



**Hellenic Society
for Systemic Studies
(HSSS)**

Full member of IFSR

10th National & International Conference

Systemic Entrepreneurship

Innovation, Business, Growth

29-31 MAY 2014 • Athens Greece

STRATOS VASSILIKOS HOTEL

PROGRAM & ABSTRACTS



In collaboration with



University of Piraeus
Department of Informatics

www.2014.hsss.eu



www.2014.hsss.eu

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Welcome Message

On behalf of the Hellenic Society for Systemic Studies (HSSS) we would like to invite you to the 2014 HSSS 10th. National & International Conference, organized in collaboration with the Department of Informatics of the University of Piraeus, which will take place in Athens, Greece.

The HSSS's annual National and International Conference is held alternately in different cities of Greece in collaboration with a local University or Department of a local University or with a contribution of a relevant international or Greek organization.

The main theme of the Conference, is to present the dynamic scientific area of "Systemic Entrepreneurship - Innovations, Business Growth" with applications in organizations and enterprises across a wide spectrum of both service and production industry sectors.

Given the dynamic nature of this challenging area, Systemics will bridge the gap between theory and practice and will promote the use of effective Methodologies and Multi-Methodologies in managing today's organizational complexity for Process Cohesion.

Our interdisciplinary international community has the scientific systemic tools and powerful specialized software to tackle up-to-date multi-dimensional strategic complex problems and to manage their complexity in different applied areas of practice.

The prominent national and international invited speakers in the scientific program, the exciting professional panels, the professional round table, and the professional workshop, will attract the attention of a large number of our colleagues. Further, the participation of the International Federation for Systems Research (IFSR) members, the International Academy of Systems and Cybernetic Sciences (IASCYS) members, together with renowned consultancy firms of national and international stature, will make this Conference a very successful and memorable one in the history of HSSS Conferences.

Who should attend?

- * Academics: Communicate your research results with colleagues around the world.
- * Consultants: Present the power of systems thinking, modeling and simulation in your applied, client-oriented work.
- * Practitioners: Show modeling and simulation at work in your organizations.
- * Graduate students: Share your developing research in a constructive environment.
- * Undergraduate students: Have a good experience within a challenging and professional environment.

Athens is the capital of Greece. Its economy is also supported by manufacturing, trade, services and tourism.

Athens is an ideal place for bringing together colleagues from all over the world to promote and exchange ideas, knowledge and experience for the benefit of both organizations and enterprises in effectively meeting the needs of a challenging international community.

Chair of the Organizing Committee

Professor Maria Virvou
Dept. of Informatics,
University of Piraeus
Piraeus, Greece

Chair of the Scientific Committee

Professor Victoria Pekka - Ekonomou
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HSSS President

Professor Nikitas Assimakopoulos
University of Piraeus



Acknowledgements

*The Board of Directors of the
Hellenic Society for Systemic Studies
&
the Organizing Committee of the
8th National & International Conference
would like to thank
all those who have contributed to
ensure the conference come to success;
reviewers, presenters, authors, sponsors,
support team and other conference assistants.*

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Brief Program

Thursday 29th. May, 2014

- 09:00 – 18:00 Registrations Open
- 09:15 – 10:30 Virtual Keynote Addresses
- 10:30 – 12:30 Opening Ceremony with Keynote Addresses
- 12:30 – 14:00 Welcome Reception
- 14:00 – 15:30 Keynote Addresses
- 15:30 – 16:00 Coffee Break
- 16:00 – 17:30 Workshop & Parallel Sessions
- 17:30 – 18:00 Coffee Break with light snacks
- 18:00 – 19:30 Professional Panel & Parallel Sessions

Friday 30th. May, 2014

- 09:00 – 15:00 Registrations Open
- 09:30 – 10:30 Virtual Keynote Addresses & Parallel Sessions
- 10:30 – 12:00 Virtual Keynote Addresses & Parallel Sessions
- 12:00 – 12:30 Coffee Break
- 12:30 – 14:00 Keynote Addresses
- 14:00 – 15:00 Light snacks with soft drinks
- 15:00 – 16:30 Keynote Addresses
- 16:30 – 17:00 Coffee Break with light snacks
- 17:00 – 18:30 Professional Round Table
- 18:30 – 19:00 Closing of the Conference
- 20:30 – 02:30 Gala Conference Dinner with dance

Saturday 31st. May, 2014

- 11:30 – 13:30 Proposed Sight seeing tour

Program Timetable

Thursday 29th. May, 2014

09:30 – 18:00	Registrations Open
09:30 – 10:15	Virtual Session
09:30 – 10:15	Hall: Limnos
 VKN-01	<i>Systemics in Law, Politics and Social Approach</i> <i>Chair: Stathatos N.</i>
<u>VKN-01.01</u>	An example of social and political systemic entrepreneurship: developing Integration and Implementation Sciences <i>Bammer G.</i>
<u>VKN-01.02</u>	Soft Computing Methods as Decision Support for Entrepreneurs <i>Clüver C.</i>
<u>VKN-01.03</u>	The Innovation of Entrepreneurship as Strongly Sustainable Networks <i>Jones P.</i>
VKN-01 <i>Evaluation Link</i>	http://speakerzen.me/vkn-01
10:30 – 12:30	Opening Ceremony
	Hall: OLYMPIA <i>Opening Ceremony with Keynote Addresses</i> <i>Chair: Varsos D.</i>
	Opening by the Bishop Theodoritos Polyzogopoulos Salutation by the President of the HSSS, Professor N. Assimakopoulos Salutation by the Chair of the Scientific Committee, Professor V. Pekka - Ekonomou Salutation by the rep. of the Dept. of Informatics, Un. Piraeus, Professor G. Tsihrintzis HSSS Gold Medal CSAP Certification Projects: Distinction Best Student Paper Award
	<u>KN-01</u> Systems-based Evolutionary Learning Laboratories to enable Systemic Entrepreneurship in a Complex World <i>Ockie Bosch</i>
KN-01 <i>Evaluation Link</i>	http://speakerzen.me/kn-01
	<u>KN-02</u> Translational Systems Thinking, Methodology and Modeling for Innovative Development <i>Hirochi Deguchi</i>
KN-02 <i>Evaluation Link</i>	http://speakerzen.me/kn-02
12:30 – 14:00	Welcome Reception
14:00 – 15:30	Keynote Addresses
14:00 – 15:30	Hall: OLYMPIA <i>Keynote Addresses</i>
	<u>KN-03</u> Towards Entrepreneurial, Systemic Change – The Radical

Learning Journey of the Systemic Excellence Group
Dr. Klein L.

KN-03
 Evaluation Link

<http://speakerzen.me/kn-03>

KN-04

VSMinteractive: the only software-based organizational design toolkit and management navigation system based on and safeguarding the principles of the Malik Viable System Model®
Sourla M.

KN-04
 Evaluation Link

<http://speakerzen.me/kn-04>

15:30 – 16:00 Coffee Break

16:00 – 17:30 Workshop 01 & Parallel Sessions

16:00 – 17:30 Hall: OLYMPIA

 **WS-01 Workshop 01**

Using Structured Democratic Dialogue To Design The Development Of Development Of Entrepreneurship In Greece
Laouris Y.

WS-01
 Evaluation Link

<http://speakerzen.me/ws-01>

16:00 – 17:30



EA-01

Hall: HEPHAESTUS
Systemics in Law, Politics and Social Approach
 Chair: *Konstantopoulou M.*

[EA-01.01](#) The Contribution of proactive Lawyer's cases in Corporate Governance: A systemic Approach
Konstantopoulou M., N. Assimakopoulos

[EA-01.02](#) The Disguised Version of the Shock Doctrine on Information Security Analysis: System dynamics complexity methodologies and tactics against hacking, fraud and industrial – corporate espionage.
Peristeras A.

[EA-01.03](#) The use of BEER's VSM and DCSYM Systemic Methodology in Operating a Headquarters of the Army.
Gkodevas G.

[EA-01.04](#) Systemic Analysis and Operation of the Public Services – A public Tax Office Study.
Antoniadou K.

EA-01
 Evaluation Link

<http://speakerzen.me/ea-01>

16:00 – 17:30



EA-02

Hall: AEGEAN
Systemic Approach into e- Governance
 Chair: *Miaris A.*

[EA-02.01](#) E-Government Models in the Digital Era: A Systemic Approach
Patsi D.

[EA-02.02](#) Quanteex e-voting System
Georgiou D.

[EA-02.03](#) Systemic approach with the use of Viable Systemic Model: The case of EGovernment in Mediterranean countries eG4M
Miaris A., Assimakopoulos N., Dareios P., Lengos P., Riggas A.

[EA-02.04](#) Systemic Archetypes for e-Government and/or e-Governance using Systemic Methodologies
Miaris A., Assimakopoulos N., Riggas A.

EA-02
 Evaluation Link

<http://speakerzen.me/ea-02>

- 16:00 – 17:30** Hall: MYRINA
 **EA-03** ***Strategy, Knowledge and Information Systems***
Chair: Katsanakis I.
- [EA-03.01](#) Using Process Assessment Models in the Evaluation of Information Systems
Katsanakis I., Georgopoulos N., Sfakianakis M.
- [EA-03.02](#) Knowledge Management Approach as a Source of Competitive Advantage in the New Business Environment
Pekka - Ekonomou V., Agoraki K.
- [EA-03.03](#) Co-opetition in light of systemic entrepreneurship
Kossyva D., Sarri A., Georgopoulos N.
- [EA-03.04](#) Non-structured User Generated Content Analysis for Customer Experience in Tourism: A Literature Review of Methodologies
Skotis A., Makris A.
- EA-03**
Evaluation Link <http://speakerzen.me/ea-03>

- 16:00 – 17:30** Hall: LEMNOS
 **EA-04** ***Environmental Management Systems and Green Entrepreneurship***
Chair: Divoli V.
- [EA-04.01](#) Green entrepreneurship tools and their implementation in SMEs, the case of BIOPIRAEUS
Divoli V., Georgakellos D.
- [EA-04.02](#) The impact of the economic crisis on the quality of the natural environment and sustainability of business in Greece: A preliminary analysis
Fousteris A., Georgakellos D.
- [EA-04.03](#) The 'green' approach in Systemic Entrepreneurship: The role of Life Cycle Analysis as a management tool in Environmental Systems
Makri A.M., Georgakellos D.
- [EA-04.04](#) Applied Systemic Methodology in a Company based in Tripoli of Arkadia: DCSYM, 7 System Dynamics (Vensim)
Paraskeuopoulos G.
- EA-04**
Evaluation Link <http://speakerzen.me/ea-04>

17:30 – 18:00 Coffee Break with light snacks

18:00 – 19:30 Professional Panel & Parallel Sessions

- 18:00 – 19:30** Hall: Olympia
-  **PP** ***Complexity in Projects and Programs: Can we manage or navigate complexity?***
Chair: Giotis T.
- PP-01** Complexity in Projects and Programs: Can we manage or navigate complexity?
Giotis T.
- PP-02** Complexity in Project Management
Chatzipanos P.
- PP**
Evaluation Link <http://speakerzen.me/pp>

- 18:00 – 19:30** Hall: Myrina
 **EA-05** ***Systemics in Business Process Modeling***



Chair: Varsos D.

EA-05.01 A Methodological Systemic Scheme (MSS) for Organizational Design and Control (DCSYM-2)
Assimakopoulos N., Varsos D.

EA-05.02 A Systems Approach to Process Alignment for Controlling the Inter-organizational Oscillatory Effect Caused by Change Initiatives
Assimakopoulos N., Varsos D., Giannakou S.

EA-05.03 Applying systemic methodologies to bridge the gap between a process-oriented management system and its supporting information system
Assimakopoulos N., Papaioannou P.

EA-05.04 Dynamic KPI's Framework
Mouratidis P.

EA-05

Evaluation Link

<http://speakerzen.me/ea-05>

18:00 – 19:30



VEA-01

Hall: AEGEAN

Innovation in the Energy field

Chair: Stathatos N.

VEA-01.01 Energiaproject - Research & Development in energy
Vlassis P.

VEA-01.02 Systemic Methodologies for the R&D in ICE's (Internal combustion engines & burners)
Vlassis P., Theiler M.

VEA-01.03 Energiaproject R&D systemic methodology
Vlassis P., Theiler M.

VEA-01

Evaluation Link

<http://speakerzen.me/vea-01>

18:00 – 19:30



EA-06

Hall: HEPHAESTUS

Electronic Business

Chair: Mitropoulos S.

EA-06.01 A Cooperative Digital Library System in a Mobile Environment
Mitropoulos S., Rodios M., Douligeris C.

EA-06.02 The digital age as an important medium of communication, information dissemination and commerce
Pekkas H.

EA-06.03 Systemic methodologies application, into Insurance Company in Greece, to diagnose troublesome procedures
Vasilakos A.

EA-06.04 Demographic Data -Innovation - Entrepreneurship
Makrynicola C.

EA-06

Evaluation Link

<http://speakerzen.me/ea-06>

18:00 – 19:30



EA-07

Hall: LEMNOS

Human Resource and Organizational

Chair: Chatzoglou P.

EA-07.01 Merger of Three Companies of Fixed Rail Human Resources Department at at "STASY S.A" company
Benetatou A.

EA-07.02 Systemic Approaches for the increase of productivity for the "Poseidon Company"

- Koulas G.**
 EA-07.03 Human centric approach to the employee's success
Konstantinidou I.
 EA-07.04 Employee Motivation Factors during Economic Crisis Periods
Karas A., Chatzoglou P.
EA-07 <http://speakerzen.me/ea-07>
Evaluation Link

Friday 30th. May, 2014

09:00 – 15:00 Registrations Open

09:00 – 10:15 Virtual Keynote Addresses & Parallel Sessions

- 09:00 – 10:15** **Hall: LEMNOS**
 **VKN-02** **Virtual Keynote Addresses**
Chair: Stathatos N.
- [VKN-02.01](#) Innovation and Entrepreneurship Thrive Where Science 1 and Science 2 Intersect
Lissack M.
- [VKN-02.02](#) Systemic Entrepreneurship: Creating A New Approach To How We Live Based On What We Value And Why: Implications For Human Capital And Wellbeing
McIntyre J.
- [VKN-02.03](#) Finding Opportunities For Innovation
De Vries D.
- VKN-02** <http://speakerzen.me/vkn-02>
Evaluation Link
- 09:00 – 10:15** **Hall: MYRINA**
 **EA-08** **Systemic Approach in Public Sector**
Chair: Antoniadis R.
- [EA-08.01](#) A systemic approach to optimize communication and procedures in one of the Services of General Interest in Greece, operating in the water market
Assimakopoulos N., Antoniadis A., Drakos I.
- [EA-08.02](#) Systemic Approaches of Strategic Planning on the Examination of Prerequisites for the Recognition & Authorization of Classification societies of Ships
Soulos D.
- [EA-08.03](#) The Effect of Risks in Public Private Partnerships Development: a System Dynamics Approach
Pagoni E., Georgiadis P.
<http://speakerzen.me/ea-08>
EA-08
Evaluation Link
- 09:00 – 10:15** **Hall: HEPHAESTUS**
 **EA-09** **Learning and systems thinking in education (II)**
Chair: Patsi D.
- [EA-09.01](#) Growth of Entrepreneurship: Standard Methods vs System Thinking
Patsi D., Alexiou I.
- [EA-09.02](#) The use of the DCSYM systemic methodology for the

structure of the Department of Informatics
Triantafyllou A., Karagiannis P.

[EA-09.03](#) Using Web2.0 technologies for information dissemination on entrepreneurship
Sypsas A.

[EA-09.04](#) Island Development and Entrepreneurship
Chatzopoulos P.

EA-09
Evaluation Link

<http://speakerzen.me/ea-09>

10:30 – 12:00 Virtual Keynote Addresses & Parallel Sessions

10:30 – 12:00 **Hall: LEMNOS**
 **VKN-03** **Virtual Keynote Addresses**
Chair: Stathatos N.

[VKN-03.01](#) Formalizing Porter's Integrated Practice Unit with System-of-Systems Modeling and Simulation
Zeigler B.


[VKN-03.02](#) Innovation And Growth In The Economics Of Information
Pla-Lopez R.

[VKN-03.03](#) Entrepreneurship based on the exploitation of Data and Metadata Standards and Best Practices
Tsinaraki C.

[VKN-03.04](#) Thoughts about Innovation, Business, and Growth for the Aspiring Systemic Entrepreneur
Buckle-Henning P.

VKN-03
Evaluation Link

<http://speakerzen.me/vkn-03>

10:30 – 12:00 **Hall: MYRINA**
 **EA-10** **Systemics Entrepreneurship in Operations and strategic management**
Chair: Kutsikos K., Antoniadis R.

[EA-10.01](#) An applied framework for digital service innovation
Kutsikos K., Mpithas G.

[EA-10.02](#) Control Management and Financial Control for a Logistic Warehouse Center Facilities
Karampatos G.

