



Keynote Addresses

The Eutopian Geometry of Languaging of The Science of Dialogic Design



Dr Alexander N. Christakis

Demosensus Lab, Crete, Greece

Dr. Alexander Christakis comes from Crete and has taught at Universities such as Yale, Princeton, Georgetown University, University of Virginia etc. He was a co-founder of the Club of Rome (the important manifesto for dealing with the world's complex problems), elected president of the International Society for System Sciences (International Society for the Systems Sciences) and is the creator of the Institute for 21st Century Global Agoras, as well as Demoscope. Dr. Christakis is internationally known for his scientific work in the Science of Systems and Governance, Social Systems Design, Dialogue, as well as in the management of social and political crises, in negotiation, as well as in the methodology of Structured

Democratic Dialogue (S.D.D.) for peace building and conflict resolution. S.D.D. is inspired by the vision of direct democracy found in Ancient Athens and seeks to create a better world by the citizens for the citizens.

The Eutopian Geometry of Languaging of The Science of Dialogic Design

The phenomenon of Situational Complexity emerges when groups of stakeholders congregate to assault wicket problems. In accordance with the Complexity Axiom of the Science of Dialogic Design (SDD), it is essential to reconcile two contradictory requirements: (a) requisite variety of observations regarding the situation, and (b) the cognitive limitations of the human agents engaged in deliberative dialogue. The Architecture of SDD includes the employment of the Logosofia software platform, the availability of the Demosofia Situation Room for displaying visually the graphics resulting from the utilization of the "Eutopian geometry" for languaging. This specialized geometry, on account of its multidimensionality, enables stakeholders to reconcile the requirement of the Complexity Axiom, namely to minimize the cognitive overload and the interpretive ambiguity, while maximizing the transparency of meaning of observations. Generic graphics of the Eutopian geometry are presented. The inclusion in the Architecture of the Demosofia facility, the Logosofia platform, and the Eutopian geometry, creates a cybernetic learning environment capable of reducing the Situational Complexity by more than ninety percent.



Hellenic Society for Systemic Studies (HSSS), 22nd National & International Conference
University of Ioannina, Lab. of New Technologies & Distance Learning
Applied Systemic Management in the AI era



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Keynote Addresses

Predictive Analytics, Generative AI, and Intelligence Augmentation in Socio-Technical Systems:
Root Metaphors, Automation, Embodiment, and the Partitioning of Autonomy



David Ing
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David Ing is an Adjunct Professor in the School of Graduate Studies at OCAD University, Toronto, and an associate of its Strategic Innovation Lab (sLab). His work focuses on systems thinking, systemic design, and systems change, with research interests spanning systems science, service science, and organizational innovation. He previously spent 28 years at IBM in roles including management consulting, market development, and headquarters planning, and served as President of the International Society for the Systems Sciences (2011–2012). He is also a co-founder of Systems Thinking Ontario and continues to contribute to research and education in systems thinking and systemic design.

Predictive Analytics, Generative AI, and Intelligence Augmentation in Socio-Technical Systems:
Root Metaphors, Automation, Embodiment, and the Partitioning of Autonomy

Predictive Analytics, Generative AI, and Intelligence Augmentation represent three distinct traditions in computing that are reshaping contemporary socio-technical systems. Predictive Analytics focuses on anticipating likely outcomes, Generative AI expands the production of digital representations across text, images, audio, and video, and Intelligence Augmentation seeks to improve individual and collective capability. Applications of these advances have raised apprehension about machines outpacing human decision-making. Yet the challenge is not understanding machines and humans as separate entities, but appreciating how technical and human systems function together within larger socio-technical wholes.

Using autonomous driving and reporting systems as illustrative cases, this presentation draws on the World Hypotheses of Stephen C. Pepper to show how Formism, Mechanism, Organicism, and Contextualism lead to different questions about the same phenomenon. Building on contextualism, the presentation introduces contexturalism-dyadicism as an extension emphasizing rhythms, propensities, embodiment, and diachrony.

Through the concepts of anticipation, teleonomy, and negotiated order, the partitioning of autonomy between machine automation and human agency is understood as a developmental choice. While technical systems may become increasingly capable, excessive automation can weaken the human skills, judgement, and practical knowledge required to sustain and renew those systems. The central challenge of this turbulent transition with Generative AI technologies is not framing machines and humans as opposing competitors, but understanding how technical, individual, and collective capabilities may be developed together across longer time horizons within coevolving socio-technical systems.



Keynote Addresses

Systemic Management and Approaches in Finance: Lessons for Financial Leaders



Dr Christos Floros
Professor, Hellenic Mediterranean University

Dr. Christos Floros is a member of the Board of Governors of the Hellenic Mediterranean University (HMU). He is a Professor of Finance in the Department of Accounting and Finance of the HMU School of Management and Economics and Director of the Postgraduate Programs in "Accounting and Auditing" and "Financial Management." Additionally, he is the Director of the "Research Laboratory in Accounting and Financial Management" (LAFIM) as well as Director of the "Institute of Economic Analysis, Entrepreneurship, and Tourism" of HMU Research and Innovation Center. His main research interests include finance, financial economics, risk management, modern banking and applied economics. His research work is distinguished by the high number of citations (7400, h-index 45), while he is ranked among Greece's leading academic economists according to international rankings. He has published over 100 articles in many prestigious international scientific journals, has presented numerous research papers at International conferences, has taken part as a Keynote Speaker and coorganizer of Conferences and has participated in many scientific committees of International Conferences. Dr. Floros currently serves as President of the Multinational Finance Society (MFS).

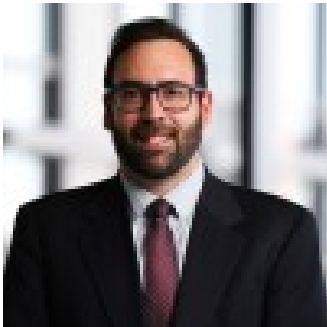
Systemic Management and Approaches in Finance: Lessons for Financial Leaders

Modern finance is no longer a collection of independent functions, but an interconnected system in which risk, strategy, technology, markets, and managerial decisions continuously influence one another. This keynote introduces the concept of Systemic Management in Finance and explores how a systemic perspective can help financial leaders understand and manage complexity in an increasingly uncertain and technology-driven environment. The keynote begins by explaining what systemic financial management means and presents the key principles of systemic financial management, emphasizing interconnectedness, adaptability, resilience, integration, and informed decision-making. It then examines Risk Management as a Systemic Function, highlighting how financial risks should be understood not in isolation but through their interactions with liquidity, market conditions, technology, strategy, and organizational decisions. The discussion subsequently turns to Strategic Financial Management, followed by Technology and the Future of Finance, with particular attention to how technological transformation and Artificial Intelligence are reshaping financial decision-making, risk assessment, market behavior, and competitive advantage. These concepts are illustrated through an empirical example focusing on the interaction between Artificial Intelligence (AI), market liquidity, and trading activity and their influence on daily stock market returns in the United States. Using recent daily data, the analysis investigates whether overall AI developments, AI uncertainty, AI economic activity, market liquidity measured by turnover, and trading activity measured by trading volume significantly affect stock market return dynamics. It also examines whether market liquidity moderates the relationship between AI-related shocks and stock market returns. By integrating AI indicators with key market-microstructure variables, the empirical analysis demonstrates how technological developments, liquidity conditions, and trading behavior can interact within the financial system. The keynote concludes with Lessons for Financial Leaders, translating the systemic perspective and empirical evidence into practical insights for investors, portfolio managers, policymakers, and financial executives. The central message is that successful financial leadership in the AI era requires moving beyond fragmented approaches toward systemic thinking, integrated risk management, strategic adaptability, technological awareness, and resilient decision-making.



