PROGRAMME BOOK

2007 KARABÜK ÜNİVERSİTESİ

FLSF 2024

2nd FUTURES LITERACY AND STRATEGIC FORESIGHT CONFERENCE

OCTOBER 7-8, 2024

Abstract Registration Deadline

September 5, 2024

- Agile and Resilient Management
- Sustainable Management
- The Role of Creativity in Management
- The Use of Artificial Intelligence in Corporate Management
- Futures Literacy in Corporate Management

2007 KARABÜK ÜNİVERSİTESİ

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FLSF 2024 – 2nd FUTURES LITERACY AND STRATEGIC FORESIGT CONFERENCE

Agenda & Abstracts

October 7, 2024 – Futures Literacy Laboratory (Lead Facilitator: Dr. Riel Miller)
(Venue: Karabük University Central Library's Exhibition Hall)

10:00 – 10:15	***Welcome**, the purpose and brief introduction of the event.*
10:15 – 12:00 Phase 1 Revealing imagined futures: tacit to explicit	**Phase 1a: Probable Futures** Participants work in small break-out groups to engage in a process of collective intelligence knowledge creation around probable futures. **Phase 1b: Desirable Futures** Participants work in small break-out groups to engage in a process of collective intelligence knowledge creation around desirable futures. **Phase 1c: Plenary Session** Participants report back on the group discussions.
12:00 – 12:30	**Phase 2a: Presentation of the Reframing Scenario** Participants are provided with a description of a discontinuous future that takes a non-probable, non-desirable approach to imagining tomorrow.
12:30 – 14:00	*Lunch*
14:00 – 15:30	**Phase 2b: Describing Life in the Reframed Scenario** Participants work in small break-out groups to describe life in the reframed scenario. **Phase 2c: Plenary Session** Participants report back on the group discussion.
15:30 – 16:30	**Phase 3a: Rethinking the Present** Participants work in small break out groups to explore the ways in which imagining different kinds of future changes perceptions of the present. **Phase 3b: Plenary Session**
16:30 – 17:15	**Review of the Theory of Anticipatory Systems and Processes** **Review of the Futures Literacy Laboratory Design Principles**
17:15 – 17:45	**Next steps**

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October 8, 2024 – Seminars
(Venue: 15 Temmuz Şehitler Conference Hall)

10:00 – 10:30	**Welcome Address**
	Welcome Speech ***Prof. Dr. Elif Çepni*** *(Dean, Vice Rector of Karabük University – UNESCO Chair on Anticipation Studies, Futures Literacy and Strategic Foresight)* ***Prof. Dr. Fatih Kırışık*** *(Rector of Karabük University)* ***Mustafa Yavuz*** *(Governor of the Province of Karabük, Türkiye) (to be confirmed)*
10:30 – 12:00	**Session I - Keynote Speaker(s)**
10:30 – 11:00	***Dr. Riel Miller*** *(Former Head of Futures Literacy of UNESCO)* ***Title of the presentation:*** Arrogance and Futility: What are the Costs of Futures Illiteracy?
11:00 – 11:30	***Prof. Dr. Piero Dominici*** *(Official Delegate to UNESCO, Fellow of the World Academy of Art & Science (WAAS), University of Perugia, Scientific Director of CHAOS)* ***Title of the presentation:*** Managing Complexity? An epistemological challenge and … a contradiction in terms.
11:30 – 12:00	**Session I - Presentation(s)**
11:30 – 12:00	**Ekin Karabulut & Gül Beyza Kocamış** *(Türk Havacılık ve Uzay Sanayii, The Turkish Aerospace)* ***Title of the presentation:*** Technology Foresight and Scenario Analysis at Turkish Aerospace (TA): A Practical Case Study
12:00 – 13:45	*Lunch*
13:45 – 15:15	**Session II - Presentation(s)**
13:45 – 14:15	**Prof. Dr. Elif Çepni** *(Dean, Vice Rector of Karabük University – UNESCO Chair on Anticipation Studies, Futures Literacy and Strategic Foresight)* ***Title of the presentation:*** Complex Systems Management and the Role of Futures Literacy in Healthy, Long Lasting Corporate Management

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14:15 – 14:45	**Yuri Calleo** *(PhD Student, University College Dublin, Ireland)* **Title of the presentation:** A robust coefficient for expertise quantification in futures research using web scraping and weighting methods
14:45 – 15:15	**Dr. Oya Önalan** *(Karabük University)* ***Title of the presentation:*** The Role of Organizational Creativity in Management
15:15 – 15:30	*Coffee Break*
15:30 – 16:00	**Session II - Keynote Speaker(s)**
15:30 – 16:00	***Garry Jacobs*** *(President and CEO of the World Academy of Art and Science (WAAS))* ***Title of the presentation:*** Overcoming the time wrap in education: Toward a transdisciplinary AI-based delivery system to augment foresight into the future
16:00 – 16:30	**Session III - Presentation(s)**
16:00 – 16:30	**Asst. Prof. Dr. Andrijana Bojadzievska - Danevska** *(Faculty of Economics and Administrative Sciences, International Balkan University)* ***Title of the presentation:*** Futures Literacy vs. Scenario Thinking: Complementary or Distinctive Capabilities in Corporate Strategic Planning
16:30 – 17:00	***Evaluation (Venue: 15 Temmuz Şehitler Conference Hall)***

