNIVERSITY OF ECONOMICS IN BRATISLAVA
FACULTY OF ECONOMIC INFORMATICS



Appplied **I**nformatics **E**conometrics **S**tatistics **A**ccounting

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vedeckých pracovníkov

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prof. Ing. Michala Fendeka, PhD.

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SCIENTIFIC WORKERS ON BUILDING OF SOCIETY BASED ON
KNOWLEDGE“**

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prof. Ing. Michal Fendek, PhD.

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INTERNATIONAL SCIENTIFIC COMMITTEE**

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From Scientific To Knowledge Management

The aim of the article is to give information on theoretical basis of knowledge management implemented in the area of work management. Primarily, the principles of scientific management applied in manufacturing sphere for more effective planning of work capacities, which could be also implemented in non-manufacturing sphere by means of up-to-date information technologies, are emphasized.

Ing. Josef Drahekoupil, Fakulta informatiky a managementu, Univerzita Hradec Králové

Environmental Issues and their Implications for the Accountancy Profession

State of the environment continues to deteriorate and become a global problem. Environmental protection should be in the interests of society as a whole, and thus each individual living in society. In this paper we focus on the role of accountants in the environmental field. Environmental issues are business issues and that's why they are related to accounting. These issues will affect all accounting specialties. Any accountant would be well advised to consider how his or her responsibilities are, and should be, influenced by today's environmental agenda. In the future it will be necessary to include a responsible approach to all business activities.

Ing. Veronika Dubielová, Katedra účtovníctva a audítorstva, Fakulta hospodárskej informatiky, Ekonomická univerzita v Bratislave

The Relation between the Levels of Poverty and Material Deprivation in the EU

Poverty is often considered as closely tied with material deprivation. This paper aims to closely analyze the relation between these occurrences as well as the influence of poverty levels of different population groups on the income inequality of a society. For this purposes we will use the methods of correlation and regression analysis. As for data, we will focus on the EU indicators in the field of social inclusion.

Ing. Roman Gavuliak, Katedra štatistiky, Fakulta hospodárskej informatiky Ekonomickej univerzity v Bratislave

Decision Trees and Decision Rules in Data Mining

This article deals with decision trees and decision rules in data mining process. It describes selection criterias of test variables in decision trees. Generating, trimming and termination of decision trees are also mentioned.

Ing. Marián Hricko, AUO s.r.o., Bratislavská 517, 911 05 Trenčín

Econometric Simulation of the Implementation the Minimum Wage in Germany and Long Term Forecast of Economics as a Whole

Discussions about how to tackle the economic problems caused by low wages have been taking place in Germany. One of the possible solution could be the introduction of the wage floor to the German law. However, the disagreement about the possible consequences of this regulation discourages the German economic policy representatives from making this change, which is so important for efficiency of the labor market and of the whole economy. This paper presents the results of the econometric simulation of the implementation of the minimum wage and a long term forecast for the German economy as a whole for years 2012 – 2022.

Ing. Ida Kameniščáková, Ekonomicko-správní fakulta, Masarykova univerzita, Brno

Graph Augmentation by Means of Genetic Operators

Generally, logistic problems may be modelled and solved via apparatus based on theory of graphs and flows. Unfortunately, many of such problems are unsolvable by deterministic means in polynomial time. Approximate algorithms are used to solve the hard problems, however global optimal solution cannot be guaranteed. We propose an evolutionary algorithm that operates over graphical individuals that match candidate solutions. We designed a set of evolutionary operators specifically designed for the mixed postman problem, which we use as a proof of concept. Experimental results are promising and show that the algorithm is efficient in comparison to known approximate algorithms concerned with the same task.

Ing. Kamil Krauspe, Katedra aplikovanej informatiky, Fakulta hospodárskej informatiky Ekonomická univerzita v Bratislave

The IT Support for Knowledge Management

The competitive advantage lies often in proper use of information technology (IT). Therefore IT deployment projects in organizations are performed with higher frequency. Another key for unlocking competitive advantage in organization is Knowledge Management (KM). Thus the IT alignment of KM is very important during the whole process of KM implementation. In this article the possibility of IT supporting the KM is analyzed. The most promising technologies are discussed and ranked regarding their usefulness for KM.