[EA-10.03](#) E- Commerce as a source of advanced managerial performance in the new business area
Ekonomou M.

EA-10
Evaluation Link

<http://speakerzen.me/ea-10>

10:30 – 12:00 **Hall: HEPHAESTUS**
 **EA-11** **Systemic approach into the Public Sector**
Chair: Giannakou S.

[EA-11.01](#) Developing a systems approach for the enhancement of entrepreneurial capabilities of European Medicinal Agencies through structured bench-learning schemes
Giannakou S., Assimakopoulos N., Varsos D., Giannakakis E.

[EA-11.02](#) Business Development of a Small Accounting Office using Systemic Methodologies

Petsoukis L.

[EA-11.03](#) The use of DCSYM and System Dynamics Systemic Methodologies in a Branch of the Piraeus Bank

Stagouraki A., Goniotakis L.

[EA-11.04](#) Environmental Management System for Oil/Chemical Tankers
Papadopoulos A.

EA-11

Evaluation Link

<http://speakerzen.me/ea-11>

10:30 – 12:00



EA-12

Hall: AEGEAN

Innovation and StartUp

Chair: Dareios P., Lengos P.

[EA-12.01](#) Tutorizon - it is a new tutors' horizon
Gavrilakis F., Mouzakitis A.

[EA-12.02](#) Startup: Uninotes
Xiradakis K.

[EA-12.03](#) tizU - Time delayed messenger
Lianos A., Xenos S.

[EA-12.04](#) Connecting brands with fashion influencers worldwide
Tsaggas P.

EA-12 Evaluation Link

<http://speakerzen.me/ea-12>

12:00 – 12:30

Coffee Break

12:30 – 14:00

Keynote Addresses



Hall: OLYMPIA

Chair: Varsos D.

[KN-05](#) The Anthropocentric Approach to Systemic HR Development & Entrepreneurship
Kalogerakis I.

KN-05

Evaluation Link

<http://speakerzen.me/kn-05>

[KN-06](#) Social Responsibility and Ethics in Systemic Entrepreneurship
Lewis L.

KN-06

Evaluation Link

<http://speakerzen.me/kn-06>

14:00 – 15:00

Light snacks with soft drinks

15:00 – 16:30

Keynote Addresses



Hall: OLYMPIA

Chair: Sourla M.

[KN-07](#) Entrepreneurship: Challenges Of Innovations

Potocan V.

KN-07

Evaluation Link

<http://speakerzen.me/kn-07>

[KN-08](#) Innovation in Design, Manufacturing, Energy, and Service Systems: A Big Data Perspective
Kusiak A.

KN-08

Evaluation Link

<http://speakerzen.me/kn-08>

[KN-09](#) Systematic Innovation And Entrepreneurship Via Adaptive Systems Requirements Engineering
Jureta I.



KN-09
Evaluation Link <http://speakerzen.me/kn-09>

16:30 – 17:00 Coffee Break with light snacks

17:00 – 18:30 Professional Round Table
Hall: Myrina



PRT Professional Systemic Entrepreneurship

Chair: Varsos D.

Contributors

Laouris Y.

Zampetas G.

Bosch O.

Klein L.

Sourla M.

Deguchi H.

Kusiak A.

Lewis L.

Potocan V.

Jureta I.

PRT
Evaluation Link <http://speakerzen.me/prt>

18:30 – 19:00 Closing of the Conference



Hall: Myrina

Chair: Prof. Assimakopoulos N.

Total Conference
Evaluation Link <http://speakerzen.me/2014hss>

20:30 – 02:30 Gala Conference Dinner with dance

Saturday 13th. July, 2013

11:30 – 13:30 Sight seeing tour



Scientific Events



KN-01

Systems-based Evolutionary Learning Laboratories to enable Systemic Entrepreneurship in a Complex World

Ockie Bosch

The University of Adelaide
5005 Adelaide, South Australia
E-mail: ockie.bosch@adelaide.edu.au

EXTENDED ABSTRACT

Policy makers and leaders in organizations, governments, business institutions and funding bodies are under increasing pressure to be innovative in their decision making to ensure investments with the biggest impact and to find systemic long-lasting innovative solutions to manage the increasing complexity in our world. Solutions so far have seldom been long lasting, because 'quick fixes', using traditional linear thinking, are the easiest way out, but do not deliver the solutions. Entrepreneurship and innovation require a new way of systems and interconnected thinking and a radical approach to enhance cross sectoral and organizational communication and collaboration. Systems-based Evolutionary Learning Laboratories (ELLabs) have been developed and are used for unravelling complexity through participatory systems analysis and the identification of leverage points for systemic interventions. The successful application of this systems tool in many countries has led to its refinement and the development of a web-based system tool, Think2Impact©. This paper describes the refinement of the current ELLab in terms of identified limitations: Scalability (manual approach and reliance on specialists, to a collaborative platform supporting learning and problem solving); outreach/participation (limited ability to engage participants from various demographics, to an online collaboration platform integrated with social media); utilization (limited access to specialists and facilitators, to a blended model that provides opportunities to utilize a range of tools, forums, data and resources globally); capacity building (manual training and skills development, to a model with access to a range of online and gamified learning options); knowledge sharing (limited within project teams, to a global knowledge sharing portal) and accountability and tracking (limited ability to track value, monitor accountability and optimise outcomes, to a platform to monitor the value of activities, assign responsibilities and optimise the impact of projects). Special attention is also given to innovation to foster entrepreneurship through the establishment of a global systems thinking ecosystem. The use of the refined systems tool will be demonstrated in addressing the complex problem to systemically identify labour saving innovations for women in agriculture in South East Asia and Sub-Saharan Africa and how systemic entrepreneurship could be an integral part of the solutions towards improving their quality of life.

KN-02

Translational Systems Thinking, Methodology and Modeling for Innovative Development

Hiroshi Deguchi

Tokyo Institute of Technology

259 Nagatsuta-cho, Midori-ku, Yokohama, Kanagawa, 226-8503 Tokyo, Japan

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EXTENDED ABSTRACT

In this presentation, we clarify the mission of systems sciences for the development of our global and complex world in this century. General systems science had emphasized on the unity of sciences. The Society for General Systems Research has founded in 1956. The important mission of the society is to promote the unity of science through improving the communication among specialists. However, our world and our research domain become more complex and the communication among specialities becomes more difficult. Incommensurability of scientific theories is emphasized on. It looks like the discipline oriented researchers who touched just part of the world and tried from that to describe the whole world. Ultimately, nothing in the world is single. We have to translate, bridge and link different ways of thinkings such as political, economical, social, cultural and many discipline-based thinkings. Our mission is to support the translational ways of thinkings to analyze and design our life world itself in this era. For the purpose, it is the necessary not to bridge each disciplines directly but to bridge the ways of systems thinkings about methodology, theory and language under the context of our problems to be solved in this era. That is not a traditional function way of systems thinking. We have to develop trans-disciplinary and translational ways of thinkings for bridging pragmatic and methodological thinkings, agent based and macro functional thinkings, internal model based and intersubjective model based thinkings, design based and implementation based thinkings. In this presentation, we explain a frontier of the translational ways of systems thinkings that include agent based modeling, agent based simulation, philosophy of sciences as methodologies and several real world examples of new systems approach for innovative development in the area of health care, service and policy sciences.



KN-03

Towards Entrepreneurial, Systemic Change – The Radical Learning Journey of the Systemic Excellence Group

Louis Klein

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EXTENDED ABSTRACT

When confronted with the social complexities in change management and organisational development projects, a systemic focus on the individual in relationship to others and the organisation as such becomes the basis for any type of positive change. Since over twelve years, the Systemic Excellence Group (SEgroup) supports organisations and their members in their efforts to continuously learn from each other. Started in 2001 with the ambition of approaching change from a systemic perspective, SEgroup has since been on an intensive learning journey, which led to becoming an independent think and do tank, supporting and reflecting change processes and change projects, not only in organisations. By integrating different disciplines through a praxeological action/reflection approach, SEgroup has become an innovative and unique organisation that developed from a small start-up to a global cooperative of independent entrepreneurs. Today, SEgroup's vision is clear: Changing the change! Oscillating between practice and reflection, between consulting and research, propels the process, which systematically explores the conditions for the possibility of change and ventures new thinking and alternative practices. Innovation is one result. But what is more important is the efficacy in supporting value-creating change. Driven by the habits of systemic thinking and a passion for change, SEgroup has expanded its focus beyond its own organisation: with initiatives such as Systemic Project Management (SystemicPM) and Global Responsible Advisory and Consulting (GRAC) SEgroup tries to help building a global body of knowledge for change – driven by an entrepreneurial spirit and a systemic mind-set.

KN-04

VSMinteractive: the only software-based organizational design toolkit and management navigation system based on and safeguarding the principles of the Malik Viable System Model®

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EXTENDED ABSTRACT



KN-05

The Anthropocentric Approach to Systemic HR Development & Entrepreneurship

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EXTENDED ABSTRACT

The human element has always been paramount in business. More so in times of economic despair. Planning for growth with innovative thinking is the current requirement for rebuilding the economy.

The narrow "silo mentality" of human development in the past, has led us to rethink the methodology of successful HRD.

The Anthropocentric Approach that emerged equipped with timeless principles and values and a systemic approach to HRD, surfaced the fundamentals of Business Growth and is currently showing good results of reshaping the economy.

KN-06

Social Responsibility and Ethics in Systemic Entrepreneurship

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EXTENDED ABSTRACT

Systemic entrepreneurship involves more than economic growth and financial gain. It also considers the social impact of innovations and develops a business plan that ultimately benefits the quality of life for individuals of different classes and socio-economic status. In this presentation we discuss two examples of outstanding social problems in view of systemic entrepreneurship: (i) the dramatic increase of children with Autistic Spectrum Disorders (ASD) and (ii) the dramatic increase in the number of elderly people in the next few decades. An innovation of interest to researchers and entrepreneurs in these areas is socially assistive robots (SARs) – humanoid robots that assist individuals through forms of social interaction. Children with ASD are naturally interested in humanoid robots, and thus there is an opportunity to use this interest as a basis to develop social skills and to transfer the newly learned skills to human interaction. Challenges of systemic entrepreneurship include collaborative SAR design and interactive design among participants with different methods and backgrounds, including computer scientists, roboticists, clinical psychologists, social workers, parents, and educators. Further, due to advances in healthcare and birthing trends, there is expected to be a large number of elderly patients but fewer caregivers in the next decade, thus reducing the amount of time that caregivers can spend with patients beyond the provision of essential services causing more stress for the patient's relatives. A SAR can be used to converse and reminisce with an elder person, thus contributing to the patient's quality of life. The SAR may also remind the patient of events such as medicine-taking and appointments. The challenges are similar but require collaboration among gerontologists, nurses, and family. We explore the social impact of SARs, other potential applications of SARs, their benefits and detriments to society as a whole, and the ethics of SAR applications.



KN-07

Entrepreneurship: Challenges Of Innovations

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EXTENDED ABSTRACT

Global environment demands the small and medium-size enterprises (SMEs) to care for permanent changing and innovations. SMEs must innovate their work and behavior with technological and non-technological innovations – those concerned with SMEs as economic enterprises and those concerned with SMEs' sustainability behavior. To survive, SMEs must be economic rather than only legal enterprises, hence their heads ought to have innovative and entrepreneurial personalities. Demands over SMEs have developed from efficiency by synergistically adding quality, range, uniqueness, and sustainability, in recent decades; now, social responsibility is added, too. In that framework SMEs are faced with two basic challenges. The first challenge presents innovation of their behavior and especially entrepreneurs' style, including the application of sustainable and socially responsible (SSR) SMEs ethics. SSR ethics enables more, or even requisitely, holistic decision making and supports implementation of social and natural environment demands through SMEs business practice. The second important challenge is connected with the innovative implementation of change process in SMEs. In the theory and practice, several authors have developed a series of partial approaches to mastering the total change process and its single phases. The known solutions offer limited insights into the systemic consideration of change process. The least investigated are relations between several changes and different leading types, which define possible strategies for implementation of innovations. Paper discusses two theses. (1) Innovations of SMEs' system of values, culture, ethics and norms (VCEN) regarding on idea of SSR enterprise influences the SMEs competitiveness; and (2) Consideration of organizational changes as innovations influences on the implementation of beneficial organizational changes.

KN-08

Innovation in Design, Manufacturing, Energy, and Service Systems: A Big Data Perspective

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EXTENDED ABSTRACT

Increasing customer base is of paramount importance to corporations participating in the global economy. Companies compete in various ways, including design of large product portfolios aimed at meeting expectations of an individual customer.

Innovation is a primary tool addressing competitiveness in global markets. Big data presents an opportunity to innovate. Creativity, inventiveness, innovation, and innovation facilitators such as leadership, entrepreneurship, and idea incubation are discussed. Business rules and best practices enhancing innovation are presented. Big data is a valuable source in innovation of products, processes, and services. Methodologies and tools supporting data-driven innovation are introduced.

Innovation in the presence of individual customer expectations could increase complexity of systems amenable to products, processes, and services. Approaches for management of systems complexity are discussed. Many of the complexity management approaches are versed in data mining. The ideas outlined in the presentation are illustrated with industrial examples.



KN-09

Systematic innovation and entrepreneurship via adaptive systems requirements engineering

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EXTENDED ABSTRACT

This talk presents recent research in requirements engineering for adaptive systems, and how it has informed the design and continuous improvement of innovative business models, software, and business processes that currently enable business growth in two startups in northern Europe. The talk will outline the concepts of problem and solution spaces, relaxation, feedback loops, and optimisation for adaptive systems requirements engineering and design, and relate them to the practice of making and running business models, software, and business processes for two high technology startups. The talk concludes with lessons learned that may help future.

VKN-01.01

An example of social and political systemic entrepreneurship: developing Integration and Implementation Sciences

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EXTENDED ABSTRACT

The development of the new discipline of Integration and Implementation Sciences (I2S) is an example of a particular kind of systemic entrepreneurship, namely social and political entrepreneurship. The discipline will be described through the key issue of setting the boundaries – what is covered, what is excluded and what is marginal. The process of entrepreneurship, including how the idea originated, as well as steps being taken to promote it and encourage adoption will be outlined, along with barriers and potential adverse consequences.



VKN-01.02

Soft Computing Methods as Decision Support for Entrepreneurs

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EXTENDED ABSTRACT

“Soft Computing” is a general name for rather different modeling techniques that probably better should be called “nature analogous” techniques. The common characteristic of these techniques is that they are heuristically orientated to certain natural models, in particular biological ones. We use and develop modeling techniques like Cellular Automata (CA), Boolean Networks (BN), Evolutionary Algorithms (EA), Simulated Annealing (SA), which has its model in thermodynamics, and Artificial Neural Networks (ANN). The usage of Fuzzy methods in combination with expert systems is practically also included. The advantages of Soft Computing methods are that they can be used in a very general manner. In particular these methods are themselves complex dynamical systems whose mathematical characteristics are known. Therefore, they allow modelling techniques where the elements and interaction rules of the real systems to be modelled, namely firms and institutions, can be directly mapped on the elements and rules of the according Soft Computing models, i.e. the formal complex systems.

The possibilities of these techniques for business problems are demonstrated with three examples: a) In the first example a neural network is used for the selection of suited models of procedure for project management. The network is a self-organized learning network that has been developed by our research group for tasks of classifying data. b) The same network type is applied to problems of direct marketing where potential customers are classified according to their buying behaviour. c) The third example shows the distribution of work packages, in this case reason codes for the “Deutsche Post”, with cellular automata. The goal is to minimize the time for all work packages and to optimize the handling of the different cases for each employee.

VKN-01.03

The Innovation of Entrepreneurship as Strongly Sustainable Networks

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EXTENDED ABSTRACT

Economic growth is dependent on our negotiation of natural resources, and economic development is limited by natural laws and resources. Yet traditional disciplines have failed to educate thinkers and leaders to manage our common pool resources and eco-services, leading to continuing environmental and economic crises. The system sciences of sustainability, involving business design, product design, and social systems, are imperative to changing economic paradigms. Likewise, system science must re-establish itself as an ethical voice for change, in this case from shifting innovation from financially-driven "leveraged" growth to steady-state coordinated economies.

While the economic development of humanity has expanded by easy resource-fueled growth for a century, the growth era has plateaued. Economic organization has not yet adapted to the underlying ecological shifts. The current cycles of global income inequality can be seen as an effect of the returns on leverage, not human production. The next economic cycle to follow this effect is unknown. Businesses as agents of organized economies have a significant responsibility for mitigating the risks of resource and social exploitation. These risks have largely gone unregulated in the first century of the Anthropocene era, but must be addressed as societal moral concerns of great urgency. Many turn to entrepreneurial enterprise as an answer. We might turn instead to the systemic design of small businesses as a collective social enterprise.

Small enterprises are the lifeblood of local economies. Collectively they constitute the largest base of employment in most national economies, and create dynamic and thriving economic systems. However, until recently there has been no call for entrepreneurs to consciously design sustainable businesses. The tools for this design process are just now becoming available. The social system of the small business is designed by its business model - and new business models are being designed in accordance with natural science and social system principles.