Keynote Addresses

Beyond AI Adoption: Managing Organizations as Systems in the Age of Intelligent Machines



Dr Georgios Varsos

Innovation Strategy & Business Development | Venture Partner (VC)

VU Venture Partners

Dr. Georgios Varsos is a Senior Manager of Business Development and Licensing at Mass General Brigham, where he leads healthcare innovation and commercialization initiatives involving Harvard Medical School-appointed faculty and affiliated hospitals. He is an interdisciplinary professional with expertise spanning healthcare innovation, strategic business development, venture investing, project management, and clinical research. He holds a PhD in Clinical Neurosciences from the University of Cambridge and an MBA in Leadership and Healthcare Management from Johns Hopkins University, alongside a background in Mechanical Engineering. He is also a PMP-certified professional and Venture Partner at VU Venture Partners, and actively contributes to entrepreneurship through mentoring, teaching, and supporting healthcare and life-sciences ventures.

Beyond AI Adoption: Managing Organizations as Systems in the Age of Intelligent Machines

Artificial intelligence is no longer simply a technology challenge—it is a management and systems challenge. Organizations that derive meaningful value from AI will not necessarily be those with the most advanced technologies, but those capable of redesigning how people, processes, technology, incentives, and decision-making interact as an interconnected system.

Drawing on more than 14 years of experience across neuroscience, healthcare innovation, technology commercialization, business development, and venture investing, this keynote explores the principles of Applied Systemic Management in the AI Era. My experience working on commercializing more than 350 healthcare innovations across Harvard Medical School-affiliated institutions, while developing strategic partnerships and licensing transactions exceeding \$80 million, provides a real-world perspective on why promising technologies succeed in some organizational environments and fail in others.

The keynote examines AI adoption not as an isolated technology implementation, but as a systemic transformation challenge. It explores how organizations can identify high-value opportunities for AI, redesign workflows and decision-making, develop effective human–AI collaboration, and create the organizational conditions required for sustainable adoption.

A practical framework is proposed around four interconnected dimensions:

Value: Identifying where AI can address meaningful organizational and societal problems and generate measurable impact.
System: Understanding how AI adoption changes workflows, organizational structures, capabilities, incentives, and stakeholder relationships.
Human–AI Collaboration: Designing new models of work in which AI augments human expertise, creativity, judgment, and decision-making.
Scale: Establishing leadership, governance, trust, measurement, and organizational learning mechanisms that transform individual AI experiments into sustainable capabilities.

Healthcare provides a particularly relevant context because of its scientific complexity, specialized human expertise, regulatory requirements, fragmented stakeholders, and significant potential for AI-enabled transformation.

The central proposition is that AI adoption is not primarily a technology implementation problem—it is a systemic management problem. Organizations must move beyond asking what AI can do and instead ask how AI can reshape the broader system to create sustainable value. The leaders of the AI era will therefore be those who can connect technology with people, organizational design, and strategic purpose—and who can transform AI from a collection of powerful tools into a system-level capability for innovation, performance, and impact.

Keynote Addresses

Using Fuzzy Cognitive Maps in Applied Systemic Management



Professor Peter P. Groumpos

Emeritus Professor, University of Patras, Patra, Greece

Prof. Peter P. Groumpos is an emeritus professor since 2017 at the department of Electrical and Computer Engineering of the University of Patras. He was born in Greece in 1950 at the small town of Xylocastron, Corinthia. At the age of 18 years old, he went to USA with the primary goal to do his university studies. He did his undergraduate and graduate studies at the Department of Electrical and Computer Engineering at the SUNYAB. He received his Ph.D. in 1978. He joined as an Assistant Professor, Cleveland State University, Ohio in 1980 and he was promoted to Associate professor in 1985. He was Vice President of the Advanced Manufacturing Center of Cleveland, Ohio (1983-1988). In 1990, he returned to his motherland Greece, been elected as a full Professor at the Department of Electrical and Computer Engineering of the University of Patras. In 1992 he established the Laboratory for Automation and Robotics to which has been its director till he retired in 2017. A Fulbright Scholar one year award by the State Department of USA. Chairman of the Dept. of Electrical and Computer Engineering, University of Patras (1999-2003). Academic Honorary Member of the Russian Academic Council of Mechatronics and Robotics 2002-2011 and Honorary Invited Professor of the University of Science and Technology of the Eastern China of Shanghai 2013-2017. President & CEO, Patras Science Park, Patras, Greece (2004-2010). Vice-President of the Technical Advisory Board, National Institute for Research, Greece, 2005-2010. The Greek National representative to high positions: a) at European Management Committees (ESPRIT, ICT, IMS, INCO). Included in b) Who's Who in Frontiers of Science and Technology and Men of Achievement, c) General Chairman of IFAC Conferences, LSS '98 and MIM 2000, and of the IEEE Conferences, ISIC 2000 and MED 1994, 2000 and 2016 d) Chairman of the TC 9.5 of Large-Scale Systems of IFAC (1996-2001), e) Co-Chairman of the Creativity in Intelligent Technologies and Data Science Conferences, CIT&DS 2017, 2018, 2019 and 2021, Volgograd, Russia. He has taught in the 40 years of his professional life undergraduate and graduate courses in the thematic areas of automatic control, stochastic processes, intelligent control, Fuzzy systems, Robotics, modeling Complex Dynamic Systems and Bioinformatics. His research interests cover the broad thematic areas of modeling and control of large Complex Dynamic Systems, Intelligent control, Artificial Intelligence (AI), fuzzy systems, Fuzzy Cognitive Maps, Hybrid Energy Systems (HES), Intelligent Manufacturing systems, Renewables, Decision Support Systems (DSS), Knowledge Management, Creative software Computing, Simulation Methods, Technology Transfer, and Innovation Systems. He has conducted funded research using advanced new intelligent and fuzzy techniques in many applications especially in Health, Business and Economics, Energy, Environment, Manufacturing, Agriculture and Transportation. He has been the principal investigator and/or participated as a partner in many R&D projects been funded by the EC, the Greek Government and/or the private sector. He has published four (4) books, edited seven (9) books, 17 invited chapters in books, over 350 papers in journals and/or in international conferences, and over 50 Technical Reports. He has more than 7400 citations. For two consecutive years, 2020 and 2021, he has been ranked internationally among the world's top scientists in Artificial Intelligence, ranking him in the top 2% of the most influential scientists, according to the published PLOS Biology 2020 & Mendeley Data 2020 lists and the Stanford University study "Updated science-wide author databases of standardized citation indicators". Prof. Groumpos has been the Reviewer for several International Journals and for many International Conferences. Has organized more than 20 invited special sessions on Conferences and has been Keynote Plenary Invited Speaker in more than 30 International conferences

Using Fuzzy Cognitive Maps in Applied Systemic Management

Organizations today function in environments characterized by uncertainty, rapid technological change, globalization, competition, and increasing interdependence. Managers are therefore required to make decisions in situations where multiple variables interact and where the consequences of an intervention may extend beyond the area in which the decision was initially made. Modern organizations operate as complex systems in which numerous factors interact dynamically, often producing outcomes that are difficult to predict using traditional analytical approaches. Traditional management approaches often attempt to analyze organizational problems by separating them into individual components. Although this reductionist perspective can be useful for examining specific issues, it may be insufficient when dealing with complex systems in which relationships between variables are as important as the variables themselves. Applied Systemic Management (ASM) can be understood as a management approach grounded in systems thinking, systems theory, and complexity science, with the purpose of understanding and intervening in real-world organizational and socio-economic systems. The key word is systemic. It means that a management problem is not examined as an isolated event or as the result of a single variable. Instead, the analysis considers relationships, dependencies, feedback mechanisms, and interactions among multiple variables and stakeholders. ASM addresses this challenge by emphasizing relationships, feedback, interdependence, emergence, and the behavior of the system as a whole. In this context, Fuzzy Cognitive Maps (FCMs) provide a valuable methodological framework for representing, analyzing, and communicating complex cause-and-effect relationships. FCMs combine elements of cognitive mapping and fuzzy logic to model how different concepts influence one another and how changes in one part of a system may propagate throughout the whole system. This article examines the role of FCMs in ASM, focusing on their theoretical foundations, methodological characteristics, practical applications, advantages, and limitations. It argues that FCMs can support managers and decision-makers by transforming qualitative knowledge and expert experience into structured models that facilitate scenario analysis, strategic planning, and organizational learning. FCMs can be used as a practical tool for ASM and to demonstrate their potential contribution to organizational analysis and decision-making.



