

**Informācijas
Sistēmu
Menedžmenta
Augstskola**



**Information
Systems
Management
Institute**

Information Technologies, Management and Society

The 7th International Conference
***Information Technologies and
Management.***

2009 April 16-17,
Information Systems Management Institute,
Riga, Latvia

Programme and Theses

Riga, 2009

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Ludzas 91, LV-1003, Riga, e-mail: isma@isma.lv

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IT&M 2009 Programme and Timetable, 2009 April 16-17

April 16	Hotel Ridzene	
8.40.-9.00.	Registration	
9.00.-9.05.	R. Dyackon, ISMA president	Opening of International Conference Information Technologies & Management 2009
9.05.-9.10.	M. Zhivitere, ISMA rector	Greeting to Conference
9.10.-9.30.		Guests Greetings
	Plenary session 1	Education And Labour Market
	Plenary Hall Kronvalds	The Head of the Session Professor Yu. Shunin
9.30.-9.45.	G. Rakovska, N. Paunova,	The Role of Growing Counseling Profession in Eastern Europe. Bridging the Gap Between Education and Labor Market
9.45.-10.00.	M. Thum-Kraft	Knowledge, Skills, Competence – Standards for Career Guidance Counsellors
10.00.-10.15.	V. Fissamper	Active Labour Market Policies (Almp) in Europe
10.15.-10.30.	V. Chlaidze, I.Linde, I. Utinane-Suharevska	The Influence of Tourism Services Quality on Consumer Choice
10.30.-11.00.	Coffee break	
	Plenary session 2	New Technologies in Modern Society: Nanosystems and Information Technologies
	Plenary Hall Kronvalds	The Head of the Session Associate Professor V. Gopeyenko
11.00.-11.15.	A. Kiv, D. Fuks, D. Fink, V. Golovanov, O. Britavska	Nanotechnology and Novel Electronic Devices
11.15.-11.30.	Y.-R.Kalnins	Systems Dynamics, Simple Economical Models and Education.
11.30.-11.45.	Yu. F. Zhukovski S. Piskunov, E.A. Kotomin, S. Bellucci	Carbon Nanotubes in Project CATHERINE: 2D Periodic Model of CNT Bundle Growth on the Nanostructured Ni(111) Surface: Ab Initio Simulations
11.45.-12.00.	Yu. Shunin	Theoretical Simulations of Carbon Nanotubes Devices
12.00.-12.15.	I. Kabashkin	Transport for a Global Economy. Challenges and Opportunities in the Downturn
12.15.-12.30.	T. Lobanova ,Yu. Shunin	The Systemic Approach to Language Acquisition Related to Emotion Regulation
12.30.-12.45.	K. Agarval	Large Classes: Models of Language Learning and Teaching with Internet Resources
12.45.-13.30.	Lunch	
	Section IT1	Information Technologies: Methods, Software and Decision Making
	Hall Viesturs	Moderator Associate Professor R. Muhamedyev
13.30.-13.40.	D. Fuks, D. Shapiro, A. Kiv	Structural Stability and Chemical Bonding in Laves Phase Compounds
13.40.-13.50.	D. Fuks, D. Shapiro, A. Kiv, V. Golovanov, C.C. Liu	Peculiarities of The Band Structure for Slab Model in Ab Initio Calculations
13.50.-14.00.	A. Kiv, D. Fuks, I. Donchev, O. Rybalchenko, I. Tolkach, O. Katan	Natural Ageing of Memory Devices
14.00.-14.15.	A. Gopejenko, Yu.F. Zhukovskii, P.V. Vladimirov, E.A. Kotomin, A. Mösiang	Simulation of Yttrium Oxide Particle Formation in Iron in Support of ODS Steel Development
14.15.-14.30.	D. Bocharov, D. Gryaznov, Yu.F. Zhukovskii, E.A. Kotomin	Ab Initio Calculations on the Atomic and Electronic Structure of Defective UN(001) Surface
14.30.-14.40.	E.K. Shidlovskaya	Embedded Molecular Cluster Model for Theoretical Study of Processes in Nanosystems
14.40.-14.50.	N.Galikova, M.Kelminskas, I.Galikov, A.Gruodis	Electron Transfer Reactions in Ordered Aggregates: Quantum Chemistry Approach
14.50.-15.00	N. Shunina	Simulation Model of Electronic Structure and Conductivity of Carbon nanotubes in Effective Medium Approximation
15.00.-15.30.	Coffee break	
	Section IT2	Information Technologies: Methods, Software and Management
	Hall Kronvalds	Moderator Professor A. Kiv
15.30.-15.50.	K.N. Nechval, N.A. Nechval	Finding Unbiased Predictive Density Functions for Future Observations