VKN-02.01

Innovation and Entrepreneurship Thrive Where Science 1 and Science 2 Intersect

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EXTENDED ABSTRACT

If we label the "hard" sciences as Science 1, then the "special" or "anticipatory" sciences are Science 2. Science 2 differs from Science 1 in that volition, emergence, reflexive anticipation, and design all have active roles to play. The philosophical sources necessary to understanding the hermeneutics of social experience can be found in the systems sciences (including cybernetics) with a focus on the underlying models, feedback loops, reflection, and anticipation which goes by the label of systems thinking. In social science modeling, apparent inconsistencies raised by including the observer are replaced by a need to pay close attention to processes and to multiple adjacent possibles or affordances. Once participants are admitted as part of the process being modeled and their decision making and design abilities are taken into account, then the multiple possibilities to which they give rise must also be taken into account and not seen as contradictory -- or worse labelled as Science 1 would as "noise." Innovation thrives on the opportunities presented by trying to embody these multiple perspectives and possibilities. Embodiment itself is often a Science 1 process -- but acceptance and adoption of embodiments depends on Science 2. Entrepreneurs often have a tacit understanding of this -- an understanding which is hard to articulate because the vocabulary of philosophy is foreign. Placing the concurrent but orthogonal roles of Science 1 and Science 2 into a better understood narrative can help create awareness of the many opportunities around us for innovation and entrepreneurship. Such is the goal of this talk.

VKN-02.02

Systemic Entrepreneurship: creating a new approach to how we live based on what we value and why: implications for human capital and wellbeing

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EXTENDED ABSTRACT

Given that we have overshot our consumption of resources and that the population continues to grow and continues to consume in every greater quantities, what is the way forward? It addresses the paradox raised by Wadsworth (2010: xvii) that 'we want change' – and yet 'we do not want [to] change' . Does increased consumption make us happier? Wilkinson and Pickett (2009) and Pretty (2013) argue that after a certain point, more consumption does not lead to more happiness. Thus, increased consumption based on increased growth does not make us happier. My presentation is about how to protect the environment through an innovative approach to re-framing economics through distributed leadership that values the human capital generated in ongoing acts of self reflection on how we live and how we should relate to others and the environment. The process, based on a new paradigm values the many aspects of life that are not given attention in organizations that strive to survive in the current business environment.

The bottom line of economic profit ought to be replaced by a systemic index adapted from Max Neef's 'being, doing, having and interacting' index. This is the conceptual framework I have adapted based on the Indigenous philosophy developed in earlier research. My paper will address the need for a different approach to the way in which we live our lives. I start by addressing the unsustainable way we live our lives in terms of our consumption of 'oil, fresh water, vehicle and meat consumption, GDP, CO2 emissions' (Pretty (2013:1). I make the case that what is needed is entrepreneurship and cultural innovation – not the development of more growth (based on the economic bottom line of economic profit). By developing more leadership potential in local communities we could develop or enhance our appreciation that our personal and public wellbeing go hand-in-hand with the way we treat the others and the environment. I argue that the innovation we need for the future is innovation in the way we live our lives, not innovation in terms of growing the current economy. We need to re-think our perceived rights and our responsibilities to others (including future generations of life) and the environment. This has socio-cultural implications for education, governance, democracy, business, economics and ethics concerning the distribution and consumption of resources. The French roots for the word 'entrepreneurship' are 'entre' and 'prendre' or 'engaging in something that 'also takes hold of you.' The aim of the research is to enable people to be the change through re-thinking the way in which we relate to others. The Greek root for the word 'economics' and environment is 'oikos' meaning 'house or home' and the other root for these



words is administration or management, thus it means administration of the place in which we live . It implies that the good household manager saves resources and does not waste, but it also implies that the home is not merely the household, it is the environment in which it is located and on which it depends. Wellbeing – not the economic bottom line needs to be the focus of our attention for cultural transformation, according to Stiglitz et al (2010). But this requires re-conceptualising culture.

The research detailed in this on line paper and audio presentation aims to make a contribution by:

- Demonstrating a way to measure intangible aspects of wellbeing, in order to provide a practical means to re-frame economics and to re-think our identity as global citizens who consider the rights of current and future generations within regional areas.
- Enhancing the capability of members of the public to think in terms of larger assemblages of ideas spanning many kinds of knowledge. The plasticity of the brain is such that it shapes the environment and it in turn is shaped by the environment (Bateson, 1972, Beer, 1994, Greenfield, 2000, Von Foerster, 1995).
- Exploring discourses, habits and a range of behaviours (Hogget, 2010) shaping dualistic attitudes towards rights and responsibilities and denial of responsibility for unsustainable consumerist culture.

Participants are asked to suggest indicators that could together measure wellbeing and sustainability at the local level. It applies a personal approach to assessing the way we live our lives. Thus the principle of subsidiarity underpins the argument along with the notion that complex decisions about what is valuable, need to be based on the ideas of the people who live in a local regional biosphere. The research project extends previous research with First Australians, in order to protect the global commons and the collective good.

VKN-02.03

Scientific Areas: Finance, Virtual Keynote

Finding Opportunities For Innovation

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EXTENDED ABSTRACT

In the current economic climate as we are crawling our way out of the global financial crisis, we should be taking every opportunity to innovate, to identify those opportunities, and there are many, and to identify the risks so that we can balance risk-taking with some caution. Getting a holistic view of the domain by gathering information from all stakeholders involved provides information about what issues and concepts are present, both tangible and intangible, as well as stakeholders' perceptions of what will work, what will not work, how it will work and why it will work. These factors build a knowledgebase from which one can build patterns for solutions and discover opportunities for innovation.



VKN-03.01

Formalizing Porter's Integrated Practice Unit with System-of-Systems Modeling and Simulation

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EXTENDED ABSTRACT

Michael Porter's Integrated Practice Unit (IPU) concept is important as disruptive innovation in healthcare delivery. It can be enhanced with systems concepts and implemented using systems modeling and simulation. Therefore, in this talk, we consider IPUs from a system-of-systems perspective. Porter defines patient value as outcome per unit cost at the output of the entire value chain, i.e., you must consider it as an entire system, possibly fragmented into independent systems that include actors and services. Therefore we formulate criteria for creation of IPUs based on whether a collection of systems with their own care delivery value chains (CDVC) can be integrated into a viable IPU. These criteria are both explicit and implicit, in Porter's characterizations of IPUs. For example, the collection of services involved must form an integrated CDVC, the composition of sub-systems must satisfy the necessary mathematical conditions for a well-defined system, etc. Also, playing a key role is the scope of the IPU, which in the simplest case, is a single well-defined medical condition. However, our formulation should help to answer to what extent IPUs can be created based on frequently occurring bundles of medical conditions (i.e., applied to multi-condition chronic care) and recognize that the conditions for IPU creation can be time dependent. This formulation requires advancing the theory of System-of-Systems (SoS) focusing on characteristics such as autonomy, belonging, connectivity, diversity, and emergence so as to be capable of supporting the formalization of the IPU model and related alternative coordination architectures. We employ the Discrete Event Systems Specification (DEVS) formalism and associated systems modeling and simulation framework to formalize the IPU concept. We discuss representation in the MS4 Modeling and Simulation Environment and close with comments on how the environment and tools can play a role in implementation of IPUs in healthcare delivery.

VKN-03.02

Innovation and Growth in the Economics of Information

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EXTENDED ABSTRACT

The ecological limits on consumption of energy and other natural resources make the economics of information in the only feasible way to sustainable development. But this is characterized by the fact that its basic engine of growth is not the external monetary investment, but innovation within the same job. Naturally, the development continues to require interaction with the environment, but this interaction is mainly circulating information, either in training workers, either in scientific and technological cooperation. In this context, entrepreneurship essentially corresponds to the workers themselves, which can not be reduced to performing repetitive activities, but must make a creative activity and take a leading role in the development of the company.



VKN-03.03

Scientific Areas: Finance, Virtual Keynote

Entrepreneurship based on the exploitation of Data and Metadata Standards and Best Practices

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EXTENDED ABSTRACT

This talk will describe the potential for providing advanced services in a ubiquitous, open and interoperable working environment, focusing on Geo-ICT (i.e. GIS/geo-location) services. The interoperability is achieved today at both the syntactic and the semantic level using standards and best practices. Syntactic interoperability is based mainly on XML-based data and metadata standards, while semantic interoperability is achieved through Semantic Web technologies. Best practices for bridging these two approaches will be described as well as the integration of both XML and Semantic Web Data in Open and Linked Data scenarios. A big opportunity for the ICT companies today is the provision of Geo-ICT services based today on the available data and metadata that are compliant with the INSPIRE Directive 2007/2/EC. The INSPIRE Directive establishes an Infrastructure for Spatial Information in Europe to support the EU environmental policies as well as policies or activities which may have an impact on the environment. It is based on the creation, operation and maintenance of infrastructures for spatial information established and operated by the 28 EU Member States of the European Union plus Switzerland, Norway and Iceland, addressing 34 spatial data themes related to environmental applications. The (XML-based) spatial data and metadata formats that implement the INSPIRE directive will be outlined in this talk and the business opportunities from their exploitation will be presented. The integration of the INSPIRE data and metadata in Open and Linked Data scenarios will also be described, as well as innovative services and systems that have been built on top of INSPIRE metadata and/or data. Finally, the future research directions for the utilization of INSPIRE based metadata and/or data will be sketched, including crowdsourcing frameworks, geo-location based applications that also exploit sensors etc.

VKN-03.04

Thoughts about Innovation, Business, and Growth for the Aspiring Systemic Entrepreneur

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EXTENDED ABSTRACT

What entrepreneurs want to achieve is commonly understood in capitalist societies – to identify and exploit opportunities for profitable ventures. Because profit – monetary or otherwise – can mean different things, business theory ought not be the only theoretical lens through which we try to understand entrepreneurship. This presentation explores an understanding of entrepreneurship informed by ideas drawn from management theory, but also general systems theory and organizational behaviour. Different standpoints will be explored on the nature of innovation, ways to define growth, and the implications of seeing entrepreneurship through a business lens. Many rich perspectives are often lost in entrepreneurial exuberance to create innovative businesses positioned for growth. The intent for this plenary presentation is for entrepreneurship to be considered for both its promises and perils.



WS-01

Scientific Areas: Finance, Workshop

Using Structured Democratic Dialogue to design the development of development of entrepreneurship in Greece

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EXTENDED ABSTRACT

Participants will be introduced to the theory and practice of the Structured Democratic Dialogue Process (SDDP) using the example of a contemporary complex problem that the people of Greece are facing; the lack of entrepreneurship. The Triggering Question is:

What are key obstacles, which the political leadership needs to overcome in order to develop a clear vision for the development of entrepreneurship in Greece? In response to this question, members of the CSAP program have already proposed over 40 factors. The SDDP will begin by inviting participants to enrich the list. New participants may choose to either contribute or attend and observe the process. The factors will be clustered using a bottom-up approach and then participants will be asked to choose their top five in terms of their subjective perception of importance. Factors that will receive 2 or more votes will enter the final phase in which participants will consider whether there exist an influence relationship between any two factors. This interpretative structural modelling (ISM) process will result the development of a tree (an influence map). The factors that will end up at the root of the tree are the most influential. Using this SDDP as example, the participants will learn the laws and axioms of the science of dialogic design and understand how the SDDP process invites every participant (i.e., stakeholder) to become a systems thinker and to apply third-phase science to solve complex problems of any kind.

This year's workshop builds on last year's workshop, which introduced the concept of "digitalizing ideas" as requirement for processing and harnessing collective intelligence and collective wisdom, but no previous knowledge is required.

PP

Complexity in Projects and Programs: Can we manage or navigate complexity?

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EXTENDED ABSTRACT

For the last five decades the complexity in our lives, projects and programs has increased substantially. With projects increasing dramatically all over the world and in all economy sectors, project and program management has become a crucial and core business activity vital to the organizations' vision, mission and business results. Project complexity has also dramatically increased due mainly to globalization, new rapidly developing technologies and fragmented supply chains.

Complex systems have always existed. Being unique, as vehicles of change devised by humans, projects are enveloped within complexity and thus have inherent elements of uncertainty and ambiguity. Further, projects require strategic processes, human and other resources, investments, social and political actions and are exposed to unpredictable changes that reflect power struggles and social resistance.

Projects in a complex environment consist of interconnected elements (components), working together as parts of an interdependent web, forming a complex organized whole, set to perform a predetermined function (i.e. to create change). The words "components" and "elements" have the same meaning for the purposes of this document. The word "agents" on the other hand, signifies a component of a project that seeks to maximize some measure of its properties (its own goals) or its "fitness" by evolving over time. Usually, agents in projects with complexity are people, management and knowledge structures or issues.

Project size, project duration, technology issues and human interaction and intervention enhance complexity. Complexity increases primarily by the number of active interconnected components, especially agents, which exhibit interconnectedness, recursiveness, uncertainty, and instability. According to PMI's latest publication on Complexity from a project/program perspective (PMI, 2014), three categories (groups of causes) of complexity may be encountered in projects and programs:

- Human Behaviour (Individual Behaviour, Group Behaviour [organizational/social/political], Communication & Control and Organizational Design & Development)
- System Behaviour (Connectedness, Dependency and System Dynamics)
- Ambiguity (Uncertainty and Emergence)

In this environment, can we manage or navigate complexity? What factors are complexity enhancers?



PRT

Professional Systemic Entrepreneurship

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EXTENDED ABSTRACT

An entrepreneur is an agent of change. An entrepreneur is an individual who accepts the risk associated with uncertainty, and exercises leadership, initiative and innovation by organizing a venture to take benefit of an opportunity and, as the decision maker, decide what, how, and how much of a good or service to produce. Entrepreneurs are the key drivers of industry dynamism and integral to creating long-term economic growth. Entrepreneurial spirit is an essential part of a nation's ability to succeed in a complex business environment, which changes constantly due to social-cultural, legal, economic, political, environmental, ethical, demographic and technological influences.

Entrepreneurship is the process of discovering new ways of employing resources. It may result in new organizations or revitalizing mature organizations (through corporate ventures) in response to a perceived business opportunity. Yet entrepreneurship is often treated as an isolated event rather than a holistic process. Decisions are derived through analytical methods which involve the determination of meaning in the context of a reductionist approach: reducing the whole into its constituent elements, understand each element separately and aggregating understanding of the individual elements into an understanding of the whole. Given the dynamic complexity of today's business environment and the continual exchange between its constituent elements, application of the reductionist method typically results in the loss of the essential properties of both the system as well as its parts. Hence, decisions relative to the new venture lack cohesion, and the decision maker, the ability to align activities to effectively achieve the venture's long-term strategic objectives.

Systems thinking is fundamentally different from the reductionist method in that it focuses on the understanding of how and why various elements affect one another within a defined unified whole. A systemic approach concentrates on the understanding of the interactions of the constituent elements of a system that produce a behavior rather than the isolated parts of the system, studied in isolation. The need for a systemic approach has never been more imperative, given the ambiguity of the new economic climate impelled by the current credit crisis and the need for decision makers to challenge existing paradigms, core values and business assumptions against the dynamic complexity of a volatile economic environment. Adapting a systems approach enables the entrepreneur to embrace a fact-based position to decision making, while emancipating the intellectual capital required for the new venture. The new organization's processes, assets, culture and politics, employee required and emergent systems, existing and potential customers' needs, suppliers' capacities, competitors' capabilities, and governmental agencies'



requirements are all essential elements of a unified system. The product of the interaction of these interdependent elements needs to be approached and understood as a unified whole relevant to the new venture undertaken. Understanding the fundamental systemic relationships which affect the behavior of the system over time augments the decision maker's capacity to better manage the inherent risk associated with the uncertainty of the new endeavor.



Extended Abstracts

EA-01.01

Scientific Areas: Politics, Law & Bargaining,

The Contribution of Proactive Lawyers' Cases in Corporate Governance: A Systemic Approach

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EXTENDED ABSTRACT

In this paper we use the Viable System Model (VSM) of Beer to approach a company and we try to see at the five systems of VSM where the proactive Lawyers' cases could take place. We examine each VSM system and we present cases where a lawyer could prevent the company to do action that may damage its operations and generally its reputation and rights.

According to L.3016/2002 (on corporate governance), the lawyer can help in some of the following proactive cases :

Establishment and continuous monitoring of implementation and compliance with the Rules of Operation and Articles of Association of the Company, as well as updating the entire legislation on the company and especially the law applicable to public limited companies.

In any petition/appeal to the Board in all cases of conflict of interest between the private interests of the Directors or managers of the company, and by extension the interests of the company itself, which can be elucidated during the execution of the internal audit function.

Attend general meetings of shareholders for any legal advice. To provide, upon Board approval, legal advice requested in writing by specific members of the Company.

Finally, we shall clarify some proactive cases for the lawyer that fit to the specific systems of the VSM of Beer Model.