Mgr. Ing. Michal Krčál, Katedra podnikového hospodárství, Ekonomicko-správní fakulta, Masarykova univerzita, Brno

Fast Image Search Using Kohonen Networks

This paper deals with searching in large datasets with the aim finding an individual similar to the search pattern. We used an image database with 140 000 pictures as dataset, each picture is 300 pixels wide and 225 pixels high, so every picture is represented by 67500 pixels, multiplied by 3 bytes (RGB values) gives us 202 500 bytes. Using brute force as a search approach is ineffective, as we would need to compute the deviation of each pixel. With the size of our database, this would be 140 000 x 202 500 arithmetic operations. To speed up the search process, we implement a Kohonen network variation to pre-process the data and build clusters of similar images.

Ing. Miroslav Kršjak, PhD., Katedra aplikovanej informatiky, FHI EU v Bratislave

Buying and Selling Business

The growth of commercial transactions such as purchase and sale of business requires knowledge of legal, accounting and tax regulations in this area. The paper summarizes this information for both parties - buyer and seller. The aim is not only the realization of business sale in which the seller and the buyer follows the prescribed procedure, but data in the financial statements should be interpreted in the economic context.

Ing. Zuzana Kubaščíková, PhD., Katedra účtovníctva a audítorstva, FHI EU v Bratislave

Optimizing the Production Cycle for Recycling Household Waste

Spectrum was considered waste of large cities (with populations over one million people). Problem areas of the technological scheme have been defined for recycling household waste. A comparative economic analysis of the different mechanisms of waste sorting in technological process.

Mikhail Kurmach, student, Chemical technology Faculty, Olena A. Pidlisna, C.Sc., Associate Professor of Economics and Business, National Technical University of Ukraine

The Interdisciplinary Character of Forensic Accounting in Relation to Expert Activities with an Emphasis on Economic Fraud Selection

Forensic accounting has an irreplaceable role in the detection of economic fraud. The outputs from it are very good evidence in lawsuits, as they are based on a summary of knowledge of several scientific disciplines such as mathematics, statistics, criminology and expert activities. Forensic accounting is thus interdisciplinary in nature. Forensic expert must have knowledge of several scientific disciplines and be able to examine and evaluate evidence individually but also in their connection and interdependence with other evidence. Forensic accounting especially in times of crisis and in economic growth of crime has become increasingly important and it is undergoing the most dynamic development

Ing. Milan Lagosz, ANYMex, s. r. o., Kukučínova 7, 040 01 Košice

Telematic Technologies in Education Professionals for Inland Navigation

In connection with the adoption of the EU programme is required in the Member States a higher level of education with the aim of acquiring faster and more advanced telematics technologies by the introduction of European space program Galileo. From the level of the training the students / potential users of these advanced technologies will depend the further economic development in EU countries. In this sense it is therefore necessary and curriculum innovation profile subjects of the study program "Water transport" through the development of methodological programs to implement the new information and communication technologies into the main subjects of practical exercises.

Ing. Martin Lednický, doc. Ing. Jarmila Sosedová, PhD., Ing. Jan Šlesinger, PhD., Fakulta prevádzky a ekonomiky dopravy a spojov, Žilinská univerzita v Žiline

CGE Modeling of Climate Change Impacts

Climate change in general is not currently conceived as future threat, but represents one of the greatest environmental, social and economic threat facing our planet today. Impacts of climate change are already unavoidable and it's necessary to recognize possible damages that would this phenomena cause. Modeling the expected impacts could help policymakers in choosing appropriate measures for mitigation and adaptation to climate change.

Computable general equilibrium (CGE) modeling represents an effort to utilize general equilibrium theory for analyzing the resource allocation and income distribution questions in market economies. Past twenty years CGE modeling has been widely used also for analysis of environmental, energy and economy issues. Purpose of this paper is to review current state of art in the environmental and resource management branch of CGE modeling.

