

DAUGAVPILS UNIVERSITĀTE
HUMANITĀRO UN SOCIĀLO ZINĀTŅU INSTITŪTS

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DAUGAVPILS UNIVERSITY
THE INSTITUTE OF HUMANITIES AND SOCIAL SCIENCES

21. starptautiskās zinātniskās konferences

SOCIĀLĀS ZINĀTNES
REĢIONĀLAJAI ATTĪSTĪBAI 2026

TĒZES

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*ABSTRACTS of
the 21st International Academic Conference*

SOCIAL SCIENCES FOR
REGIONAL DEVELOPMENT 2026



DAUGAVPILS UNIVERSITĀTES
AKADĒMISKAIS APGĀDS „SAULE”

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„Sociālās zinātnes reģionālajai attīstībai 2026”
Konference norisināsies hibrīda formātā – klātienē un attālināti.

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Jurijs Baltgailis (LATVIA)

KEY DIRECTIONS FOR DEVELOPING AN INCLUSIVE ECONOMY BASED ON DIGITAL CURRENCY

ECB Executive Board member Piero Cipollone has publicly stated that the rising popularity of stablecoins could lead to an outflow of retail deposits from European banks, as well as a loss of fee income and payment data. This weakens banks' lending capacity. The ECB is promoting the digital euro (with a projected launch in 2029) as an alternative to private stablecoins. European clients are free to use cryptocurrency for peer-to-peer (P2P/C2C) settlements via self-custody solutions, as well as for business-to-business (B2B) transactions through regulated channels. The CeFi sector is fully regulated, whereas DeFi regulation depends on the degree of decentralization. By design, CBDCs (such as the digital euro) virtually eliminate opaque "grey" market transactions. Regarding US-based stablecoins: USDC can be used legally and transparently, whereas the use of USDT is limited and occurs primarily through unregulated channels. However, it is important to remember that the regulatory landscape continues to evolve. The rapid growth of the digital financial market is noteworthy, driven by its ability to lower transaction costs and strengthen competitive positions—particularly by reducing the tax burden associated with "black" and "grey" market operations and offering ways to avoid the consequences of bureaucratic pressure. The DeFi sphere is not so much about "cross-border money transfers" in the traditional sense (payments for goods, services, or wages). Although stablecoin volumes in DeFi run into the trillions of dollars, these figures reflect trading, arbitrage, liquidity, and collateralization rather than payments between individuals (C2C) or businesses (B2B). Traditional channels (CeFi and banks) handle transfers ranging from tens to hundreds of trillions of dollars annually. Alternative channels (stablecoins in B2B and C2C) account for hundreds of billions of dollars per year. Stablecoins are already making an impact in niche corridors—particularly in emerging markets and flows originating from Asia—and are showing rapid growth (B2B transaction volume rose 733% year-over-year); nevertheless, they still represent a negligible fraction of the transaction volumes in major national currencies flowing through traditional infrastructure. In emerging markets, stablecoins often substitute for physical dollars, bank accounts, and traditional remittance systems. USDT is particularly strong in the retail and P2P sectors of developing nations, whereas USDC holds a more significant position in regulated

institutional and Western financial flows. Actual payment volumes remain small compared to global figures but are growing rapidly (especially in the B2B segment). USDT and USDC continue to dominate most emerging markets, while local tokens play a niche role (facilitating domestic payments without conversion into dollars). Liquidity for most national stablecoins in emerging markets remains low compared to the dollar-backed giants. The world of financial inclusion has split into zones of influence. China possesses its own closed ecosystem centered on a central bank digital currency (CBDC). The US, meanwhile, has a crypto-dollar—comprising stablecoins and Bitcoin as a strategic asset—that is open to innovation. Europe operates under a strict regulatory framework designed to safeguard "digital sovereignty." Developing nations will likely either follow China's lead or emulate its experience. China and India are fostering inclusive economies through state control over digital currencies and the development of robust digital infrastructure, without relying on private cryptocurrencies. They have banned (or severely restricted) decentralized private digital currencies (cryptocurrencies) to preserve monetary sovereignty and combat money laundering, speculation, and capital flight, promoting central bank digital currencies (CBDCs) and fintech ecosystems instead. China has completely banned private cryptocurrency transactions, mining, and related services.

Key words: financial inclusion, remittance systems, competitive positions, local tokens, fully regulated.

Alina Betlej (POLAND)

DIGITAL EXCLUSION IN THE AGE OF ARTIFICIAL INTELLIGENCE: NEW FORMS OF SOCIAL INEQUALITY

The presentation focuses on the changing nature of digital exclusion in the context of the rapid development and increasing social significance of artificial intelligence. Digital exclusion can no longer be understood solely in terms of access to the Internet, digital devices, or basic technological infrastructure. Increasingly, inequalities are also shaped by differences in digital competences, AI literacy, the ability to use artificial intelligence effectively, and the capacity to recognize both the opportunities and risks associated with AI-based tools. Particular attention is paid to the emergence of new forms of inequality between individuals and social groups that are able to use AI as a resource and those who remain excluded from its benefits. Such differences may affect access to education, employment opportunities, information, public services, and participation in social life. In this context, AI literacy becomes an important dimension of digital inclusion, as the ability to understand, critically assess, and

effectively use artificial intelligence may increasingly influence an individual's position in society. The presentation also considers whether the development of artificial intelligence may contribute to reducing existing inequalities by improving access to information, education, communication, and support services. At the same time, attention is drawn to the possibility that AI may reproduce or deepen existing social and regional disparities, especially when access to relevant competences, infrastructure, and institutional support remains uneven. The central question addressed in the presentation is therefore whether artificial intelligence can become a tool of social inclusion or whether it may contribute to the emergence of a new layer of digital exclusion. The analysis highlights the need to understand digital inequality as a dynamic and multidimensional social process that changes together with technological development.

Givi Bedianashvili (GEORGIA)

SUSTAINABLE COMPETITIVENESS OF SMALL COUNTRIES UNDER GLOBAL UNCERTAINTY

Rising geopolitical tensions, geoeconomic fragmentation, disruptions to global value chains, technological shifts, and energy and climate risks are significantly altering the conditions under which national competitiveness is shaped. These processes are particularly relevant for small countries, which are characterized by highly open economies, limited domestic markets and resources, and a high degree of dependence on foreign trade, investment, technology, and international financial flows. Under these conditions, the traditional understanding of competitiveness – based primarily on productivity, efficiency, and comparative advantages – needs to be complemented by the concept of resilience. The aim of this study is to develop a conceptual framework for analyzing the sustainable competitiveness of small countries amidst global uncertainty and to identify the key factors that enable a national economy to maintain and transform its competitive advantages in the face of external shocks. The study employs a systemic and institutional approach, integrating concepts of national competitiveness, economic resilience, adaptability, and structural transformation. Sustainable competitiveness is defined as an economy's ability to simultaneously ensure productivity and long-term development, withstand external shocks, adapt to changing global conditions, and generate new sources of competitive advantage. The study highlights the primary determinants of this competitiveness: institutional quality; human capital; innovation and digital potential; macroeconomic stability; economic diversification; integration into global production networks; and the state's capacity to implement adaptive

economic policies. It argues that for small countries, competitiveness is determined not so much by the scale of their resource base as by the quality of their institutions, the flexibility of their economic structure, and their capacity for strategic adaptation. The proposed approach enables the integration of the concepts of competitiveness and resilience into a unified analytical framework and can serve as a theoretical basis for the comparative study of small countries and the development of policies to strengthen their long-term competitive positions amidst rising global uncertainty.

Keywords: sustainable competitiveness, small countries, global uncertainty, economic resilience, adaptability, geoeconomic fragmentation.

Ryšardas Burda (LITHUANIA)

LEGAL ASPECTS OF HYBRID WARFARE

The concept of war is not clearly defined in international law. However, two meanings of war are commonly employed: a formal declaration of war and a clash between conventional armies. A formal declaration of war is possible under the provisions of the 1907 Hague Convention. Yet, there are also indirect ways to signal a state of war. Such instances include the severance of diplomatic relations, the denunciation of bilateral treaties, and the imposition of specific legal regimes within a country (e.g., the declaration of martial law, a state of emergency, or mobilization, as well as restrictions on civil rights and freedoms). Alongside the concept of war, the concept of "armed conflict" is also used. Unlike the definition of war, the concept of armed conflict is much broader; it encompasses not only war itself but also other situations characterized by armed confrontation—whether between states or between different groups (or organizations) within a single state. The armed conflict between Ukraine and Russia serves as a prime example of this; neither party has officially designated the conflict as a war or severed diplomatic relations. Although statements regarding a war in Ukraine do appear in the public sphere, such references are typically made in the context of the European Union's involvement and support for Ukraine. The aim of this article is to examine a legal situation characterized by the absence of both a formal declaration of war—as provided for under international law—and an armed conflict as defined in Article 2 of the 1949 Geneva Conventions. This is the situation referred to by experts in warfare and international law as "hybrid war." There is no established legal framework for hybrid warfare. It is frequently described as a politicized concept, and the boundaries of its legal definition remain unsettled. The means and methods of hybrid warfare are dynamic, evolving in both nature and content over time. Ordinary, everyday socio-economic phenomena—which were not exploited

even during conventional warfare—often serve as instruments of hybrid warfare. Such conflicts engage not only conventional forces, paramilitary units, and private armed groups but also civilian state structures and even civilians. This publication seeks to examine the legal issues arising from the involvement of these various means and actors in the conduct of hybrid warfare.

Sergejs Hilkevics, Sandra Jekabsone (LATVIA)

MACROECONOMIC EQUILIBRIUM AND THE GROWTH OF LATVIAN ECONOMY

Macroeconomic equilibrium and economic growth are commonly analyzed by different classes of models. Short-run models explain the joint determination of output, interest rates, employment, wages and prices around a given productive capacity, whereas growth models explain how capital, labor and technology change productive capacity over time. This paper develops a transparent sequential framework that connects these two perspectives. An IS–LM goods-and-money-market equilibrium is extended to an AS–AD–WS–PS three-market equilibrium with Cobb–Douglas production. For every period t , the model defines a locally calibrated equilibrium state E_t . The sequence $\{E_t\}$ forms a moving macroeconomic equilibrium path. Within each period, negative feedback among output, employment, unemployment, wages, prices, real money balances, interest rates and investment drives convergence toward the current local equilibrium. Between periods, changes in technology, capital and labor shift the equilibrium itself. A calculated trajectory of theoretically smooth growth is constructed as $Y_t^g = A_t^g (K_t^g)^\alpha (N_t^g)^\beta$, while $q_t = \ln Y_t - \ln Y_t^g$ measures actual deviations from that trajectory. Unlike purely statistical trend–cycle decomposition, the proposed path has an explicit production and market-equilibrium interpretation. An illustrative application to Latvia for 2004–2025 identifies a smooth-growth rate of approximately 1.59% per year, pre-2008 overheating, the post-crisis contraction, the pandemic shock and near coincidence of actual and calculated output in 2025. The contribution is not a new individual equilibrium or growth equation, but a sequential and computationally accessible architecture that interprets growth as movement of equilibrium and fluctuations as deviations around that movement.

Key words: macroeconomic equilibrium, economic growth, Latvian economy.

**Dzintra Iliško, Alina Romanovska,
Ludmila Aleksejeva (LATVIA)**

ARTS-BASED LEARNING AS A CATALYST FOR INCLUSION POLICY AND PRACTICE: A CASE STUDY

Traditional education does not meet the requirements of the contemporary reality in providing truly inclusive educational for learners. 21st-century pedagogy requires new approaches to teaching and learning. Teachers need to be prepared to work in an increasingly complex environment of immense cultural diversity. The idea that education can benefit from the arts and aesthetics, and that learning can take place in and through the arts, has been widely discussed (Eisner, 2002). Art-based education encompasses various art forms, including music, dance, drama, visual arts, and other media that help express oneself, build connections with others, and serve as a means of communicating content in diverse ways. There is a need for an arts-rich, interdisciplinary education in fostering creativity and inclusion. Therefore, arts-based education serves as a tool for fostering more inclusive and creative practice. The study presents analyses of an art-based educational mini-project led by artists, educators, teachers, and researchers from Latvia, carried out as part of the Horizon Europe project “The Cultural Literacies’ Value in Europe” (CLiViE). The method used in this study is semi-structured interviews with educators and artists engaged in art-based learning in informal educational settings, along with an analysis of learners’ drawings and artefacts. The study employs a qualitative research design, utilising an interpretive approach in a participatory case study. A qualitative research design provides an in-depth, complex understanding of arts-based education, as it entails multiple approaches to interpreting and understanding the world. It has been reported that arts-based approaches unleash creativity, foster greater inclusivity, and introduce new ways of viewing education, as they are emotionally charged and involve a hands-on process rather than imparting pure knowledge or theory. The study has some limitations, such as a small sample size and a case study methodology, which limit generalisation. Bearing this in mind, the study still highlights the challenges and benefits of integrating arts-based education into teaching.

Key words: inclusive education, creativity, arts-based pedagogy, participatory case study.

**Vera Komarova, Shupeng Zhao,
Inta Ostrovska (LATVIJA)**

“ĀTRĀS UZTICĒŠANĀS” PĀRVALDĪBA PAGaidu ORGANIZĀCIJĀS: KONCEPTUĀLS IETVARS

Globālās pagaidu organizācijas ir atkarīgas no ātrās uzticēšanās (swift trust), lai koordinētu kultūras ziņā daudzveidīgu dalībnieku sadarbību laika ierobežojumu, nenoteiktības un ierobežotas iepriekšējās savstarpējo attiecību pieredzes apstākļos. Tomēr sākotnēji pieņemtā uzticēšanās var kļūt ievainojama, ja komandas dalībniekiem ir nesavienojamas gaidas attiecībā uz leģitīmu autoritāti un piemērotiem reaģēšanas veidiem nenoteiktības situācijās. Šajā pētījumā tiek izstrādāts konceptuāls konfiguracionāls ietvars, kas skaidro, kā šādas atšķirības var radīt ātrās uzticēšanās ievainojamību un kā vadītāji var aizsargāt uzticēšanos dažādās kultūras konfigurācijās. Balstoties uz integratīvu literatūras apskatu, teorētisko sintēzi un konfiguracionāla ietvara izstrādi, pētījumā tiek ieviests kultūras gaidu atšķirību (cultural expectation divergence, CED) jēdziens, kas konceptuāli operacionalizēts, izmantojot varas distances atšķirības (power distance divergence, PDD) un izvairīšanās no nenoteiktības atšķirības (uncertainty avoidance divergence, UAD). Pētījumā tiek piedāvāts interpretatīvs mehānisms, saskaņā ar kuru latentās atšķirības kļūst nozīmīgas, izraisot gaidu nesakrītību, uztvertus gaidu pārkāpumus, nelabvēlīgu rīcības cēloņu piedēvēšanu un uzvedības paredzamības samazināšanos. Rezultātā izstrādātā Ātrās uzticēšanās aizsardzības matrica (Swift Trust Safeguarding Matrix) izšķir deviņas teorētiskas konfigurācijas, kas veidojas, kombinējot zemu, vidēju un augstu PDD un UAD līmeni. Šīs konfigurācijas atspoguļo atšķirīgus iespējamus ievainojamības veidus un vadības prasības uzticēšanās aizsardzībai, nevis iepriekš noteiktus uzticēšanās rezultātus. Tiek piedāvāti četri savstarpēji papildinoši mehānismi: autoritātes strukturēšana (authority structuring, AS) precizē leģitīmu lēmumu pieņemšanas kārtību; nenoteiktības strukturēšana (uncertainty structuring, US) veido kopīgas gaidas attiecībā uz neskaidrības un pārmaiņu pārvaldību; gaidu interpretēšana (expectation translation, ET) padara netiešos kultūras pieņēmumus savstarpēji saprotamus; savukārt uzticēšanās atjaunošana (trust repair, TR) risina uztvertos gaidu pārkāpumus, kas jau ir mazinājuši uzvedības paredzamību. Izstrādātais ietvars nošķir preventīvu uzticēšanās aizsardzību no atjaunojošas iejaukšanās un izvirza konfiguracionālās atbilstības, nevis kultūras optimizācijas principu. Pētījums sniedz ieguldījumu ātrās uzticēšanās un starpkultūru vadības teorijas attīstībā, pārvirzot uzmanību no nacionālo kultūru atšķirībām uz kultūras gaidu atšķirībām komandas iekšienē un konkrētām konfigurācijām atbilstošiem uzticēšanās aizsardzības mehānismiem. Tā kā piedāvātais ietvars ir konceptuāls, tajā izstrādātajiem

mehānismiem un teorētiskajiem pieņēmumiem nepieciešama turpmāka empīriskā pārbaude.

Maryna Navalna (UKRAINE)

SOCIAL PROJECTS IN UKRAINE DURING THE PERIOD OF FULL-SCALE WAR OF 2022–2026

The social projects in Ukraine during the period of full-scale war involve comprehensive initiatives aimed at overcoming the humanitarian crisis, psychological rehabilitation, the integration of veterans, support for internally displaced persons, and the recovery of affected communities. This sector has become the foundation of national resilience, uniting the efforts of the state, business, and civil society. The charitable foundations and civil society organizations play a key role in rapid response. Some Ukrainian businesses have pivoted their activities and are funding military, social, and educational projects. Funding and expert support come from the governments of other countries, European Union agencies, and global donors. Some social initiatives in Ukraine are constantly adapting: at the start of the full-scale invasion, the focus was on emergency evacuation and humanitarian aid, but now priorities have shifted to integration, sustainable development, and rebuilding the resilience of Ukrainians. In this presentation, we will attempt to analyze various social projects and their evolution over the years of the full-scale Russia-Ukraine war.