Keywords: Proactive Lawyer's Cases, VSM, Corporate Governance



EA-01.02

The Disguised Version Of The Shock Doctrine On Information Security Analysis: Systemic Methodologies And Tactics To Resolve Complex Dynamic Systems Against Hacking, Fraud And Industrial – Corporate Espionage

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EXTENDED ABSTRACT

The Shock Doctrine, introduced by the Canadian author Naomi Klein, argues that the free market policies have risen to prominence in some countries because of a deliberate strategy of certain leaders to exploit crises by pushing through controversial, exploitative policies while citizens were too busy emotionally and physically reeling from disasters or upheavals to create an effective resistance. It is implied that some man-made crises, such as the Iraq war, may have been created with the intention of pushing through these unpopular reforms in their wake. The goal of this project is to show people (of all educational and living standards) that, for the Theory of Shock Doctrine to be applied, it has to pass firstly through information analysis, by recording (legally or to the limits of the law) the facts and events of the private-working living, so as to gather knowledge in think tanks, in order decisions of unknown motives to be taken by a Central Administration (mostly non-Governmental), most of the times the location of which is not even in the country of the unsuspecting citizens. It aims to demonstrate the importance of Analysis in Information Security through Systems Dynamics Complexity Methodologies and Tactics, as a weapon against fraud and corporate - industrial espionage in the newly formed complex international and economic environment, at all typology level forms of the hierarchical structuring and the cross connection of malicious attacks from hackers, due to the growth (qualitative and quantitative) trend in cybercrime notes. It also targets to the need for awareness of systemic thinking to fraud analysts specifically and in business generally, and the creation of a permanent mechanism for monitoring and development of Information (Central Single Database for Fraud and Violation of Privacy Cases Record in the Family and Business). By this way, the actual European Doctrine "Freedom, Security and Justice for all" regarding Security of Personal Data will be fulfilled. Moreover, the project hopes to enhance the views, positions, studies, papers and already preceding strenuous and persistent efforts of private and public Agencies and Institutes, to implement such a systemic mechanism. The project proposes the notion for a "Family Information Security Analyst" for the everyday family and an "Information Security Analyst in Business" for any business. DCSYM CASE Tool, Anylogic, Vensim, Joget and IBM I2 Analysts Notebook are the systemic tools used to analyse the current situation and support the propositions.

Keywords: Fraud, Espionage, Systemic Methodologies, Family Information Security Analyst

EA-01.03

The use of BEER's VSM and DCSYM Systemic Methodology in Operating a Headquarters of the Army.

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EXTENDED ABSTRACT

In this presentation the application of Systems Theory in Headquarters with a viable system model (BEER's VSM), which consists of five systems. The aim of this study is to ensure Headquarters' customization to the external environment and maintenance of an internal stability. In a standalone form, such as the Headquarters, will need to keep score, to operate in the environment of five key processes. These are: 1) Application, 2) Coordination, 3) Control, 4) Intelligence, 5) Policy. The Headquarters will be also described with DCSYM methodology (Design and Control Systemic Methodology), which is based on the principles of PSM (Problem of pricing Methodology).

Additionally, in the context of this presentation the use of additional Systemic Methodologies in the operation of the Headquarters is studied, analyzing the dynamics simulation with Vensim, Anylogic, and Forio. Finally, proposals are made for applying Systemic Methodologies in the operations of Army's units.

Keywords: BEER's VSM,DCSYM,Systemic Methodology,Army



EA-01.04

Systemic Analysis and Operation of the Public Services – A public Tax Office Study.

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EXTENDED ABSTRACT

In the Headlines , remains the request of the <> of the Greek Public Sector and the improvement of the various public operations.

In the strategic framework for the upgrading of the public are included : e-transactions , mergers ,shut down and abolition of several organizations, removal of sections, departments and abolition of posts, mobility of staff, layoffs etc. Motivation for this project, was the personal working experience ,within a year of service. A working experience full of constant changes , and in an environment of uncertainty and complexity.

Main aim of the project, is to prove that Systemic Analysis ,and methodologies such as DCSYM and VSM , can and should be used for prognosis and improvement in Public Tax Offices ,and in general in Public Organizations. The system in Focus is a Tax Office ,that we name -for reasons of discretion to the Ministry of Economics-: Tax Office A-B.

Our Tax office (A), was merged with another Tax office (B)(B was absorbed by A),and then the departments of control and Justice were cut off and moved to a third Tax Office (C).Managerial positions were abolished ,such as the Deputy Managers position ,and all Head of Departments ,and the rest of departments were regrouped .The New Taxis software was installed.

Facing the changes of this fast -changing working environment and trying to deal with the challenges (conflicts, crisis ,systems failures etc) we tried to explore the possibilities of solutions and to investigate whether Systems Analysis can be used for the reform of public organizations.

We briefly present the structure of Tax Office A-B ,the organizational chart after the changes applied (merger).We must note hear that we see the organization from the position of the Administrator.

We then explain briefly about the methodologies we use in our Analysis :the Design and Control Systems Methodology and the Viable System Model. We also refer to Cybernetics ,Organizational Cybernetics, and the Law of Requisite Variety



In order to depict the structure of our system in focus, we applied the Design and Control Systems Methodology (DCSYM). Through the analysis of <>we see the game played with the communications ,and we diagnose the system. We make suggestion for improvement and we export from DCSYM software our schema after DCSYM and the following matrix of communications.

We attempted afterwards to analyze strategically our organization with VSM and from our experiment we export all screenshots for further analysis. The conclusion is that VSM can and must attribute in the public sector as its recursive functions have unlimited potential for the study of any organization regardless size, activity etc.

The Reform of Public Services can be achieved with the aid of Systemic Analysis. Systemic brains must handle the reform ,in a way that is beneficial for all and Public Tax Office will become what has to be for the tax payers and citizens. Changes are inevitable and must start from within ,we all should try to see with cybernetic eyes ,and change our old ways with new pattern of thoughts ,in order to deal with the complexity we face in our modern organizations .
<>----Albert Einstein

Keywords: Systemic Analysis Of Public Services ,Cybernetics,Organizational Cybernetics,Dcsym,Vsm

EA-02.01

E-Government Models in the Digital Era: A Systemic Approach

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EXTENDED ABSTRACT

Governments worldwide are faced with the challenge of transformation and the need to change government systems to offer a more economical and more efficient services, information and knowledge through information and communications technologies (ICT's). The development of information and communications technologies paved the way for e-government (e-government). In this study is defined e-government as a tool of governments to use the most innovative information and communication technologies, particularly web-based Internet applications, to provide citizens and businesses better access to government information and services to improve the quality of services and to provide greater opportunities to participate in democratic processes. One of the most important aspects of e-government is how to bring citizens and businesses closer to their "governments". We describe eight types or models in a system of governance, which is useful in order to determine the scope of the e-Government study. These are the following: Government-to-Citizen (G2C), Citizen-to-Government (C2G), Government-to-Business (G2B), Business-to-Government (B2G), Government-to-Government (G2G), Government-to-Nonprofit (G2N), Nonprofit-to-Government (N2G) and Government-to-Employee (G2E).

After presenting the models we observe that if we talk about an integrated system of electronic governance, the best way to approach this is to plan it from the beginning in a different way. Using the DCSYM Systemic Methodology we find that the whole system of e-government is composed of smaller subsystems (eight models) which are consist of other subsystems, and thus are analyzed in detail and clearly observe the operation of each subsystem. We also consider some examples of e-government in practice and present a generally applicable framework for the analysis of requirements and problems in developing e-Government.

Developing e-government, theories and practices of public administration have switched to a new digital era. Contemporary issues concerning electronic governance in public administration is an administrative interface, for example management in human-computer interaction, digital processes and management systems and virtual enterprises, such as online government systems, etc. Finally, we analyze concepts and theoretical frameworks in these issues given the broader context of structural aspects of the development of e-Governance and the requirements for further studies of e-Government in the public administration.

Keywords: e-Governance, e Government, DCSYM Systemic Methodology, Virtual Enterprise

EA-02.02

Quanteex e-voting System

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EXTENDED ABSTRACT

E-Voting is a procedure where people state an opinion, make a choice or - more formally - exercise their right to vote via an electronic platform. The fundamental traits of the electronic vote that differentiate it from the traditional ballots are:

1. The use of computer systems for organizing and running the process.
2. The ability to cast a vote via an electronic means, possibly remotely.

An electronic voting platform is an eminently systemic tool. It is a complex system that includes computer hardware and software, implements a security mechanism and conforms to a set of institutional and regulatory controls in order to produce results that can have social impact.

QUANTEEX is such a platform. It's a modern system that enables electronic voting in an easy and secure way. The system allows the creation of simple public opinion polls, private votes, or even secret ballots and elections requiring institutional intervention to audit and validate the results. It is a fast yet simple system that gives verifiable results.

QUANTEEX has a set of procedures and rules for conducting a vote, and it controls all individual stages ensuring the integrity and validity of the result.

- It supports all necessary procedures for properly organizing and conducting a vote.
- It supports the use of different forms of questionnaires and ballots comprising of simple or complex questions to fit different types of votes.
- It upholds fundamental democratic principles (uniqueness of vote, secrecy, security) at each stage of voting.
- It supports transparency and verification of the process.
- It is practical and efficient, keeping costs to a minimum compared to a traditional vote.
- It supports a plethora of devices and other voting tools, e.g. smartphones, voting machines etc.

QUANTEEX may be useful in a variety of situations that will be discussed.

Keywords: E-voting, e-poll, e-business, e-governemnt, electronic voting.



EA-02.03

Systemic approach with the use of Viable Systemic Model: The case of E-Government in Mediterranean countries eG4M

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Changes in information and communication technology (ICT) require continuous modifications in contemporary organizations and in corresponding work processes. Although technologies are a means and not an end, should be chosen considering legal frameworks, organizational issues, social and territorial peculiarities and economic sustainability.

The eG4M (e-Government for Mediterranean Countries) project basically concentrates on extending, completing and improving the e-Model through the achievement of new research results and its application by participating supportively with Mediterranean Countries (MCs) – in establishing and consolidating their E-Government systems.

This paper focuses on improving the modelling of eG4M perspective using Systemic Methodologies and especially the Viable System Model. The methodologies' target is to correctly analyze and form the model and in parallel to improve it. The systemic methodologies concentrate on the human factor that is evolving in those systems and they constitute a very valuable tool helping us to understand and define the system functions. Thus the model's usability and agility is improved, having a reduced abstraction level and giving the business high and realizable functionality.

Keywords: eG4M, Systemic approach, process modelling, VSM

EA-02.04

Systemic Archetypes for e-Government and/or e-Governance using Systemic Methodologies

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The System Archetypes are highly effective tools for analyzing patterns of behavior, themselves reflective of the underlying structure of the system being studied. Diagnostically, archetypes help designers recognize patterns of behavior that are already present in their systems or organizations. Designers can prospectively formulate the means by which they expect to accomplish their organizational tasks, applying the archetypes as to test whether policies and structures under consideration may be changing the organizational processes in such manner as to produce the archetypal behavior.

Focus of this paper is to transform System Archetypes into Systemic Archetypes using systemic methodologies and tools. The systemic methodologies concentrate on the human factor that is evolving in those systems and they constitute a very valuable tool helping us to understand and define the system functions. Systemic Archetypes become the basis of a holistic systemic approach revealing the underlying problems and for offering a basic structure or foundation upon which a model can be further developed and constructed. Thus the model's usability and agility is improved, having a reduced abstraction level and giving high and realizable functionality.

Keywords: Systemic Methodologies, System Archetypes, Systemic tools, Archetypes



EA-03.01

Using Process Assessment Models in the Evaluation of Information Systems

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EXTENDED ABSTRACT

In this constantly changing and demanding business environment, organizations need to effectively use all their resources in order to survive and ensure their long-term continuation and success. One of their most important resources is information, which with the appropriate use can lead to the creation of value and therefore advantages over their competitors. Organizations, recognizing its significance, spend enormous amounts of money for the development of Information Systems (IS) and Information and Communication Technology (ICT) infrastructure. Consequently, the need for the evaluation of Information Systems has emerged, and has become a critical issue within organizations. Information Systems Evaluation is a process which enables organizations to appraise the impact of Information Systems on their organizational performance. Moreover information systems evaluation can be regarded as the integration and management of business processes that control the effective use of Information Systems and Information and Communication Technology infrastructure. Over the years, various approaches have been developed for the evaluation and measurement of Information Systems' contribution at strategic, operational and tactical levels.

This study aims to examine the use of process assessment models in the evaluation of information systems, and whether they can lead to a reliable and consistent method to assess Information Systems and Information and Communication Technology infrastructure within organizations. Process Assessment Models (PAMs) provide a basis for assessing an organization's processes, giving organizations the ability of continuous improvement leading to higher levels of efficiency and effectiveness. Therefore, process assessment models from various process-based standards and frameworks, such as ISO/IEC 15504, TIPA and COBIT 5, are presented. Each process assessment model comprises of a process reference model, a measurement framework and a process assessment model. Subsequently, these process assessment models are analyzed and their main principles, processes, and components are examined. Finally, a comparison of each process assessment model's components is presented.

Keywords: Evaluation, Information Systems, Process Assessment Model

EA-03.02

Knowledge management approach, as a source of competitive advantage in the new business environment

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EXTENDED ABSTRACT

In a highly uncertain business environment, modern firms and organizations are facing many strategic challenges that have resulted in a demand for new skills, making knowledge management approach a vital element in current business practices. Knowledge management has become one of the main sources of competitive advantage that leads to superior firm performance. Besides its importance for practicing managers, knowledge management has serious theoretical implications as well. In particular, knowledge management is a research field that still faces under-theorization and lacks systematic empirical support, presenting an opportunity for further conceptual development and quantitative empirical research.

The purpose of this paper is to provide a critical review of the interrelations between knowledge management and competitive advantage. In today's business landscape it is widely accredited that knowledge management is increasingly recognized as an important source of competitive advantage. In other words, firms have to coordinate the skills and talents of the workforce and translate specific capabilities into sustainable competitive advantage in order to advance superior performance. Knowledge management has been defined as the process of accumulating and creating knowledge, as well as facilitating the sharing of knowledge so that it can be applied effectively throughout the organization. In this vein, it is an organizational discipline bridging information demand and supply in support of learning processes within organizations. Since it affects firm competitiveness and subsequently firm performance, knowledge is one of the most intangible assets that senior managers have to manage. Proper management and leveraging of knowledge can propel an organization to become more adaptive, innovative and effective. Knowledge is the key element in competitive differentiation, especially in neuralgic industries and is a significant instrument enabling organizations to obtain greater capability to respond and adapt to the contiguous changes. The organizations can achieve better business opportunities in relation to new products or services and become more flexible when acquiring and interpreting knowledge. Under this notion, knowledge management has become one of the main components of firms' competitive strategy in their quest for sustainable competitive advantage and thus for superior firm performance.

Keywords: knowledge management, competitive advantage, firm performance



EA-03.03

Co-opetition in light of systemic entrepreneurship

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EXTENDED ABSTRACT

The contemporary business environment requires firms to establish more flexible forms of collaboration so as to accelerate innovation process and ensure their long-term competitiveness. Systemic entrepreneurship refers to a holistic view of entrepreneurship which involves socially-productive entrepreneurial activities which lead to social welfare and economic development. It occurs through the establishment of organizational structures that enable the exploitation of opportunities beyond the local level. From a systems innovation perspective, systemic entrepreneurship is considered a systemic (network) phenomenon which emerges as an outcome of alignment between technological, market and institutional opportunities. It involves complex business networks in which firms interact and depend on each other in order to achieve economies of scale and scope. These “systemic connections” are based on high volumes of market transactions between a firm, its buyers, suppliers and other external collaborators in pursuit of entrepreneurial opportunities.

Inter-organizational relationships among competing firms (co-opetition) could be a systemic form of collaboration due to the value co-creation outcomes which might arise. Co-opetition as a business strategy combines competition and cooperation for value creation. Through this process, competing organizations which have common interests pool their resources in order to create value for themselves as well as for their buyers. At the same time “co-opetitors” try to exploit the created value, depending on their knowledge base and absorptive capacity, and use it for individual purposes and future competitive advantages. Co-opetition is particularly important for small and medium-sized enterprises (SMEs) in terms of innovation outcomes due to their deficiency of resources and capabilities, their limited market presence and the lack of necessary skills to pursue long-term strategies. The high cost and risk of developing new products and services, the shorter product life cycles as well as the convergence of multiple technologies constitute potential factors that increase the likelihood of co-opetition in SMEs. Therefore, the formation of co-opetitive relationships on innovation activities enables SMEs to explore uncontested markets and gain “first mover” advantages over other local or global competitors.