Keynote Addresses

From Anthropocentric AI to Human Accountability: A Systemic Framework for Keeping Humanity in Command



Dr Yiannis M. Kalogerakis
CEO of JMK-Anthropocentric Corporate Training & People Development, Greece

Dr Kalogerakis is an Engineer with masters in HRD & Production Management. After completing his Ph.D on Applied Industrial Robots, he returned to HR as he realized that the most important thing on this earth is the Human Being. So he decided to become Anthropocentric and abandon equations, technology, and machines. Dr Kalogerakis is identified as the expert on Anthropocentric, Experiential Training & Development, with 38 years of experience in the European and international market from Canada, UK, US to Iran and the M. East. With a comprehensive, lively, animating, playful and educational style, he manages to touch deeply the hearts of people, helping them discover the greatness within them. Today he does exclusively, Anthropocentric Training and Development Seminars, Workshops and Keynote Speeches in 4 continents..

From Anthropocentric AI to Human Accountability: A Systemic Framework for Keeping Humanity in Command

Artificial Intelligence is increasingly embedded in organisational decisions, professional practices and everyday human interactions. Previous discussions of Anthropocentric AI have established that intelligent systems should enhance rather than replace human potential and must be guided by transparency, fairness, ethical responsibility and respect for human values. The next challenge is no longer simply to define these principles, but to translate them into applied systemic management.

This paper proposes the Anthropocentric Accountability Loop: a systemic framework designed to ensure that human purpose, judgement and responsibility remain central throughout the lifecycle of AI-supported decisions. The framework consists of seven interconnected stages: Human Purpose, AI-Augmented Action, Human Judgement, Systemic Consequences, Ethical Feedback, Human Correction and Continuous Relearning.

The proposed model extends the conventional idea of keeping a “human in the loop.” Merely including a person in an automated process does not guarantee meaningful oversight, particularly when individuals become overdependent on algorithmic recommendations or are unable to challenge them.

An anthropocentric system must therefore keep humanity in command of the loop by establishing clear accountability, feedback mechanisms, intervention rights and organisational cultures that encourage critical thinking.

The paper examines AI not as an isolated technological tool, but as an active component of a wider organisational and societal ecosystem. Every AI-supported action can produce intended and unintended consequences for employees, customers, institutions and communities. Systemic management must consequently evaluate not only efficiency and accuracy, but also human agency, trust, dignity and long-term social impact.

The central argument is that AI can make people and organisations more capable, but only human accountability can keep them humane. The future of responsible AI will depend not simply on better algorithms, but on better human judgement, courageous leadership and organisational systems capable of learning, correcting and continuously adapting without abandoning their timeless ethical principles.

The changing role of Systemic Leadership in the age of Artificial Intelligence (AI)



Professor Athanasios (Thanos) Kriemadis, Ph.D., M.I.B.A., M.A.

Head of the Department of Management Science and Technology.

University of Peloponnese, Greece.

Dr. Athanasios (Thanos) Kriemadis is Professor of Strategic Planning in the Department of Management Science and Technology at the University of Peloponnese. He is Head of the Department, President of the Innovation and Entrepreneurship Committee, and former Deputy Rector of Financial Management and Infrastructure. He received his B.Sc in Management from the American College of Greece, his M.I.B.A. in Strategic Management and International Business from The United States International University, San Diego, California, USA, under the guidance of Dr. Ansoff (The Father of Strategic Management), his M.A. in Sport Management and Marketing from Springfield College, Massachusetts, USA, and his Ph.D. from the University of New Mexico, USA, specialized in Strategic Planning in sport organizations and Business Administration. He was an active member of the San Diego Deming User Group where he was introduced to Total Quality Management (TQM) by Dr. Deming's disciples (Dr. Deming is considered as The Father of TQM and Transformation of organizations worldwide). Dr. Kriemadis is Quality Auditor for Quality Management Systems (ISO 9001:2015) and Certified Lean and Six Sigma Black Belt. He was Quality Assessor of the EFQM Excellence Award promoted by the European Foundation for Quality Management (EFQM) specialized in Small and Medium Enterprises and the Public sector-Education. Before moving to academia Dr. Kriemadis held several management posts in both the public and private sectors in the USA and Greece. In USA, he worked in the Department of Quality Assurance in Motorola, Inc. using the Lean Six-Sigma methodology, a variety of Total Quality Management principles and practices, the Malcolm Baldrige National Quality Award criteria, and the Deming Management Method. He also served as a quality and strategy consultant developing and auditing quality systems and strategic plans in Greece, European Union and USA. Research interests include TQM and Strategic Management issues applied to service organizations. He has written 7 Books in Management, 60 papers published in International Journals, and 200 papers presented in International Conferences.

The changing role of Systemic Leadership in the age of Artificial Intelligence (AI)

The diffusion of Artificial Intelligence (AI) into organizational decision-making, business operations and human resource management, is triggering a deep review of what systemic leadership entails. The purpose of this presentation is to examine the changing role of Systemic Leadership in the age of AI, answering the following research questions:

1. How AI reshapes the leader’s role ?
2. How AI reshapes the leader’s decision authority ?
3. How AI reshapes the leader’s information capability ?
4. How AI reshapes the leader’s ethical obligations ?
5. How AI reshapes the leader’s management of human resource ?

This presentation synthesizes recent business literature in the scientific fields of strategic management, information systems, and organizational behavior. We view AI not as a productivity tool but as a structural force that is reshaping the nature of leadership itself. The business literature also reveals that algorithmic systems do not merely support business decisions but they dynamically redistribute authority and power within contemporary organizations.

In our opinion, AI is not replacing leadership. The core purpose of leadership, that is formulating strategic direction of the organization, building trust, empowering human resource, respecting all stakeholders, and creating a high performance organization, remains fundamentally human. Business schools and organizations should develop leaders who are fluent in both routes, the human-centered leadership and the AI capability.



Keynote Addresses

Why do we Visualize? Securing the WOW! Effect on Business Innovation through AI-Powered Digital Transformation



Dr Andreas Maniatis

Assistant Professor, University of Windsor

Dr. Andreas S. Maniatis is an Assistant Professor in the School of Computer Science at the University of Windsor, Canada. He holds a Ph.D. from the National Technical University of Athens and has more than thirty years of experience spanning academia, research, and the information technology industry in Greece and Europe.

His research and teaching interests encompass Data Science, Big Data Analytics, Data Visualization, Artificial Intelligence, Machine Learning, Data Mining, and Software Engineering, with particular expertise in the visual and interactive exploration of large-scale data.

He has published extensively in international journals and conferences and has contributed to numerous national and European research and technology projects. Today, his work combines academic research, extensive industry experience, and a strong commitment to developing innovative approaches to teaching and learning in data and computing.

Why do we Visualize? Securing the WOW! Effect on Business Innovation through AI-Powered Digital Transformation

We, Homo Sapiens, are by gene coding a visual biological species. Vision is by far our most important sense and has thus helped us dominate the planet.

But what does the phrase “Data Visualization” sound like to the uninitiated? “Data” conjures up images of computers and statistical analysis, whereas Visualization is more accessible but vague enough so as to be unclear. One may wonder: Is Data Visualization new, overflowing with cutting-edge tools and technology, or is it as old as human communication itself? Well, Data Visualization may be rooted in ancient times and have a rich history over the last couple of centuries. Still, the field is transforming in the technological age, and transforming the world along with it. Big Data Analytics and Artificial Intelligence, Machine Learning, and Deep Learning, have become the major scientific and technological catalysts that have successfully set in motion a whole world of new, relative applications.