15.30.-15.50.	K.N. Nechval, N.A. Nechval	Determining Non-unbiased Predictive Density Functions for Future Observations
15.30.-15.50.	N.A. Nechval, K.N.Nechval, G.Berzinsh, M.Purgailis, U.Rozevskis, K.Rozite	Technique for Obtaining Percentage Points of Order Statistics
15.30.-15.50.	K.N. Nechval, N.A. Nechval, G. Berzinsh, M. Purgailis, U.Rozevskis, J. Krasts	Prediction Limits for Weibull Order Statistics
15.30.-15.50.	K.N. Nechval, N.A. Nechval, G. Berzinsh, M. Purgailis, U.Rozevskis, J.Krasts	Detection and Identification of Cracks Using Eigenfrequency Test Data From Vibration
15.50.-16.05.	V. Boicov, N. Bogdanov	Automated Design System of Control Automatics of Ventilation and Indoor Climate
16.05.-16.20.	V. Boicov, J. Krepsa	Imitating Modeling for Local Area Net.
16.20.-16.35.	V. Gopeyenko	The Research of the Computer Experiment Result Processing Methods
16.35.-16.50.	I. Kulish, A.Mrochko, R.Muhamedyev	Reduction of Experts System for Students Knowledge Evaluating in the Area of Hospitality Technology
16.50.-17.05.	Y. Kozmina	On Profiles of Primitive Functions and Application to Nonlinear Differential Equations
17.05.-17.20.	A. Kovantsov	Projector Systems.
17.20.-18.00.		Sessions Discussion and Conclusion

April 16	Section C	Education and Training Competence
	Hall Viesturs	Moderator Professor M.Zhivitere
11.00.-11.10.	A.Joma	Overview of Career Guidance System in Latvia
11.10.-11.20.	G. Pavare	Employability Skills – Key Issue for Career Development In Latvia
11.20.-11.25.	M. Zhivitere A.-L. Zhivitere	Education and Training Competence Standards for Career Counsellors
11.25.-12.35.	Workshop	Moderator B.Mikelsone
	Speakers: A.Joma, M. Thum-Kraft, G. Rakovska, N. Paunova, V.Fissamper, G. Pavare, A.L. Zhivitere, M. Zhivitere	<ol style="list-style-type: none"> 1. Quality standards for educational and vocational counsellors 2. Self Assessment tool for checking counsellors' competences and skills 3. Database of information on counsellor skills and competences 4. Client checklist of counselling offers 5. Client feedback

April 17	Section M1	Management: Methods and Decision Making
	Hall V-401	Moderator Associate Professor V. Chlaidze
9.00.-9.15.	I.Balode	Accordance of Constructivism Study Environment in the Studios of Hospitality Management
9.15.-9.30.	I. Kulish	Service Culture of A Hospitality Manager
9.30.-9.45.	O. Lukashina	Contents, Diagnostics and Monitoring of Tax Risks in the Private Companies
9.45.-10.00.	D.Zmicerevska	Business Angel Network Start Up in Latvia
10.00.-10.15.	D. Korsunova L. Babich	Financial Products Migration Process in Global Crisis Conditions on the Example of Bank A
10.15.-10.30.	I.S. Kalenyuk, N.I. Holyavko	The Assessment of Innovation Projects of International Cooperation
10.30.-11.00.	Coffee break	
	Section M2	Management: Methods and Software
	Hall V-401	Moderator Associate Professor V. Chlaidze
11.00.-11.15	L. Lastovskaya, Yu. Shunin	Human Resources Systemic Management in the Private Higher School
11.15.-11.30.	A.Zalessky, V. Chlaidze	Research Of Innovative Technologies Influence On Efficiency of Agribusiness
11.30.-11.45.	M.Gripukale	The Assessment of State Supervision of Trade Enterprises
11.45.-12.00.	I.Gonzalez-Ortiz	The Logistic Analysis of Goods Transportation by Latvian Railway
12.00.-12.15.	V. Reingold	Legal Aspects of Intellectual Property Rights Protection
12.15.-12.30.	T.Odinokova	The Stimulation of Innovation of Small and Medium Enterprises