The present study discusses the concept of co-opetition under the prism of systemic entrepreneurship focusing on SMEs. More specifically, it focuses on the development of a “co-opetitive portfolio” among SMEs and their competitors which might lead to various benefits such as the creation of new products and services, the improvement of production methods, access to valuable resources, greater bargaining power over suppliers, cost sharing in product development, the production process acceleration and new market entry. Moreover, this study stresses the importance of SMEs forming co-opetitive relationships in order to



explore and exploit entrepreneurial opportunities in a sustainable way. Finally, this study aims to feature that “systemic” partnerships among competing firms can lead not only to the creation of added value for all collaborating firms and their buyers but also to social welfare, economic development and growth.

Keywords: co-opetition, systemic entrepreneurship, sustainable competitive advantage, SMEs

EA-03.04

Non-structured User Generated Content Analysis for Customer Experience in Tourism: A Literature Review of Methodologies

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EXTENDED ABSTRACT

User Generated Content in the Web 2.0 environment and specifically in tourism - related social media such as travel blogs, forums and travel review sites can be regarded as a rapidly growing and valuable source of customer knowledge for the tourism industry. Tourism services consumers express their experiences, feelings and opinions but also interact to each other more massively than ever and this exponential growth gradually diminishes the role of traditional marketing influencers. This online, mostly free-access content provides a huge potential of customer knowledge discovery for businesses and has certain advantages compared to official, expert-driven material, such as diversity and trustfulness, thus making it a significant factor of decision making. It extends to both pre-consumption stages, such as customer informational needs, and post-consumption stages, where tourists post their experiences on the web, in which we emphasize in this paper. The largest part of online User Generated Content is in non-structured form, so it is difficult to develop tools of systematic analysis capable of revealing the richness of meanings and concepts of this content. This paper aims to briefly present the academic literature covering the most common methodologies for non-structured user generated content in travel-related social media. Also, to relate different methodologies in order to discover corresponding qualities and attributes of tourist knowledge and experience, as it is presented online through textual and visual media. Automatic tools of analysis as well as manual methods are implemented to gain generalized and informative, as well as contextual and meaningful knowledge from online expressed experiences presented in many forms by tourists. Implications, advantages and drawbacks for each technique followed are presented. Relevant literature suggests that, by combining qualitative and quantitative methodologies of online content analysis, businesses and organizations can uncover a variety of dimensions of tourist experience, which can be useful in terms of forming a more complete picture of customer knowledge for tourism services and products that eventually contribute to the formation of destination images and overall assessment and evaluation of tourist experience. Finally, these techniques and extracted customer knowledge concepts, as found in the literature, are categorized and presented in a single section. We also draw examples from relevant content analysis literature concerning other industries in order to make suggestions for future research, which we argue that it should continue following the implementation of mixed methods of analysis and aim at revealing deeper dimensions of customer experiential knowledge, such as emotions.

Keywords: User Generated Content Analysis, Customer Knowledge, Tourist Experience

EA-04.01

Green entrepreneurship tools and their implementation in SMEs, the case of BIOPIRAEUS

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EXTENDED ABSTRACT

Concepts such as sustainable development, ecology, green technologies are inextricably linked to green growth. The sustainable development of Europe requires environmentally aware and educated citizens that drive their everyday decisions towards reducing their environmental footprint. In case that citizens do also own and run/manage an SME (Small and Medium Size Enterprise), their decisions greatly influence the consumption rate of environmental resources (i.e. water, energy, raw materials) through the "metabolism" of their company. This fact makes these people of crucial importance for establishing local sustainable production and consumption systems.

The incentives for a company to deal with the environment is compliance with environmental regulations, reduce costs, attracting consumers that show a great interest for environmental issues, investors and the community, reducing business risks due to climate change and manage effectively the changing conditions in which a company operates nowadays. Companies can and should be a force for good, leading the charge on caring for the environment and protecting our shared natural assets. Financial and environmental success can be achieved together.

In order to design and implement an environmental policy in a company, a number of tools are used. Some of these tools are Environmental Management Systems - EMS (certified or not), carbon footprint estimation and minimization, "clean" production, green procurement, private insurance against environmental risks, environmental quality management, environmental information, eco-labelling products and green marketing.

The target-group of individuals that own/run an SME is in the spotlight of BIOPIRAEUS. The project "BIOPIRAEUS" aimed at motivating and engaging citizens –owners/managers of SMEs that are not environmentally proactive to adopt EU environmental policies, strategies and tools to achieve at the same time the double goal of i) creating green competitive advantages for their SMEs and ii) to further promote environmental sustainability in the community. During BIOPIRAEUS project participants were trained in concepts such as sustainable development and were familiarized with green business tools. By the end of the project entrepreneurs had already started applying these tools in their business and had started to evaluate the positive results. The project helped



companies to find new ways, through environmentally correct production, to be competitive and survive the economic crisis.

The most valuable lessons learned by this project were the following:

- a. Businessmen in the Piraeus area are very interested in environmental matters because they live and work in an underprivileged environmentally region.
- b. Environmental matters are considered to be business opportunities during the economic crisis.
- c. Local authorities and businessmen are willing to cooperate for the good of their area, despite all other differences.

Keywords: Green entrepreneurship, tools green business, BIOPIRAEUS

EA-04.02

The impact of the economic crisis on the quality of the natural environment and sustainability of business in Greece: A preliminary analysis

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EXTENDED ABSTRACT

The outbreak of the global financial crisis in 2008 and the spread to Europe, burst in Greece, probably, the strongest economic crisis of recent history. Greece from that time faces an intense and long-lasting economic recession, which is likened to the Great Depression of 1929 in the U.S.A. Since 2008, when GDP was \approx 210.4 billion, up to the end of 2013 which was \approx 161 billions, GDP has declined over 25%.

According to the evaluation of the Greek environmental performance by the OECD in 2011, the rich natural environment of Greece is among the most important economic assets of the country. Greece has undertaken significant steps to control the pressures on the environment, however, further efforts are needed to achieve environmental convergence within the OECD and the European Union. The deterioration of public finances restricts government's actions and abilities to meet its environmental commitments. Should be noted that despite the theoretical emphasis on green growth, government's fiscal policy is not meant green investments, technologies or businesses. In recent years, a large part of the environment-related investments have been financed by European Union funds. Between 2000-2006 about 10 % of EU aid was given to the protection of nature and environmental infrastructure. About 25 % of EU funds for Greece 2007-2013 were intended for green investments. However, the environmental expenditures in Greece are under 1% of GDP, which are fairly low compared to other OECD countries in the same economic situation.

At first we will attempt to make a historical overview of the impact of international financial crisis on the environment, such as those recorded in the scientific literature. Secondly, we will focus on the impact, either positive or negative, of the current economic crisis in the quality of the natural environment in Greece. Specifically we will investigate the current economic recession effects to basic environmental indicators and try to find out the connection with fundamental macroeconomic indicators, during the same period. In the current paper the main indicators which be studied are the Gross National Product, Gross National Income, Net Savings, the volume of Carbon Dioxide (CO₂) emissions, Carbon Monoxide (CO), oxides of Nitrogen (NO_x), oxides of Sulfur (SO_x), the quantities of waste produced and the quantities of which have been recycled.

Keywords: Sustainability, Financial Crisis, Environmental Performance



EA-04.03

The 'green' approach in Systemic Entrepreneurship: The role of Life Cycle Analysis as a management tool in Environmental Systems

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EXTENDED ABSTRACT

As environmental awareness increases, industries and businesses are assessing how their activities affect the environment. Society has become concerned about the issues of natural resource depletion and environmental degradation. In order to meet these challenges, environmental considerations have to be integrated into a number of different types of decisions made both by business, individuals, and public administrations and policymakers. This includes decisions related to goods and services. A well-accepted method of carrying out environmental assessment of products and services along their lifecycles is the methodology of Life Cycle Assessment. Life Cycle Assessment (LCA) is a method for evaluating the environmental impact associated with a product, process or activity during its life-cycle by identifying and describing, both quantitatively and qualitatively, its requirement for energy and materials, as well as the emissions and waste released to the environment. The LCA process is a systematic, phased approach and consists of four components: goal definition and scoping, inventory analysis, impact assessment, and interpretation. During the evolution of LCA, a number of related applications emerged, such as: internal industrial use in product development and improvement; internal strategic planning and policy decision support in industry; external industrial use for marketing purposes; governmental policy making in the areas of eco-labelling, green procurement and waste management opportunities.

On the other hand, the acceptance of ISO 9000 standard about quality management and quality assurance and therefore the increase of environmental standards round the world, results in the necessity for international environmental management standards. The result was the creation of ISO 14000 family to cover: environmental management systems; environmental auditing and related environmental investigations; environmental performance evaluation; environmental labeling; life cycle assessment; environmental communication, environmental aspects of product R&D and product standards etc. ISO 14001 demands organizations to establish and maintain procedures to spot the environmental aspects of its activities, products or services which it can be expected to have an influence to the environment in order to determine which of them have or can have significant impacts to the environment. According to international surveys, the driving force to conduct an LCA in most cases is the benchmarking of different products, as well as the evaluation of environmental improvement options on a product-specific basis. Specifically, according to such a survey, the main reasons why LCA is used are: to support business strategy, research and development, as an input to product or process



design, for education and for labelling or product declarations. On the other hand, several surveys conducted in the region of Europe to examine the current and future use of LCA have been shown that, actually, LCA results are more probably integrated (of course together with other sources) into environmental design strategies and their tools (i.e. check lists, recommendations, guidelines, standards etc.). These environmental design strategies are called 'Design for Environment', 'Design for Recycling', 'Design for Remanufacturing' or 'Life Cycle Design', conditional on their focus.

LCA can implement a constructive task in public and private environmental management relative to products, processes and activities. This may involve environmental comparisons between existing products, comparisons with prototypes, the development of new products etc. Furthermore, despite direct product applications, LCA may also be used in a wider sense.

Keywords: Life Cycle Assessment, Environmental Systems



EA-04.04

Applied Systemic Methodology in a Company based in Tripoli of Arkadia: DCSYM, 7 System Dynamics (Vensim)

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EXTENDED ABSTRACT

In this paper, we are dealing with analyzing one of the stores that belongs to the chain under the well-known brand name in Tripoli and its levels of organization. At the first stage we use the systemic methodology DCSYM where we are trying to analyze the business, its processes and will schematically illustrate the subsystems interacting in the business. Then, we simulate dynamically using the systemic methodology System Dynamics and with the aid of the «VENSIM» and procedure of supplying two store products, from warehouse until their placement on the shelves, and also how the demanded products change, while the store is open 24 hours per day or when there is a period of economic crisis. Finally, we export inferences from both the use of systemic methodologies and the use of the tool Vensim.

Keywords: DCSYM, System Dynamics, Vensim, Systemic Methodologies

EA-05.01

A Methodological Systemic Scheme (MSS) for Organizational Design and Control (DCSYM-2)

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EXTENDED ABSTRACT

The vast majority of organizations today treat decisions as isolated events, rather than the product of a holistic process. Management action is often developed reactively to environmental disturbances and/or inter-organizational oscillation that results from feedback mechanisms. Initiatives are implemented within strict functional boundaries, with minimum attention given to systemic interaction, promoting specialization that encourages a silo mentality, where departmental results take precedent over overall organizational performance. Treatment of problematic conditions is often applied within the operational boundaries of the function where the problem was initially identified, ignoring the larger whole of which the function is a part. Business decisions are derived through analytical methods in the context of a reductionist approach: reducing the whole into its constituent parts, understanding each part separately and aggregating understanding of the parts into an understanding of the whole. The effectiveness of the reductionist approach however needs to be questioned when considering that the behavior of the whole cannot be understood by examining the isolated part. Understanding of the behavior of the system as a whole requires an appreciation for the manner in which the parts of the system actually relate to and interact with one another. The very act of reduction disturbs the interconnectivity of the parts of the system and therefore corrupts the essential properties of both the parts as well as the whole. Hence, business decisions lack cohesion, and management, the ability to effectively cascade initiatives throughout the organization.

Most traditional management tools employed to support decision makers lack the sophistication to effectively address the dynamic complexity inherent in the modern organization's business environment, relying on simplification rather than holistic treatment of complexity. They tend to embrace a single perspective and direct attention to the symptoms rather than the underlying structures which are responsible for the manifestation of the symptoms in the first place. Hence, problems are often treated as static events and addressed locally, ignoring complex networks of time delayed feedback mechanisms and non-linear relationships between the intervention and the resulting consequences. Thus, the impact of a well intentioned intervention on one part of the system treated in isolation may be entirely different than the (often counterintuitive) consequences that surface on other parts of the system, with entirely different short and long term results.

This work will introduce a Methodological Systemic Scheme (MSS), which is designed to serve as the practical means through which to augment



management's capacity to align the organization's tactical planning with the system's operational capabilities, by providing a clear understanding of the structural relationships between the various interrelated and interdependent elements interacting to form a coherent functional whole (system). Specifically the MSS makes use of the semantic diagramming principles of the Design and Control Systemic Methodology (DCSYM) for the purpose of mapping out complex structures so as to depict both content and context, and the Causal Loop Diagramming techniques used in System Dynamics to reveal the manner in which the various variables in the system are interrelated, thus providing an indication of the system's behavior over time. Through the MSS a dynamic layer is added to the DCSYM – which we shall call DCSYM-2 - which serves as a systemic management platform with which the policy-maker can bridge the gap between the present and a future state when planning, organizing, directing and controlling change initiatives.

Keywords: Methodological Systemic Scheme, DCSYM-2, Causal Loops

EA-05.02

A Systems Approach to Process Alignment for Controlling the Inter-organizational Oscillatory Effect Caused by Change Initiatives

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EXTENDED ABSTRACT

It is an axiomatic tenet today that organizations operate in complex environments that change frequently due to social-cultural, legal, economic, political, environmental, ethical, demographic and technological influences. Successful adaptation to a changing environment is as critical to an organization as it is to a biological system. Just like biological systems, organizations encounter changing conditions to which they must effectively adapt if they are to survive. Organizations that have the ability to cope with a constantly changing environment (able to effectively manage complexity) have a competitive advantage over others who do not have the same capacity. Thus, the organization's ability to respond effectively to the complexity in its environment is a key contributor to its very survival.

Most management systems employed today respond to this measure of complexity by embracing a process approach. Within the context of a process approach, a process may be defined as an integrated set of interrelated activities that uses resources to transform inputs into outputs. The quality of the transformation activity is dependent on the relationship between the process variables, which are the people, equipment, input material (or information), methods, and energy that interact in a given operating environment for the purpose of producing a desired output. The arrangement of the process variables and the manner in which they interact are typically defined in standard operating procedures. The operational capability (performance) of a process depends on the manner in which the process variables have been designed to interact and on the manner in which they are operating. A system is said to exist when a number of interconnected processes interact in such a manner that their input-output relationships constitute the operational utility within the overall purpose or defining function of the whole. That is to say, the output of a single process (or a set of processes) forms the input (or inputs) for another process (or set of processes), within the boundary of a defined whole, affecting the overall performance of the whole and being affected by the whole. It is important to stress here that the system is not the sum of the processes of which it is comprised, but rather the product of their interactions. Thus, through a process approach, a loose network of processes is turned into an integrated system. When considering the dynamic nature of the sum of the input-out relations that link the various processes together to form an integrated whole, it becomes evident that the system's complexity is difficult to manage relying solely on intuition and heuristics. Applying a systems view to a process approach places an emphasis on the interaction between these processes, and the inputs and outputs



that link these processes together to form a unified whole. Embracing a systems view to process alignment augments management's ability to develop change initiatives and take appropriate action which reflects the complex networks of time delayed feedback mechanisms and non-linear relationships between system's elements, which are responsible for the system's behavior. This work will introduce a process alignment model through which the modern organization can arrange its processes, thus controlling the inter-organizational oscillatory effect that will result from feedback mechanisms responding to change initiatives that operate to achieve system homeostasis following system intervention.

Keywords: Systems thinking, process approach, process alignment

EA-05.03

Applying systemic methodologies to bridge the gap between a process-oriented management system and its supporting information system

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EXTENDED ABSTRACT

This work is an application of the Soft Systems Methodology (SSM) for the purpose of improving an information system in order to fully support the related process-based management system and to help its internal improvement. Design and Control Systemic Methodology (DCSYM) was used as a modelling tool and to facilitate conceptual models comparison within the SSM context.

The case study refers to the Education and Training (E&T) department of a large scale organization. It acts as a facilitator in organizing E&T activities for the company's employees and also provides E&T services to external customers. An early but efficient information system has been developed to support E&T activities and it is still in use. In order to improve the quality of services, a new Quality Management System (QMS) for this department was developed and established recently. The functions of the information system were incorporated into the QMS.

The challenge and the project initiated after that was: How the existing information system could be enhanced and improved in order to (a) fully support the processes scheme defined by the QMS and (b) contribute to operations improvement according to the specified performance indices.

The early approach revealed the "mess" consisting mainly of poorly defined organizational problems similar to the Ackoff's description. A good reference point was the requirements set by the QMS. Stakeholders' expectations were reviewed and taken into account. The fulfilment of these expectations was critical in order for the QMS to operate as transparently as possible and with the minimum operation over-heading. Stakeholders' list included all company employees who receive E&T services, external clients, the top and middle management as well as the E&T department team.