So, we Visualize, because:

- Visualization is the most secure path towards achieving genuine Business and Organizational Intelligence, both in terms of entrepreneurship, as well as technology,
- Storytelling, Narration, and Comprehension are greatly augmented when Visuals are included and are wisely and carefully used, and finally,
- Data Visualization has been a tremendously successful tool supporting Exploratory Data Analysis (EDA) at all levels, thus promoting the analysis and understanding of data in every single domain and area of application.

But even though the three pillars mentioned above form a more or less expected and straightforward path towards understanding and interpreting data, using them in various everyday applications (ranging from simple sales reports to autonomous car driving to promoting secure decision-making) is anything but trivial. We will herein work with history, reference examples, and case studies that will help us formalize a recommended Data Visualization process, specifically adapted to secure a WOW! Effect when addressing Business Innovation through AI-Powered Digital Transformation.

Beyond Watzlawick: Axioms of Pragmatic Interaction for Second-Order Cybernetics



Dr Yiannis Laouris

D Lead Scientist of Ekkotek Ltd., Cyprus
Future Worlds Center

Yiannis Laouris is a social, science, and business entrepreneur, a neuroscientist, and a systems engineer. He founded Future Worlds Center, the Cyprus Neuroscience & Technology institute, the Cyprus Society for Systemic Studies, and several high-tech companies, including Ekkotek and GNOUS Labs. He is a Member of the Board of the Institute for 21stCentury Agoras, a national representative in several COST Actions, Insafe, Inhope, EU Kids online, ECSO, Cybercrime Centre of Excellence, ECTEG - Europol, etc. He is one of the 12 authors of the ONLIFE Manifesto. Laouris promotes the application of digital technologies and structured democratic dialogue as tools to harness the collective intelligence and collective wisdom of people. His team develops systems to scale up participatory dialogic processes to engage asynchronously thousands of participants in meaningful authentic dialogues, thus accelerating institutional and societal change. Laouris has a medical degree and a PhD in Neurophysiology from Germany and an MS in Systems and Industrial Engineering from the US. His work is published in several books, over 100 scientific papers, and honored with more than 12 distinguished awards

Beyond Watzlawick: Axioms of Pragmatic Interaction for Second-Order Cybernetics

Paul Watzlawick and colleagues profoundly influenced the study of human communication through a small set of propositions concerning the inevitability of communication, the coexistence of content and relational meaning, digital and analogical codes, punctuation of interactional sequences, and symmetrical versus complementary relationships. These ideas have remained highly influential across communication theory, family systems, psychotherapy, and cybernetics. Yet, despite their conceptual power, they were never developed into a coherent formal axiom system capable of supporting derivation, falsification, or systematic empirical testing.

This paper addresses that gap by recasting Watzlawick’s pragmatic insights within a second-order cybernetic framework. It introduces a minimal formal ontology of agents, observable conduct, interpretation, punctuation, relational stance, and belief updating, and reformulates the five classical propositions as level-separated axioms concerning information flow, meta-communication, coding, observer-dependent segmentation, and relational dynamics. Five additional axioms extend the framework to turn-taking and timing, repair, common ground, relevance/cooperation, and public–private channels.

The formalization explicitly adopts a non-ontological stance: conduct is not assumed to contain meaning in itself, but is treated as an action schema whose meaning emerges through situated interpretation by observers within punctuated interactional contexts. This allows paradox, reflexivity, and context-dependence to be retained rather than eliminated. From the resulting axiom system, the paper derives testable theorems concerning, among others, the communicativity of silence, reciprocal blame arising from divergent punctuation, stabilization of symmetry or complementarity through repeated meta-signals, and the effects of code choice and leakage on interpretive uncertainty.

The framework also introduces posterior interpretive entropy as a descriptive measure of the dispersion of possible readings, while explicitly rejecting any assumption that lower entropy necessarily implies better communication. Relational viability, repair, and contextually requisite variety remain independent evaluative criteria.

The contribution is therefore twofold. Theoretically, it shows that core insights of Watzlawick, Bateson, and the Palo Alto tradition can be rendered as a formal, observer-dependent axiomatics compatible with second-order cybernetics. Practically, it provides a basis for empirical operationalization in mediation, organizational communication, Structured Democratic Dialogue, and human–AI interaction. The paper thus offers a bridge between classical systems thinking and contemporary socio-technical interaction research.



Keynote Addresses

Reporting of a CSH project in the AI era



Dr Roelien Goede

Research Director: Unit for Data Science and Computing
North-West University, Potchefstroom, South Africa

Roelien Goede is the Research Director of the Unit for Data Science and Computing at the North-West University (NWU) in South Africa. She serves on the process management committee in the Faculty for Natural and Agricultural Sciences of the NWU aimed at improving the effectiveness of administrative processes of the university, including digital transformation. She also chairs the Post-Doctoral Research Fellow process committee in the faculty. Her research interest is in Critical Systems Thinking applied to Information Management Systems and Programming Education. She was the President of the International Society for Systems Sciences for the 2022–2023 term. Recently she published an extension of Critical Systems Heuristics, introducing a third boundary concerning causal structures in an organisational system.

Reporting of a CSH project in the AI era

The aim of this talk is to present a reporting strategy Critical Systems Heuristics (CSH) studies in a way that does justice to its core ideas. Reporting of professional practice in a professional concise manner is vital to the adoption of the findings in an organisation. Board members are usually not aware of systems thinking methodological approaches and often systems practitioners approach the reporting process with too much systems terminology and analysis details. The argument of this talk is that reporting on a project guided by CSH or any other critical systems approach should be guided by both transactional and transformative validity. Most important, it should be guided by the purpose of the system and true to the assumptions of the specific systems thinking methodology. The aim of CSH is to engage with different perspectives to increase understanding of the complexity of the problem situation in context of the purpose of the system, to facilitate sustainable improvement. Reporting on such a CSH requires a good understanding of research principles and a strategy for presenting the project's process. This talk focuses on the hermeneutic circle of analysis to achieve trustworthy findings sensitive to the emergence which is inherent in systems. Giving justice to minority and majority voices is central to CSH as a methodology. The talk is covers traditional CSH, and the additional sources of influence of CSH2.0 (2026) This talk demonstrates how to report on a complete CSH project in an era of AI. It addresses several ways AI tools can be useful and harmful in a CSH project.

Safeguarding living heritage through a systems approach: The Škofja Loka Passion Play as a UNESCO case



Prof. Tadeja Jere Jakulin, PhD

Full professor of systems
Faculty of Tourism Studies – TURISTICE,
UNESCO UniTwin University of Primorska

Prof Tadeja Jere Jakulin. PhD is a full professor of systems at the UNESCO UniTwin University of Primorska, Faculty of Tourism Studies- TURISTICE. She holds a PhD in systems theory from the University of Maribor, which is the management of information systems. She researches, studies and teaches soft systems and develops models in the framework of system dynamics in the search for solutions to problems of natural and cultural heritage. Her research and teaching work has earned her international, national and university awards of excellence. In 2020, together with colleagues from the University of Ljubljana and the University of Maribor, she was nominated for the Balzan Prize, an annual award of the International Balzan Foundation for outstanding achievements in the fields of systems, humanities, natural sciences, culture, as well as for efforts for peace and the brotherhood of man. She held several leading administrative roles at the university, as well as at the faculty and internationally. She led national and international projects in systems, events and festivals in cultural heritage-related courses (Management of Cultural Events, Cultural Events in Tourism); students relate to local and national cultural heritage and representatives of institutions through charitable, cultural events as part of their study obligations. In the postgraduate courses (Hospitality in Tourism, Tourism Systems and Pilgrimage Tourism), the student develops a sense of humanistic studies through Aristotle's ethics and passes on a systematic methodology for solving problems in the environment of complex tourism systems, cultural heritage and nature

Safeguarding living heritage through a systems approach: The Škofja Loka Passion Play as a UNESCO case

Intangible cultural heritage comprises living practices, performances, knowledge and skills that communities recognise as part of their cultural identity. The UNESCO framework for safeguarding emphasises that intangible heritage must be protected through community participation, the passing on of knowledge, and links to sustainable development, rather than being treated merely as a static object of conservation. This perspective matters for destinations that are already developed for tourism or wish to develop in this regard. In this context, living cultural heritage strengthens local identity and social cohesion, whilst also attracting visitors and supporting broader development.