Keywords: social projects, Russia-Ukraine war, social assistance, social initiatives.

Jānis Neimanis (LATVIJA)

NO SODĀMĪBAS LĪDZ PROFESIONĀLAJAI NEPIEMĒROTĪBAI: ABSOLŪTU PROFESIONĀLO AIZLIEGUMU KONSTITUCIONĀLĀS ROBEŽAS

Sabiedrības un likumdevēja sākotnējā reakcija uz risku, ko noteiktās profesijās var radīt agrāk sodīta persona, nereti ir kategoriska – liegt tai attiecīgo profesionālo darbību neatkarīgi no sodāmības dzēšanas, pagājušā laika un personas turpmākās dzīves. Šāds risinājums šķiet drošs, vienkārši piemērojams un īpaši pārliecinošs profesijās, kuru veikšana saistīta ar ievainojamām personām, būtisku sabiedrības uzticēšanos vai publiskās varas īstenošanu. Tomēr Satversmes tiesas, citu Eiropas valstu konstitucionālo tiesu un Eiropas Cilvēktiesību tiesas judikatūra atklāj absolūta aizlieguma konstitucionālo

problēmu: noziedzīga nodarījuma fakts tiek pārvērsts neatspēkojamā prezumpcijā par personas profesionālo nepiemērotību nākotnē. Absolūta aizlieguma noraidīšana rada nākamo, sarežģītāko jautājumu – kā profesionālo risku regulēt tā vietā. Tiesu judikatūra atklāj, ka izvērtējumā nozīme var būt nodarījuma nozīmei profesionālā ziņā, nodarījuma smagumam, profesijas raksturam, aizsargājamām interesēm, personas vecumam nodarījuma izdarīšanas laikā, pagājušajam laikam, turpmākajai uzvedībai, resocializācijai un sodāmības dzēšanai vai rehabilitācijai. Tomēr individualizācija tomēr nav konstitucionāls pašmērķis. Likumdevējam saglabājas rīcības brīvība izvēlēties terminētu, diferencētu vai noteiktos izņēmuma gadījumos arī absolūtu ierobežojumu, ja iespējams pamatot, ka saudzējošāks risinājums lēgītīmo mērķi nesasniegtu līdzvērtīgā kvalitātē.

**Valentyna Krykun, Svitlana Kucherenko,
Liudmyla Levaieva (UKRAINE)**

THE CIRCULAR ECONOMY AS A MODEL FOR THE TRANSFORMATION OF PRODUCTION AND CONSUMPTION

Abstract. This article provides a comprehensive examination of the conceptual and practical aspects of the global economy's inevitable transition from the traditional linear model to an innovative circular economy model. It clarifies in detail the nature of the outdated 'take – make – dispose' paradigm and scientifically substantiates its extreme inefficiency and ecological destructiveness against the backdrop of the rapid depletion of the global mineral and raw material base, the exponential accumulation of waste and the intensification of irreversible climate change. Based on contemporary research, the fundamental principles governing the functioning of a closed-loop economy – aimed at preserving added value and regenerating the biosphere – have been systematised. The paramount role of eco-design has been demonstrated, and the significance of strategies for reducing the use of primary resources (dematerialisation), multi-level reuse (including remanufacturing) and high-tech deep processing has been elucidated. An in-depth analysis is provided of the five basic business models of the circular economy: circular supply chains, resource recovery, product life-cycle extension, sharing platforms and the revolutionary 'product-as-a-service' concept. Their crucial role in minimising waste, ensuring decoupling (the separation of economic growth from resource consumption) and improving the resource efficiency of businesses is substantiated. To confirm the viability of the models, leading international practices were examined (the Kalundborg Eco-Industrial Park, Signify and Renault's circular projects), as well as leading domestic examples of the

implementation of industrial symbiosis and recycling (the MHP agricultural holding, the Interpipe metallurgical company, and the eco-start-up ReLeaf Paper). Consequently, the strategic importance of the circular economy for achieving the global Sustainable Development Goals has been demonstrated. Particular emphasis is placed on the fact that circular transformation is a critically necessary tool for enhancing the long-term competitiveness of domestic enterprises, overcoming the barriers posed by carbon regulation (CBAM) and ensuring the sustainable, innovative post-war reconstruction of Ukraine in strict accordance with the requirements of European integration and the European Green Deal.

Keywords: circular economy, linear model, eco-design, business models, sustainable development, resource efficiency, waste management, post-war reconstruction.

Murman Kvaratskhelia (GEORGIA)

KEY CHALLENGES TO GEORGIA'S ECONOMIC SECURITY

At the current stage, Georgia's economic security faces complex challenges. Despite sustained macroeconomic growth and record levels of foreign currency reserves in recent times, several key factors threaten sustainable development. These include:

1. External shocks and geopolitical instability.

This includes:

a) The impact of regional conflicts: ongoing conflicts involving Russia-Ukraine and the Middle East directly affect regional security and economic dynamics. Shifts in migration flow trends or a weakening of external demand (particularly in the services sector) have an immediate impact on the country's economic growth.

b) Economic dependence on asymmetric markets: the significant share of separate strategic sectors (exports, tourism, remittances) linked to specific large trading partners (including the Russian market) increases the country's vulnerability to politically motivated economic sanctions or restrictions.

2. Structural challenges and the quality of growth.

a) Concentration of Economic growth and consumption dependence: The process of growth is significantly conditioned by the inner consumption and precise sectors (information and communication, service). This is happening while the real sector (manufacturing, agriculture) is characterized by low productivity. Consequently increasing the economy's dependence on external factors.

b) Geographical and sectoral diversification of investments: shifts in the dynamics of traditional Western foreign direct investment (FDI) and the intensification of new flows from the East create a need to ensure a long-term sustainability and transparency in large-scale infrastructure projects.

3. Fiscal and monetary risks.

a) Inflationary pressure: Disruptions to global supply chains and fluctuations in oil prices keep inflationary risks constantly relevant for an import-dependent country.

b) Current account deficit: Despite recent improvements, the negative trade balance remains a structural issue, the offsetting of which depends largely on tourism and remittances.

4. Energy and logistics security.

a) Energy dependence: Despite the growth of local generation, dependence on imported energy resources (particularly natural gas) during the winter period remains a key issue regarding economic sovereignty.

b) Harnessing transit potential: The development of the "Middle Corridor" and Trans-Caspian transport routes requires rapid infrastructure and regulatory reforms to ensure the country maintains its competitiveness among regional logistics hubs.

Based on the aforementioned points, it can be concluded that while Georgia's infrastructure is developing, the pace is linear, whereas global demand and the geopolitical landscape are changing exponentially.

The corridor's main competitor is not merely other geographic routes, but the time itself. If infrastructure modernization is not completed in the near future, international carriers—despite the risks—will inevitably begin readapting to alternative routes (such as northern or southern maritime paths). This would further exacerbate the challenges that are so critical for Georgia in the current situation and conditions.

**Vladimirs Meņšikovs, Viktorija Šipilova,
Jurijs Baltgailis (LATVIA)**

EMERGING TRENDS IN DIGITAL FINANCE, SOCIETY, AND THE DEVELOPMENT OF ARTIFICIAL SOCIALITY

Advancements in digital finance are driven by innovation. Financial technology has currently transitioned into its fourth evolutionary phase, widely known as FinTech 4.0. This phase is defined by the emergence of disruptive technologies. The financial sector become more sophisticated and digitalized, driven by the new participants and technologies. A modern financial sector may be characterized by more customer-centered approaches and exclusion of human

intermediaries between clients and financial service providers. As a result, smart and decentralized technologies, new approaches to money management, and collaboration forms appear. Social acceptance is key to the success of any innovation. According to the technology acceptance theory, there are key factors, which determine interest and ability to use new technology – perceived usefulness, perceived ease of use, price value, trust, perceived security, social influence, habit, digital literacy, facilitating conditions, and hedonic motivation. Consideration of these factors reveals the potential for widespread acceptance of advanced digital finance products and services. Given the deepening technological nature of the financial sector, interpersonal relationships in the financial field are gradually being supplemented and replaced with interactions between humans and autonomous agents. This, in turn, provides a basis for discussions on development of artificial sociality, which is emerging and disputable theme. This research aims to identify features of advanced digital finance that may enhance the development of artificial sociality.

Keywords: society, financial sector, digital finance, disruptive technologies, artificial sociality.

**Jarosław Mioduszewski, Marian Oliński,
Renata Przygodzka (POLAND)**

CITIZEN ENERGY IN POLAND: BETWEEN INDIVIDUAL PROSUMPTION AND CITIZEN-LED COOPERATION

Citizen energy is increasingly recognised as an important component of the European energy transition because it enables households, local authorities, farmers and small businesses to participate directly in energy production, management and benefit sharing. Poland has experienced rapid growth in distributed renewable energy, particularly individual photovoltaic prosumerism. However, the development of collective and community-based models remains considerably slower. This raises the question of whether the expansion of distributed generation in Poland has produced genuine citizen energy or has primarily strengthened individual forms of prosumption. The paper examines the current state, institutional conditions and development prospects of citizen energy in Poland. It distinguishes between individual prosumerism and collective models based on shared ownership, participation in decision-making and the local distribution of economic and social benefits. The analysis covers individual, collective and virtual prosumers, energy cooperatives, energy clusters and citizen energy communities. It combines a review of European and Polish legislation with descriptive analysis of administrative and sectoral data and relevant research findings. The results indicate a marked asymmetry in the

development of citizen energy. While individual prosumer installations have achieved substantial scale, collective initiatives remain relatively limited and spatially uneven. Their development is constrained by regulatory complexity, changing support mechanisms, limited access to capital, insufficient organisational capacity and difficulties in building trust and coordinating diverse local actors. At the same time, recent legal changes, growing interest from municipalities and rural communities, energy storage and new possibilities for local balancing create favourable conditions for further development. The paper argues that Poland is entering a new stage of citizen energy development. Future progress will depend less on increasing the number of individual installations and more on creating stable rules, financing arrangements and local capacities that enable citizens to cooperate, share benefits and participate in energy governance on equal and transparent terms over time.

Marzena Piotrowska-Trybull (POLAND)

COMPETITION FOR EMPLOYEES BETWEEN THE DEFENSE AND CIVIL SECTORS IN THE LABOR MARKET

The defense sector's increasing demand for soldiers and civilian personnel in Poland, driven by the war in Ukraine and the threat posed by the Russian Federation, is bringing about changes in the labor market. The Polish Armed Forces are encouraging candidates to enlist through various programs and initiatives. At the same time, businesses are seeking employees to support their own growth and development needs. In certain areas, competition between enterprises and the armed forces has become particularly intense, as companies face labor shortages resulting from a variety of factors. Consequently, the study presented in this article aims to identify the extent of this competition and the specific measures employed by both businesses and the armed forces to attract potential employees and military recruits. The analysis is based on survey data collected from enterprises in selected regions of Poland using the diagnostic survey method, as well as on statistical data from Statistics Poland.

Baiba Rivža (LATVIA)

**OPPORTUNITIES AND CHALLENGES OF AUTOMOTIVE
ELECTRIFICATION IN LATVIA: IMPLICATIONS FOR THE
EUROPEAN GREEN DEAL AND SUSTAINABLE TRANSPORT
DEVELOPMENT**

The present research analyses development opportunities for car electrification in Latvia in the context of the European Green Deal and Sustainable Transport Development assessing both political and economic aspects as well as business practices. The research aims to identify factors that influence the development of electromobility and to develop proposals for its promotion. The research employed document analysis, statistical, qualitative and quantitative methods, as well as conducted a case study of the company Ayvens Latvija and five expert interviews. The results show that the electrification of cars in Latvia could ensure a 10-15% increase in the share of electric cars by 2027, yet progress depends on state support mechanisms and infrastructure development. The growth of the electric car market, especially in corporate fleets, points to the important role of the private sector in promoting sustainable mobility. Electric cars are essential for reducing GHG emissions, but Latvia's development pace lags behind other European countries, pointing to the need to improve existing infrastructure and increase the use of renewable energy resources. The research concludes with proposals developed by the author to promote the development of electromobility in Latvia, emphasizing the need for coordinated action between state institutions, local governments, and the business community. The recommendations cover strengthening education and public awareness, developing charging infrastructure in the regions, introducing financial support mechanisms for businesses, and promoting innovative solutions, including the development of battery recycling. Particular emphasis is placed on promoting private sector involvement and the importance of public sector leadership to ensure a smooth transition to a sustainable transport system. The proposals have been developed for public authorities and businesses, including financial incentives, expansion of the charging network, and public awareness measures.

**THE POSTWAR ECONOMIC REBUILDING OF UKRAINE IN
GLOBAL CONTEXT**

The postwar economic rebuilding of Ukraine represents a complex and multidimensional challenge that extends beyond the physical reconstruction of infrastructure and requires the restoration of human capital, institutional capacity, social cohesion, and economic competitiveness. The relevance of the study is determined by the need to develop an effective model of Ukraine's economic recovery that takes into account international experience and the specific consequences of prolonged war. Particular attention is devoted to the reintegration of veterans, whose successful transition to civilian and economic life will be an essential component of postwar recovery. Veterans represent a significant human capital resource possessing leadership skills, professional experience, resilience, and potential for entrepreneurship and civic engagement. The purpose of the study is to examine the key dimensions of Ukraine's postwar economic rebuilding in the global context and to substantiate the role of veteran reintegration as an integral element of sustainable economic recovery. The study applies methods of comparative analysis, synthesis, systematization, and generalization of academic literature, international experience, policy approaches, and available socioeconomic data. The research examines major challenges and opportunities associated with Ukraine's postwar economic transformation, including human capital recovery, labor-market reconstruction, investment, innovation, institutional development, and social cohesion. The results demonstrate that successful economic rebuilding requires an integrated approach combining physical reconstruction with investment in people and inclusive economic participation. Veteran reintegration should therefore be incorporated into national and regional recovery strategies through education and retraining, employment support, entrepreneurship development, psychological and social services, and opportunities for veterans to participate in community and economic decision-making. The study substantiates that international experience can provide valuable lessons for Ukraine, but its successful application requires adaptation to the country's postwar institutional, demographic, economic, and social conditions. The proposed approach positions veteran reintegration not only as a social-policy priority but also as an important mechanism for restoring human capital, strengthening social resilience, and supporting Ukraine's long-term economic.

Anita Stašulāne, Ilze Kačāne, Oksana Kovzele (LATVIA)

COMPARING NATIONAL APPROACHES TO CULTURAL AWARENESS AND EXPRESSION: A CROSS-NATIONAL ANALYSIS

This presentation is based on findings from research conducted as part of the Horizon Europe programme project PULSE-Art (No. 101178988). It examines how cultural awareness and expression (CAE) is conceptualized and implemented in education policy across France, Greece, Latvia, Malta, Morocco, the Netherlands, and Spain during 2014–2024. It aims to identify common policy trends, national differences, key strengths and persistent challenges, and the conditions necessary for embedding CAE more effectively in education systems. The analysis reveals broad convergence in policy ambition: all seven countries recognize culture and the arts as contributing to educational quality, social cohesion, and participation, while several frame cultural participation as a right. Key strengths include the formal recognition of CAE, the expansion of experiential and participatory learning, cross-sector collaboration, and the use of arts education to support wider civic and social goals. However, implementation remains uneven due to territorial and socioeconomic inequalities, fragmented governance, insufficient teacher preparation, the marginal position of the arts in some curricula, and weak evaluation mechanisms. The analysis also highlights the risk that diversity is addressed primarily at a representational rather than transformative level. The presentation concludes that the central policy challenge is no longer recognition of CAE, but its institutionalization. Effective implementation requires stable, inclusive, assessable, and locally responsive learning ecosystems, supported by coherent approaches to curriculum, teacher development, governance, funding, inclusion, evaluation, and research.

Jānis Teivāns-Treinovskis (LATVIA)

CONTEMPORARY NATIONAL AND GLOBAL SECURITY CHALLENGES

In today's world, threats of various kinds—capable of seriously destabilizing the situation both within individual countries and globally—must be considered among the most significant challenges. These threats can take various forms, ranging from military actions to so-called hybrid threats. Overall, they can lead to serious consequences affecting not only the security and economies of individual nations but also the functionality of international organizations and global markets. A case in point is the US military action in the Persian Gulf

region, which effectively blocked the trade of oil products and paralyzed several sectors of the economy.

Keywords: Security, threats, risks, hybrid threats.