12.30.-12.45.	Z.Oborenko	Main Aspects of Balanced Scorecard
12.45.-13.15.	Coffee break	
	Section M3	Management: Methods and Software
	Hall V-401	<i>Moderator Associate Professor V. Chlaudze</i>
13.15.-13.30.	Y. Lukyanova	The Research for the Essence of Innovation Phenomena
13.30.-13.45.	V. Dyakon	The Problems of Assessment of Intellectual Capital of Higher Education Institutions
13.45.-14.00.	A. Roshia	Implementation of Coaching Techniques in Personnel Management
14.00.-14.15.	Z. Kleshchevnikova	Protection of Creditors in the Commercial Law of the Republic of Latvia and in the European Union Directives
14.15.-14.30.	D. Klyukin	3PL System For CIS Countries Using Baltic Transit Region - Achieving Versatility
14.30.-14.45.	D. Dyackon	Managing the Development of a Higher Education Institution in Modern Conditions
14.45.-15.00.	A. Zhuravlov	Management of The Economic Environment Of Latvia Business
15.00.-15.15.	O. Grishnova, O. KANISHCHENKO	E-Support of Global Intellectual Resource Redistribution
15.15.-15.30.	O. Kuklin	Structural Features of Higher Education in Ukraine
		M session closing, decision making

April 17	Section IT3	Internet Conference: Information Technologies Management in Education
11.00.-12.00.	Hall V-117	<i>Moderator Professor A. Kiv</i>
	O. Y. Chebykin.	Emotional Regulation in Teaching Process
	D.Goncharenko, S. Zyrin, L. Bodnar, O. Britavska, K. Shilova	Zipf's Laws and Information Value.
	K. Shilova, D.Goncharenko, L.Bodnar, O.Britavska, A.Grechkosiy	Zipf's Laws and Translation Approaches
	D. Chabanenko	Prediction of Financial Time Series with the Technology of High-Order Markov Chains
	I. O. Stratiichuk, V.V. Solovieva, O Nechinennaya.	Research Real Estate Market in the Global Crisis With Help Of The Methods Of Non-Linear Dynamics
	A.V. Batyr, V.N. Soloviev, E.P. Sedov	The Cyclic Surgings as One of The Reasons of The Modern Economical Crisis
	Coffee break	
	Section IT4	Internet Conference: Information Technologies Management in Education
12.00.-13.00.	Hall V-117	<i>Moderator Associate Professor R. Muhamedyev</i>
	I. Grishin, G. Potapov	Heuristic Algorithm of Main Facets Determination at The Solve of Linear Programming Problem
	Y.A. Zuban	Management System for Distance Learning
	V.O. Lyubchak, B.O. Kuzikov	Peculiarities and Implementation Experience of E-Learning in Sumy State University
	O. Yu. Smirnov, S.P.Stetsjun	The Virtual Practical Trainer in A University Course On Biology
	A.S.Krasnopoyasovskiy, O.A. Yakushev	Optimization of Discretization Step For Recognition System of Voice Commands
	S. Opanasiuk, O. Sylka	The Usage of ICT in the Development of Flash-based Educational Medical Complexes
	S.S. Martynenko	Oncological Pathology Diagnosis In Bound of Information-Extreme Intelligence Technology
	G. Momcheva, V. Spasova	The Utilization of The Extra-Curricular Classes for Computer Science Students In Varna Free University By Combining Collaborative And Blended Approaches
	I.Lemberski	Hazard-Free Implementation of Speed-Independent Logic
	T. Cakar	Simulated Annealing Approach For Single Robot Total Weighted Tardiness Problem
		IT session closing, decision making

April 14*	Section D	Increasing Employability of Disabled People
13.45 – 14.00	Hotel Ridzene Hall Viesturs	Registration
		Moderator Associate Professor Seyhan FIRAT
14.00.-14.20.	As. Prof. Seyhan Firat	Increasing Employability of Disabled People in Turkey
14.20-14.50.	Gunta Anca	Different Employment Models for People with Disabilities in Europe
14.50.-14.10.	R. Pandurska, I. Danailova	Employment of Disabled People in Bulgaria – Problems, Trends and Perspectives
14.10.-14.45	M. Taube, R. Andrezina, A. Uzkalna	Integration of People with Mental Disturbances and Psychiatric Illnesses in the Labour Market
14.45.-15.00.	M. Zhivitere, A. L. Zhivitere	Developing a Disability Management in the Workplace
15.00.-15.20.	Coffee/Tea break	
15.20.-17.00.	Workshop Hall Viesturs	Increasing Employability of Disabled People
		Moderators prof. Recai Coskun, Adnan Boynukara and Mrs. Gunta Anca
	Speakers: S. Firat, F. Yurtsever, V. Vural, M. Hiziroglu, V.Racinska, Agency of Employment Latvia, E. Fijipovs, Employers' Confederation of Latvia, S. Baltina	<ul style="list-style-type: none"> ▪ European policies to promote employment and social inclusion ▪ Situation with employment of disabled people ▪ Different prejudices against people with disabilities ▪ Facilitating the inclusion of people with disabilities in the labour market ▪ Mechanism of stimulation of entrepreneurs to employ disabled people ▪ Co-operation employers with employment agencies, educational institutions etc.
17.00.-17.10.		Sessions discussion and conclusion
17.10 – 20.00	Excursion Old Riga	