The keynote address presents the Škofja Loka Passion Play in Slovenia as a systems example of living heritage, inscribed on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity in 2016. The Passion Play is the oldest surviving dramatic text and stage directions from the 18th century, written in the Slovenian language by the Capuchin friar Romuald, and is staged today as a procession in the historic town of Škofja Loka, involving more than a thousand local performers and volunteers from the surrounding valleys and villages. Owing to their scale, symbolic meaning and the deep involvement of the local community, the Škofja Loka Passion Plays are a striking example of the mutual influence between heritage, community and the development of a tourist destination.

A systems approach treats the destination as a living network of relationships rather than as a collection of separate cultural and tourism functions. Methodologically, it combines document analysis, autoethnographic observation based on direct participation in the Passion Play, and a semi-structured interview with the performance director. These sources are interpreted through qualitative systemic dynamics to identify the key actors, processes and feedback loops that shape the long-term balance of the heritage element.

The analysis shows that preservation depends on strengthening the links between community participation, intergenerational transmission, management, interpretation and tourism development. Strong local involvement supports a sense of ownership, continuity and cultural meaning, whilst careful interpretation can improve public understanding and enrich the visitor experience. At the same time, we note the risk that excessive tourism pressure may undermine authenticity and community control if development is not guided by conservation principles. The article argues that participatory management is a key mechanism for balancing these tensions and for preserving living heritage as both a cultural asset and a resource for development.



Keynote Addresses

A Systems Theory Perspective on AI Applications in Education



Prof. Jenny Polyxeni Pange, PhD.

University of Ioannina, Greece

Professor Jenny (Polyxeni) Pagge is an ex-Dean of the School of Education at the University of Ioannina, Greece. Since 2008, Jenny Pagge has been a Professor at the Department of Early Childhood Education, School of Education of the University of Ioannina in the field of "Information Technology and Applied Mathematics with emphasis on educational programs." During the period 2003–2008, she worked as an Associate Professor at the Department of Early Childhood Education, School of Education of the University of Ioannina. During the period 1998–2002, she worked as an Assistant Professor at the Department of Early Childhood Education, School of Education of the University of Ioannina. She is an expert in the field "Informatics and Applied Mathematics with emphasis on educational programs."

Professor Pagge holds the following certifications:

- 1. Key theme expertise in Collaborative Learning; E-learning / Use of ICT; Educational Strategy; Teachers.
- 2. Trainer B sector PE60 within the MPT (Major Project Training, Pedagogical Institute, Athens).
- 3. Inclusion in Introductory Register of Adult Trainers E.KE.PIS (2007).
- 4. Inclusion in the trainers’ registry (Regional Training Center), Ioannina.

She has published several papers in scientific journals, conferences, and chapters of books. She also held several administrative positions at the international level, participated in social involvement activities, and received a number of European-funded research programs.

Additionally, she is:

- 1. Member of the Greek Network of Open and Distance Education, especially involved with innovative forms of online education: <http://www.edae.gr>.
- 2. Tutor in the Academic and Professional Enhancement Program (EPEAEK) for teachers in primary education (Department of Early Childhood Education of the University of Ioannina), 2001–2005.

Scientific coordinator for the Hellenic Studies Program from the Center for the Study of the Hellenic Language and Culture in 2011 for the training of USA students (University of Washington) – in collaboration with Prof. T. Lagos, University of Washington, USA, and the Dean of the Philosophy Department, Associate Professor Mr. A. Angelou.

A Systems Theory Perspective on AI Applications in Education

The rapid integration of Artificial Intelligence (AI) into education is transforming teaching, learning, assessment, and academic decision-making. However, AI applications are often examined as individual technological tools, without sufficient consideration of the complex interactions between technology, learners, educators, institutions, and the wider educational environment. This presentation shows how a Systems Theory perspective is used for analysing AI applications in education as components of dynamic and interconnected socio-technical systems. Drawing on key principles of Systems Theory, including interdependence, interaction, feedback, adaptation, emergence, and system–environment relationships, this presentation conceptualises AI not as an isolated technological intervention but as an element that interacts continuously with human and organisational agents. The proposed framework examines how AI-mediated interactions may generate changes in learning behaviours, pedagogical practices, institutional processes, and educational outcomes, while also producing feedback loops. Particular attention is given to the reciprocal relationship between human users and AI systems and to the capacity of educational systems to adapt to the increasing presence of AI. According to recent studies a systems perspective can provide a more holistic framework for understanding both the opportunities and challenges associated with AI in education. It is important to study the directions for future postgraduate programs, considering human–AI interaction, AI literacy, educational effectiveness, and the long-term systemic transformation of educational environments.

Who Is Prepared for AI? Regional Disparities in AI Literacy Across Europe

Prof. Dr Georgios A. Panos

¹Professor of Financial Management - Aristotle University of Thessaloniki

Affiliate Professor of Finance - University of Glasgow



Prof. Georgios A. Panos

Georgios Panos (44 years old) is a Professor of Finance at Aristotle University of Thessaloniki and an Affiliate Professor of Finance at the Adam Smith Business School at the University of Glasgow, where he worked for the past 10 years. He has held previous positions at the Universities of Stirling and Essex. He holds a Ph.D. in Economics from the University of Aberdeen (2010), a MSc Economics from the University of Warwick (2004), and a Bachelor's degree in Economics with honors from the University of Ioannina (2002). He worked as a consultant at the World Bank for a total of seven years, focusing on financial and private sector development, entrepreneurship, and poverty reduction. He has collaborated on financial literacy enhancement programs with the World Bank for developing countries. His research activities in financial management, financial education, and skills matching and development have led to the attainment of major research programs funded by the European Union, such as the PROFIT program (2016-2019: €1.6 million) and the TRAILS program (2024-2027: €3 million). He is an Associate Editor of the European Journal of Finance, as well as a member of the editorial boards of Small Business Economics: An Entrepreneurship Journal and Journal of General Management. In April 2020, he was recognized as one of the best 40 MBA professors under the age of 40 globally by the American organization Poets&Quants, which ranks global postgraduate business administration programs. His published and ongoing unpublished studies on personal finance, financial management, financial technology, financial literacy, skills matching and development, as well as financial and social exclusion, are critically impacting these top-priority policy, education, and practice agendas.

Who Is Prepared for AI? Regional Disparities in AI Literacy Across Europe

Artificial intelligence is rapidly transforming the organisation of work, the demand for skills, firms’ production processes and the geography of innovation. However, the capacity of individuals to understand, evaluate and use AI technologies is unlikely to be distributed evenly across space. Existing research has documented marked territorial inequalities in digital infrastructure, human capital, innovation capacity and technology adoption, but there is still limited comparative evidence on the regional distribution of AI literacy. This paper examines who is prepared for AI across European regions and investigates the individual and regional factors underlying spatial disparities in AI literacy. The analysis draws on novel microdata from the EU-TRAILS project, covering more than 30 European Union and neighbouring countries. The survey contains harmonised measures of AI literacy alongside detailed information on respondents’ demographic, socioeconomic and labour-market characteristics. Crucially, the data include regional identifiers that permit analysis at both the NUTS-1 and NUTS-2 levels. This structure allows us to move beyond national averages and examine whether substantial differences in AI preparedness exist within countries, across metropolitan and peripheral territories, and between regions characterised by different levels of digital development. We conceptualise AI literacy as a multidimensional form of human capital encompassing basic knowledge of AI, understanding of its applications and limitations, and the capacity to engage critically and effectively with AI-enabled technologies. AI literacy is treated not solely as an individual attribute but as a regionally embedded capability. Its formation may depend on education, employment and income, but also on the wider technological and institutional environment in which individuals live and work. Regions with stronger digital infrastructure, more advanced firms, higher-skilled labour markets and more developed innovation systems may offer greater opportunities for exposure to AI, learning and knowledge diffusion. Conversely, digitally lagging regions may face cumulative disadvantages that restrict the acquisition of AI-related capabilities.