Manuela Tvaronavičienė (LITHUANIA)

HOW HORIZON EUROPE PROJECTS CONTRIBUTE TO TECHNOLOGY TRANSFER: THE CASE OF CLUSTER-INN

Horizon Europe, the European Union's framework programme for research and innovation for 2021–2027, aims to strengthen Europe's scientific, technological and economic capacity by connecting research with practical innovation. A key element of this approach is technology transfer, through which knowledge, technologies, expertise and research results are transformed into applications by companies, public organisations and other users. The Cluster for Innovative Energy (CLUSTER-INN) provides a relevant example of how a collaborative European project can facilitate technology transfer in the energy sector. Its cluster-based approach connects research organisations, companies, public authorities and other stakeholders with complementary capabilities. Research institutions contribute scientific and technological expertise, while companies provide market knowledge, engineering capabilities and commercialisation experience. Public and other institutional actors can contribute regulatory support, infrastructure and access to users. Technology transfer within this framework can be understood as a sequence of interconnected activities: knowledge creation, co-development, demonstration, adoption and scaling. Research results are developed in cooperation with potential users, tested under relevant conditions and subsequently adapted to technical, economic and market requirements. This is particularly important in the energy sector, where technologies such as renewable energy systems, energy storage, smart grids and energy-efficiency solutions must operate within complex infrastructures and regulatory environments. Demonstration and validation are especially important because technological feasibility does not automatically guarantee market adoption. Testing innovative solutions in realistic environments can provide evidence concerning technical performance, economic viability, reliability, user acceptance and compatibility with existing systems. Such activities reduce uncertainty and facilitate subsequent investment and deployment. SMEs and industrial partners play a central role in this process because they can transform research outputs into products, services and commercial applications. However, effective technology transfer may be constrained by limited commercialisation expertise, regulatory barriers, intellectual-property issues, insufficient funding for scaling, skills shortages and weak market demand. Therefore, project

success should be assessed not only through scientific publications or technological outputs but also through adoption, commercialisation, replication and continued use of project results. Besides, there are numerous implementation issues related to inner regulations of participating organizations, shortage of working time and tensions between different cultures. Anyway, CLUSTER-INN demonstrates how Horizon Europe can function as a bridge between research and practical innovation. Its contribution extends beyond transferring individual technologies by strengthening the relationships, capabilities and networks required for sustained technological uptake and the energy transition.

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SOCIOLOĢIJA, VADĪBZINĀTNE, SOCIĀLĀ PSIHOLOĢIJA / SOCIOLOGY, MANAGEMENT, SOCIAL PSYCHOLOGY

Dhruv Bagul, Viktorija Šipilova (LATVIA)

TASK AND SCHEDULE AUTONOMY AS A JOB DESIGN LEVERS FOR MANAGING WORKPLACE STRESS: A GENERATIONAL LITERATURE REVIEW OF GENERATION Z AND MILLENNIAL EMPLOYEES

Today's organizations employ workers from multiple generations — Millennials, Generation Z, and others — and managers must decide how much autonomy to grant across these groups. This is not merely a workplace preference; it carries real consequences for business outcomes such as employee burnout and turnover. Task and schedule autonomy are theoretically two distinct levers, yet most research and most organizational practice still treat them as a single, undifferentiated one. When organizations do attempt to differentiate how autonomy is applied, they typically rely on generational cohort membership as the basis for doing so — despite weak and inconsistent evidence that generational differences are reliable enough to justify this approach. This paper argues that task and schedule autonomy are not merely theoretically distinct but function through different psychological mechanisms and carry different risks: both act as a buffer against job demands and satisfy a basic psychological need, but schedule autonomy specifically carries a risk of work intensification that task autonomy does not. Generational cohort membership is not the right variable for explaining differences in how autonomy operates; employees' actual work values and psychological needs are a more direct and defensible variable to examine instead. This divergence is illustrated by Bipp and Walczok's (2024) finding that schedule autonomy simultaneously increased engagement and work intensification, a paradoxical effect not observed for task autonomy. This conceptual paper draws on a targeted review of the literature on job design and generational workforce differences to develop an integrated conceptual model and propose directions for future research. For managers, this suggests that autonomy should not be treated as a single, undifferentiated lever to allocate uniformly, and that generational cohort should not serve as the basis for differentiating its use; work values and psychological needs offer a more defensible foundation for these decisions instead. More broadly, this paper's

contribution lies in pointing future research toward directly measuring work values and psychological needs, rather than relying on generational cohort as a proxy for them.

Qingling Bu (CHINA), Dzintra Iliško (LATVIA)

RETHINKING THE EVOLVING ROLE OF REGIONAL HIGHER EDUCATION INSTITUTIONS IN CHINA AMID DIGITAL TRANSFORMATION

Regional higher education institutions in China have long contributed to local development through talent cultivation, knowledge dissemination, industry collaboration, and social services. As digital transformation deepens across Chinese higher education, artificial intelligence, online learning platforms, data technologies, and remote collaboration tools are changing the conditions under which these institutions perform their regional functions. Digital technologies expand opportunities for educational provision, knowledge exchange, and cross-spatial collaboration, raising questions about whether regional engagement remains primarily dependent on geographical proximity. This conceptual paper examines how digital transformation is reshaping the ways regionally oriented higher education institutions in China contribute to regional development. Drawing on literature on higher education digital transformation and university regional engagement, the analysis focuses on four interconnected areas: human capital and skills development, knowledge transfer and innovation, collaboration with regional actors, and the accessibility and spatial reach of educational and knowledge services. Existing research suggests that digital technologies are extending forms of learning, knowledge exchange, and institutional collaboration while enabling universities to participate in wider knowledge networks. In the Chinese context, these developments may lead regional higher education institutions to combine strong local embeddedness with broader digital connectivity. Such changes may alter how universities serve local industries, public institutions, learners, and communities without removing the importance of place. The paper therefore offers a conceptual perspective on the evolving relationship between digital transformation, regional engagement, and regional development in Chinese higher education.

Anna Bulanova, Iveta Katelo (LATVIJA)

DARBINIEKU LABBŪTĪBAS NOVĒRTĒJUMA METOŽU ANALĪZE UN VIENOTĀ NOVĒRTĒJUMA INSTRUMENTA IZSTRĀDE LATVIJAS UZŅĒMUMIEM UN IESTĀDĒM

Mūsdienās uzņēmumi un iestādes arvien biežāk apzinās cilvēkresursu faktora nozīmīgumu darba tirgū. Darbinieka labbūtnības līmenis ir būtiski svarīgs gan viņam pašam, gan darba devējam, gan kopumā uzņēmumam, jo darbinieki, kuri darbā jūtas labi, droši un novērtēti, veido pozitīvas attiecības darba vidē un sasniedz augstākus radītājus, tādējādi sekmējot uzņēmuma attīstību un ražīgumu. Darba vietām, kas patiesi veicina un novērtē labbūtnību un labu garīgo veselību, ir lielāka iespēja uzlabot darbinieku iesaistīšanos un noturēšanu, palielināt produktivitāti. Pētījuma mērķis bija veikt darbinieku labbūtnības novērtējuma metožu analīzi un izstrādāt vienotu novērtējuma instrumentu labbūtnības novērtēšanai Latvijas uzņēmumiem un iestādēm. Pētījumā izmantota analītiskā teorētisko avotu izpētes metode, elektroniskās anketēšanas metode, datu statistiskā apstrādes metode. Izanalizētas labbūtnības novērtēšanas metodes, uz kuru pamata izveidots vienots labbūtnības novērtējuma instruments. Izveidotā instrumenta aprobācijai veiktas elektroniskās intervijas ar uzņēmumu un iestāžu vadītājiem. Izstrādāto labbūtnības novērtējuma instrumentu var izmantot Latvijas uzņēmumu un iestāžu vadītāji, novērtējot nodarbināto labbūtnību darba vietā.

Atslēgas vārdi: labbūtnība, labbūtnības novērtējuma metode, labbūtnības instruments, nodarbināto labbūtnības līmenis.

Oleksandr Cheban (UKRAINE)

PRODUCTION OF PREMIUM VALUE-ADDED ORGANIC AND ECOLOGICAL PRODUCTS

Based on an analysis of several Baltic regions focusing on their economic potential and agricultural sector structure, we evaluated the opportunities for developing local production and the prospects for regional producers to enter domestic and international markets. Latgale is of particular research interest. The analysis suggests that the region possesses significant potential for developing modern forms of agricultural entrepreneurship, including the production of high-value-added ecological and organic goods. In my view, one of the most promising avenues for this development could be the organic fruit and berry winemaking segment. Notably, this segment is of interest not as an independent industry, but as a practical case study for a broader investigation

into regional business development mechanisms. This ranges from the formation of local production clusters and new entrepreneurial initiatives to the creation of a regional brand and the entry of small-scale producers into EU markets.

Inese Dāvidsone (LATVIJA)

PROFESIONĀLĀS KOMUNIKĀCIJAS KOMPETENCES ATTĪSTĪBA POLICIJAS IZGLĪTĪBĀ: MŪSDIENĪGU MĀCĪBU METOŽU IZMANTOŠANAS IESPĒJAS

Policijas profesionālajā darbībā komunikācijas kompetence aptver daudzveidīgas situācijas, sākot ar ikdienas saskarsmi ar sabiedrību un institucionālo saziņu līdz komunikācijai konflikta un riska situācijās, procesuālajām darbībām un profesionālai saziņai digitālajā vidē. Tehnoloģiju attīstība, informācijas aprites intensitāte un policijas darba specifika nosaka nepieciešamību profesionālajā izglītībā mērķtiecīgi attīstīt ne tikai zināšanas par komunikāciju, bet arī spēju tās lietot konkrētās profesionālās situācijās. Pētījuma mērķis ir izvērtēt mācību metodes, kas sekmē profesionālās komunikācijas kompetences attīstību policijas izglītībā un teorētisko zināšanu pārnesi profesionālajā praksē. Pētījuma metodoloģisko pamatu veido zinātniskās literatūras un institucionālo dokumentu analīze, kā arī izvēlēto mācību metožu salīdzinošs izvērtējums atbilstoši policijas profesionālajā darbībā nepieciešamajām komunikācijas prasmēm. Pētījumā aplūkota situācijās un problēmuzdevumos balstīta mācīšanās, gadījumu analīze, simulācijas, lomu spēles, digitāli interaktīvi uzdevumi, formatīvā vērtēšana un strukturēta atgriezeniskā saite. Atsevišķi analizētas digitālo tehnoloģiju un mākslīgā intelekta izmantošanas iespējas profesionālu situāciju modelēšanā, mācību procesa individualizācijā un izglītojamo aktīvas līdzdalības veicināšanā. Pētījuma rezultātā paredzēts sistematizēt profesionālās komunikācijas kompetences attīstīšanai izmantojamās mācību metodes, izvērtēt to piemērotību dažādu profesionālo prasmju apguvei un formulēt priekšlikumus to mērķtiecīgai integrēšanai policijas izglītības procesā.

Anna Dembovskaya, Irēna Kokina (LATVIJA)

VADĪTĀJA DOMĀŠANAS VEIDU UN ORGANIZĀCIJAS SNIEGUMU UZLABOŠANAS SAVSTARPĒJĀ SAIKNE DAŽĀDU VADĪBAS PIEEJU KONTEKSTĀ

Mūsdienu mainīgā un sarežģītā uzņēmējdarbības vide no vadītājiem prasa ne tikai spēju pieņemt pamatotus lēmumus, bet arī pielāgoties pārmaiņām, saskatīt ilgtermiņa iespējas un efektīvi izmantot organizācijas resursus. Šajā ziņā vadītāja domāšana kļūst par nozīmīgu organizācijas snieguma priekšnoteikumu, savukārt tās nozīme var atšķirties atkarībā no izmantotajām vadības pieejām. Tāpat kā zems vadītāja domāšanas līmenis var ierobežot dažādu vadības pieeju izvēli, tā arī izvēlētas vadības pieejas, kas tiek izmantotas bez vadītāja pietiekamas izpratnes un mērķtiecības var veicināt zemāku organizācijas sniegumu. Pētījuma mērķis ir empīriski noskaidrot, kā vadītāju domāšana apvienojumā ar mūsdienīgām vadības pieejām ir saistīta ar organizācijas sniegumu, ko novērtē ar sabalansēto rādītāju sistēmu (BSC). Vadītāja domāšana pētīta, balstoties uz līderības eksperta Dž. C. Maksvela (J. C. Maxwell) 11 domāšanas veidu koncepciju, kas raksturo vadītāju spēju veidot stratēģisku skatījumu, elastīgi pielāgoties vides izaicinājumiem, kā arī izmantot kolektīvo intelektu. Pētīšanai izmantotās mūsdienu vadības pieejas atlasītas, ņemot vērā to plašu pielietojumu mūsdienu organizāciju vadības praksē. Savukārt organizācijas sniegums vērtēts, izmantojot Balanced Scorecard (BSC) četras perspektīvas – finanses, klientus, iekšējos biznesa procesus, kā arī mācīšanos un izaugsmi. Pētījums balstās uz 212 Latvijas un citu Eiropas valstu organizāciju vadītāju aptaujas datiem. Pētījuma praktisko ieguldījumu veido iespēja identificēt vadības pieeju izmantošanas nosacījumus, pie kuriem vadītāja domāšanas potenciāls tiek izmantots efektīvāk organizācijas snieguma uzlabošanā.

Atslēgvārdi: vadītāja domāšana, Dž. C. Maksvela domāšanas veidu koncepcija, vadības pieejas, organizācijas sniegums, sabalansētā rādītāju sistēma.

Xiaolu Dong (CHINA)

ENGLISH AS A REGIONAL RESOURCE L2 INVESTMENT AMONG UNIVERSITY STUDENTS IN LATVIA

This conceptual paper examines how regional language policies shape university students' investment in English, and how this investment contributes to regional human capital development. In the EU context, regional

development increasingly relies on multilingual human capital, with English proficiency framed as a key resource for cross-border mobility and economic competitiveness. In Latvia, language policies at national and institutional levels position English as essential for regional integration and labour market participation. However, the pathway from policy to human capital outcome is not automatic: it depends on whether individual learners invest in English as a meaningful resource. Drawing on Norton's (2013) theory of investment and imagined communities, this paper explores how regional language policies influence learners' imagined participation in regional and transnational professional communities, which in turn mediates their investment decisions. By linking language policy, learner investment, and regional human capital, this study offers an interdisciplinary framework for understanding how individual language learning engagement contributes to regional development goals. The European Language Portfolio (ELP) language biography is proposed as a tool for capturing these processes in future empirical work. The aim of this paper is to link regional language policy and learner investment through Norton's (2013) theory of investment. Its novelty lies in applying the investment framework to the regional-development context of Latvia, thereby bridging language policy research and second language acquisition. The paper concludes that investment, mediated by imagined communities, is the missing mechanism between regional language policy and human capital outcomes.

Keywords: English as a regional resource, L2 investment, imagined communities, language policy, university students, Latvia, regional development.

Bella Dubovika, Aleksejs Ruža (LATVIJA)

23–33 GADUS VECU SICĪLIEŠU SOCIĀLEKONOMISKĀ UZTVERE, SOCIĀLĀ NOTURĪBA UN ATTIEKSME PRET SOCIĀLAJĀM PĀRMAIŅĀM: REĢIONĀLĀS IDENTITĀTES, TAISNĪGUMA UZSKATU UN PAAUDŽU IETEKMES LOMAS IZPĒTE

Jauniešu nākotnes redzējums ir nozīmīgs sociālpsiholoģisks faktors, kas var ietekmēt viņu lēmumus par izglītību, nodarbinātību, migrāciju, pilsonisko līdzdalību un iesaisti sava reģiona attīstībā. Sicīlijas gadījumā jauniešu nākotnes perspektīvas veidojas sociālekonomiskās nevienlīdzības, ierobežotu iespēju, reģionālās identitātes un mainīgu sociālo attiecību kontekstā. Pētījuma mērķis ir izpētīt nākotnes orientāciju jauniešiem vecumā no 18 līdz 35 gadiem, kuri studē augstākās izglītības iestādēs vai ir ieguvuši augstāko izglītību, un identificēt psiholoģiskos, sociālos, kultūras un strukturālos faktorus, kas saistīti ar viņu nākotnes uztveri, gaidām un plāniem. Balstoties uz literatūras analīzi un astoņu kvalitatīvo interviju rezultātiem, izstrādāts teorētiskais modelis, kurā nākotnes

orientācija tiek aplūkota kā daudzdimensionāls fenomens. Modelī integrēta emocionālā attieksme pret nākotni, institucionālā uzticēšanās un taisnīguma uztvere, reģionālā identitāte un piederība, vietas piesaiste, migrācijas aspirācijas, noturība un aģentiskums, pilsoniskā līdzdalība, kā arī ģimenes un starppaaudžu ietekme. Pētījuma nākamajā posmā izstrādāts kontekstam specifisks pētniecības instruments, kura psihometriskā validācija tiks veikta aptuveni 250 dalībnieku izlasē, kam sekos plašāks pētījums ar aptuveni 1000 jauniešiem. Pētījums sniegs ieguldījumu jauniešu nākotnes orientācijas izpratnē un palīdzēs identificēt sociālpсихолоģiskos priekšnoteikumus jauniešu līdzdalībai un reģionālās attīstības procesos Sicīlijā.