SSM was used as a tool which helped us to understand and manage the "problematic" situation, in other words to bring order into chaos. The 7 stages of SSM, including the CATWOE statement, were used in order to describe the current situation, the desired state according to QMS requirements and stakeholders' expectations and to specify the actions that should be taken in order to bridge the gap between the present and future situation. A critical issue in the whole process was the representation of concepts in several stages of SSM. Conceptual modelling was used to represent the system viewpoint of each



stakeholder (or stakeholders group), the QMS map of processes, the information system's operational model as well as the analyst perspective of the whole system. DCSYM was used as a common modelling methodology not only for its effectiveness in modelling but also in order to facilitate models comparison. Models comparison was based on their structure and the properties of their elements or relations. The comparison outcome was the differences, compliances and/or gaps between the information system model and the QMS model including stakeholders' expectations.

The final outputs include: (a) Information system improvement requirements, (b) QMS improvement proposals and (c) Processes and operations understanding.

Keywords: SSM, DCSYM, Process-based-Management-System, Information-System

EA-05.04

Dynamic KPI's Framework

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EXTENDED ABSTRACT

This paper presents a newer modelling approach for a structured KPI development framework based on the dynamic relationship among leadership, top management, managers, coordinators, administration officers or/and other stakeholders. The objectives of this modelling approach are achieved by providing a specific way of KPI definition to reassure that a company has established a common mechanism for the KPI development, well understood at all levels within the company. This Dynamic KPI's Framework gives the ability to define/redefine the related processes, procedures, best practices required for a KPI achievement, especially when a combination of departmental actions/tasks required in a different involvement. Changes to the related actions, procedures & best practices can affect personnel roles & responsibilities. Within this Dynamic KPIs Framework we can assist to define roles & responsibilities and authorities without override leadership vision. The last important point within this following Dynamic KPIs Framework is to implement a mechanism to Plan-Act-Measure-Improve, based on the stakeholders feedback focused on areas where maximum benefit and improvements can be obtained, with the respect to the company's quality management system.

Keywords: kpi,dynamic,quality,management,framework,dcsym



EA-06.01

A Cooperative Digital Library System in a Mobile Environment

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EXTENDED ABSTRACT

In this paper, we present a digital library and cooperation system in the form of a mobile device application. The operational system used for the application is the Android OS, which is one of the most popular mobiles OS. The system aims towards increasing the efficiency and the collaboration of a traditional library or an institution that provides library functions to its users that are librarians or library visitors. This is achieved by offering a multitude of services including chat, interaction with other users, management functionality, etc.

For the implementation of the platform, modern technologies were used both at the application side, and at the side of the database that contains the material that manages the application. The mobile application uses the Android API on the Java platform in order to create the user interface and associate it with the library's functions. In order to bridge the mobile application and the remote server the JSON standard is used for the asynchronous communication. For the dispatch and management of notifications, Google Cloud Messages (GCM) is utilized. PHP 5.0 is the language used for writing the web services that communicate with the database (MySQL).

The application offers the following functions: connection to the application using credentials, creation of new profile, password retrieval, advance search for digital objects, object adding to the user's personal digital bookshelf, rating the digital objects, creation of new projects using Wiki technology, share of them with connected colleagues and managing them, creation of task management activities, share and management of them, connection with friends and colleagues, chatting with them and finally a user's profile data maintenance. There is also an administration application that is Web based and can modify, add or delete user or object data from the database located on the remote server. In order to investigate the usefulness of the application, a survey was conducted which examines how users benefit in terms of efficiency. The survey was handed out to a mixed statistical subject. A total of 132 answers were collected and analyzed both statistically and based on a mathematical model for evaluating efficiency. The survey provided encouraging results for further development of the application. The model separates the questions asked into five different categories, and then calculates three different scores: a score for each question, a score for each category, and the total score depending on the evaluation model. Each answer is awarded a value of 1-5, with 3 being considered the original state. The results were promising, and a theoretical increase of the users' efficiency of around 22% was observed.



The conclusions of the research are that the application functionality is generally accepted by its users, but the feeling is that the mobile application needs to include the use of social networks in a wider scale. Also, it is recommended to expand the application into other operation systems, such as Apple iOS or Microsoft Windows Phone. Finally, it is advisable to extend the research on user efficiency, by installing the system on an existing librarian environment and measuring the increase of efficiency at regular intervals.

Keywords: Cooperative Digital Libraries, Mobile Apps, Project Management



EA-06.02

The digital age as an important medium of communication, information dissemination and commerce

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EXTENDED ABSTRACT

The new economy of 21st century the so called e-Economy, has altered completely the lives of citizens, businesses, markets and industry structures and has lead to the new evolution of e-business. According to the Harvard Policy Group on Network-Enabled Services and Government, Information technology (IT) is defined as "the umbrella term that encompasses the entire field of computer-based information processing: computer equipment, applications, services, telecommunication links and networks, digital databases and the integrated technical specifications that enable these systems to function interactively".

The wide use of internet has played a vital role in the new age of electronic relationships and IT technologies offer numerous benefits both to suppliers i.e. lower selling costs, lower transaction costs, or to buyers i.e. easier access to price and product information. These benefits make easier the efficient cooperation between firms and organizations and help them to build and sustain relationships of trust.

Nevertheless, various aspects related to information technology infrastructure of firms (the extent to which organizations use relevant information or networking technologies) present main obstacles. And it's not only that. Due to the fact that millions of people expose themselves to the social media like Facebook, showing every aspect of their personal profile, the temptation for illegal activities from suspicious groups all around the world is irresistible. What is more there are cases were regimes of undemocratic nature have used the Internet as a tool for applying their power suppressing the rights of the citizen. Thus a new reality of Orwellian dimensions could be created in the future allowing both groups with dark incentives and dictators to extent their power without control from the organized society, by making use of these capabilities for their doubtful purposes. Also there is the case of the entertaining companies like businesses of cinema and music which suffer incalculable loss every day by the pirating downloading and they ask for the right to have access in the data related with those illegal users of their products, as well as to be given the authority to monitor communications, records of emails, phone calls and internet surfing in an attempt to proceed legally against the modern pirates.

On the other hand, many firms seem cautious of the insecurity problems connected to the internet as a medium of exchanging information between partners. Many attacks in the past have taken advantage of fundamental



vulnerabilities in the Internet's infrastructure and have resulted to great damage in firms. As a result executives have loosened their confidence in using the internet as a 'vehicle' for electronic commerce transactions. As a result internet privacy and security are of growing importance to businesses and nations because security policy for the Internet has not yet well properly developed. The issues related to information security are of critical significance to the future of Internet, commerce and society.

Generally speaking, people seem to be unaware about the threats and dangers the modern technology poses and it's high time for the responsible scientist's and the conscious individuals to propose and agree to initiatives and reactions in order to sustain and advance social cohesion and stability of the western societies.

Keywords: digital age, Internet security problems, privacy, modern threats



EA-06.03

Systemic methodologies application, into Insurance Company in Greece, to diagnose troublesome procedures

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EXTENDED ABSTRACT

This project is a real assignment, running to the road assistant company in Greece, to improve the organizational structure of the technical administration by using the System think methodologies like DCSYM and VSM using the soft wares DCSYM Drawing VSmod which have been developed in University of Piraeus and Valladolid respectively. In this thoroughly analyzed both all the departments and the company that focused on Greek territory, as a member of a global network with the values that govern it, by presenting the current situation with all its pathogenesis. Also is being made a brief reference to the theory of systemic thinking, we analyzed the problems of management structure based on the systemic methodology, by examine the pathogenesis and proposed improvements. Finally we analyze the concerns raised by this study, given certain future interventions that could be made in order to develop new implementations in that particular working area. We come up with some conclusions generally

Keywords: System methodology, DCSYM, System Thinking, VSM, VSmod

EA-06.04

Demographic Data - Innovation - Entrepreneurship

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EXTENDED ABSTRACT

The exploitation of demographic changes, changes in attitude and new knowledge lead to successful business administration. This paper focus to the importance of the use of demographic data to provide innovation.

Managers of a modern business act as entrepreneurs (intrapreneurship) and lead the business and the entrepreneur/founder (entrepreneurship) to the new markets, promoting innovation.

The study of demographic data and the successful introduction of innovation into the market is the most important element in making a business viable, not the product or a clever idea. With many examples from the Greek and international business environment, we will show the great importance of demographic data.

The analysis of demographic changes begins with the study of population, age groups (whether the composition is renewed or not, dependance on the elderly), level of education and employment.

The educational process in Greece will provide a benchmark in our analysis of why the strong presence of master's degree programs in Greek Universities plays a role in reducing emigration and unemployment. Professional management of Greek Universities, along with demographic data, has led to an impressive increase in master's degree programmes reducing the loss of resources to foreign universities.

Keywords: Demographic Data, Innovation, Master's Degree Program



EA-07.01

Merger of Three Companies of Fixed Rail Human Resources Department at at "STASY S.A" company

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EXTENDED ABSTRACT

The main goal of the Project and the main expected outcomes. Refer to the innovative and exemplary aspects of the Project (100 – 200 words): The main goal is the normal function of the human resources department after the merge of three companies with subject the transportation work within the Attica basin with means of fixed rail. The merger didn't result after the will and agreement of the three companies, but was held forcibly with the Law 3920/2011, which imposed the direct – with its publication – acquisition of a limited company (TRAM) and a former public utility company (ISAP), which applied public sector operational procedures for more than 100 years of life, from a limited company (AMEL). The new company (STASY) has OASA as the sole shareholder, has the legal form of a limited company and operates with the rules of a Public Utility company.

The Law 3920/2011 mentions as objective of the merger the service of the superior public interest, which consists in the efficient operation of the entity-companies in benefit of the passengers and the national economy, in parallel with their technical and economical purge.

The diversity of the organization, the structure, the culture, the recruitment and the function of the three companies, apart from the obvious difficulties during the consolidation, is a challenge for success and innovation, in the operation of a company of the broader public sector. This is a Project, for which we're called to complete with many unexpected factors, which are enforced by the general political landscape of the Country and affect the management of the company, which must always operate within a constantly transforming framework delimited by the European Union guidelines in regards to the Greek economy and the reformations, imposed in the last four years.

The systemic with the imprinting methodologies and its dynamic tools will help us present the current situation, test methods which will possibly help in substantial merger in the future and after we evaluate them in an experimental stage, to propose possible optimal operating modes.

Keywords: Merger, DCSYM, VSM, archetypes.

EA-07.02

Systemic Approaches for the increase of productivity for the "Poseidon Company"

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EXTENDED ABSTRACT

The enhancement of human resources of every organization is something which requires constant adjustment in today's competitive corporate environment. Especially in a period of economic crisis companies and organizations must strive to increase the productivity of all physical, economic and human resources. The members of an organization's human resource are urged to develop new skills and increase special and general abilities in order to remain competitive between each other internally and at a global level. As the chief editor of the New York Times is quoted in his book "The world is flat": it is nowadays unavoidable that employees of organizations in developed countries will undergo enormous pressure as a consequence of fast paced change.

As was stated at the 7th international seminar "Professional Systemics in Action" by Dr Kalogerakis, practice has shown that successful HR is that which through systematic and targeted procedures has managed to "bless" its employees with skills and abilities which enable them to face the challenges of their current and future work. Organizations which adopt this holistic approach towards HR have safeguarded their employees against the difficulties which are now being faced and have given them the tools which will ensure they have a stable and safe future, stable work ethic and high levels of efficiency.

The certification study initially deals with a workload take down and subsequently with a takedown of procedures which aim to increase the productivity of the employees of the Posidonas maritime company. The work load take down took place between the 13 of November and the 7th of December 2012.

The results and the indicative trends of activities have been based primarily upon information and data received by the personnel, through the filling out of specialized activities record documents, which the employees were asked to fill out for the above stated period. Data was also recorded during meetings with supervisors of the various services carried out in order to form a picture of the current state of affairs. Lastly a specialized on-line questionnaire, to be completed by employees, was designed to qualitatively calibrate the workload as perceived by the personnel.

This data was used and analyzed under the assumption that it constitutes reliable and true information. This data could not be officially endorsed nor could it be subject to any reliability test.



Upon authorization of the managing director of the organization I have decided to rely on the data collected in the current research, which I had involvement in, and include a systemic approach based on these.

The certification study aims, through the assistance of systemic approaches and methodologies, to record the current situation of the organization and through this provide a set of suggestions to increase the productivity of personnel and the organization as a whole in general.

The target of this research is to assist the management of the Posidonas organization in its mission to develop methods to increase productivity and performance of its personnel and to make use of high quality information received upon the restructuring of activities such as information on the need for training, organizational and procedural restructuring and development of evaluation systems.

Keywords: CSAP,14

EA-07.03

Human centric approach to the employee's success

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EXTENDED ABSTRACT

How much time do executives dedicate on researches that will maximize their employees' satisfaction in order to increase their productivity and efficiency? How multinational corporations exploit the workforce to achieve their mission? What measures taken by firms in periods of economic recession that both sides, employers and employees to be happy? How can management trends affect efficiency? These are some of the questions that each company has to achieve its goal.

Nowadays, instability prevails both global business environment and the global economy, the search for solutions of costs cutting and achieving prosperity through the workplace are issues that need to be answered. Global crisis that affects all business units, it is highly important for the employees to contribute effectively and to be satisfied. As the average global salary has reached \$ 1.480 (reduced by 43%) according to the International Labor Organization, the income cannot exceed the cost only for basic survival items. This is reminiscent of the conditions of life in the period of industrial revolution. Having developed a modern culture, companies must make a turn to working experience, subverting each negative situation but also to review the working environment of employees.

This article seeks to provide HRM professionals information and guidance that will assist them in understanding, evaluating, and applying current thinking regarding the new employment relationship. The discussion incorporates empirical findings from other studies, provides recommendations for HRM professionals, and suggests methods of systemic analytic for efficiency results. Moreover, presents a new research about implications of employees for managing turnover and their retention. These ideas challenge the conventional wisdom that dissatisfied people leave and money makes them stay. People often leave for reasons unrelated to their jobs. In many cases, unexpected events or shocks are the cause. Employees also often stay because of attachments and their sense of fit, both on the job and in their community. But with this way, company can't have a profitable way of working.

Keywords: Human capital, job satisfaction, employee effectiveness, employees empowerment, HR management



EA-07.04

Employee Motivation Factors during Economic Crisis Periods

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EXTENDED ABSTRACT

Organizations, today more than ever, need to have a well motivated workforce that performs at its highest level, in order to increase their possibilities for success and survival in the long run. In order to increase work motivation, various motivational programs exist. However, the financial resources organizations have at their disposal are limited due to the financial crisis. This fact generates the need to highlight the factors that more effectively influence employees' motivation in order for organizations to avoid investing in motivational programs that are not considered as important by their employees and, consequently, will not have the desirable outcomes.

Having that in mind, the main purpose of this study is to identify the factors that positively affect employees' motivation during a long crisis period. More particularly, this study investigates the magnitude of the effect of financial, non-financial, as well as Job related factors on employees' motivation. However, if this analysis was limited in only answering the question "what motivates employees", the study would be incomplete. Organizations need to know whether the time, the effort and the relative costs of using motivational programs will eventually yield a positive outcome on their overall effectiveness and performance. Hence, another purpose of this study is to assess the role of work motivation on employees' performance and organizational effectiveness. Data were collected from 164 bank employees using a structured questionnaire.

Although it seems controversial, the results indicate that non-financial incentives are the ones with the strongest positive impact on Greek bank employees' motivation, highlighting employees' need to remain at their jobs. Moreover, it is supported that the existence of a highly motivated workforce may lead, through the increase of employees' performance, to an overall increase in corporate effectiveness.

Keywords: Employee motivation, motivational incentives, financial crisis, employee performance, organizational

EA-08.01

A systemic approach to optimize communication and procedures in one of the Services of General Interest in Greece, operating in the water market.

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EXTENDED ABSTRACT

The prosperity of any business, regardless of the type of its legal nature, and the industry in which it operates, depends largely on the procedures which have been laid down for it in order to be flexible and adaptable to continuous changes in a dynamic environment. This need has become more urgent due to the global financial debt crisis plaguing the international markets in recent years and in particular Greece. In other words, processes reengineering and the elimination of bureaucracy at all levels, has to become a way of life for every business, including those of General Interest, for them to be adapted to the requirements of a demanding external environment, in order to mitigate social distress and consequently upgrade the living standards of the consumers they serve. The present case study attempts to give directions for reorganization procedures in a key part of an under investigation General Interest Organization of and more specifically the Research Department - Construction Sector, making use of Systemic Analysis methodologies and the Viable System Model. The examined sector provides technical services (design, construction, maintenance and network expansion) to approximately 1 million customers, which, in combination with the type of product it provides - social good(s) - creates high responsibility in terms of providing direct, prompt and high quality services. This paper is divided into three parts. The first part presents the current state of the department, where all procedures and communications which take place within it, are designed with the help of a systemic tool DCSYM. Having a complete picture of the destroyed communications, proposals for improvement are given in the second part of the paper in order to establish documented procedures, which will place emphasis to the customer as well as social responsibility. Finally, the concept of Ontologies and their relationship with the systemic methodology DCSYM is demonstrated at the third part of the paper and is subject for further research.