A central contribution of the empirical analysis is the integration of a regional measure of digital development based on the Digital Economy and Society Index at the NUTS-2 level. The regional DESI measure captures differences in digital connectivity, human capital, use of digital technologies and the digitalisation of firms and public services. We use it to assess whether regional digital maturity is associated with higher levels of AI literacy after accounting for individual characteristics and national institutional conditions. We also examine whether regional digital development moderates socioeconomic inequalities in AI literacy. For example, digitally advanced regions may raise overall literacy while simultaneously generating greater returns to education and occupational position, or they may narrow disparities by expanding access to digital resources and learning opportunities.

The empirical strategy combines descriptive mapping with multilevel and regional regression analysis. We first document cross-country and within-country variation in average AI literacy at the NUTS-1 and NUTS-2 levels. We then estimate models relating individual AI literacy to gender, age, education, income, employment status, occupation and other relevant characteristics. Regional variables include the NUTS-2 DESI index, labour-market conditions, economic development, industrial composition, urbanisation, innovation intensity and the local concentration of skilled employment. Country fixed effects are used to ensure that regional comparisons are not driven by national differences in institutions or policy environments. Interaction terms assess whether the individual determinants of AI literacy vary systematically with regional digital maturity and economic structure.

The paper contributes to three strands of literature. First, it extends research on digital and AI-related skills by introducing a comparative, regionally disaggregated measure of AI literacy. Second, it links individual AI preparedness to regional innovation systems and theories of cumulative causation, according to which technological capabilities, skills and economic opportunities become increasingly concentrated in already advantaged places. Third, it contributes to debates on skill-biased technological change by showing that exposure and preparedness for AI are shaped by both personal resources and local opportunity structures.

The findings will have direct implications for European cohesion, skills and innovation policy. If regional digital maturity strongly predicts AI literacy, policies focused exclusively on individual training may be insufficient. Effective intervention may require territorially differentiated combinations of digital infrastructure investment, education and training, support for firm-level AI adoption, and stronger links between employers, universities and public institutions. Identifying regions and population groups at risk of being left behind is therefore essential for ensuring that the diffusion of AI supports, rather than weakens, inclusive regional development.



Keynote Addresses

Managing Organizational Complexity in the AI Era: Rethinking the Relationship Between Intelligence and Decision Quality



Dr Panagiotis Papaioannou

Director of Data Governance at EYDAP S.A.

University of Piraeus, CSAP, HSSS

Panagiotis Papaioannou holds a Bachelor’s Degree in Physics, a Master's in Information Systems, and a PhD from the University of Piraeus (Department of Informatics). He is also a Certified Systemic Analyst Professional (CSAP) specialising in Project Management.

Panagiotis has profound professional experience in the field of Software Engineering & Development. For more than 25years, he has served as an Analyst Programmer and IT Liaison at EYDAP SA (Athens Water Supply and Sewerage Company). Since January 2022, he has been the Director of Data Governance of the Company.

He is an active member of the Hellenic Society for Systemic Studies (HSSS). His scientific interests fall into Business-IT alignment, Software Engineering, Business Process Management, ISO Management Systems, Project Management, as well as Systems Approach and Systemic Methodologies.

Managing Organizational Complexity in the AI Era: Rethinking the Relationship Between Intelligence and Decision Quality

The recent rapid adoption of Artificial Intelligence (AI) in organizations has created the expectation that more data, more analytics, and more computational intelligence will inherently enhance decision-making. The reality is that, although AI has enhanced organizations' information-processing capabilities, many still face greater uncertainty, coordination difficulties, governance challenges, and unintended consequences. This paradox prompts a critical inquiry: why does greater intelligence not consistently yield better decisions?

Organizational complexity is a key concept to understand situations like this. The Systems Approach, including systems thinking, cybernetics, complex adaptive systems, and organizational theory, leads to the perception that AI should not be viewed merely as a technological tool. Instead, it is an active non-deterministic agent in an already complex socio-technical system. As AI becomes an active part of organizational processes, it enables new interactions among individuals, data, algorithms, and organizational structures. These interactions create additional complexity at a pace that exceeds organizations' capacity to manage and to absorb it.

Acting as a complexity catalyst, AI creates new dependencies, reshapes feedback loops, and ultimately contributes to emergent organizational behaviors. The Systems Approach reveals that many challenges associated with AI do not originate in the technology itself but in the dynamic relationships that evolve among technological and human elements of modern sociotechnical systems. Moreover, self-directed and agentic AI systems challenge established perceptions regarding control, accountability, and decision authority.

Instead of limiting our focus to AI governance, we need a broader perspective on System Governance. Effective management in the AI era requires managers to understand and manage interactions, dependencies, and systemic consequences rather than merely deploy increasingly intelligent technologies. The future success of organizations will depend not on the extent of AI adoption, but on their capacity to remain adaptive, resilient, and governable amid high complexity, both internal and external.

Managers have to reconsider a dominant assumption of the AI era: that more intelligence inevitably produces better outcomes. In modern organizations, acting as complex adaptive systems, sustainable performance depends less on intelligence itself and more on the capacity to understand and manage the complexity that intelligence creates.

Integrating Soft Systems Methodology and AI-Based Multi-Criteria Decision Making for Predictive Supervision: A DEXi-Based Application in Peru’s Natural Gas Transportation System



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Chartered Industrial Engineer from the National Engineering University-UNI (Peru). Master of Arts (MA Systems), UK; Master in Business Process Management for Digital Transformation (MUBPM), Spain; MBA (DS & Analytics), Brazil. President and Principal Researcher at Instituto Andino de Sistemas - IAS, Lima, Peru; Professor, Universidad Nacional de Ingeniería - UNI, Lima, Peru. He is author of two books and coauthor in six books and co-editor of one book. He has peer-reviewed publications in international systemic journals as well as author in the UNESCO

Encyclopedia of Living Support Systems - EOLSS. Former Chief Editor of Sistemica, the journal of the Instituto Andino de Sistemas-IAS, Peru. He has been former member of the Editorial Board of the peer-reviewed journals: Systems Practice, Plenum Press (UK); Systems Research & Behavioral Science (SRBS), John Wiley & Sons (UK); and International Journal of System Dynamics Applications (IJSDA), IGI Global (USA). Member of the International Advisory Board of the Systems Thinking Four Volume Set, Sage Publications (UK), he has also served at the System Dynamics Society Annual Conference as papers peer reviewer during several years. Author of the Soft System Dynamics Methodology (SSDM), Systemic Methodology for Risks Evaluation and Management (SYSMEREM), Systemic Methodology for Developing and Maintaining a Dynamic Balanced Scorecard (SMDBSC-DM) and Soft-BPM: A Systemic Methodology for Business Process Management. He is Qualified Researcher of the Peruvian National Council of Science and Technology (RENACYT Code: P0013855) as well as Fellow of the Hellenic Society of Systemic Studies (HSSS) and Founder and Honorary President of the Latin American Systemic Association (ALAS).