Jelena Fedosejeva (LATVIJA)

ILGTSPĒJĪBAS FENOMENA REIFIKĀCIJA PROFESIONĀLAJĀ IZGLĪTĪBĀ DIGITĀLĀS UN ZAĻĀS TRANSFORMĀCIJAS UN REĢIONĀLĀS ATTĪSTĪBAS MIJIEDARBĪBĀ

Darba mērķis: Antropocēnes laikmeta sociālekonomiskie un vides izaicinājumi pieprasa būtisku profesionālās izglītības sistēmas pilnveidošanu, atteicoties no tradicionālajiem, uz zināšanu reproducēšanu orientētajiem modeļiem. Pētījuma mērķis ir teorētiski pamatot un empīriski izvērtēt ilgspējības fenomena reifikāciju — ilgspējas principu praktisko aprobāciju un iedzīvināšanu — profesionālajā izglītībā, integrējot digitālās tehnoloģijas, zaļās prasmes, pašvadītas un darba vidē balstītas mācības, kā arī analizēt šo procesu mijiedarbību ar reģionālo sociālekonomisko attīstību. Materiāli un metodes: Pētījuma pamatā ir kompleksā pieeja, holisma paradigma, paaudžu teorija un izglītības darbības pētījuma (Educational Action Research) metodoloģija, kas īstenota Daugavpils Tehnoloģiju un tūrisma tehnikumā. Pētījumā tika veikta divu pedagoģisko pieeju salīdzinošā analīze: transformatīvā un pašvadītā pieeja pret instrukcionālo un tradicionālo pieeju (direktīvu, skolotāja vadītu). Mācību vides transformācija un sadarbības dinamika tika izvērtēta pēc četriem kvalitatīvajiem kritērijiem: komandas darbs, savstarpējā mācīšanās, lietišķā saskarsme un radošā darbība. Nozīmīgākie rezultāti: Tika pierādīts, ka ilgspējības fenomena reifikācija jeb praktiskā iedzīvināšana visefektīvāk notiek caur nozares reālo situāciju modelēšanu un darba vidē balstītu problēmrisināšanu, kas sekmē zaļo un digitālo prasmju sinerģiju, kā arī veicina izglītojamo līdzatbildību un reģionālo sociālekonomisko noturību. Secinājumi: Ilgspējības principu reifikācija profesionālajā izglītībā pieprasa sistēmisku pāreju no pasīvas, uz reproducēšanu orientētas didaktikas uz holistisku, transdisciplināru un sadarbībā balstītu izglītības vidi, kurā izglītojamais kļūst par aktīvu mācību procesa līdzradītāju. Transformatīvā un pašvadītā mācīšanās pieeja visefektīvāk atbilst

jaunas paaudzes izglītojamo vajadzībām, būtiski paaugstinot viņu motivāciju, komandas darba prasmes, savstarpējo mācīšanos, lietišķo saskarsmi un radošumu. Šāda pašvadītu un darba vidē balstītu mācību integrācija zaļās un digitālās transformācijas ietvarā nodrošina elastīgu profesionālās izglītības pielāgošanos darba tirgus prasībām, kļūstot par būtisku dzinējspēku reģionālajai sociālekonomiskajai noturībai un ilgtspējai.

Atslēgas vārdi: profesionālā izglītība, digitālā transformācija, zaļā transformācija, reģionālā attīstība, pašvadīta mācīšanās, darba vidē balstītas mācības, sociālekonomiskā noturība, izglītības darbības pētījums.

Diana Fomenko, Anita Pipere (LATVIA)

BETWEEN INDIVIDUAL INITIATIVE AND INSTITUTIONAL GUIDANCE: TEACHERS' USE OF ARTIFICIAL INTELLIGENCE IN LATVIAN SCHOOLS

The integration of generative artificial intelligence (AI) is reshaping teachers' everyday work, yet empirical evidence from Latvian schools remains limited. This article presents a descriptive pilot study of AI use in teaching, focusing on teachers' sociodemographic characteristics, digital qualifications, frequency of AI use, preferred tools, AI-supported pedagogical activities, information sources, school-level policies, and teacher training. Data were collected through an anonymous online questionnaire completed by 22 teachers working in Latvia. Descriptive statistics were used to analyse frequencies, percentages, means, and standard deviations. The findings indicate that AI was already embedded in the respondents' everyday pedagogical practice: 68.2% used AI in every lesson or several times per week, while only one teacher reported not using it. ChatGPT was the most widely used tool (95.5%), followed by Google Gemini (50.0%), Canva AI (40.9%), and AI-powered presentation generators (27.3%). The most common applications were creating teaching materials, preparing learning tasks, and planning lessons. At the same time, more than half of respondents said their schools lacked clear policies on AI use. The findings reveal a gap between teachers' active individual experimentation and the slower development of institutional guidance. The article concludes that schools need clear, ethically grounded, and pedagogically relevant guidelines for AI use, combined with systematic professional development for teachers. Further research should expand the study to a larger, more diverse sample and examine AI use in students' learning, with particular attention to students' needs.

Qingwen Gao, Yulan Xing, Jelena Davidova (LATVIA)

**PERFORMANCE-ORIENTED MANAGEMENT AND FACULTY
CAREER SUSTAINABILITY: IMPLICATIONS FOR SUSTAINABLE
REGIONAL DEVELOPMENT**

Higher education institutions increasingly face pressures to improve productivity, research performance, teaching quality, and institutional competitiveness. While performance-oriented management can strengthen organizational accountability and resource efficiency, excessive performance pressure may also undermine faculty well-being, motivation, and long-term career sustainability. This issue is particularly relevant to regional development because universities contribute to regional human capital, knowledge production, innovation, and social development. This paper examines the relationship between performance-oriented management and faculty career sustainability from a management perspective. Drawing on the Job Demands–Resources (JD-R) framework, the study conceptualizes performance pressure as a major job demand and institutional support as a key organizational resource. Faculty career sustainability is understood as the capacity of academic staff to maintain productive, healthy, and meaningful professional development over the long term. The paper proposes that sustainable faculty development depends not only on performance expectations but also on the availability of institutional resources that enable faculty members to cope with increasing demands. Based on a conceptual review of relevant literature, the paper develops a management framework linking performance pressure, institutional support, faculty career sustainability, and sustainable regional development. The framework highlights the importance of balancing performance-oriented management with supportive institutional practices, including professional development opportunities, organizational resources, recognition, autonomy, and supportive leadership. The study contributes to higher education management research by connecting faculty career sustainability with the broader question of sustainable regional development. It also provides a conceptual foundation for subsequent empirical research comparing higher education management contexts in China and Latvia. *Keywords:* Faculty Career Sustainability; Performance-Oriented Management; Institutional Support; Performance Pressure; Higher Education; Regional Development.

Tea Gutović, Renata Relja, Marieta Marić (CROATIA)

**YOUTH ATTITUDES TOWARD FOOTBALL FANS:
THE SOCIAL AND LOCAL CONTEXT OF THE CITY OF SPLIT**

Football represents an important social phenomenon that contributes to the formation of collective identities, senses of belonging, and local communities. Within this context, football fans occupy a complex social position. They may act as important agents of solidarity, local identity, and social engagement, while at the same time being associated with violence, hooliganism, and other forms of socially undesirable behaviour. This study examines young people's attitudes toward football fans in the city of Split and explores the relationship between these attitudes and gender, frequency of following football, perceptions of the influence of fan culture in the local community, media exposure, and participation in fan-related activities. The empirical research was conducted in May and June 2026 using an online questionnaire administered to a convenience sample of 202 young people aged 18 to 30 from the Split area. The findings indicate that young people hold predominantly balanced attitudes toward football fans. While they recognise their contribution to the atmosphere at football matches, social cohesion, and local tradition, they simultaneously express clear rejection of violence and hooliganism. Statistical analyses revealed differences in selected attitudes by gender, while more frequent engagement with football, greater exposure to fan-related content through the media and social media, and participation in fan activities were associated with more favourable attitudes toward football fans. The relationship between attitudes and perceptions of the local influence of fan culture was only partial. Overall, the findings point to the complexity of young people's social perceptions of football fans and highlight the importance of considering the local context in understanding contemporary football fan culture in Split.

Keywords: football fans, youth, fan culture, social identity, local context.

Sergejs Hilkevics, Galina Hilkevica (LATVIA)

**STOCHASTIC ALGORITHMS FOR OPTIMISING ELECTRIC
AIRCRAFT PASSENGER FLOWS IN EUROPE**

The development of electric regional aviation requires the allocation of limited aircraft, energy and airport resources to routes that offer the greatest transport and regional benefits. This study proposes a stochastic optimisation framework within the INGERA project, extending the knapsack problem to multiple objectives and resource constraints. Its empirical starting point is the project's

six-stage methodology: geographical delimitation, airport-pair generation, technical filtering, market and transport screening, operational and regional assessment, and multi-criteria ranking. The Northern European prototype covers the Nordic and Baltic countries, Poland and Northern Germany. Its 123 airports generate 7,503 airport pairs; range screening retains 3,322 pairs, and subsequent market and direct-service checks identify 311 high-potential pairs without a direct connection in the working dataset. These screening results define the candidate set rather than an optimised network. In the proposed formulation, route–frequency alternatives are represented as knapsack items. Binary variables select alternatives, while their passenger capacities determine feasible flow allocations subject to demand limits. Shared constraints account for fleet availability, aircraft operating time, energy consumption, charging capacity, turnaround time and airport throughput. Fully electric and hybrid-electric operating modes are distinguished according to route-specific range and energy requirements. The objectives are to increase served passenger demand and regional accessibility while reducing operating costs and emissions; the existing technical, market, transport and operational/regional indicators support candidate evaluation. A stochastic search combining randomised feasible initialisation and simulated annealing is proposed to explore route portfolios, with repeated runs and alternative criterion weights approximating a Pareto set of trade-offs. Demand and energy uncertainty will be assessed through scenarios, and small instances will be compared with exact solutions to evaluate solution quality. The framework advances route prioritisation towards resource-constrained passenger-flow allocation. The current contribution is a methodological formulation grounded in the INGERA screening prototype; computational performance and network benefits remain to be validated using observed demand, airport and energy data.

Esin Inal (TURKEY)

SOURCES OF POSITIVE PSYCHOLOGICAL CAPITAL: A COMPARATIVE ANALYSIS OF NORDIC MODELS

Psychological capital (PsyCap), across all its dimensions, signifies a broad and meaningful sphere of influence extending from the individual to society. From this perspective, the role of psychological capital in regional development is highly significant. Within the framework of positive psychological capital, it is possible to identify the emergence of crucial sociocultural strategies. Consequently, overarching regional development strategies cannot be considered independently of the dimensions of this positive psychological capital. It can be stated that the dimensions of self-efficacy, hope, optimism, and

psychological resilience constitute a vital framework from a socio-cognitive standpoint. In this regard, in an era where individualism is increasingly prominent, all studies focusing on positive psychological capital hold substantial importance within the contexts of sustainability and continuous development. Designed with a qualitative methodology, this study seeks to answer the research question: "What are the sources of positive psychological capital in Nordic countries?" In addition to a comprehensive literature review, the study compares various models and practices of Nordic countries by utilizing international data reports -most notably the World Health Organization's Mental Health Atlas- pertaining to diverse fields such as education, economy, and culture, which are intrinsically linked to the sources of psychological capital. Based on this comparison, three fundamental source frameworks have been established: (1) Sources of Hope and Optimism: Social policies, healthcare, and education; (2) Sources of Resilience and Self-Efficacy: Economy, flexibility, and job security; (3) Sources of Psychological Safety: Social trust and interpersonal relationships. It is anticipated that an in-depth analysis of the outcomes derived from these models and the established source frameworks will contribute to the development strategies of other regions. Furthermore, the socio-cognitive benefits of these dynamics -particularly within the context of working life- are predictable at both the individual and societal levels, thereby offering a valuable contribution to social memory.

Keywords: Regional development, Nordic models, comparative analysis, positive psychological capital.

Jacinta Ivbulē (LATVIJA)

PERSONALIZĒTAS MATEMĀTIKAS MĀCĪŠANĀS DIDAKTISKIE RISINĀJUMI SKOLĒNU PAŠVADĪTAS MĀCĪŠANĀS ATTĪSTĪBAI

Personalizēta mācīšanās arvien biežāk tiek atzīta par nozīmīgu pedagoģisko pieeju matemātikas izglītības pilnveidei un skolēnu pašvadītas mācīšanās prasmju attīstībai. Pielāgojot mācību saturu, mācīšanas stratēģijas un vērtēšanas metodes skolēnu individuālajām vajadzībām, spējām un mācīšanās progresam, personalizēta matemātikas mācīšanās veicina skolēnu patstāvību, motivāciju un aktīvu iesaistīšanos mācību procesā. Mūsdienu izglītībā tiek uzsvērta skolēnu spēja izvirzīt mācīšanās mērķus, plānot un uzraudzīt savu mācīšanos, izvērtēt sasniegto progresu un uzņemties atbildību par mācīšanās rezultātiem. Tomēr personalizētas mācīšanās integrēšana matemātikas mācību procesā joprojām ir izaicinājums, īpaši attiecībā uz efektīvu didaktisko risinājumu izvēli un īstenošanu. Pētījuma mērķis ir teorētiski izpētīt personalizētas matemātikas mācīšanās didaktiskos risinājumus un to potenciālo ieguldījumu skolēnu

pašvadītas mācīšanās prasmju attīstībā. Pētījumā uzmanība pievērsta tādu didaktisko stratēģiju identificēšanai un analīzei, kas atbalsta individuālu mācīšanās ceļu veidošanu, diferencētu mācīšanu, formatīvo vērtēšanu, refleksiju un skolēnu patstāvības attīstību. Īpaša uzmanība veltīta skolotāja lomai atbalstošas mācību vides veidošanā, kas rosina skolēnus pieņemt patstāvīgus lēmumus, izmantot pašregulācijas stratēģijas un izvērtēt savu matemātisko izpratni. Balstoties uz augstāk minēto, plānots veidot teorētisko pamatu tādu didaktisko risinājumu izstrādei, kas integrē personalizētu matemātikas mācīšanos ar sistemātisku skolēnu pašvadītas mācīšanās prasmju attīstību, tādējādi sekmējot iekļaujošāku, elastīgāku un uz skolēnu centrētu matemātikas mācību procesu. Pētījuma pamatā ir zinātniskās literatūras teorētiskā analīze par personalizētu mācīšanos, pašvadītu mācīšanos un matemātikas didaktiku. Analīzē aplūkots diferencētu matemātikas uzdevumu, individualizētas atgriezeniskās saites, mērķu izvirzīšanas, pašvērtēšanas un digitālo mācību rīku potenciāls skolēnu iesaistes un atbildības par savu mācīšanos stiprināšanā. Vienlaikus tiks analizēti personalizētas matemātikas mācīšanās īstenošanas pedagoģiskie priekšnosacījumi un izaicinājumi, tostarp skolēnu gatavība patstāvīgai mācīšanās darbībai, skolotāju profesionālā kompetence un pieejamie izglītības resursi. Kā rezultātā plānots izveidot didaktiskos materiālus digitālās platformas vai mācību grāmatas ietvarā.

Atslēgvārdi: personalizēta mācīšanās, pašvadīta mācīšanās, didaktiskie risinājumi, diferencēta mācīšana, formatīvā vērtēšana, skolēnu patstāvība.

Lāsma Jaudzema-Danovska, Irēna Kokina (LATVIJA)

PACIENTU DROŠĪBA VESELĪBAS APRŪPES ORGANIZĀCIJU KULTŪRAS PARADOKSU (RAKSTUROJUMU) KONTEKSTĀ

Pacientu drošība ir viens no būtiskākajiem veselības aprūpes kvalitātes rādītājiem, tomēr, neraugoties uz tehnoloģiju attīstību, klīniskajām vadlīnijām un arvien stingrākām kvalitātes prasībām, novēršams kaitējums pacientiem joprojām ir globāla veselības aprūpes problēma. Pasaules Veselības organizācijas dati rāda, ka aptuveni katrs desmitais pacients veselības aprūpes laikā piedzīvo kaitējumu, vairāk nekā puse šāda kaitējuma ir novēršama, savukārt nedroša veselības aprūpe pasaulē ik gadu ir saistīta ar vairāk nekā trim miljoniem nāves gadījumu (World Health Organization [WHO], 2023; WHO, 2024). Šie skaitļi liek pacientu drošību aplūkot ne tikai kā klīniskās kompetences vai individuālas kļūdas jautājumu, bet kā veselības aprūpes sistēmas un organizācijas vadības problēmu. Pacientu drošības incidentu cēloņi ir daudzdimensionāli, tie var veidoties sarežģītā mijiedarbībā starp darba slodzi, personāla nodrošinājumu, komunikāciju, komandas darbu, vadības praksi,

organizācijas kultūru un darbinieka iespējām savlaicīgi identificēt un paust bažas par iespējamu risku pacientam (WHO, 2024). Šī jautājuma nozīmīgumu apstiprina starptautisko pētījumu rezultāti. Veselības aprūpes darbinieka psiholoģiskais stāvoklis vairs nav interpretējams tikai kā individuālas labbūtības jautājums — tam var būt tieša nozīme veselības aprūpes kvalitātē un drošībā. Eiropas veselības un sociālās aprūpes nozare ir viena no nozarēm, kurā psihosociālie riski ir īpaši izteikti. Veselības aprūpē šie riski iegūst papildu nozīmi, jo darbinieka pārslodzes, izsīkuma vai komunikācijas traucējumu sekas potenciāli skar ne tikai pašu darbinieku, bet arī pacientu. Baltijas valstu situācija šo problēmu padara īpaši aktuālu. Latvijā OECD norāda uz īpaši zemu praktizējošo ārstu un māsu nodrošinājumu, kas veselības aprūpes sistēmā palielina slodzi uz jau esošo darbaspēku. Organizācijas kultūra šādos apstākļos var darboties gan kā aizsargfaktors, gan kā papildu riska avots. Denison organizācijas kultūras modelī darbinieku iesaiste, konsekvence, spēja pielāgoties un organizācijas misija raksturo organizācijas spēju ilgtermiņā funkcionēt efektīvi (Denison & Mishra, 1995; Denison, 2000). Rodas jautājums, vai pacientu drošības kultūra var būt patiesi ilgtspējīga organizācijā, kurā par pietiekami nozīmīgu drošības resursu netiek uzskatīts pats darbinieks. Latvijas un Lietuvas veselības aprūpes sistēmu kontekstā šīs sakarības līdz šim ir pētītas ierobežoti, īpaši vienotā modelī sasaistot organizācijas kultūru, darbinieku psiholoģisko labklājību un pacientu drošības uztveri. Tādēļ pētījumā tiek analizēti Latvijas un Lietuvas veselības aprūpes organizāciju darbinieku dati, izmantojot organizācijas kultūras un psiholoģiskās labklājības rādītājus un īpašu uzmanību pievēršot resursu pietiekamībai, darbinieku iesaistei lēmumu pieņemšanā, profesionālā viedokļa respektēšanai, vadības atbalstam un pacientu drošības prioritātei. Pētījumā izmantota kvantitatīva pieeja, analizējot Latvijas un Lietuvas veselības aprūpes organizāciju darbinieku aptaujas datus. Organizācijas kultūras novērtēšanai izmantots Denison organizācijas kultūras modelis, savukārt psiholoģiskās labklājības izvērtēšanai – Ryff psiholoģiskās labklājības pieeja. Datu analīzē tiks vērtētas sakarības starp organizācijas kultūras dimensijām, darbinieku psiholoģiskās labklājības rādītājiem un pacientu drošībai nozīmīgiem organizatoriskajiem faktoriem. Mērķis – analizēt organizācijas kultūras un veselības aprūpes darbinieku psiholoģiskās labklājības savstarpējās sakarības Latvijā un Lietuvā, izvērtējot iespējamo neatbilstību starp pacientu drošībai piešķirto prioritāti un organizatoriskajiem apstākļiem, kuros veselības aprūpes darbiniekiem šī drošība jānodrošina.