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Abstracts

Name of the speaker: **Dr. Riel Miller**

Author(s): Riel Miller

Title of the presentation: Arrogance and Futility: What are the Costs of Futures Illiteracy?

Abstract: What if I told you I could fly or jump over a tall building? You might say I've watched too many Superman movies or I've simply lost my senses. Or, what would you think if I claimed another equally impossible power – that today I know the exact future of my children, or my friendships, or my perception of myself when I will be 90 years old (in 23 years). One way to describe claims of this kind is that they are delusional or arrogant. But there is a flip side to such expectations – disappointment, resentment, anger, even despair. If I claim powers I do not have what are the consequences? Look at the Pact for the Future that emerged from the recent Summit for the Future at the United Nations in New York. It reads like they think they are 'supermen' – able to do things that they clearly cannot and never have been able to do. If we try to understand today's widespread anxiety and despair can we grasp its global presence without recognizing that the floodgates of failure and fear are opened by the expectations of certainty and power that are just not part of a universe that is a constant fount of difference, novelty, indeterminism, unknowability. Systematically under-nourished, our imagination betrays us. The cost of futures illiteracy is the damage caused by humanity's vain efforts to conquer the world and by extension each other. Bent on empire, immortality, continuity – the colonization of each other and the future – we deny what we know about our own imagination, pretending to be what we are not. Time to cultivate the innate capacity to imagine for different reasons, using different methods, in different contexts. Time to become futures literate.

Name of the speaker: **Prof. Dr. Piero Dominici**

Author(s): Prof. Dr. Piero Dominici

Title of the presentation: Managing Complexity? An epistemological challenge and … a contradiction in terms.

Abstract: The purpose of my speech is to enhance the capacity for recognizing, comprehending and learning how to inhabit complexity, in particular social complexity, on the part of both experts and laymen, by describing the unique characteristics of complex systems, and above all by clarifying the crucial differences between complex and complicated systems, so often confused even among prominent scientists and researchers. Equally important is the purpose of changing the trajectory of those experts, educators, economists and political leaders who persist in the erroneous conviction that in the near future it will be possible to obtain a thorough understanding of virtually all phenomena, controlling and managing their complexity, and eliminating error, doubt and unpredictability from our societies and our lives.

I will analyze the illusions of social control and elimination of error and the vision of an ordered, regular society occasionally interrupted by "black swans": a vision that doesn't consider that emergency, error, uncertainty and unpredictability are intrinsic to all complex adaptive systems, which follow an irreversible arrow of time.

Name of the speaker: **Ekin Karabulut and Gül Beyza Kocamış**

Author(s): Ekin Karabulut and Gül Beyza Kocamış

Title of the presentation: Technology Foresight and Scenario Analysis at Turkish Aerospace (TA): A Practical Case Study

Abstract: This study presents the foresight and scenario analysis activities conducted by the Critical Technologies Department of the Turkish Aerospace (TA). The activities are classified into three primary areas: internal foresight applications and community-building efforts, academic research in technology foresight, and collaborative foresight projects with the Secretariat of Defense Industries (SSB).

Each category is exemplified by at least one practical case. These include the "Future Air Platforms Workshop," which demonstrates TA's internal foresight efforts, and the "Technology Foresight Knowledge Hub," a digital platform that enables the virtual dissemination of foresight-related information within the company. Additionally, the "Futures Thinking and Technology Foresight" course, introduced at universities, alongside related workshops, demonstrates academic collaboration in this field. The partnership with SSB is further emphasized through the "Technologies Shaping the Future Operational Environment" future scenario competition and workshop, a project designed to explore and assess emerging defense technologies.

This presentation underscores the critical importance of cultivating future literacy among employees in an aerospace company and systematically integrating foresight methodologies within the organization. Moreover, it highlights the significance of fostering this literacy for university students who will soon be shaping the future. It highlights the pivotal role that the design and application of foresight methods play in shaping the future of aerospace technologies, ensuring that companies remain agile and forward-thinking in an increasingly dynamic technological landscape.