Integrating Soft Systems Methodology and AI-Based Multi-Criteria Decision Making for Predictive Supervision: A DEXi-Based Application in Peru’s Natural Gas Transportation System

Organizations responsible for supervising complex infrastructure systems face decision situations characterized by interacting technical, organizational, human, and environmental factors, incomplete information, qualitative judgments, multiple criteria, and the need to incorporate expert knowledge into timely and accountable decisions. This paper presents and critically examines an applied systemic approach developed for the predictive supervision of natural gas pipeline transportation in Peru. The approach integrates Soft Systems Methodology (SSM) for systemic problem structuring and organizational modelling with Multi-Criteria Decision Making (MCDM), operationalized through DEXi, to develop transparent, knowledge-based decision-support models.

SSM provided the methodological foundation for understanding the natural gas transportation industry and its supervisory processes as interconnected Human Activity Systems. The intervention incorporated strategic analysis, Root Definitions, CATWDE analysis, and Conceptual Models to identify relevant transformations, actors, clients, worldviews, ownership, environmental constraints, and the logically related activities required for effective supervision. This systemic modelling supported the identification and validation of effectiveness and efficiency indicators and provided the conceptual basis for determining the attributes and criteria subsequently incorporated into the decision-support models.

The integration establishes an explicit methodological transition from systemic inquiry to intelligent decision support. Rather than introducing Artificial Intelligence as an independent technological layer, SSM is used to determine what should be evaluated, why it should be evaluated, from which perspectives, and how the relevant activities and criteria are systemically related. MCDM and DEXi subsequently operationalize selected expert knowledge through hierarchical multi-attribute models and qualitative utility functions. Evaluations proceed through a hierarchical semantic tree in which utility functions define decision rules linking lower-level attributes to higher-level assessments.

Four expert decision-support systems were developed for the principal lifecycle phases of natural gas transportation infrastructure: Design, Construction, Operation and Maintenance, and Abandonment. The models reached up to six levels of resolution and jointly incorporated 1,047 decision rules: 93 for Design, 216 for Construction, 438 for Operation and Maintenance, and 300 for Abandonment. Their development involved 23 working sessions, representing approximately 69 hours of interaction with the organization’s Technical Work Committee, through which the systemic methodology and expert systems were progressively validated and calibrated.

The experience indicates that the principal contribution of integrating SSM with AI-based MCDM is not the automation of expert judgment itself, but the creation of a traceable methodological pathway from systemic problem understanding to explicit criteria, structured expert knowledge, explainable decision rules, and actionable supervisory assessments. SSM and MCDM/DEXi perform complementary roles: SSM supports systemic problem structuring, multiple perspectives, organizational learning, and conceptual modelling, while DEXi transforms relevant expert knowledge into transparent, hierarchical, and operational decision-support models. The case therefore provides a human-centered and explainable AI approach to systemic management, with particular relevance to complex public-sector supervision and risk-management environments.



Keynote Addresses

The Shifting International Consensus on Climate Policy: Trends and Added Value of a Systemic Political Economy Approach to Climate Action



Nikolaos Kalatzis

Special Secretary for International Affairs, Administrative Chamber of Greece (ΔΕΕ)- Economic Analyste at MoEF

Nikos Kalatzis is a senior economic policy analyst and advisor with a disinguished record of senior positions at the Greek Ministry of National Economy and Finance (MoEF), core International Ogranisations and organised Civil Society. Among his current portfolio, he co-pilots as Steering Group Member the OECD-hosted Inclusive Forum on Carbon Mitigation Approaches (IFCMA), a global initiative bringing together more than 60 countries from all continents to advance well-evidenced and efficient climate mitigation policies. He is also a Member of the European Union's Economic Policy Committee in charge of the economic policy coordination among EU and EZ Countries and coordinates the on-going technical support programme on climate economics for the Greek MoEF. He is currently also the Special Sectlary in charge of International Projects of the Management Chamber of Greece (ΔΕΕ).

Previously, Nikos has served as Adviser to the Secretary General for Economic Policy and Strategy of the MoEF, also the Economic Counsellor of the Greece at the OECD and elected Vice-Chair of the OECD/EDRC Committe in charge of Country Economic Surveys, supporting top-policy missions and deliverables across a broad range of economic and structural reform initiatives. Along is outanding policy-making experiene, he has delivered invited lectures and presentations on macroeconomics, sustainable development, and inclusive growth, contributing to academic and policy dialogues across Europe and beyond. His expertise spans economic policy analysis, international cooperation and governance Civ, and efficient sustainable development strategies.

The Shifting International Consensus on Climate Policy: Trends and Added Value of a Systemic Political Economy Approach to Climate Action

First, the presentation traces the widening gap between the ambitious objectives of the Paris Agreement and the actual progress in implementing climate mitigation policies within the current international macroeconomic and geopolitical environment, thereby underscoring the need for a recasted evidence base for climate policy. While international organizations continue to uphold the prevailing “post-Nordhaus” consensus that the macroeconomic benefits of an orderly implementation of decarbonization policies exceed those associated with a “no policy change” scenario, novel uncertainties are emerging. These concern not only the objectives themselves, reflected in growing strands of “eco-revisionism,” but also the methodologies used to assess emissions reductions, in addition to persistent uncertainties surrounding the green investment gap and, most importantly, its distributional consequences at both local and global levels.

The lecture then reviews the main findings of recent forecasting scenarios and analytical approaches developed by leading international organizations, which increasingly point toward a deterioration in the prospects of limiting global temperature increases to around the benchmark 1.5°C scenario. Within this spectrum of medium- and long-term climate impact projections, a critical unresolved issue remains the “black box” of cross-border environmental spillovers (“carbon leakage”) and their secondary economic effects in a context characterized by increasingly unilateral climate policies. What analytical approaches are currently put forward for Greece and the European Union, and what steps are needed to develop the necessary and comperhensive expertise toward producing credible national macroeconomic forecasts and a strategic policy framework aimed at designing evidence-based measures to mitigate the economic costs of climate change?

In conclusion, the evolving context makes it imperative to update the evidence base supporting effective, sustainable, and equitable public climate policies through the lens of a new political economy of climate change. Such an approach should explicitly take into account the significant local and supranational distributional impacts of climate policies, exemplified internationally by movements such as the “Yellow Vests” in France, particularly in an environment of mounting pressures on public finances. A strategic and evidence-based framework of this kind, currently emerging within major international organizations, could serve as a catalyst for building “pro-green reform coalitions” around more innovative and inclusive regional climate initiatives, counterbalancing the broader trend toward increasingly asymmetric, unilateral, and/or climate-sceptic policy responses worldwide.

Dancing with Wicked Problems in the AI Era: BIMA-SDD as a Reality-Led Systemic Management Framework



Prof Dr Rudolf Wirawan

Founder & CEO - Wirasoft Pty Ltd

Founder of the BIMA Framework—Bridging Intelligence, Mindfulness, and Awareness—and President of The Indonesian Association of NSW

Dr. Rudolf Wirawan, PhD (University of Adelaide) is the Founder of the BIMA Framework-Bridging Intelligence, Mindfulness, and Awareness-and President of The Indonesian Association of NSW. He is also Founder & CEO of Wirasoft Pty Ltd and a Higher Degree Researcher at the Adelaide Business School. Dr. Wirawan's work integrates indigenous wisdom, systems science, and advanced technologies such as AI, blockchain, and decentralized governance to create regenerative pathways in governance, education, health, and peacebuilding. A recipient of the 2024 Margaret Mead

Award at the International Society for the Systems Sciences, Dr. Wirawan has presented globally on regenerative knowledge management, ecological governance, and ethical innovation. His BIMA for Peace Foundation initiative positions peace as a living, spiralling system-fusing scientific insight with cultural wisdom to address today's most pressing global challenges

Dancing with Wicked Problems in the AI Era: BIMA-SDD as a Reality-Led Systemic Management Framework

The rapid expansion of artificial intelligence has strengthened society’s capacity to collect data, recognise patterns and automate decisions. Yet many contemporary challenges—including digital transformation, public health integration, environmental degradation, community development and institutional governance—remain wicked problems. They emerge from dynamic relationships among people, technologies, organisations, cultures and nature. Consequently, they cannot be permanently solved through a single technical intervention, predefined model or optimisation process. As soon as one condition is addressed, the wider system continues to evolve, and new tensions, paradoxes and unintended consequences may appear.