Atslēgvārdi: pacientu drošība, organizācijas kultūra, psiholoģiskā labklājība, veselības aprūpes darbinieki, psihosociālie riski.

Lingxian Jiang (CHINA) Vera Komarova (LATVIA)

SYSTEMATIC REFORM AND ADAPTATION MECHANISM OF ENTERPRISE INNOVATION MANAGEMENT MODEL IN THE ERA OF DIGITAL INTELLIGENT GOVERNANCE

The era of digital intelligent governance has fundamentally reshaped the institutional environment, internal resource allocation logic and value creation paradigm of enterprise innovation activities. Traditional innovation management models, featured by closure, hierarchical bureaucracy and linear processes, are increasingly unable to adapt to complex, dynamic and open innovation demands, highlighting the urgency of systematic reform. Based on system theory and innovation governance theory, this paper constructs an analytical framework of governance embedding – structural reshaping – adaptive synergy, and investigates the systematic reform trajectory and dynamic adaptation mechanism of enterprise innovation management models in the context of digital intelligent governance. It deconstructs the multi-dimensional reshaping effects of digital intelligent governance on innovation strategy formulation, organizational structure design, innovation process operation, resource integration mode and innovation culture cultivation. The research reveals that the systematic reform follows a three-dimensional evolutionary path: ecological upgrading of innovation strategy oriented by value co-creation, agile flattening of organizational structure driven by cross-border collaboration, and closed-loop iteration of innovation process enabled by data intelligence. Furthermore, this paper identifies a three-tier adaptation mechanism system, including technology-empowered dynamic regulation, institution-supported governance matching, and ecosystem-based value alignment, which collectively promote the continuous matching between innovation management system and digital governance scenarios. This study expands the research boundary of digital innovation management, and provides actionable theoretical references and practical paths for enterprises to build a resilient, efficient and open innovation management system compatible with the digital intelligent governance era.

Dorota Kurek (POLAND)

WOMEN'S DIGITAL COMPETENCE IN POLAND IN THE ERA OF DIGITAL TRANSFORMATION

The aim of the study was to identify the level of women's digital competence in Poland and the barriers and challenges associated with their development. The study employed desk research, i.e. an analysis of existing data, based on reports

by Statistics Poland (GUS) and Eurostat as well as institutional reports. The findings show that women in Poland have a lower level of digital competence than the EU average, with age, rather than sex, being the key differentiating factor. The competence profile of women is internally diverse: high communication and information competences coexist with clear deficits in digital content creation and digital safety. The study identifies economic, structural and psychosocial barriers. It also discusses the measures set out in the Strategia Cyfryzacji Państwa (State Digitalization Strategy), including those intended to increase the share of women in the ICT sector.

Keywords: women, labor market, digital competence, digital transformation, DigComp, digital skills.

Karīne Laganovska (LATVIJA)

ELASTĪGA PROFESIONĀLĀ IZGLĪTĪBA REĢIONĀLĀ CILVĒKKAPITĀLA ATTĪSTĪBAI

Demogrāfiskās pārmaiņas, darbaspēka pieejamības izaicinājumi un mainīgās darba tirgus prasības aktualizē nepieciešamību pilnveidot profesionālās izglītības piedāvājumu reģionos. Latgalē, kur būtiska nozīme ir cilvēkresursu ilgtspējīgai attīstībai un ekonomiskās aktivitātes veicināšanai, profesionālajai izglītībai ir nozīmīga loma ne tikai jauniešu profesionālajā sagatavošanā, bet arī pieaugušo prasmju pilnveidē, pārkvalifikācijā un mūžizglītības iespēju nodrošināšanā. Prezentācijas mērķis ir izvērtēt elastīgas profesionālās izglītības nozīmi reģionālā cilvēkkapitāla attīstībā, pievēršot uzmanību izglītības piedāvājuma pielāgošanai darba tirgus vajadzībām un dažādu mērķgrupu izglītības vajadzībām. Elastīga profesionālā izglītība šajā kontekstā ietver daudzveidīgus izglītības ceļus, moduļu pieeju, mikrokvalifikācijas, darba vidē balstītas mācības un pieaugušo profesionālo kompetenču pilnveidi. Tādējādi aktualizēta ir profesionālās izglītības iestāžu loma kā reģionāliem profesionālās izglītības centriem, kas sadarbojas ar darba devējiem, pašvaldībām. Elastīgas profesionālās izglītības attīstība var veicināt pieejamāku izglītību dažādām iedzīvotāju grupām, operatīvāku reaģēšanu uz darba tirgus pārmaiņām un reģionam nepieciešamo kompetenču pilnveidi. Vienlaikus tās īstenošanai nepieciešama skaidra izglītības iestāžu specializācija, sadarbība ar nozaru pārstāvjiem un ilgtspējīgs resursu izmantojums. Tādējādi elastīga profesionālā izglītība vērtējama kā viens no instrumentiem reģionālā cilvēkkapitāla stiprināšanai un Latgales attīstības iespēju veicināšanai.

Shuying Li (CHINA), Anita Pipere (LATVIA)

WHOSE ACCOUNT OF SCHOOL HAPPINESS COUNTS? TEACHER-STUDENT PERCEPTUAL DIVERGENCE IN URBAN AND COUNTY/RURAL SCHOOLS

Regional development increasingly depends on understanding and supporting young people's psychosocial well-being, yet institutional assessments of their school experiences often rely primarily on adult perspectives. This study examined whether teachers' perceptions of the conditions supporting students' school happiness corresponded with students' own perceptions and whether any divergence was greater in county or rural schools. Mirrored instruments were administered to 220 students and 110 teachers in eight Chinese high schools, four urban and four county or rural. Both groups rated the importance of 27 identical sources of school happiness. Analyses accounted for clustering within the eight schools using small-sample cluster-robust procedures. Rank-order congruence between the two group profiles was moderate ($\rho = .60$). Almost all dissimilarity lay in profile shape rather than level: elevation accounted for 0.6% of squared profile distance and shape for 99.3%. The groups differed mainly in which sources of school happiness they considered important, rather than in their overall level of importance ratings. Compared with students, teachers assigned greater importance to institutionally visible provision, including the physical environment ($g = 0.66$), and less importance to relational conditions, including peer relationships ($g = -0.37$). After controlling for the general agreement expected across the 27 items, little teacher-specific correspondence remained. Critically for regional policy, this divergence was not peripheral. Urban and county/rural strata diverged on the same items ($r = .63$ across the 27 item-level differences). The role-by-location interaction was essentially zero ($B = .01$, $SE = .07$, $p = .91$). Against the equivalence margin pre-specified in the parent study ($d = \pm 0.35$), the location difference was equivalent to zero, though only just; smaller differences cannot be excluded with eight clusters. Thus, teacher-student perceptual divergence did not appear to be specific to county or rural schools.

Keywords: school happiness; teacher-student perceptual divergence; psychosocial well-being; urban-rural comparison; regional inequality; dual-informant assessment.

Yibo Liu (LATVIA)

CHINESE VIDEO GAMES IN WESTERN DIGITAL DISCOURSE: PERCEPTIONS, CULTURAL MEANING AND TRANSNATIONAL RECEPTION

This study aims to examine how Western players perceive Chinese video games and identify major dimensions through which Chinese video game brands are discussed, evaluated and emotionally positioned in Western market contexts. After employing a large-scale computational analysis of English-language player discourse by integrating BERTopic modelling, semantic network analysis and dimension-based sentiment analysis, the results show that Western players' discussions of Chinese game brands display shared patterns, which helps the researcher develop a five-dimensional framework consisting of Core Gameplay, Technical Performativity, Cultural Representation, Monetization and Evaluation and Social Dynamics for analysing game brand perception. Meanwhile, Western players express an overall positive orientation towards the selected game brands in this study while their value perception is primarily anchored in the gameplay mechanics and intrinsic quality rather than cultural novelty alone. Overall, the study develops a framework for analysing player discourse on video game brands and uses computational analysis to examine consumer perceptions of Chinese video game brands in Western market contexts. It contributes to the study of transcultural game branding by showing that gameplay mechanics and overall game quality constitute the fundamental basis for Chinese game brands to overcome cultural barriers and build overseas brand recognition.

**Dzintra Ločmele (LATVIA), Elīna Akmane (LATVIA),
Elza Strazdiņa (LATVIA), Paola Luzzatto (ITALY),
Kristīne Mārtinsone (LATVIA)**

IMPLEMENTING THE TRAUMA TREATMENT THROUGH ART THERAPY (TT-AT) PROTOCOL IN LATVIA: A MIXED-METHODS PILOT STUDY

Background: Art therapy is increasingly used in trauma treatment, but evidence for structured protocols across cultural and clinical contexts remains limited. TT-AT protocol is a brief group intervention targeting trauma recovery. Aim: To pilot a Latvian-language, culturally reviewed TT-AT protocol in psychiatric rehabilitation and explore changes in trauma-related symptoms and participants' experiences. Methods: A single-group mixed-methods pilot study was conducted. Protocol materials were translated into Latvian through multi-stage

translation and expert review for linguistic clarity and cultural relevance. Eleven women with elevated trauma-related symptoms were enrolled; nine completed the intervention and all assessments at baseline, post-intervention, and six-week follow-up using the Trauma Symptom Inventory (TSI) and PTSD Checklist for DSM-5 (PCL-5). Changes were examined using Wilcoxon signed-rank tests. Questionnaire responses were analysed using reflexive thematic analysis. Results: Exploratory analyses indicated lower post-intervention scores on most TSI subscales and PCL-5, with several comparisons reaching nominal statistical significance. Improvements were generally maintained at six-week follow-up. Qualitative analysis identified four themes: universality and shared experience; discovery of inner resources through creative processes; emotional engagement with trauma-related experiences; and the perceived need for additional individual support. Conclusions: The Latvian TT-AT protocol is feasible in psychiatric rehabilitation and may support positive trauma-related symptom trajectories and meaningful therapeutic experiences. Findings are preliminary given the small sample and lack of control group. Implications for practice and future research: Clinical implementation should include careful monitoring of emotional responses and flexible access to additional support. Future research should assess fidelity, safety, acceptability, and longer-term outcomes of the TT-AT protocol.

Xingye Lu, Anita Pipere (LATVIA)

CROSS-CONTEXTUAL CHALLENGES TO TEACHERS' AI LITERACY: A PERSPECTIVE FROM EUROPEAN AND CHINESE SCHOOL MATHEMATICS EDUCATION

Building on previously conducted qualitative research (published in *Social Sciences Bulletin*, 2026 1) on artificial intelligence (AI) literacy among lower-secondary mathematics teachers in Latvia and China, this study extends the analysis of AI literacy as an emerging factor of professional differentiation by examining its broader educational, institutional, and sociocultural dimensions. Previous findings revealed that teachers differ not simply in their use of AI technologies, but in their capacity to integrate AI into pedagogical judgement, assessment practices, and the development of pupils' independent mathematical reasoning. The present study adopts a cross-contextual perspective to explore how educational traditions, institutional expectations, and professional environments shape the development of teachers' AI literacy in European and Chinese lower-secondary mathematics education. Particular attention is devoted to shared challenges concerning the reliability of AI-assisted homework, the assessment of mathematical understanding, the critical evaluation of AI-

generated solutions, and the balance between technological support and pupils' intellectual independence. Methodologically, the study develops a comparative qualitative framework combining thematic interpretation of teachers' professional narratives with contextual analysis of educational policies, institutional support, and pedagogical practices. This approach seeks to distinguish challenges arising from the educational implications of generative AI from those shaped by specific national and institutional contexts. The study advances the argument that teachers' AI literacy represents not merely technological competence, but a context-dependent form of professional agency shaped by pedagogical knowledge, institutional resources, assessment cultures, and educational expectations. By extending the comparative perspective beyond individual teacher experiences, the research contributes to understanding how AI literacy may reinforce or reduce professional inequalities and identifies directions for developing context-sensitive teacher education and professional development strategies in lower-secondary mathematics education.

Kristīne Lubāne-Uzuleņa, Kristīne Mārtinsone (LATVIJA)

DIGITĀLS REFLEKSIJAS RĪKS “MANS CEĻOJUMS”: IZSTRĀDE UN PILOTĒŠANA MĀKSLAS TERAPIJAS PIEEJAMĪBAS VEICINĀŠANAI PUSAUDŽIEM LATVIJĀ

Pusaudžu emocionālās labizjūtas stiprināšana un psiholoģisko resursu attīstīšana ir aktuāls sabiedrības veselības jautājums (WHO 2020). Psiholoģiskā noturība ir pozitīvi saistīta ar pusaudžu subjektīvo labizjūtu (Wu et al. 2025), tādēļ nozīmīgs ir atbalsts, kas sekmē iekšējo un ārējo resursu apzināšanos (Wilson 2017). Mākslas terapijā radošais process un mākslas darbs profesionāla mākslas terapeita vadībā tiek izmantots terapeitisko mērķu sasniegšanai (Mārtinsone, Duhovska 2022). Digitālās tehnoloģijas rada iespējas mākslas terapiju īstenot arī attālināti un izmantot digitālus mākslas medijus, vienlaikus aktualizējot drošības, privātuma un profesionālās prakses nosacījumus (Zubala et al. 2021; Du et al. 2024). Pētījuma mērķis ir dizainā balstītas pētniecības ietvarā izstrādāt un sākotnēji izvērtēt digitālu refleksijas rīku “Mans ceļojums” 14-17 gadus vecu pusaudžu resursu apzināšanai un pieredzes strukturēšanai mākslas terapijas procesā. Rīks ietver digitālus vizuālus un refleksijas elementus (attēlu atlasī, radīta zīmējuma fotografēšanu un rakstisku refleksiju) un ir izmantojams arī attālināti mākslas terapeita vadībā. Pieredzes strukturēšanai izmantots autores adaptēts Dž. Kempbela “Varoņa ceļojuma” modelis kā naratīvs ietvars, jo pusaudža vecumā attīstās spēja saistīt atsevišķas pieredzes vienotā dzīves stāstā (Habermas, Reese 2015). No 17 posmiem atlasīti seši, kas atbilstoši pusaudžiem uztveramā veidā piedāvā strukturēt pieredzi, apzināties savus resursus un

integrēt tos savā ikdienā. Sākotnējās izstrādes posmā rīka saturu izvērtēja vizuālās mākslas terapeiti (N = 5), bet lietojamību un lietotāju pieredzi izvērtēja pusaudži (N = 5); vidējais System Usability Scale (SUS) rādītājs bija 86,0. Neeksperimentālā pilotpētījumā (N = 10) tiek izvērtēta rīka īstenošanas iespēja mākslas terapijas praksē. Lai gan 2025. gadā internets bija pieejams 98,6% mājsaimniecību ar bērniem (CSP 2025), rīka izmantošanai būtiski priekšnoteikumi ir stabils interneta savienojums, piemērota ierīce, privāta vide un profesionāla terapeita iesaiste.

Atslēgas vārdi: vizuālās mākslas terapija, pusaudži, digitāls rīks, digitālie mākslas mediji, psiholoģiskie resursi.