Ing. Ivan Lichner, Katedra operačného výskumu a ekonometrie, FHI EU v Bratislave

The Role of Innovation Processes in Managing Risk in the Modernization of Vocational Education

In given article the author analyzes a domestic education condition. In this connection dynamical development of economy, competition growth is required formations of modern thinking from young generation. Education modernization can be an exit from a current situation, creation of the mechanism of investment appeal of formation for an investment of means of the enterprises that will allow to increase volume of off-budget means in formation.

Jeanne Murzasheva, Master of Economics, University of International Business, Almaty, Kazakhstan

Simple Applications of a Game Theory

In my paper, I will deal with the games theory. On the present, this part of applied mathematics is used in various areas such as biology, politics or business. The first part provides a brief description of the problem and explanation of some basic concepts of this problematics. In the following part, there is described decision making problem, with an interesting modification of Prisoner's Dilemma.

Ing. Tomáš Oliva, Katedra aplikovanej informatiky, FHI EU v Bratislave

Fair Value Measurement - from Past to Present

This paper describes the development of the definition of fair value from 1982 to the present. During this period, the definition has undergone many changes, for example: the first definition is only talking about assets; „party“ and others have replaced the term „buyer and seller“. The aim was to highlight the different definitions given in the individual International Financial Reporting Standards (IFRS). In order to achieve uniformity of setting fair value and subsequent reporting was in May 2011 issued new IFRS 13 Fair Value Measurement of the amounts as a result of cooperation of the International Accounting Standards Board (IASB) and the Financial Accounting Standards Boards (FASB).

Ing. Lenka Tkáčová, Katedra účtovníctva a audítorstva, FHI EU v Bratislave

Virtual Environment Effect on the Company Culture

Balanced ScoreCard (BSC) method is used for quantification of efficiency. One perspective of BSC method is focus on education and growth (other say - learning and innovation). These methods require the employees' lifelong learning with employees' motivation, employees' competence, new technologies usage and company culture atmosphere. Virtual environment is one of the solutions how to upgrade company learning and motivate employees. Virtual environment is a strong quality upgrade, which inhibit a lot of e-learning disadvantage. One of the virtual environment which is already famos is Second life. Questionnaire investigation of actual learning status in Slovak companies with recommendation (VEGA 1/0261/10 research) is content in this paper.

Ing. Hana, Trochanová, PhD., Ing. Janette, Brixová, Katedra aplikovanej informatiky, FHI EU v Bratislave

Purchase of Tangible Asset in Terms of Value Added Tax

Most fundamental and also the easiest way of acquisition of tangible fixed assets is their purchase. In view of the added taxvalue, constitutes tangible assets goods which become subject to this tax in the event of its delivery in the country for consideration, of entry at home in another Member State for consideration or if imported from third countries. The aim of thispaper is to acquaint the reader with the issue of taxation of goods in individual cases.

Corporate Social Responsibility in Relation to the Accounting

The term corporate social responsibility generally means the voluntary commitment of businesses to implement their economic activities effectively and responsibly towards society and environment taking into the interests of all stakeholders. It is a business that the process and results of the business deliver benefits for a wider range of people, respectively for society as a whole. Socially responsible business is focused on long-term objectives and long-term optimal profits to ensure its long-term existence and fulfillment of its mission to society. To his welfare and the welfare of your surroundings can help with every activity, including accounting. The area is particularly important because it provides information on which the relevant interest groups take competent decisions. It follows that true and fair view of the business presented by accounting is an important aspect of corporate social responsibility.

Ing. Miroslava Vlkoláčková, Katedra účtovníctva a audítorstva, FHI EU v Bratislave

Possibilities of Management Accounting in the IAS 38 - Intangible Assets

Management accounting provides an important source of information not only internal but also external users. External users using information provided by management accounting especially for the needs of the preparing financial statements. The aim of this paper is to point view on meaning management accounting in area intangible assets.

Ing. Katarína Zeleníková, Ekonomická Katedra účtovníctva a audítorstva, FHI EU v Bratislave

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