Keywords: Technology Foresight, Scenario Analysis, Futures Thinking, Foresight Methods, Aerospace Technologies

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Name of the speaker: **Prof. Dr. Elif Çepni**

Author(s): Prof. Dr. Elif Çepni

Title of the presentation: Complex Systems Management and the Role of Futures Literacy in Healthy, Long Lasting Corporate Management

Abstract: Institutions of today are living in interconnected and interdependent world. People, companies and countries live in interconnected networks like never before. Different technical terms are used to define today's complex world. Post normal times, VUCA World (Volatile, Uncertain, Complex, Ambiguous). Complexity as a theme seems to be popping everywhere. As interdependency increases, we must learn to learn in a new way. Many systems exhibit complex behaviours such as financial markets. The behaviours of complex systems are very difficult to model and predict.

Their chaotic behaviour, self-organizing patterns, their fat tail behaviours, adaptive interactions make their modelling almost impossible. Post-normal science proposes that, when times are complex and decision stakes are high, a wider dialogue with key stakeholders is critical. Leaving decisions to a talented few could be dangerous. And traditional, charismatic leadership can kill creativity. The science of complex systems combines physics, biology, and the social sciences in a unique blend that is a new discipline (Thurner, Hanel and Klimek, 2018).

Instead of using certainty, value neutrality and stability criteria of Newtonian paradigm for complex, nonlinear relations and discontinuities, there is a necessity to develop alternative ways of preparing ourselves, our companies and governments in a better way for the unknown future.
As it is mentioned in Obolensky 2014 "What are the areas of main change that you consider significant in the last 100–150 years?" is a vital question and all companies, all entrepreneurs need to do serious work on this issue.

This article aims to show the necessity and importance of measuring the futures literacy level of institutions and entrepreneurs to deal with the complex adaptive systems.

Keywords: Complex Adaptive Systems, Futures Literacy, Corporate Management

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Name of the speaker: **Yuri Calleo**

Author(s): Yuri Calleo, Francesco Pilla, Simone Di Zio

Title of the presentation: A robust coefficient for expertise quantification in futures research using web scraping and weighting methods

Abstract: In Futures Studies, decision-making is a complex process that requires evaluating a range of interconnected variables. These variables must be continuously analyzed considering objectives, available information, resources, alternatives, risks, and potential impacts to arrive at an optimal decision. A key element in this process is the use of diverse information sources, particularly expert input. Experts play a crucial role by providing specialized knowledge that can significantly influence the outcomes of decisions. Their selection is typically based on their depth of expertise, which is defined by their advanced skills and knowledge in specific fields. However, one of the main challenges in expert selection is measuring the level of expertise, as current methods often rely on facilitators' assessments or self-reporting, both of which are prone to cognitive biases. This study introduces an innovative approach to objectively quantify expertise by using web scraping techniques and developing a coefficient called the Expertise Reliability Coefficient (ERC). The ERC is designed to reduce the subjectivity and biases commonly associated with traditional self-assessment methods. It incorporates bibliometric indicators such as the h-index, citation counts, and the frequency of relevant publications, reports, and policy contributions to create a standardized measure of expertise. This new approach enhances the reliability of expert selection and evaluation in decision-making panels. By applying statistical tools such as the Mann-Whitney U test and Kendall's tau, the research reveals that experts often overestimate their competencies, with less experienced individuals exhibiting an even greater tendency toward overestimation compared to their more qualified peers. This confirms the presence of cognitive biases in traditional self-assessment methods. The methodological

innovation presented in this study provides a more reliable tool for improving the accuracy and credibility of consensus-building in participatory decision-making, particularly in futures studies, where expert input is crucial.

Keywords: Expertise, Expertise Quantification, Web Scraping, Decision-Making.

Name of the speaker: **Dr. Oya Önalan**

Author(s): Dr. Oya Önalan

Title of the presentation: The Role of Organizational Creativity in Management

Abstract: Businesses operate in a highly unstable and unpredictable world with fierce domestic and international rivalry. Organizations must fully utilize the intrinsic creative potential of their workforce to thrive, adapt, and acquire a competitive edge. This is because workers' innovative and creative ideas can serve as the foundation for organizational innovation, change, and competitiveness (Ambile,1988, Woodman et al., 1993).

A set of abilities unique to creativity, or creativity-relevant talents, are necessary for creative performance (Amabile, 1988). This is because creativity necessitates a cognitive-perceptual style that includes the gathering and application of a variety of information, an accurate recall, the application of useful heuristics, and the propensity and capacity to concentrate deeply for extended periods of time (Amabile, 1988). As a result, having the capacity for creative thought—such as the capacity to discover alternatives, think outside the box, and suspend judgment—is a talent that is relevant to creativity.