CSP (Centrālā statistikas pārvalde) (2025) DLM060. Datoru / interneta pieejamība dažāda tipa mājsaimniecībās (procentos no mājsaimniecību kopskaita attiecīgajā grupā). (In Latvian) Pieejams: https://data.stat.gov.lv/pxweb/lv/OSP_PUB/START_IKT_EK_DLM/DLM060 (skat. 30.09.2026).

Du, X., An, P., Leung, J., Li, A., Chapman, L. E., Zhao, J. (2024) DeepThInk: Designing and probing human-AI co-creation in digital art therapy. *International Journal of Human-Computer Studies*, 181, 103139. <https://doi.org/10.1016/j.ijhcs.2023.103139>

Habermas, T., Reese, E. (2015) Getting a life takes time: The development of the life story in adolescence, its precursors and consequences. *Human Development*, 58, Nr. 3, 172–201. <https://doi.org/10.1159/000437245>

Mārtinsone, K., Duhovska, J. (2022) Mākslu terapija. Nacionālā enciklopēdija. (In Latvian) Pieejams: <https://enciklopedija.lv/skirklis/102328-makslu-terapija> (skat. 30.09.2026).

WHO (World Health Organization) (2020) Guidelines on Mental Health Promotive and Preventive Interventions for Adolescents: Helping Adolescents Thrive. Geneva: World Health Organization.

Wilson, M. (2017) Resource Focused Counselling and Psychotherapy. Abingdon, New York: Routledge.

Wu, J., Zhang, Z., Chai, T., Shen, Y., Yu, X. (2025) Adolescent psychological resilience and subjective well-being: A meta-analysis. *Journal of Psychology in Africa*, 35, Nr. 6, 771–790. <https://doi.org/10.32604/jpa.2025.067273>

Zubala, A., Kennell, N., Hackett, S. (2021) Art therapy in the digital world: An integrative review of current practice and future directions. *Frontiers in Psychology*, 12, 595536. <https://doi.org/10.3389/fpsyg.2021.600070>

Aleksandra Mārtinsone (LATVIJA)

ĢENERATĪVĀ MĀKSLĪGĀ INTELEKTA PROFESIONĀLĀS PIEŅĒMAMĪBAS ROBEŽAS PSIHOLOGU PRAKSĒ: EKSPLORATĪVS KVALITATĪVS PĒTĪJUMS

Mērķis. Ģeneratīvā mākslīgā intelekta (MI) rīki arvien biežāk tiek izmantoti psihologu darbā, taču robeža starp MI kā atbalsta instrumentu un MI kā profesionālā sprieduma aizvītotāju nav skaidri definēta. Pētījuma mērķis ir

izpētīt, kā psihologi konstruē profesionāli pieņemamas un nepieņemamas MI izmantošanas robežas savā praksē. Pētījuma jautājumi. (1) Kādas MI lomas psihologi apraksta profesionālajā darbā? (2) Kādi apsvērumi pamato MI lietošanas pieņemamību vai nepieņemamību? (3) Kādas spriedzes parādās starp faktisko MI lietojumu un formulētajām profesionālajām normām? Metode. Datu vākšana turpinās, izmantojot anonīmu aptauju ar slēgtiem un atvērtiem jautājumiem par MI lietošanas pieredzi, konkrētiem piemēriem un profesionālās pieņemamības vērtējumu. Atvērtās atbildes tiks analizētas ar induktīvu kvalitatīvu satura analīzi, identificējot nozīmes vienības, kodus, kategorijas un augstāka līmeņa tēmas; slēgtie jautājumi kalpos rezultātu kontekstualizēšanai. Centrālā analītiskā tēze. Profesionālā pieņemamība tiek aplūkota nevis kā bināra attieksme “par” vai “pret” MI, bet kā robežu veidošanas process starp profesionālā darba papildināšanu un profesionālā sprieduma deleģēšanu. Īpaša uzmanība tiks pievērsta atbildībai, kompetencei, konfidencialitātei, cilvēka kontrolei un prakses–normu spriedzei. Paredzamais pienesums. Pētījumā paredzēts konceptualizēt profesionālās pieņemamības kontinuumu no tehniska un lingvistiska MI atbalsta līdz klientam specifiskai interpretācijai un profesionālā sprieduma deleģēšanai, radot pamatu profesionālām diskusijām un ētisku un metodisku vadlīniju pilnveidei.

Vladimir Menshikov, Oksana Ruza (LATVIA)

**STARTUPS IN THE AGE OF PLATFORM CAPITALISM:
INNOVATION OR DIGITAL DEPENDENCY?
A BALTIC AND SMALL-ECONOMY PERSPECTIVE**

This paper examines the contradictory role of startups in small economies within the contemporary configuration of platform capitalism. While startups are widely understood as key agents of innovation, technological modernisation, and economic transformation, less attention has been paid to the structural dependencies that shape their development in small and peripheral economies. The paper addresses this gap by examining the Baltic states - Latvia, Lithuania, and Estonia - as a case of small, highly digitalised economies embedded in global technological and financial networks. The central research question is: To what extent do startup ecosystems in small economies generate autonomous innovation, and to what extent do they reproduce dependency on global digital platforms, infrastructures, and capital? The theoretical framework combines the concepts of platform capitalism, electronic neo-feudalism, and small-economy dependency. It conceptualises startups not simply as autonomous entrepreneurial actors but as organisational formations embedded in hierarchical digital ecosystems. Particular attention is given to dependence on global cloud

infrastructures, software ecosystems, payment systems, app stores, venture capital, and international markets. Methodologically, the study combines comparative analysis of the Baltic startup ecosystems with an examination of startup typologies, business models, ownership structures, investment patterns, and platform dependencies. The analysis also considers the ideological dimension of the startup discourse and its role in legitimising particular models of economic development. The paper argues that Baltic startups represent a hybrid formation between innovation and structural dependency. They contribute to technological renewal, internationalisation, and economic diversification, while simultaneously increasing reliance on infrastructures and forms of capital controlled outside the national economy. The paper therefore proposes a shift from measuring startup success primarily through investment, valuation, and internationalisation towards examining technological sovereignty, domestic value creation, and broader social and economic effects. The study contributes to the sociology of digital capitalism by connecting platform power with the structural constraints experienced by small economies and by identifying policy directions aimed at strengthening digital autonomy and the long-term developmental capacity of national startup ecosystems.

**Rasaq Sijuola, Olalekan Oladepo,
Jelena Davidova (LATVIA)**

THE INPUT OF EDUCATIONAL MANAGEMENT IN SUSTAINABLE NATIONAL DEVELOPMENT

The sustainability of a country's national development is, to a considerable degree, contingent upon how well its educational system performs in terms of quality, relevance and effectiveness. This study investigates the contribution of educational management to the advancement of sustainable national development, focusing specifically on leadership, the management of resources, the execution of policy, teacher professional growth, innovation and institutional accountability. The objective is to explore the ways in which competent educational management can convert educational institutions into effective hubs for developing human capital and driving national transformation. The study tackles the challenge of insufficient managerial capacity, wasteful distribution of educational resources, feeble policy execution, deficient accountability and the restricted incorporation of sustainability principles into educational practice. Adopting a conceptual and analytical framework, the paper explores how educational management relates to the economic, social, technological and environmental pillars of sustainable development. Its originality rests on portraying educational management not simply as an administrative task but as a

strategic means of harmonizing people, resources, policies and innovations in pursuit of long-term national development. This paper contends that capable educational managers shape the quality of teaching and learning, the performance of staff, institutional efficiency, research output, technological innovation and the formation of responsible citizens. It goes on to demonstrate that educational management fosters sustainable development when educational policies are converted into quantifiable institutional practices and when stakeholders take part in decision-making. The paper draws the conclusion that sustainable national development demands educational management systems that are visionary, accountable, innovative, inclusive and attuned to evolving societal needs. Consequently, reinforcing leadership capacity, enhancing resource utilization, advancing digital transformation and synchronizing educational planning with national development priorities are indispensable for attaining sustainable development.

Keywords: Educational management; human capital; national development; educational leadership; sustainable development; innovation; resource management.

Rosemarie Sisneros, Kiven Olivar (PHILIPPINES)

AN EVALUATION OF SAFETY PREPAREDNESS AND SECURITY MEASURES OF HOTELS IN DAVAO CITY AFTER COVID-19 PANDEMIC

The main purpose of conducting this study was to determine the level of implementation of safety preparedness and security measures in hotels in Davao City after the COVID-19 pandemic. The findings were done by gathering data from the guest of the hotels through a survey questionnaire. The findings manifested the following: the respondents have a total frequency of 400 and analyzed through frequency count and percentage; The level of implementation of safety preparedness of hotels in Davao City after the COVID-19 pandemic was very high, which indicates that hotels are well prepared to protect the health of their guests; The level of implementation of security measures in hotels of Davao City after COVID-19 pandemic was high, from guestroom security, staff security, and detectors; and, Safety preparedness and security measures were correlated, the result of the study shows that these two variables have a low positive relationship. The level of implementation of safety preparedness and security measures was analyzed through the average weighted mean, and the significance was analyzed through Pearson-r statistical treatment. This research could provide an opportunity to expand the study on how the hotel can adapt to

the current situation after the pandemic of COVID-19 to help the hotel's performance.

**Shenglin Sun (CHINA), Dzintra Ilisko (LATVIA),
Xing Wei (CHINA)**

ADAPTED PHYSICAL ACTIVITY FOR CHILDREN AND ADOLESCENTS WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES: A SYSTEMATIC REVIEW AND META-ANALYSIS

Children and adolescents with intellectual and developmental disabilities (IDD) face persistent disparities in physical fitness and motor competence that limit their inclusive participation in education and community life across regional contexts. Rigorous evidence on adapted physical activity (APA) interventions is therefore critical for informing evidence-based special education policy and advancing equitable social development at the regional level. This study used PRISMA 2020 to guide the review. Eligible studies were controlled pretest–posttest studies, including randomised and non-randomised designs, involving participants aged 8–18 years with IDD. Effect sizes were calculated as Hedges' g from between-group differences in pre–post change. A three-level random-effects meta-analysis accounted for dependent effect estimates within studies. Outcome domain was specified a priori as a moderator, with cluster-robust variance estimation used in sensitivity analysis. Results: Eighteen controlled studies involving 692 participants contributed 44 estimates. The pooled effect was positive prediction interval [0.35, 1.59]). Domain-specific effects were $g = 1.04$ for motor competence and coordination, $g = 0.83$ for cardiorespiratory endurance, and $g = 1.10$ for muscular fitness. No statistically detectable differences were found across domains. Conclusions: Comparative evidence indicates positive standardised between-group effects of APA interventions on physical fitness and motor competence in children and adolescents with IDD. Interpretation is constrained by the modest number of independent studies, variation in risk of bias, methodological heterogeneity, geographic concentration, and incomplete reporting of within-study outcome correlations. The pooled estimate represents standardised between-group differences rather than uniform or clinically meaningful improvement across fitness measures. Implications for Special Education: Structured, developmentally adapted physical activity programmes may be incorporated into special education settings to support physical fitness and motor competence. Implementation should be tailored to individual needs and context, as the evidence does not establish the superiority of specific intervention components or a minimum effective duration.

Key words: adapted physical activity; intellectual and developmental disabilities; motor competence; physical fitness; cardiorespiratory endurance; three-level meta-analysis.

Olalekan Oladepo (LATVIA)

ADOPTION OF CITIZEN DEVELOPMENT-DRIVEN NO-CODE TOOLS, TO ADDRESS IT TALENT SHORTAGES IN LATVIAN STARTUPS

The pertinence of the study is due to the upward gravitating global IT-talent shortage in sharp contrast to the fast-pace digital transformation, which necessitates the potential role of no-code platforms and employee-driven innovation approach as alternative tools to ensure scalability and continuity of Latvian startups.. There is a skill-set specific vacuum that needs filling. This IT-talents shortfall hampers innovation-related activities in startups and could lead to (\$)billions of global losses. According to Jeanetter (SAP): “A global shortage of highly skilled software developers is a significant risk factor for companies as they transition to truly intelligent enterprises”. Latvia, a small Baltic European country, is not immune to this scarcity of IT-talents. On the national level in Latvia , and according to Labs of Latvia, “the Latvian IT sector is experiencing a shortage of IT Talents, with a deficit of three thousand(3000) specialists annually”. The aim of the work is to provide a theoretical justification and conceptualisation of a model of employee-driven digital innovation in a Latvian startup environment in conditions of limited availability of IT talents, taking into account the transformational potential of no-code technologies in development processes. The study was carried out in the format of theoretical and analytical generalisation using systemic, comparative, and content analysis of scientific publications and industry reports, which made it possible to form an integrated model of interaction of the shortage of IT resources, no-code platforms and employee-driven innovation mechanisms within startup ecosystems. The results show that the IT talent shortage functions as a structural constraint on the development of startups, which triggers cascading effects in the form of slowing down innovation cycles, increasing human capital costs, and increasing dependence on a limited number of highly qualified specialists. At the same time, no-code platforms are identified as a tool for partial compensation of these imbalances, which is implemented by reducing technical barriers, expanding access to development, and involving employees with non-professional IT training in creating digital solutions. It is proven that the employee-driven innovation model in combination with no-code approaches forms a decentralised innovation architecture, in which employees with domain

expertise act as key agents, and technological platforms ensure the operationalisation of the ideas in the form of functional prototypes and products. This contributes to increasing the inclusiveness of innovation processes, as well as increasing the organisational flexibility and adaptability of startups. At the same time, the ambivalent nature of the impact of no-code technologies was established, which combines the acceleration of innovation dynamics with the formation of restrictions associated with dependence on platform solutions and the complexity of scaling individual products. To assist us to gain an understanding of existing research in an attempt to address the IT-talent shortages with reviewed results, which identified gaps and based on the collated gaps, a new model was birthed to assist to inject more IT-talents into the Latvian IT sector. The proposed model is interpreted as a tool for adapting startup ecosystems to the conditions of resource constraints and high uncertainty of the digital environment. The results obtained can be used by researchers, startup managers and specialists in the field of innovation policy to improve approaches to managing digital transformation and organising innovation processes. The model would assist non-technical employees to unleash their innovative and creative abilities in No-code.

Keywords: citizen development, no-code, personnel shortage, employee-driven innovation, resource constraints, domain expertise, citizen innovation.

Marvin Omaque, Mary Jane Amoguis (PHILIPPINES)

EMOTIONAL BIASES AS A MEDIATOR OF FINANCIAL LITERACY AND INVESTMENT DECISION BEHAVIOR OF BANK CLIENTS IN DAVAO CITY

This study explored the mediating effect of emotional biases on the relationship between financial literacy and investment decision behavior of bank clients in Davao City. A descriptive correlational design was employed, and 300 banking clients in Davao City were the respondents through the snowball sampling technique. Mean, standard deviation, Pearson r , mediation analysis, and path plot were the statistical tools utilized to analyze the study results. Results revealed that bank clients demonstrate high investment behavior, with financial literacy significantly influencing decisions. Emotional biases were also high, with loss aversion being the most dominant, indicating a strong tendency among clients to avoid financial losses. Correlation and mediation analyses confirmed significant relationships between financial literacy and investment decision behavior, emotional biases and investment behavior, and financial literacy and emotional biases. Moreover, emotional biases were shown to significantly mediate the effect of financial literacy's effect on investment behavior. These

findings emphasize the importance of cognitive knowledge and emotional regulation in guiding sound investment decisions. The study concludes that enhancing financial literacy and emotional intelligence is key to fostering prudent and well-informed investment practices among bank clients.

Keywords: Business management, investment decision behavior, financial literacy, emotional biases, mediation analysis, bank clients, and Davao City.

Mary Jane Bounette T. Palicte (PHILIPPINES)

FROM AMBIGUITY TO MEANING: INTERPRETING LEGAL LANGUAGE IN PHILIPPINE SUPREME COURT DECISIONS

This study examines how linguistic ambiguity contributes to the construction and interpretation of legal meaning in Philippine Supreme Court decisions. It aims to identify lexical and syntactic forms of ambiguity in judicial discourse and determine how semantic, pragmatic, grammatical, and contextual factors influence their interpretation. The research problem addressed is how ambiguous linguistic expressions accommodate multiple interpretations while acquiring more specific meanings within legal discourse. Focusing on twenty full-text Supreme Court decisions involving farming-related land disputes, the study employs a qualitative corpus-based research design. The data were purposively selected from decisions retrieved from the official website of the Philippine Supreme Court and analyzed through systematic identification, manual coding, and thematic interpretation of ambiguous expressions. Anchored in Galen's classification of lexical and syntactic ambiguity, the study examines ambiguity as both a structural or lexical feature and an interpretive phenomenon shaped by semantic, pragmatic, and contextual factors. Particular attention is given to elliptical or dangling clause structures and lexical items occurring in nouns, verbs, and adjectives. Expressions such as *case*, *rendered*, and *just* demonstrate how words may accommodate multiple meanings while acquiring more specific interpretations within legal discourse. Syntactically ambiguous constructions similarly illustrate how grammatical relationships may generate alternative readings requiring contextual interpretation. The novelty of the study lies in examining linguistic ambiguity in Philippine judicial language as an interaction between linguistic form, legal register, and contextual interpretation. The findings indicate that legal register, surrounding discourse, grammatical relationships, and contextual information contribute to narrowing or shaping multiple lexical and structural interpretations. The study concludes that ambiguity is more than a textual characteristic; it functions as an important point of interaction between language, context, and interpretation in legal discourse.