Keywords: Social Good, Social Responsibility, DCSYM, Ontology, Joget, VSM.



EA-08.02

Systemic Approaches of Strategic Planning on the Examination of Prerequisites for the Recognition & Authorization of Classification societies of Ships.

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EXTENDED ABSTRACT

In this study it is attempted to record and specify the procedures for the recognition and the provision of authorization of Classification Societies dealing with the compilation of rules and regulations regarding safety and security aspects applying to the legislation related to the construction and classification of ships. The procedures are being analyzed in detail and accordingly depicted with the use of suitable systemic tools. Taking into account the systemic approach, useful conclusions on the operation of the Greek Administration can be extracted, as well as specific improving recommendations can be formulated, for the overall contribution to the optimization of the relevant operation procedures.

The problem: The Greek Administration's operational procedures are systemically reflected by using the Viable System Model (VSM) and the Design and Control Systemic Methodology (DSCYM) tools. In fact, these procedures are usually characterized by intense workload issues of a general nature, due to the external environment complexity. The final decision is taken at a higher hierarchical level, while the function of intelligence and the management of specialized topics are resolved at lower hierarchical levels. Furthermore, these procedures may include a case where the mother entity of an organization proceeds to questioning the representation of its domestic representative due to legal reasons. Such a case forms an extreme scenario as it cannot be confronted with a clear outline of actions.

The idea: In the study, a memo concerning actions related to operation of the Administration and that of Classification Societies is being described. Particular emphasis is given in the fact that the Administration has to make clear to the mother company that it is its own responsibility to undertake the assistance of ships as far as the validity of statutory certificates already issued are concerned, until a satisfactory solution is reached and avoid any case of ships' immobilization, while exploring the next stage of the legal status of the domestic representation of the recognized/ authorized Classification Society.

The details: Resolving the above mentioned issues could be addressed schematically as follows:
-Accurate job descriptions at all levels.



- Application of Total Quality Management Systems at all levels.
- Installation of integrated information systems to meet the objectives.
- Assessment of results/ creation of memos describing actions until final adjustments of issues are completed on behalf of the Administration.
- Review legislative framework/ Provision of access to interested parties.
- Availability and distribution of adequate resources.

Conclusions: Even though the Administration and its operation are being ruled by comprehensive regulations for decades, the system dynamics highlighted issues that could be solved in the middle levels of hierarchy and not be pushed towards the upper level, where the intelligence of the system is located. To conclude referring to the idea of this study, in order to regulate the field that we deal with, which may currently be out of the systemic view and until this field can be reflected with systemic methodology, it is believed that a memo of actions can provide the first steps in terms of guidance to address the issue.

Keywords: Systemic, recognition, authorization, Classification, ships, Administration

EA-08.03

The Effect of Risks in Public Private Partnerships Development: a System Dynamics Approach

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EXTENDED ABSTRACT

The development of infrastructure projects through Public Private Partnerships (PPPs) has been an implementation method preferred by governments with financial shortages, forming a common practice especially across Europe. According to the European Commission's 2004 Green Paper on Public-Private Partnerships, PPPs are forms of cooperation between the public and private sectors for the funding, construction, renovation, management or maintenance of an infrastructure or the provision of a service (COM(2004)327). In most PPP agreements the private partner is responsible for the financing, design, construction and operation of the project, while the public partner has a supervisory role and delivers the project upon expiration of the contract term. As an alternative method to public procurement, PPPs are expected to contribute to economic growth and employment levels in the same manner.

The effectiveness of PPPs however, depends on the level of risks realized upon their development. Usually risks in a PPP once recognized are allocated between the public and the private sector. In most cases the partner who has the capacity to manage a recognized risk is the one who bears it. However, their successfulness and viability depends on the behavior of the third actor of the system that is the society. Infrastructure is a social demand but preferences and necessity change during the operation of a project underlining the dynamic character of the risks associated. Decision makers counteract demand risk during the feasibility period by groping for estimations about the social acceptability of a PPP project. Perceptions of risks however, often differ from reality. Therefore, realization of social benefits delivered by PPPs, such as employment depends on the timing that a PPP agreement takes place, since some risks decrease with time while others increase. A more socially effective approach should suggest strategic planning of PPPs.

In order to build strategy and study the effectiveness of a PPP pipeline in a region, we have adopted the method of system dynamics (SD). SD concerns a holistic feedback structure of the system based on the interrelations between its elements and existing time delays. In the current study we have developed a conceptual SD model that incorporates risk elements considered to affect the flow of PPPs in all implementation phases; decision, procurement, construction and operation under real-life assumptions. With a focus in the stream of PPPs introduced in the Greek context over the last decade the model integrates assumed behavioral patterns of the actors in the system considering social acceptability, investment attractiveness, country's experience in PPPs, good governance and employment.



Simulation runs of several dynamic scenarios regarding social behavior patterns and development rates deliver the dynamics of PPPs and employment contribution. Development rate activates control mechanisms for guiding the implementation of PPPs under several scenario settings. Long term dynamic results justify practices for employment growth. The conceptual model can be used as a useful tool for further policy making and strategic planning of PPPs in a regional context.

Keywords: Public Private Partnerships, Risks, Employment, System Dynamics



EA-09.01

Growth of Entrepreneurship: Standard Methods vs System Thinking

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EXTENDED ABSTRACT

In the modern Western world the concept of development of society and the economy, apart from any political or institutional action, is also associated with the development of entrepreneurship. This action does not only concern humans nowadays but from ancient times. It is not accidental the characterization of Hermes, apart from his capacity as a messenger of the ancient Greek gods, to be the God of trade as well and hence of entrepreneurship.

The entrepreneurship concerns a large gaggle as a meaning, an activity, prerequisites of development and social rank among other things but also as an idea is based mainly on three features: innovation, business and development. The issue on financing a new business is a big topic of intense concern and interest for every entrepreneur and not only. Every new business has an impact on society, State and depending on the activity or the spread, across the country or the world. Therefore there is interest also by the State to reinforce the company's activities.

On the other hand, the company should convince any founder for the expected results of operations of the company. This is the purpose of the business plan which is a written strategic planning and programming of future operations of the company and necessary tool for every nascent enterprise. To achieve the design must be taken into account also the environment in which a company operates.

In more modern times, due to intense and constant changes occurring in the environment, including the financial, political, physical, institutional, and social, there was the need to introduce new method of implementation of strategic planning so to compromise the total effects of the environment. In this way the plan of a business will be completed. The financier will know in advance, with whatever possible risks may exist in each project by unpredictable factors, what the fund results will be. For this reason, system thinking is the designing tool. There is a variety of tools that helps the systemic thinking. With the support of the DCSYM methodology and simulation through systemic dynamics will be able to depict the situation and to prevent any problematic point without even having started the project as well as to predict the results of the projects.

Systems thinking is an important and powerful tool, which, together with the establishment of the necessary procedures and processes, lead us to the conclusion much earlier than the realization of the idea.

Keywords: Entrepreneurship, funds, system thinking, DCSYM, simulation

EA-09.02

The use of the DCSYM systemic methodology for the structure of the Department of Informatics

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EXTENDED ABSTRACT

In the content of this paper, the current state of systems, in the Department of Informatics at the University of Piraeus, will be analyzed using the DCSYM systemic methodology. Using the DCSYM structure, the functions of the systems and their subsystems can be visualized along with the relationships between the two of them.

Later on there will be the presentation of the new ideas that we came across during the study of the visualized model of the Department of Informatics at the University of Piraeus.

Furthermore, some useful improvements can be recommended in order to aid the Department to be operationally improved. The new structure will also be presented with the DCSYM. Lastly, the conclusions will be expressed in detail comparing the DCSYM designs.

Keywords: DCSYM, Systemic Methodology, University Department

EA-09.03

Using Web2.0 technologies for information dissemination on entrepreneurship

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EXTENDED ABSTRACT

Recently, a consecutive increase of unemployment is observed, effecting mainly young adults in Europe (Hellevik & Settersten, 2012). Especially, the economic and financial crisis of 2008 revealed the lack of information on entrepreneurship development. Thus, a large number of actions that relate, directly or indirectly, to the youth entrepreneurship are implemented in different levels of education from primary school to lifelong learning (Lekka et al., 2013). As entrepreneurship is primary an innovative and active oriented operation (Romero, 2013), entrepreneurship education should involve constructivist and learning-by-doing activities and experimental methodologies (Solomon, Duffy & Tarabishi, 2002). Research studies show that young people use in their everyday life Web 2.0 services, like social networks, blogs and wikis (Nielsen, 2010). Through Web 2.0 technologies, interaction, communication and collaboration are facilitated. By using social networks, wikis, blogs and other applications open to interactions among the users, teachers and learners are connecting and they can interact and collaborate one by one or even several at a time (Martin et al., 2011).

Additionally, the aforementioned technologies incite the user active participation. Young generation, that succeeds harder to find a job, as mentioned above, should get in touch with businesses. Moreover entrepreneurship education enables them to set up their own business in order to overcome the unemployment. By using Web 2.0 applications, it can be facilitated the transfer of good practices and experiences from the people who succeed in different types of business to young entrepreneurs. Especially, the social network LinkedIn is mainly used for professional networking. As of June 2013, LinkedIn reports more than 259 million acquired users in more than 200 countries and territories.

Massive Open Online Courses (MOOC) facilitate the distribution of knowledge over the Internet, overtaking the limitations of traditional teacher based learning. Specifically, MOOCs concerning entrepreneurship can help students identify their own strengths and challenges as entrepreneurs. The use of Game Based Learning (GBL) approach in the conventional MOOC environments could help to overcome the lecture-based approaches adopted in the main MOOC platforms. So the basic teaching tools that are used like text, audio and video lectures can be combined with automatic puzzles and quizzes. Thus, students through GBL develop their practical abilities and knowledge, such the entrepreneurship abilities.

For the purpose of this study a wiki for undergraduate students at the Laboratory of New Technologies and Distance Learning in University of Ioannina is created



and supported. In this wiki undergraduate students can discuss, find material, post questions and get advices from teachers on entrepreneurship issues. Also the educational design of a MOOC about entrepreneurship is implemented and is planned to be available for the students in summer 2014. Additionally, a group named "Entrepreneurship Topics, Laboratory NT & DL Uoi" is created in social network LinkedIn to help students in entrepreneurship networking.

Keywords: Entrepreneurship, Web 2.0 technologies, MOOC

EA-09.04

Island Development and Entrepreneurship

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EXTENDED ABSTRACT

The model of “polar regional development” applied for many decades. Basic assumption was that the inequalities observed, the free market’s functions correct them.

These inequalities are impact of:

- i) The external economies of the taken measures between regions.
- ii) The several negative external economies with local characteristics,

by the hypothesis of competitiveness, known as “free hand”, markets should have eliminated the different levels of income that observed between regions. The mobility of the labour and the capital, in sectors and regions, would be an effective mechanism to establish the desirable balanced level in all economy. When the markets failed, the model of regional policy was adapted, towards to local development. According to, any community is responsible to “correct” the inequalities and to transform them to a developmental advantage. Local factors, institutions and resources such as Environmental and Natural resources, labor, citizens, local entrepreneurship must participate to this. In case of island the local development face the dynamic impact of insularity. It means that it is under a condition of a continuous and dynamic phenomenon, which attaches to the islands a specific and personal identify with economic, social, cultural content. It’s responsible for the geographical isolation and low attractiveness of investments and deposits but it is also the competitive advantage that will redefine the local economy. The local enterprises must extend their scope beyond net profit, to participation role in public life. Which means that must develop processes friendly to innovation. Firstly to participate and support social innovations and secondly to participate to decision making process. This role of entrepreneurship – a leader part, the critical part for the process of development - is the appreciate for sustainable growth of an island.

Keywords: economic growth, insularity, DCSYM, SDD, model simulation, systemic approach

EA-10.01

An applied framework for digital service innovation

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EXTENDED ABSTRACT

Globalization, technological change and an increasing demand for specialization has led to new economic activities, new business models and new value propositions. To achieve business competitiveness in such an environment, businesses need to increase their collaboration capabilities with business partners, by creating collaboration networks for exploiting new opportunities and engaging in value innovation (Weigand et al., 2009; Johannesson et al., 2010).

Through our research we try to develop a generic architecture for exploring digital business networks comprised of service systems ('Service Ecosystems'). We also adopt the Service Science definition of a service system (Maglio et al., 2009) for exploring business networks: a firm participating in a business network is a service system that interoperates with other service systems for acquiring resources and combining them with its own for enhancing its business viability and continuity.

Our approach is based on Resource Classification Spider, which enables service nodes to decide what restrictions can impose on their resources. (see Figure 1).

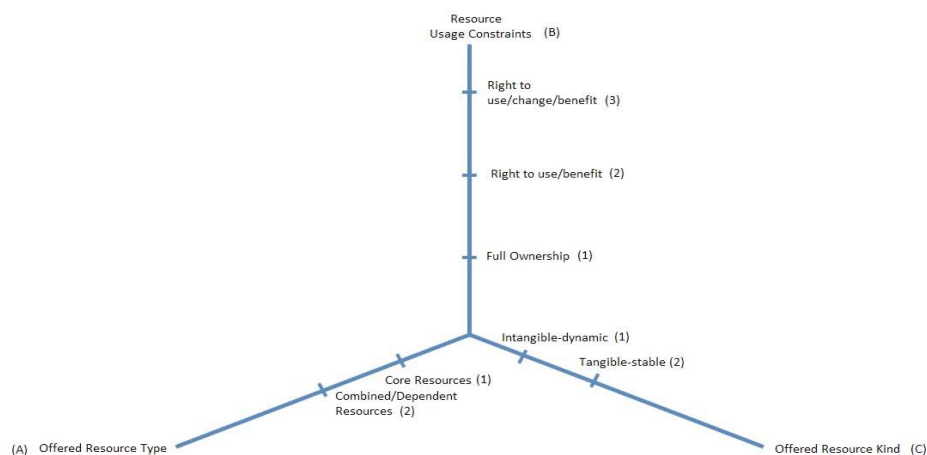


Figure 1: Our Proposed Resource Classification Spider



The Spider is based on two principles: a) Value-in-use – value co-creation must drive decisions on how service links are created among service nodes. We are particularly interested in the role of value-in-use in the process of making such decisions, b) Cascading Resource Usage Constraints – service links create 'resource access rights' paths within a service map. This is based on the reasonable assumption that a service provider must be able to negotiate and enforce resource usage constraints, as its provided resources flow across a service map, through cascading service provisions. This, in turn, may constrain downstream service nodes in their internal service development process and/or guide them in their own resource acquisition decisions.

Based on these principles, we developed a framework, which takes into account the rights that each node has imposed on their resources, as well as the type of these resources. This framework is combined with the E3-value ontology and in conjunction with the Service Science theory and the Service-dominant logic, in order to give a great impetus to enterprises that are unable to survive alone in today's highly competitive and demanding business environment. We believe that small enterprises in particular, which are often excluded from participation in business networks, can understand what it means to take part in a business network (what resources they have to manage and how, what role this enterprise can play and what it can offer in this network). This will help them achieve sustainability and business continuity, which are particularly difficult for many small enterprises in today's uncertain business environment.

Keywords: Service Science, Business Continuity, SMEs

EA-10.02

Control Management and Financial Control for a Logistic Warehouse Center Facilities

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EXTENDED ABSTRACT

Contract Management and financial control are very important subjects for a Facilities Manager in order to keep under control the Maintenance budget for a Logistics Warehouse Center.

The scope of this dissertation is to analyze the current situation of the Contract Procedures for Warehouse Facilities in a multinational company using the Design and Control Systemic Methodology (DCSYM) as well as the Viable System Model (VSM). Moreover, it is necessary to evaluate the economic situation of suppliers and sub-contractors.

There is a requirement to manage all contracts, formal contracts with external contractors and informal contracts called as SLAs with in-house or outsourcing service providers. The procedures and the principles must be in a proper way so that contracts can be managed and provide in a realistic level of flexibility. All procedures must be transparent and in accordance with the accepted accounting standards.

There is necessary to develop a DCSYM model in order to monitor and to control the contract costs against the maintenance budget and tender price on a basis that is appropriate to their duration and size. Some contract expenditures may be broken down into the planned preventive maintenance, the unplanned or reactive maintenance, the special equipment maintenance as well as the performance-related payments in order to reduce the complexity of the business environment.

Moreover, using the Viable System Model of Stafford Beer (VSM) we will design a model which will help us to ensure that all contract cost are monitored and controlled systematically. It will ensure the continued performance of the service provider against the service specification and SLAs. This model is a performance-related payment tool that would reward the external supplier or sub-contractor for exceeding the specification and penalise him in case the service provider are not able to meet the minimum specification requirements.