Innovation implementation is the process of putting new ideas into practice, whereas creativity is the process of developing new ideas. For an organization to become more innovative, it is critical that new ideas and creative approaches are continuously considered. Many businesses have adopted a team culture and flat management structure to support this kind of operation. It is assumed that assigning tasks to highly autonomous groups (self-managed teams) will significantly boost member motivation. Self-managed teams are allowed a great deal of flexibility in how the work and the process of group interaction are organized. Rather than depending on a superior's guidance, the team is expected to exercise its own leadership (West, 2003).

A managerial grid that includes creativity management focuses on influencing an organization's internal and external environments by examining divergent and unconventional approaches to stimulating creative processes.

Due to intense competition, a volatile economy, and a faster rate of change, creativity is becoming increasingly valuable for commercial enterprises. Many of the conventional business concepts are no longer viable in today's environment. The high-tech sector must quickly adapt to changing client needs and aggressively manage changes in the external environment. Organizations must be able to foresee, respond to, and take advantage of rapid changes rather than depending solely on long-term plans. Drucker predicted that the future civilization would be a knowledge society. The value of the high-tech industry in the information economy lies not in its physical assets, but rather in its intellectual property.

Research studies (Amabile & Conti, 1999; Madjar et al., 2002; Oldham & Cummings, 1996; Stahl & Koser, 1978; Zhou, 2003) have consistently found that in the laboratory and in the field, a supportive and stimulating work environment is positively associated with creativity (Oldham, 2003). On the other hand, non-supportive or controlling work environments are negatively associated with creativity.

In recent years, managerial interests have placed a premium on the concept of "organizational creativity" due to these constraints. To enhance theoretical knowledge of the nature of organizational creativity's antecedents, this paper reviews the antecedents of organizational creativity as they have been presented in articles.

Keywords: Creativity, Innovation, Creative Thinking, Organizational Creativity.

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Name of the speaker: **Asst. Prof. Dr. Andrijana Bojadzievska - Danevska**

Author(s): Asst. Prof. Dr. Andrijana Bojadzievska - Danevska

Title of the presentation: Futures Literacy vs. Scenario Thinking: Complementary or Distinctive Capabilities in Corporate Strategic Planning

Abstract: The dynamic and complex changes in the company's environment impose new "rules of the game" in the market. The turbulence in the new economy, asks for establishing a balance between stability in the decision-making process and instability in continuous adaptation to it. In this area of strategic foresight, the companies need to use sophisticated methods for environmental analysis, planning and navigating for the future. Here, two powerful concepts emerge: Futures Literacy and Scenario Thinking. Each might play a crucial role in how individuals and companies prepare for the complexities of the future, but they do so in distinct yet complementary ways. They are both valuable tools for navigating the future, but they serve different purposes and have distinct approaches. The question is whether they are considered as distinctive or complementary capabilities in corporate strategic planning. Scenario thinking at the corporate level can be regarded as a process and a position. In the first instance scenario thinking by using the assumptions and data from the various methods of forecasting and analyzing establishes narratives for

different plausible futures, while in the second it presents an attitude towards the world, i.e. the way of thinking and managing changes, and exploring the future (Scearce, D., Fulton, K., 2004, p.8). On the other hand, futures literacy, defined by UNESCO, is more than just a skill; it's a mindset that fosters a deeper comprehension of how the future influences the present. Participants learn to anticipate possibilities, encouraging creativity and innovation as they explore various potential futures.

Scenario thinking offers a more structured approach, similar to a carefully plotted map guiding a journey through uncertain terrain. This method involves the development of detailed scenarios in which strategies are tested against potential futures. It operates within the strategic planning process, answering the main question: "What if?" By systematically identifying key drivers and crafting scenarios, companies explore different paths and prepare a strategy that is robust to a variety of outcomes. Futures Literacy, on the other hand, serves as a broader framework, focuses on developing a general capability to think about the future and might guide companies in developing a long-term vision. It poses essential questions like "Why not?" and "What for?" (UNESCO, n.d.) fostering an environment where diverse perspectives come together to explore narratives of change.

Furthermore, the purpose of developing futures literacy capability is to prepare, plan, and interact with the complexity and novelty of our societies. (UNESCO, n.d.), while the scenario thinking function is limited to developing scenarios for the uncertain future, which are used as wind tunnels for strategy testing.

Even though futures literacy and scenario thinking are distinctive in terms of scope, purpose, posed questions, areas of application, and outputs, they intersect at the core of future studies. Future studies, which are often related to Probabilistic Modified Trends, i.e. Cross Impact Analysis, present an interdisciplinary field that involves methods like scenario planning, trend analysis, and forecasting to understand and prepare for potential future developments. In summary, scenario thinking as a process, and attitude towards the future, and future literacy as a skill complement each other, i.e. form a comprehensive toolkit for corporate leaders and thinkers in today's complex world, empowering individuals and companies alike to not only envision a wide range of futures but to actively shape them.

Keywords: Futures Literacy, scenario thinking, scenario planning, strategic planning

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