The findings demonstrate the value of linguistic analysis in understanding how meaning is communicated and interpreted in Philippine judicial language.

Keywords: applied linguistics, linguistic ambiguity, legal discourse, judicial language, legal interpretation, Philippine Supreme Court.

Toni Popović, Renata Relja, Matea Zovkić (CROATIA)

**RURAL QUALITY OF LIFE IN THE SHADOW OF TOURISM:
EVIDENCE FROM SELECTED SETTLEMENTS OF THE CITY OF
DUBROVNIK**

This paper examines the quality of life in three rural settlements administratively belonging to the City of Dubrovnik: Petrovo Selo, Pobrežje and Osojnik. The study addresses the tension between their proximity to a major urban and tourist centre and persistent rural disadvantages in access to services, mobility and employment. The aim is to assess residents' perceptions of different dimensions of quality of life and their association with sociodemographic characteristics and intentions to remain in the settlement. The empirical research was conducted in July and August 2025 using a mixed-mode questionnaire among 99 adult residents. The instrument combined sociodemographic questions, five-point assessments of quality-of-life dimensions, open-ended questions on sources of satisfaction and dissatisfaction, and questions concerning residential intentions. The study is particularly relevant because rural settlements within Dubrovnik's administrative territory are frequently overshadowed by the city's dominant international tourist image. It therefore links subjective well-being with territorial accessibility, local social resources and place attachment. Results show predominantly neutral-to-positive assessments of overall quality of life. Housing, interpersonal relations and the natural environment received the highest ratings, whereas health services, public transport and employment opportunities were rated lowest. Statistical analysis revealed significant differences in overall assessments by gender and settlement, as well as a weak positive association between perceived household economic status and quality of life. At the same time, 90% of participants reported that they would probably or certainly remain in their settlement. Open-ended responses further indicate that peace, nature, safety, neighbourhood relations and proximity to Dubrovnik are important sources of satisfaction, while inadequate public transport, limited basic services and restricted access to health care are major sources of dissatisfaction. The findings demonstrate that rural quality of life is multidimensional and shaped by the coexistence of strong local social resources and unequal access to institutional resources. The study highlights the importance of territorial accessibility, social cohesion and

inclusive local development in sustaining rural communities located within major urban and tourist regions.

Keywords: quality of life, rural settlements, rural well-being, social cohesion, local development, Dubrovnik.

Dalia Prakapienė (LITHUANIA)

THE ROLE OF SUSTAINABLE RESOURCE MANAGEMENT IN STRENGTHENING ORGANIZATIONAL RESILIENCE

Organizations strive to use financial, human, technological, and material resources efficiently, optimize processes, and reduce excess capacity. However, the crises of recent years have shown that efficiency based solely on resource conservation does not always ensure business continuity. From the perspective of organizational resilience, sustainable resource management encompasses not only reducing consumption but also the ability to ensure the availability, substitutability, and flexible reallocation of critical resources in the event of disruptions. Therefore, it is important to identify which sustainable resource management practices contribute most to organizations' preparedness, response, and adaptation. The aim of this study is to reveal the role of sustainable resource management in strengthening organizational resilience and to identify the most important practices that determine this impact. A systematic analysis of the scientific literature from 2000 to 2025 was conducted. Publications were selected from the "Scopus" and "Web of Science Core Collection" databases according to predefined inclusion, exclusion, and quality criteria. A total of 64 peer-reviewed publications examining sustainable resource management, organizational resilience, and business continuity were analyzed. The study results showed that organizational resilience is most strongly enhanced by supplier diversification, employee multifunctionality, technological modularity, process digitization, and circular resource use. Supplier diversification reduced dependence on individual supply sources, while employee multifunctionality and technological modularity enabled faster reallocation of tasks and capacities. Process digitization improved resource visibility and helped identify disruptions earlier, while circular resource use reduced the demand for primary raw materials and increased the availability of alternative resources. The impact of these practices was strongest in organizations that had identified critical resources in advance, assessed supply chain risks, and developed alternative business scenarios. Differences in outcomes were driven by the industry sector, organizational size, supply chain complexity, the duration of the disruption, the criticality of specific resources, and external environmental uncertainty. The analysis also revealed that minimizing inventory levels, reliance on a single

supplier, and full capacity utilization weakened resilience during prolonged disruptions. It was found that resilience is determined not by the total amount of accumulated resources, but by a targeted reserve of critical resources, their substitutability, and the organization's ability to reallocate them promptly. Thus, sustainable resource management strengthens organizational resilience when efficiency is combined with flexibility, alternative solutions, and the assurance of continuity for critical business functions.

Mujeeb Ur Rahman, Sadia Saeed (PAKISTAN)

SOWING TRADITION, HARVESTING CHANGE: AGRICULTURAL IDENTITY AND CLIMATE ADAPTATION IN LOWER DIR, PAKISTAN

Climate change is transforming agriculture in Pakistan, yet its social and cultural dimensions among smallholder farmers remain insufficiently understood. Drawing on 21 in-depth interviews and reflexive thematic analysis, this qualitative study examines how farmers in Lower Dir, Khyber Pakhtunkhwa, adapt to climate change while preserving agricultural identity and traditional ecological knowledge (TEK). Findings show that farming is constitutive of Pakhtun identity, making climate disruption a source of psychosocial distress as well as an environmental challenge. Rather than replacing inherited practice, farmers combine ancestral knowledge with modern techniques through what we term adaptive hybridisation. Financial exclusion, weak institutional support, inadequate infrastructure, and gender inequality nonetheless constrain adaptive capacity. The study frames adaptation as a socially embedded process shaped by culture, identity, and structural conditions, with implications for climate policy and rural development in Pakistan and comparable contexts.

Keywords: climate change adaptation; agricultural identity; traditional ecological knowledge; adaptive hybridisation; smallholder farmers, Pakistan.

Oļesja Teivāne (LATVIJA)

KĀPĒC DAUGAVPILĪ NAV SAVA KINOFESTIVĀLA: ŠĶĒRŠĻI UN IESPĒJAS

Daugavpils ir otrā lielākā Latvijas pilsēta. Pilsētā ir viss kino pasākumiem nepieciešamais: Marka Rotko mākslas centrs, moderna kinozāle Kultūras pilī, Daugavpils cietokšņa unikālā vēsturiskā vide, industriālās un laikmetīgi vēsturiskās ēkas. Tomēr sava kinofestivāla pilsētai nav. Bet ievērojami mazākā

pilsētā Rēzeknē no 2013. līdz 2019. gadam notika starptautiskais īsfilmu festivāls "Open Place". Rodas jautājums: kāpēc, pastāvot norises vietām un interesei par kino, festivāls Daugavpilī tā arī nav izveidojies? Pētījuma mērķis - noskaidrot, kas kavē kinofestivāla rašanos Daugavpilī, un iezīmēt iespējamus risinājumus. Pētījums balstīts atklāti pieejamos avotos.

Plānots:

1. Pēc mediju arhīviem un kultūras iestāžu programmām apkopot pilsētas kino pasākumu hronoloģiju 2010.–2026. gadā;
2. Izpētīt kultūras finansēšanas konkursu nolikumus un rezultātus - Daugavpils pašvaldības jauno atbalsta programmu, Latgales kultūras programmu un Valsts kultūrkapitāla fonda konkursus;
3. Salīdzināt situāciju ar festivāla "Open Place" (Rēzekne) pieredzi.

Tiek aplūkoti trīs iespējamie cēloņi:

1. Pilsētā trūkst cilvēku un organizāciju, kas būtu gatavi uzņemties šādu projektu, - profesionālās kino kopienas;
2. Kultūras finansēšanas sistēma nav piemērota šāda veida pasākumiem - summas ir nelielas, nepieciešams līdzfinansējums, pieteikumus pieņem galvenokārt no organizācijām, nevis privātpersonām;
3. Pilsētai ir vienkāršāk uzņemt Rīgas starptautiskā kinofestivāla (RIGA IFF) viesprogrammu, nekā veidot savu notikumu. Citi iespējamie cēloņi - ģeopolitiskās pārmaiņas pēc 2022. gada un iedzīvotāju skaita samazināšanās - iezīmēti kā turpmākās izpētes virzieni. Gaidāmie rezultāti: pilsētas kino pasākumu hronoloģija, novērtējums, kuri šķēršļi patiešām ir nozīmīgi, un priekšlikumi, kāds kinofestivāla formāts varētu iedzīvoties pierobežas pilsētā.

Jolanta Ūzuliņa (LATVIJA)

DEPOPULĀCIJA KĀ REĢIONĀLĀS DROŠĪBAS VADĪBAS IZAICINĀJUMS LATGALES REĢIONA PIEROBEŽAS PAŠVALDĪBĀS

Depopulācija Latgales reģiona pierobežas pašvaldībās ir ne tikai demogrāfisks un sociālekonomisks process, bet arī stratēģisks reģionālās drošības un publiskās pārvaldības izaicinājums. Iedzīvotāju skaita samazināšanās, sabiedrības novecošanās, darbaspējīgo iedzīvotāju aizplūšana un zemā dzimstība mazina pašvaldību cilvēkresursu un finanšu kapacitāti, apgrūtina publisko pakalpojumu nodrošināšanu un var vājināt pierobežas teritoriju ilgtermiņa dzīvotspēju. Pētījuma mērķis ir izvērtēt depopulācijas radītos vadības izaicinājumus Latgales pierobežas pašvaldībās un identificēt pārvaldības risinājumus reģionālās drošības un teritoriālās noturības stiprināšanai. Pētījumā paredzēts izmantot zinātniskās literatūras analīzi, demogrāfisko un sociālekonomisko rādītāju salīdzinošo analīzi, kā arī pašvaldību attīstības

plānošanas dokumentu izpēti. Depopulācijas pārvaldība pierobežā jāskata kā starpnozaru uzdevums, kurā demogrāfiskā ilgtspēja, ekonomiskā drošība, sociālā kohēzija un institucionālā kapacitāte ir savstarpēji saistīti elementi. Tādēļ nepieciešama koordinēta, datus balstīta un ilgtermiņā orientēta pārvaldības pieeja, kas apvieno pašvaldību attīstības prioritātes ar valsts reģionālās attīstības un drošības politiku.

Ke Zhang (CHINA)

CURRENT SITUATION AND OPTIMIZATION OF REGIONAL HIGHER EDUCATION RESOURCE ALLOCATION IN THE CONTEXT OF DEMOGRAPHIC STRUCTURAL TRANSITION

China's population development is entering a new phase in which a long period of incremental growth has given way to the coexistence of a declining total population and profound structural adjustment. The continued decline in births, accelerating population aging, and cross-regional population mobility are not only reshaping demand for labor and public services; through the progressive transmission of age cohorts, they will also exert long-term impacts on the scale, regional distribution, and resource allocation of higher education student sources. Based on an analysis of changes in student sources and admission shortfalls in China, this study draws on supply–demand theory and resource allocation theory to construct a "Population–Demand–Resource (PDR)" framework, and integrates data analysis, policy text analysis, and regional case studies to examine China's demographic structural shifts, trends in higher education student sources, and the phenomenon of admission shortfalls. The study aims to advance the gradual transition of China's higher education governance from a scale-expansion orientation toward a demographic-adaptive governance model.

**Ślawomir Żurawski, Marcin Oskierko,
Rafał Parczewski (POLAND)**

CYBERSECURITY OF LOCAL GOVERNMENT UNITS AS A PREREQUISITE FOR REGIONAL RESILIENCE AND DEVELOPMENT

The dynamic digital transformation of public administration has significantly increased the dependence of local government units on information and communication technologies. Digital public services, electronic document

management, databases, communication systems, and networked infrastructure improve the efficiency and accessibility of local administration, but at the same time create new vulnerabilities to cyber threats. Cybersecurity is therefore becoming not only a technical or organisational challenge but also an important component of regional resilience, public security, and sustainable socio-economic development. The aim of this study is to analyse the role of cybersecurity in strengthening the resilience of local government units and to identify its importance for maintaining the continuity of public services and supporting regional development. Particular attention is paid to cyber threats affecting local administration, including ransomware, phishing, data breaches, disruption of information systems, and attacks targeting critical and public infrastructure. The study also considers the importance of risk management, cybersecurity awareness, staff competencies, organisational procedures, incident response capabilities, and cooperation between local authorities and national institutions responsible for cybersecurity. The research is based on an analysis of the relevant literature, legal and strategic documents, and selected examples of cybersecurity challenges faced by local government institutions. The analysis adopts an interdisciplinary perspective combining security studies, public management, and regional development. The study argues that the level of cybersecurity achieved by local government units has a direct impact on their institutional resilience and their ability to provide essential services during crises and disruptions. Insufficient cybersecurity may generate not only technological and financial losses but also social and economic consequences, including reduced public trust, disruption of local services, and deterioration of conditions for regional development. Consequently, strengthening cybersecurity should be treated as an integral part of regional development policies and local resilience strategies. Building secure digital administration requires continuous investment in technological solutions, human capital, risk management, education, and inter-institutional cooperation.

Keywords: cybersecurity, local government, regional resilience, regional development, public administration.

EKONOMIKA / ECONOMICS

REĢIONĀLĀ EKONOMIKA, FINANSES UN KREDĪTS / REGIONAL ECONOMICS, FINANCES AND CREDIT

Daniel Baier (UNITED STATES)

BUILDING FUTURE BALTIC COOPERATION THROUGH HANSEATIC MEMORIES

Background: While the Hanseatic League relied on somewhat decentralized city-to-city alliances, shared mercantile law, and informal trust to build regional development, the modern Baltic states operate within the formalized legal framework of the European Union. However, this does not mean the older, citizen-led history of the Hanseatic League must be abandoned entirely. Grassroots movements are possible within the modern EU framework. By working with and taking inspiration from movements like Europe Must Act and the Degrowth Network, a modern form of the Hanseatic League can take shape, in an even more decentralized manner than ever. Objective: The modern EU faces modern global challenges, such as economic instability, supply-chain shifts, and regional security pressures. These challenges often affect the sub-regions of Europe, including the Baltic Sea Region. The objective of this presentation will be to learn how the history of the Hanseatic League can be utilized in order to inform future international development of the Baltic Sea Region, and provide stability for individuals living in those states, regardless of global economic trends. This can be achieved by using open and citizen-first diplomacy, grassroots citizen-led movements, flexible trade networks, and strong cross-border mobility networks to supplement that trade. Methodology of Study: The author will use a comparative and interdisciplinary framework to examine the relationships between local rulers and Hanseatic kontors and how they compare to state-municipality relationships in the modern day. This study will view case studies of cross-border municipal networks, including economic networks such as the Union of Baltic Cities and New Hansa, as well as environmental networks such as Interreg MUSTBE. In particular, this study will examine what lessons those networks can take from the historically guild-led Hansa, and how modern municipalities can work with (and utilize) private enterprises in order to strengthen the Baltic Sea region.

Keywords: Regional development, Hansa, Environment, Economic Stability.

Marta Bizane (LATVIA)

RETRĪTU TŪRISMS KĀ ALTERNATĪVĀ TŪRISMA VEIDS: ATTĪSTĪBAS IESPĒJU TEORĒTISKAIS IZVĒRTĒJUMS

Pēdējos gados alternatīvais tūrisms ir piesaistījis arvien lielāku uzmanību, pieaugot interesei par ilgtspējīgu, individualizētu un transformējošu ceļošanas pieredzi (Weaver, 2006; Smith & Puczkó, 2009). Starp tā veidiem retrītu tūrisms izceļas ar orientāciju uz personīgo transformāciju, pašrefleksiju un visaptverošu labbūtnību. Neraugoties uz retrītu tūrisma attīstību, tā konceptuālās robežas ar labbūtnības tūrisma un citiem alternatīvā tūrisma veidiem joprojām ir diskutējamas (Kelly, 2010). Šajā rakstā retrītu tūrisms aplūkots kā alternatīvā tūrisma veids, izvērtējot tā raksturīgās iezīmes un attīstības iespējas. Īpaša uzmanība pievērsta retrītu pieredzes specifikai, kas var ietvert personīgo izaugsmi, pieredzē balstītu mācīšanos un transformējošas prakses (Smith & Puczkó, 2009; Kelly, 2010). Pētījums balstīts uz zinātniskās literatūras analīzi un salīdzinošo pieeju. Papildus retrītu tūrisma konceptuālajam raksturojumam veikts tā attīstības iespēju teorētiskais izvērtējums, analizējot trīs galvenos aspektus: specializētu retrītu centru darbības priekšnosacījumus, retrītu pakalpojumu piedāvājuma dažādošanas iespējas un ilgtspējīga tūrisma principu integrēšanu. Šo aspektu izvērtējumā izmantotas atziņas par retrītu pakalpojumu organizēšanu (Kelly, 2010), labbūtnības tūrisma produktu daudzveidību (Smith & Puczkó, 2009) un ilgtspējīga tūrisma attīstības principiem (Weaver, 2006). Teorētiskais izvērtējums ir vērsts uz retrītu tūrisma attīstības priekšnosacījumu sistematizēšanu un tā iespējamo attīstības virzienu identificēšanu alternatīvā tūrisma kontekstā. Pētījums papildina retrītu tūrisma teorētisko izpratni un veido pamatu turpmākai specializētu retrītu pakalpojumu un ilgtspējīgu tūrisma piedāvājumu izpētei.