This keynote introduces BIMA-SDD as a reality-led systemic management framework for engaging with such complexity. BIMA represents Bridging Intelligence, Mindfulness and Awareness, while SDD draws upon Structured Democratic Dialogue and extends it through sustained listening, community knowledge, digital StoryPathways and continuing systemic learning. BIMA-SDD begins with reality rather than with a predetermined problem definition. It listens to the lived experiences of people, communities and nature; identifies emerging stories, relationships, contradictions and weak signals; and supports their collective interpretation through inclusive dialogue. Artificial intelligence may assist in organising narratives, recognising provisional patterns and revealing overlooked connections, but it does not replace human judgement, cultural authority, ethical responsibility or community governance.

The framework therefore does not claim to “solve” wicked problems. Instead, it helps participants identify the wickedness within a changing system and “dance with it” through a continuing spiral of listening, interpretation, dialogue, learning, capability development, contribution and renewed engagement with reality. This spiral treats systemic management as a lifelong relational practice rather than a linear journey towards a final solution. The keynote argues that responsible systemic management in the AI era requires not only greater computational intelligence but also deeper mindfulness, plural awareness and the humility to continue listening as reality changes.

Systemic Management and AI Governance: Towards an Adaptive Governance Architecture



Despina Kefalloniti

Delivery & AI Governance, Digital Transformation Advisor (Self-Employed)

CSAP | Independent Consultant

Despina Kefalloniti brings more than twenty years of experience in advisory, enterprise transformation and regulated environments, with a strong focus on governance, quality and delivery.

She has built PMOs and led quality and delivery governance for large-scale enterprise and EU programmes, co-founded a Project Management Centre of Excellence, and designed governance and GDPR compliance frameworks. She also served for six years as Vice President of the PMI Greek Chapter.

Today, Despina applies that experience to one of the defining challenges facing organisations: how to govern artificial intelligence effectively and responsibly.

Her approach combines AI governance with systemic management, viewing organisations as interconnected systems where technology, people, processes and decisions continuously influence one another. She supports organisations in strengthening project and AI governance, enabling responsible AI adoption, and developing practical operating models.

Despina is an ISO/IEC 42001 Provisional Implementer and holds PMP, PMI-ACP and ITIL certifications.

Systemic Management and AI Governance: Towards an Adaptive Governance Architecture

Artificial Intelligence has altered how organisations create value, make decisions and distribute responsibility, challenging assumptions embedded in established governance practices. The resulting management challenge lies not in a shortage of governance frameworks but in the need for an integrative management logic capable of governing AI as a complex, dynamic sociotechnical system. Drawing on Ackoff's treatment of messes and sub-optimisation, Trist and Bamforth's sociotechnical systems theory, Beer's Viable System Model, Ashby's Law of Requisite Variety and double-loop learning, Systemic AI Governance is proposed as an organisational architecture connecting these principles to AI management.

Conventional governance, AI-specific governance and Systemic AI Governance are distinguished as progressively broader levels of oversight. AI's opacity, autonomy, probabilistic behaviour, scale, data dependency and external dependencies challenge assumptions common to conventional governance and assurance practices. AI also operates within a sociotechnical system shaped by data, human-AI interaction, stakeholder dynamics and supply-chain relationships that extend beyond the organisation's legal boundary.

The architecture frames governance through boundary, purpose, stakeholder perspectives and variety and maps viable oversight functions through the Viable System Model. Governance mechanisms are interconnected so that outputs become inputs to others. DCSYM represents these structural relationships while System Dynamics models feedback, delays and evolving risk.

Audit is reframed as systemic assurance and organisational learning rather than periodic verification while the governance system itself becomes subject to monitoring and redesign through mechanism-effectiveness review and requisite-variety assessment. This reflexivity extends to the management cycle: a systemic extension of Plan-Do-Check-Act introduces diagnosis before planning with re-diagnosis triggered when monitoring, incidents or environmental change challenge existing assumptions; a Diagnose-Plan-Do-Check-Act-Re-diagnose logic that keeps governance aligned with a changing environment.

ISO/IEC 42001, the EU AI Act and the NIST AI RMF operate as complementary instruments within this architecture rather than as standalone alternatives.

Systemic AI Governance is further linked to six mutually reinforcing organisational capabilities:

- Trust
- safer innovation
- organisational learning
- decision quality
- strategic alignment and
- regulatory resilience.

Together they form a reinforcing capability loop through which governance can evolve from a compliance-oriented activity into an adaptive organisational capability.

AI Governance should ultimately be designed as the governance of a complex sociotechnical system rather than as a compliance overlay; as an adaptive organisational capability that senses change, learns from feedback and reconfigures itself as AI systems and their environments evolve.



Keynote Addresses

Systemic Multimethodology of High-Leverage Approach to Procurement and Category Management – Travel Retail Industry



Elena Georgiadi

Elena Georgiadi is a business professional with more than 30 years of experience, specializing in Procurement, Category and Commercial Management, with a long-standing career in the Travel Retail industry. She is a Certified Professional in Duty Free and Travel Retail by the DFWC Academy. Over the past ten years, she has served as Secretary of the Hellenic Travel Trade Confederation, contributing to the development of relationships and collaborations with organizations and suppliers, as well as to the representation and advancement of the Travel Retail sector’s interests across Europe through the European Travel Retail Confederation (ETRC, Brussels). Currently, Elena works in the watch industry as a Sourcing & Operations Manager, coordinating production lines, international sourcing, and the introduction and distribution of products and new designs in the Greek market. She is a student of the CSAP Mastering Program in Systemic Management & AI, having attended both the Digital Transformation in the AI Era and Project Management & AI tracks. She has also received training from the Institute for 21st Century Agoras in Structured Dialogic Design (SDD) in Cyprus, qualifying as a facilitator. Her Certification Project focuses on the Travel Retail sector, bringing together her extensive professional experience with Systems Thinking and its application to complex business challenges.

Systemic Multimethodology of High-Leverage Approach to Procurement and Category Management – Travel Retail Industry

This study applies the DYSODEDD multi methodology to the travel retail industry, aiming to identify, analyze, and prioritize the leverage points that determine the performance of project range (assortment) management.

Through the structural mapping of a typical travel retail operator (DCSYM) and that convergence of DYSODEDD with its constituent methodologies, eight leverage points were identified and organized into three causal loop diagrams (CLD A, B and Γ).

The first six concern processes and relationships within the direct control of category management: replenishment policy, OTB (Open To Buy) governance, demand visibility, range optimization, point of sales communication, and the procurement-operations interface. The last two lie at the boundaries of the system. Suppliers talk allocation policy, and the terms of the concession contract with the airport or port authority, well the operator's influence exists but is not decisive.

The finding on CLD Γ was quantitatively confirmed through a Stock & Flow simulation on Vensim. A specific tipping point was identified in replenishment intensity, beyond which the system transitions from controlled decline, into oscillation. The simulation also revealed that increasing the available shelf space (Linear Shelf Meters) functions as a temporary relief rather than a solution, since it's availability ultimately depends on an external leverage point outside the operator's direct control.

Based on the findings, specific transformation proposals are formulated, differentiated according to the degree of control: direct interventions for the in-system leverage points, and negotiation strategies, grounded in argumentation, strengths and BATNA, for the boundary leverage points.

The study concludes that the multimethodology and the leverage points do not make the structures or processes themselves healthier, but rather the relationships upon which those structures and processes rest.