To sum up, it is necessary to manage all contracts in order to control the maintenance budget for the facilities needs of the logistic centre in a dynamic and complex business environment. Furthermore, it is very important to monitor the performance of sub-contractors or service providers continuously in order to control the quality and the specification of the service in order to compare them with the agreement level and to avoid unnecessary activities and cost for the company. Finally, the organization must be able to control changes of contracts if it is to be fully in charge of managing its facilities as well as to identify all possible



risks together with the impact of the proposed change. Where changes are necessary their cost should be based on tendered prices and rates. The evaluation of changes should always be consistent with conditions of contract so that in case changes are not possible it should be clear that additional works has to be valued at market rates.

Keywords: Logistic Center Facilities, Contract Management , Financial Control, DCSYM,VSM, SWOT Analysis

EA-10.03

E- Commerce as a source of advanced managerial performance in the new business area

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EXTENDED ABSTRACT

E- Commerce is the conduct of business by electronic means. Especially is a type of industry where actions of buying and selling of products or services are conducted on websites and online marketplaces. Four basic types of E- Commerce are B2B, B2C, C2C and Mobile Commerce.

Starting online sales entrepreneurs should be informed of planning process, marketing strategy and technology needs. An essential aspect of customer service is regarding how quickly the business will respond to customer inquiries and complaints by phone or e-mail. E- Commerce influences in a positive way businesses, customers and suppliers.

E-Commerce impacts on business' expansion as it has a great impact on marketing and sales. Online sales have no boundaries and increase customers in national and international basis and as a result, business' profitability. E-Commerce makes easier the transactions and payments and so businesses have directly cash flow. Businesses also achieve the reduction of running costs as it is not necessary to have a physical store but they need to have an attractive online site to appeal customers, built loyalty and cope with competitors. Customers have a variety of choices online and they can compare prices and quality and buy products online easily 24h a day, 7 days a week. In addition, by online sales suppliers have operational benefits as there is reduction of cost, time and errors. It is also easier to enter new markets and satisfy faster more customers.

Consequently, through E-Commerce modern firms and organization's succeeded in increase their effectiveness and efficiently through online sales and transactions. According to researches more than of 64% of businesses have increased their revenues and sales, 48% of businesses have expanded their geographic basis and 73% have saved money by decreasing administrative costs.

Keywords: E- Commerce, managerial effectiveness, managerial efficiency

EA-11.01

Developing a systems approach for the enhancement of entrepreneurial capabilities of European Medicinal Agencies through structured bench-learning schemes.

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EXTENDED ABSTRACT

European-based pharmaceutical sector plays a vital role in the life of the EU not just for its economic contribution, but also for its social scope to protect and promote public health.

In the recent economic, social and political environment, there is an increasing recognition at European level that public agencies have to improve and modernize their services, through the use of innovative tools and management techniques and develop their culture management, in order to satisfy the needs of citizens and society.

In the present study, the implementation of a structured bench-learning scheme based on professional systemic concepts, is suggested, in order to support European Medicinal Products' Authorities (EMPA) in achieving the goals and objectives set out in European and National pharmaceutical policy and strategy and to enhance their entrepreneurial capabilities. Through this approach, all relative European systems and processes could be designed to ensure that the EMPA are on track relative to their ability to achieve their objectives and targets, and to provide a basis for continual improvement, through the sharing of best practices. Consistency at European level in terms of management methods will be provided. Furthermore, interaction with all activities of the EMPA, at every operational interface will be addressed in order to provide fact-based guidance to them regarding improvement opportunities and areas requiring attention and action, to make key processes effective and efficient and to assist their management in prioritizing needs and mitigation of risks.

To this end, the deployment of bench-learning scheme will allow the EMPA to better manage the complexity associated with their core processes within their policy boundary and will contribute to the development of a world class medicines regulatory system for medicinal products based on a network of EMPA operating to best practice standards.

Keywords: Systems approach, bench-learning, European Medicinal Agencies

EA-11.02

Business Development of a Small Accounting Office using Systemic Methodologies

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EXTENDED ABSTRACT

This work deals with the exploitation of applied systemic methodologies for the purpose of designing and implementing a business development plan for a Small Accounting Office.

The case study refers to a Small Accounting Office whose management faces the challenge of the prospect of business growth without having the ability to risk investments on that. The plan is to redesign business operation in order to make the small office capable to grow itself according to business growth. To achieve our goal we considered the Accounting Office as a system. The system has to be discovered and documented as a network of processes using the SIPOC model (Suppliers-Inputs-Process-Outputs-Customers). This process is about transforming the implicit organizational knowledge to explicit, documented knowledge and it has been part of the knowledge management practices that were established later. Part of the whole system was the information system used to support the office works. The system was studied and an intervention was designed in order to improve its functionality.

The following systemic methodologies were used for our analysis:

- (1) The Soft Systems Methodology (SSM) used to manage the "mess" consisting of business and environment requirements, customer's expectations, employee's perspective and many other complexity factors. The reengineering issue was a perfect field to apply the SSM including models of the current and desired state as well as the CATWOE statement of the problem.
- (2) PESTEL analysis and SWOT analysis were used to define specific aspects of the problem domain.
- (3) The Viable System Model (VSM) was employed in order to examine and verify the lifetime viability of the small office.
- (4) The Design and Control Systemic Methodology (DCSYM) was used to model the internal structure of the office, the external environment as well as the network of processes. The DCSYM CASE TOOL was used for the graphical presentation of the methodology.
- (5) The "Joget Workflow" software was used to implement a prototype for the automation of the process flow.

The result was a new model of processes for the Accounting Office, a semi-automated process flow as well a new information system incorporating ERP features able to manage all information handled by the office.

Keywords: Business Development, SSM, DCSYM, VSM, JOGET



EA-11.03

The use of DCSYM and System Dynamics Systemic Methodologies in a Branch of the Piraeus Bank

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EXTENDED ABSTRACT

The paper discusses the design modeling in a branch of Piraeus Bank (former ATE). This implementation will be done with the DCSYM Case Tool, an analytical tool for modeling agencies. The implementation is to introduce systems and subsystems inside and outside the organization. Then, an introduction of the human element will be done in the corresponding systems and the paper concludes with the introduction of interactions between individuals and systems that will participate in the process.

In a second step of this paper, we will deal with the analysis of banking procedures. We shall use the AnyLogic software for System Dynamics to simulate the processes in the Bank. Specifically, we simulate procedures: approval/rejection of loan application and the use of ATM by a bank customer.

Keywords: DCSYM Case Tool, AnyLogic, System Dynamics

EA-11.04

Environmental Management System for Oil/Chemical Tankers

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EXTENDED ABSTRACT

The EMS is a systemic, dynamic system integrating environmental management in accordance with the International Standard ISO 14001 with Company's operations and applies to all environmental aspects that the Company identifies, either as those that it can control or those that it can influence.

The purpose of the EMS is to ensure Company's vessels comply with all applicable marine environmental protection requirements established under applicable International, Flag State, Port State and Coastal State law including, but not limited to MARPOL and all applicable statutes and regulations, hereinafter marine environmental protection requirements and to the additional requirements and voluntary undertakings established by the EMS itself. Voluntary undertakings include industry best practices that the Company may choose to adopt. In the case of a conflict between the environmental management system and any of the aforementioned requirements such that the EMS is less restrictive, then the more restrictive authority shall govern.

The purpose of this dissertation is to determine through systemic thinking the current company's environmental policy, identify all the environmental aspects and finally try to create a tailor made environmental plan for the company's tankers with systemic methods.

The implementation of a robust environmental management system and the achievement of sound environmental performance require all activities, operations and personnel to be in the frame of environmental awareness, care and set of objectives. Consequently, all Company's employees are aware of this system and understand, implement and continually support any requirements of the EMS.

Keywords: Environmental plan, Maritime, Oil/Chemical Tankers



EA-12.01

Tutorizon - it is a new tutors' horizon

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EXTENDED ABSTRACT

Problem

Despite "word of mouth" and handmade posters, there is no credible way for a student or parent to find quality tutors for home tutoring purposes. On the other hand, tutors' self-promotion is localized and costly creating abnormalities in the market.

Solution

Tutorizon is a platform that connects students with tutors or private schools for physical or online High school, Foreign languages and University courses. A student or parent that needs to find a tutor or a private school, is sending a request of what he needs and gets personalized offers or suggestions within minutes or hours.

After a reasonable amount of time, the student or parent that requested the tutor or private school gets a review form where he can rate the services he received.

More than a simple matchmaking platform, Tutorizon pursues to become the most valuable and reliable community of quality tutors in Europe. We focus our efforts into creating a high quality tutors community. We do that by:

- Educating our community with online content.
- Educating our community with live events in collaboration with independent organizations.
- Creating our review base from the first day by letting tutors asking for a review by past students.
- Not allowing incomplete profiles bidding requests.
- Verifying tutors' Academic qualifications.

How it works

The potential student enters on Tutorizon and he makes a request for a tutor about his specific needs. After, all tutors who meet the student's criteria receive a notification for the request and every tutor who is interested is able to send his bid. Tutorizon lets the first 4 bids to go to the student or parent.

How Tutorizon makes money

Those 4 tutors that will send their bid have to pay a small fee.

We are also planning to launch a new service, after a significant amount of time. This service will be the notification SMS and it will notify tutors that bought it, that there is a request for them in Tutorizon giving them an advantage in bidding it.

Market

We plan to expand in Turkey, Spain, Romania and Poland during the next 3 years. Our market in these countries is estimated at around 0,5 billion Euros.

Our Vision

After the first 3 years, where we are going to build 5 local communities in Europe, our aim is to launch a web-tutoring tool that will merge in one consolidated community. Since then, tutors will be able find new students not only from their country, but also from abroad.

Our Numbers

During a period of 3,5 months that we have launched Tutorizon our numbers are the following:

- 1000+ registered tutors
- 5000 unique visitors
- 7500 visits
- 5 minutes time on site

While, during the last 25 days that we have launched the request button (students request for tutors), we have already received more than 40 requests.

Keywords: tutor, quality, education, marketplace



EA-12.02

Startup: Uninotes

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EXTENDED ABSTRACT

Uninotes is the place you go to organize your academic life. It is an internet service that aims to bring university students together to populate students' knowledge on a central database for sharing among their peers. That way, we believe students' performance will improve year over year to the point of evolving the university per se.

Uninotes does this by offering free printing of any academic material found on the website, as its Go-To-Market strategy. It brings together copy store owners and advertisers: by printing ads on the back of each photocopy, the cost of the print is shifted to the advertiser who would either way pay for marketing a product to students.

Keywords: growth, startup, university, notes

EA-12.03

tizU - Time delayed messenger

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EXTENDED ABSTRACT

tizU is a free iOS app that allows you to tease your friends with time-delayed messages.

A tizU is a message that consists of two parts, a visible one and a hidden one. The hidden one will only get revealed to your friend after the countdown reaches zero. Play with your friend's curiosity, tease them, have fun.

The presentation will begin with understanding of the current tech trends in mobile industry and the opportunity the two co-founders saw behind tizU. Then they will present the product itself and how it works.

A brief analysis of the social messaging market will follow afterwards, as well as details such the growth rate and the segment in which the application targets to. Next, there will be competition analysis and what makes tizU different from the other applications. At the last part of the presentation, the audience will be able to learn more about the progress made so far, as well as the next steps of the startup and the team behind it.

Keywords: mobile, iphone, social, messaging, app



EA-12.04

Connecting brands with fashion influencers worldwide.

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EXTENDED ABSTRACT

Business Summary: Susurrus's vision is to give to emerging and established fashion labels the opportunity to find influential bloggers and work with them to promote their products worldwide.

Problem: Brands currently focus their digital marketing efforts on traditional practices (display ads, fb advertising) that are proven to result in much lower engagement rates in comparison with targeted marketing campaigns involving influencers.

The issue with working with bloggers is that it's hard to find the ones that match a brand's mission and can take away a lot of resources and time in order to build and monitor a campaign as well as maintain and grow these relationships.

Solution: Susurrus is a marketing platform that enables fashion/ beauty brands to set and manage campaigns with bloggers that match the brand and the campaigns' goals in an easy, efficient and automated way.

Target Market: Fashion and consumer PR agencies, established and emerging fashion/beauty labels.

Target countries: UK, France, Italy, USA.

Business Model: Commission-based per campaign transitioning next to a subscription model.

Brands: 30% commission per campaign.

PR Agencies: 20% commission per campaign.

Competitors:

Direct: Fohrcard (www.fohrcard.com), Stylecoalition (www.stylecoalition.com)

Indirect: Tapinfluence (www.tapinfluence.com), Markerly (www.markerly.com)

Competitive Advantage: The competitive edge of our project is the fully automated service of setting, managing and monitoring the influencer marketing campaigns with verified data. We ensure the quality of the execution through a sophisticated rating system.

Marketing Strategy: Our early go-to-market strategy focuses on building a first critical mass on the bloggers side. We will build our community by strategic

partnerships with blogger organizations like IFB and relevant events as well as targeted advertising.

Traction: A few words about what we have done so far, how many bloggers are registered in our platform as well as a case study with one of our first clients.

Financial Projections: Our estimations for our revenues & expenses for the next 5 years per year.

Team: Susurrus' founding team consists of 4 engineers:

Ioannis Anagnostopoulos (Co-Founder & Business Developer)

Panagiotis Tsaggas (Co-Founder & Community Manager)

Lina Stoumpou (Co-Founder & Front end developer)

Dennis Rodis (Co-Founder & Back end Developer)

Keywords: creative content, marketing, campaigns, bloggers, brands



VEA-01.01

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EXTENDED ABSTRACT

In the energiaproject introduction are presented the basics of our project, philosophy, purpose, aim, mission, target and challenges that every innovation faces globally and locally, along with some useful methodologies. Everything that has to do with energy in an innovation approach that can be greener or more friendly with more efficiency is good enough to get be study by energiaproject.

In an ideal world we could be rich with this approach, but not in real world, what we get is the pleasure of inventing new technology approaches in everyday life that do not cost a fortune and the challenge to present the other side of Hellas, the one we need to workout at this time to survive and keep up our magnificent history.

Few scientific researches has been found that could assist us in our project and it is rather difficult to have a lab with state of the art equipment to achieve the result we need. But where there is a will always there is a way. Furthermore behind the lab issues how ready is a society that keep behaving with certain way and consume only what the main system supports or endorses? This is the most challenged issue of the project and it is going to be studied deeply before we extract the results. At this point we are acquiring the results of these innovation technologies while we try to see how the system reacts with this new reality.

This approach might seem apparently simple, however it hides facts about problems of all kinds that all stakeholders face and which are noticeable since they can prove to be detrimental in the end. This project was based on true facts from the real world along with the scientific facts that are approachable at this time.

Keywords: Systemic Methodologies, VSM Beer, DCSYM, Vensim, Anylogic, Joget, energiaproject, innovation, energy

VEA-01.02

Systemic Methodologies for the R&D in ICE's (Internal combustion engines & burners)

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EXTENDED ABSTRACT

As in all innovations behind the lab issues there is a society that keeps behaving with certain way and consumes only what the global system supports or endorses. This is the most complicated issue to resolve than to invent a new technology, and the reason is simple: the society has been trained to accept information from certain resources. Besides these straits we have achieved spectacularly results and we like to share them in the scientific community and we still believe that it can go better.

During the process of this project, more than three years, we found unbelievable information and discover a new approach of looking to energy matters. We accomplished to extend normal vehicle mileages up to 60% and reduce consumption of a regular burner more than 70%! Along with that study we discover what is really going on in fuel distribution network. We would like to share these information with the world but this is the hard job and here is where systemic approach needed most because the profit is way too big and people's interest do not come along with most stakeholders.

This approach might seem apparently simple, however it hides facts about problems of all kinds that all stakeholders face and which are noticeable since they can prove to be detrimental in the end. This project was based on true facts from the real world along with the scientific facts that are approachable at this time.

Keywords: Systemic Methodologies, energiproject, electric fields in fuel, agenda 21, Kyoto Protocol, Hydrogen



VEA-01.03

Energiaproject R&D systemic methodology

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EXTENDED ABSTRACT

The scope of energiproject is to observe, check over, study, analyze, develop, test and experiment in innovation technics in the wide field of energy matters. We do not need to discover the wheel, although sometimes it happens through this journey, but most of the times we have to use efficiently what science already know. It is amazing that best inventions are those that are here in front of our eyes but never see them.

As always in research, you do not know what you will find during this quest, and at the beginning you do not even know what you are looking for. Eventually, when this process starts, every day you try to set everything in an order in a scientific way. You examine everything you hear or read or listen theoretically at first and practically in action later to investigate and find out the results from where you have to decide if you are in the correct way or not. The magic in this unknown path is that many times it happens that you think you know to discover at a later time that things are not always the way you initial thought.

Keywords: energiproject, energy, hydrogen, water,fuel, systemic approach



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