April 17		
12.00.-14.00.	Student Workshop	Information Technologies & Management
	Hall V 409	Moderator Assist. Professor M.Mrochko

April 17		
14.00.-15.00.	Hall V-117	Conference closing, decision making
		Programme and Organizing Committees Session, discussion IT&M 2009 Conference result and recommendation

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THE CYCLIC SURGINGS AS ONE OF THE REASONS OF THE MODERN ECONOMICAL CRISIS

A.V.BATYR, V.N. SOLOVIEV, E.P. SEDOV

*Cherkassy National University by B. Khmelniysky
Cherkassy, Ukraine, nb-91@mail.ru*

Since the problem of the world economical crisis is gaining importance nowadays, it becomes necessary to reveal its real nature and reasons, in order to act in the most adequate way. The cycle theory is a possible explanation for the current situation in the economy [4].

Years ago it was noticed that economical development is a periodical process: a chain of ups and downs caused by different reasons (wars, revolutions, various inventions and innovations in industry and agriculture, famine, mass migrations etc.) [3]. Such a sequence is called a cycle, which usually includes four phases: contraction, trough, expansion and peak. Each of them has its own creative potential, due to which the further development becomes possible [2].

C. Juglar, N. Kondratiev, J. Kitchin, J. Schumpeter and S. Kuznets were the first to discover the empiric and theoretical aspect of business cycles [3].

N. Kondratiev came out with the idea of surges with the approximate duration about 45-60 years, based on the idea of the economy being influenced by the complete change of the “main material values”. The cycle principle was claimed to exist as long as the capitalistic way of production, changing subject to particular historical conditions. Therefore there are no objective reasons for us to consider it absent nowadays [1].

We have carried out our own investigation, during which the economies of USA, United Kingdom and France in 1961-2007 were compared. The real GDP and unemployment dynamics were taken into consideration. The results of the analysis are shown on the fig.1. We also paid attention to historical events of the period and Kondratiev’s empiric truths, in order to explain both the most powerful crises and the modern one.

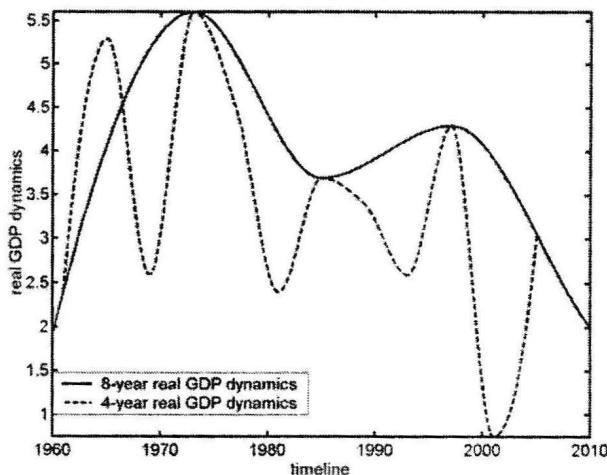


Figure 1. Real GDP growth rates dynamics for USA

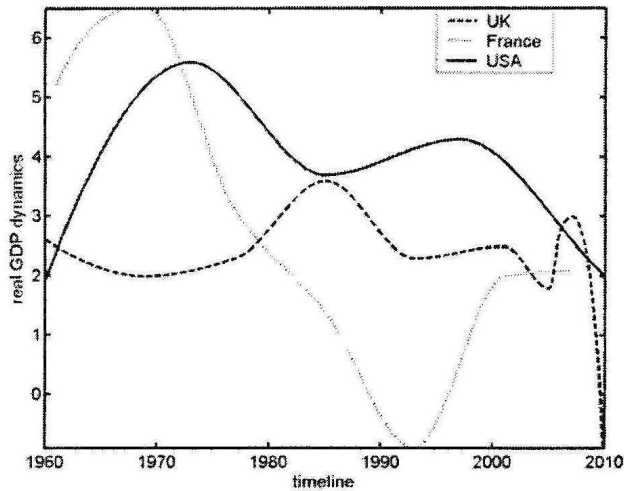


Figure 2. Real GDP growth rates dynamics for USA, France and United Kingdom

Having collated the peculiarities of the economical progress of USA, United Kingdom and France (fig. 2) we found out a lot of common features (growth of the industrial potential in the late sixties, a drop in the agricultural sector in the seventies). Nevertheless the differences, caused by inner economical and political problems, are obvious.

It is possible to make a conclusion about the existence of two waves (each of them for about 25-30 years long) in the time period under study, which can be determined as modern variations of the surges.

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