Atslēgvārdi: alternatīvais tūrisms, retrītu tūrisms, labbūtnības tūrisms, transformējošais tūrisms, ilgtspējīga attīstība, retrītu centri.

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Aina Čaplinska, Natālija Konovalova (LATVIJA)

LATVIJAS KAPITĀLA TIRGUS ATTĪSTĪBAS TENDENCES BALTIJAS VALSTU KONTEKSTĀ

Kapitāla tirgus attīstība jebkurā valstī atspoguļo vairākas globālas un reģionālas tendences, kas ietekmē investīciju vidi, finanšu infrastruktūru, regulējumu un inovācijas. Kapitāla tirgus, ir viens no svarīgākajiem nosacījumiem labvēlīgai finanšu videi valstī. Kapitāla tirgus kā alternatīva kredītam var nodrošināt kritiski nepieciešamo finansējumu izaugsmei, veicināt Latvijas un ārvalstu investoru aktivitāti, kā arī veicināt ieguldījumu kultūras attīstību. Laika posma no 2019. līdz 2025. gadam Baltijas valstu kapitāla tirgus piedzīvoja strukturālo attīstību un investoru aktivitātes pieaugumu, ko būtiski ietekmēja informētības pieaugums, vietējo investoru skaita palielināšanās, tomēr attīstības tendences Baltijas valstu starpā it atšķirīgas.

Atslēgas vārdi: Baltijas kapitāla tirgus, likviditāte un tirgus kapitalizācija, finanšu instrumenti.

Elena Fedorova, Edmunds Čižo (LATVIJA)

LATGALES REĢIONA UZŅĒMUMU GATAVĪBA MĀKSLĪGĀ INTELEKTA IEVIEŠANAI TĀ KONKURĒTSPĒJAS KONTEKSTĀ

Pētījuma mērķis ir novērtēt organizācijas gatavību mākslīgā intelekta (MI) ieviešanai darba procesā, kā arī tā izmantošanas uztvertās priekšrocības un riskus uzņēmuma konkurētspējas veidošanā. Pētījums balstās uz Latgales reģiona mazo un vidējo ražošanas uzņēmumu darbinieku aptaujas rezultātiem, kurā piedalījās 120 respondenti (aptauja tika veikta 2026.g. februārī–martā). Analīzē izmantoti rādītāji par uzņēmumu gatavību MI ieviešanai, kā arī par darbības priekšrocībām, tehnoloģiskajiem, informācijas un juridiskajiem riskiem. Iegūtie rezultāti liecina, ka uzņēmuma lielāka gatavība izmantot MI ir saistīta ar pozitīvāku novērtējumu par tās ietekmi uz konkurētspēju. Visizteiktākā saikne tika konstatēta starp konkrētām MI operatīvajām priekšrocībām – lēmumu pieņemšanas uzlabošanu, manuālā darba samazināšanu un produktu vai pakalpojumu kvalitātes paaugstināšanu – un uzņēmuma konkurētspēju. Vienlaikus ir konstatēts, ka vispārējais AI potenciāla novērtējums ir ievērojami augstāks nekā novērtējums par tā pielietojšanas iespējām pašu uzņēmumā. Tas liecina, ka MI priekšrocību atzīšana pagaidām apstēdiz uzņēmumu faktisko organizatorisko gatavību tā ieviešanai. MI radītā konkurences priekšrocība lielā

mērā ir atkarīga no uzņēmuma spējas ne tikai izmantot jaunas tehnoloģijas, bet arī stratēģiski integrēt tās darba procesos.

Pētījums veikts Daugavpils Universitātes (Latvija) pētniecības projekta Nr. 14-95/2026/17 "MI balstīta uzņēmumu transformācija un tās ietekme uz va-dības lēmumu kvalitāti" ietvaros.

Aleksejs Hilķeviĉs (LATVIA)

RELATIONS BETWEEN MICROECONOMIC AND MACROECONOMIC ASPECTS OF TECHNOLOGY TRANSFER

Technology transfer (TT) connects the commercialization of scientific knowledge at the enterprise level with productivity and economic growth, yet these processes are frequently studied separately. This study develops an integrated framework linking the microeconomic, sectoral and macroeconomic aspects of TT in Latvia. At the microeconomic level, the proposed combinatorial method varies the sequence and parallel execution of seven business functions and evaluates alternative TT arrangements by project duration, human resource requirements and financial costs. It addresses the coordination of academic institutions, businesses and public administration, whose objectives and incentives differ. At the sectoral level, the analysis of ICT companies for 2014–2024 identifies pronounced territorial concentration around knowledge and competence centres, providing an intermediate perspective between individual projects and national economic performance. At the macroeconomic level, growth decomposition using Penn World Table 11.0 data for 1995–2022 attributes 90.4% of Latvia's average annual GDP growth to total factor productivity, compared with 73.1% in Lithuania and 59.8% in Estonia. These figures describe productivity contributions and do not identify the causal effect of TT. Two structural growth models are calibrated to Latvian data for 1995–2024. The baseline model incorporates TT channels through total factor productivity, while the extended model adds human capital, ICT and institutional factors. The model comparison indicates that the extended formulation better reflects the observed GDP trajectory. The study provides complementary tools for organizing TT projects, interpreting regional innovation patterns and examining growth scenarios. Its main contribution is the analytical connection between levels, with explicit recognition that productivity is an indirect indicator influenced by TT and other factors.

Sergejs Hilkevics, Didrihsons Raitis (LATVIA)

ECONOMIC ASPECTS OF DEVELOPING ELECTRIC AIR SERVICES IN NORTHERN EUROPE

The development of regional air services using electric aircraft requires the identification of markets in which passenger demand and transport benefits can support economically viable connections. This study proposes an economic framework for selecting and comparing airport pairs in Northern Europe within the INGERA project. The geographical scope covers the Nordic and Baltic countries, Poland and Northern Germany. The analysis focuses on market potential, existing air services, competition with ground transport, passenger revenues, service costs and regional economic benefits. The INGERA prototype provides an initial empirical basis: market screening retains 1,062 candidate routes, a synthetic demand-potential index identifies 377 high-potential pairs, and a direct-service check distinguishes 311 pairs without a direct connection in the working dataset from 66 pairs with existing services. These indicators describe market opportunities rather than forecast passenger volumes or demonstrated profitability. The proposed economic assessment proceeds from demand estimation to revenue and cost scenarios. Demand is examined through the size and purchasing power of endpoint markets, business and tourism links, seasonality, competing services and passengers' willingness to pay. Competition is assessed through the generalised cost of travel, combining fares or other monetary expenses with the value of door-to-door travel time. Route revenues depend on fares, passenger volumes and load factors, while economic appraisal considers annual costs, capital commitments, break-even demand and the sensitivity of financial outcomes to prices and demand assumptions. Commercial viability is evaluated separately from wider benefits, including improved regional accessibility, business connectivity and time savings. Existing routes are treated as potential markets for service substitution, while unserved pairs are assessed as opportunities for new connections. Multi-criteria comparison makes the trade-offs between financial performance and regional benefits explicit. The contribution is a transparent economic route-selection framework that extends preliminary market screening towards investment appraisal. Subsequent validation requires observed origin–destination demand, fares, competing transport prices and credible cost estimates; the current prototype does not establish that the shortlisted routes are commercially viable.

Sergejs Hilkevics, Elina Feldmane (LATVIA)

QUALITY OF LIFE AS A PREREQUISITE FOR SUSTAINABLE REGIONAL DEVELOPMENT: THE CONTEXT OF LATVIAN STATE CITIES

Quality of life is essential for regional development, as it promotes long-term economic and social growth. An attractive and supportive environment for investment and entrepreneurship promotes competitive economic development and the sustainable use of environmental resources. Sustainable solutions for quality of life ensure the availability of resources for current and future generations. This increases the well-being of residents, the ability to retain and attract new residents. People often choose to live in regions where better quality of life opportunities are available, such as high-quality healthcare, accessible logistics, as well as a safe environment. The development of cultural infrastructure promotes tourism and, consequently, economic growth. Transport systems and modern technologies allow for improved mobility of residents and access to resources, which improves the attractiveness of the region. Regions where public participation and cohesion are promoted create a more favorable environment for living. Accessibility and the living environment in regions are closely linked to issues of effective governance, implemented quality management systems and related challenges. Quality management systems allow for the assessment of the current situation, identifying gaps and their possible solutions, thus providing an opportunity to develop and significantly improve operations, supporting change management, performance improvements on the way to creating sustainable results. Solutions for improving the quality of life include the specifics of the territory, the capacity of regions and municipalities. A population-oriented policy provides for the development of the potential of regions and the reduction of socio-economic disparities, strengthening their internal and external competitiveness.

Sergejs Hilkevics, Arturs Kokars (LATVIA)

IDENTIFICATION AND RANKING OF REGIONAL ROUTES FOR NEXT-GENERATION AIRCRAFT IN NORTHERN EUROPE

The transition to zero- and low-emission regional aviation requires not only the development of new aircraft, but also the identification of routes on which their technical and economic characteristics can provide the greatest benefits. This study presents a reproducible methodology developed within the INGERA

project for identifying and prioritising prospective Northern European routes for the Heart Aerospace ES-30 as a reference next-generation aircraft. The methodology consists of six consecutive stages: definition of the geographical study area, formation of the airport universe and airport pairs, technical range filtering, market and transport screening, operational and regional assessment, and final multi-criteria ranking. The working study area includes the Nordic and Baltic countries, Poland and Northern Germany. A universe of 123 airports generated 7,503 unordered airport pairs. After applying the ES-30 working range limit of 800 km, 3,322 technically feasible pairs remained. Initial market screening reduced this set to 1,062 routes, while the demand-potential assessment identified 377 high-potential routes. A check of existing direct air services identified 311 high-potential airport pairs without a direct connection. The preliminary door-to-door comparison with car travel showed an aviation time advantage exceeding one hour for 304 of these 311 routes. Operational and regional screening classified 265 routes as KEEP, 44 as REVIEW and 2 as DROP. In the final multi-criteria analysis, combining technical, market, transport and operational/regional criteria, five routes reached the highest Priority 1 category: PLQ–WAW, LPX–WAW, KRP–BER, BLL–BER and GOT–HAM. The results demonstrate that sequential filtering combined with multi-criteria analysis provides a transparent and extendable framework for identifying promising markets for next-generation regional aircraft. The present results constitute a methodological prototype; subsequent work will replace proxy indicators with observed passenger-demand, transport, airport, meteorological and energy-system data.

Key words: next-generation aircraft, ES-30, regional aviation, route selection, multi-criteria analysis, Northern Europe.

Sergejs Hilkevics, Sanita Lasmane (LATVIA)

LABOUR PRODUCTIVITY AND WAGES ACROSS SECTORS OF THE LATVIAN ECONOMY

Differences in labour productivity provide an economic basis for wage differences across sectors, but the relationship also reflects the composition of employment and sector-specific conditions. This study examines the association between labour productivity and average wages across ten sectors of the Latvian economy in 2024. It builds on research into Latvia's labour market, human capital and the relationship between wage and productivity dynamics, extending this perspective to a cross-sectional comparison of economic activities. Data from the Central Statistical Bureau of Latvia are combined from sectoral gross value added, national accounts employment and average monthly wages and

salaries tables. Labour productivity is measured as annual gross value added at current prices per employed person under the domestic employment concept; remuneration is measured as average monthly gross wages. The selected NACE Rev. 2 sectors comprise agriculture, forestry and fishing; mining; energy supply; water and waste management; accommodation and food services; information and communication; finance; professional activities; public administration; and health and social work. Scatter-plot analysis and Pearson correlation reveal a positive association: $r = 0.782$, with $R^2 = 0.611$ for a simple linear regression with an intercept. Financial activities combine the highest productivity in this sample, approximately EUR 99,911 per employed person annually, with monthly gross wages of EUR 2,851. Information and communication records wages of EUR 2,733 at productivity of approximately EUR 65,111, illustrating that sectoral wage differences are not proportional to differences in value added per worker. Accommodation and food services record approximately EUR 22,688 and EUR 1,107, respectively. The findings provide a descriptive basis for examining sectoral deviations in relation to skills, capital intensity, labour shortages and wage-setting institutions. Interpretation accounts for differences between total employment and wage-earner populations and for the valuation of non-market services. The selected-sector correlation does not establish causality or describe wage-productivity growth over time. The study offers a starting point for broader sectoral and longitudinal analysis of sustainable wage development in Latvia.

Key words: labour productivity, gross value added, wages, sectoral differences, correlation analysis, Latvia.

Sergejs Hilkevics, Valentina Semakina (LATVIA)

MOVING MACROECONOMIC EQUILIBRIUM AND MOVING GROWTH PATH OF LATVIAN ECONOMY

Macroeconomic adjustment involves the simultaneous movement of interdependent variables, while economic growth changes the equilibrium towards which they adjust. This study presents a graphical analysis of twelve indicators in a macroeconomic “dial” to examine these two processes jointly in the Latvian economy. The analytical framework integrates the IS–LM goods and money markets, the AS–AD aggregate supply and demand system, wage-setting and price-setting relations, and a Cobb–Douglas production block. The presentation focuses on the trajectories and mutual relationships of the dial indicators, including output, consumption, investment, interest rates, employment, unemployment, wages, prices, real money balances and aggregate demand. For each calendar period, a locally calibrated equilibrium is calculated

through iterative adjustment. The feedback mechanism links higher output to increased employment, lower unemployment, wage and price pressures, reduced real money balances, higher interest rates and weaker investment demand. Its convergence depends on behavioural parameters and adjustment coefficients. Between periods, changes in technology, capital accumulation and labour resources shift the equilibrium, producing a moving growth path. Graphs of the indicators provide a means of examining convergence within a period, changes in equilibrium values over time and the transmission of disturbances across markets. Numerical iteration is distinguished explicitly from calendar time: computational convergence does not itself measure the historical speed of economic adjustment. Latvia in 2004–2025 provides an illustrative application. The production-based smooth-growth benchmark increases by approximately 1.59% annually, combining positive technology and capital contributions with declining employment. The output comparison identifies pre-crisis overheating, the subsequent contraction, recovery and pandemic disruption. The broader graphical approach extends this interpretation to the interconnected monetary, labour and expenditure variables, helping distinguish adjustment towards the current equilibrium from structural changes in the future path. The contribution is a transparent visual and computational framework for analyzing macroeconomic dynamics as a system. The calibrated trajectories are model-based illustrations, and the smooth-growth benchmark is not an official estimate of potential output.

Key words: moving equilibrium, macroeconomic dial, graphical analysis, economic growth, market adjustment, Latvia.

Sergejs Hilkevics, Dmitrijs Smirnovs (LATVIA)

DETERMINING THE OPTIMAL LEVEL OF PUBLIC DEBT FOR LATVIA WITHIN A MOVING-EQUILIBRIUM MACROECONOMIC FRAMEWORK

Determining an optimal level of public debt remains an important problem of fiscal policy because government borrowing can produce both positive and negative macroeconomic effects. Traditional approaches address this problem through tax-smoothing models, debt-sustainability conditions, sovereign-default models, overlapping-generations models, DSGE frameworks and fiscal rules. These approaches demonstrate that there is no universal optimal debt-to-GDP ratio: the appropriate level depends on economic growth, interest rates, fiscal balances, macroeconomic volatility and other country-specific conditions. This study proposes to analyse the optimal level of Latvian public debt within a moving-equilibrium macroeconomic framework developed for the Latvian

economy. The framework distinguishes between a short-run annual macroeconomic equilibrium and a separate long-run growth-accounting layer. In the annual block, equilibrium output is determined conditionally on fiscal, financial and external conditions, while the long-run layer describes the contribution of capital, labour and broad productivity to economic growth using a Cobb-Douglas production framework. Public debt is introduced as a fiscal variable capable of affecting the economy through several channels. Additional borrowing may support aggregate demand and, when used for productive public investment, contribute to capital accumulation and future output. At the same time, a higher debt level increases debt-service requirements, reduces fiscal space and may adversely affect financing conditions. The optimal debt level can therefore be interpreted not as an exogenously imposed numerical threshold, but as a country-specific balance between the growth-supporting effects of debt-financed expenditure and investment and the increasing fiscal and financial costs associated with debt accumulation. As an initial benchmark, the Domar framework shows the importance of the relationship between the budget deficit and nominal GDP growth for the long-run debt-to-GDP ratio. For illustrative Latvian parameters, with real GDP growth of approximately 1.8% and inflation of 2.5%, nominal growth is about 4.3%; persistent deficits of 2.0%, 2.5% and 3.0% of GDP would correspond in the simplified Domar framework to long-run debt ratios of approximately 46.5%, 58% and 70% of GDP, respectively. The proposed moving-equilibrium approach extends this analysis by relating debt not only to fiscal sustainability but also to the position of macroeconomic equilibrium and to the long-run determinants of economic growth. The study is intended to provide a methodological basis for estimating a Latvia-specific range of public debt consistent with macroeconomic stability and sustainable long-term growth.

Key words: public debt, optimal public debt, Latvia, moving equilibrium, fiscal policy, economic growth, Cobb-Douglas, debt sustainability.

Yaozong Huo, Edmunds Čižo (LATVIA)

FROM IOT DATA TO OPERATIONAL DECISIONS: A CONCEPTUAL FRAMEWORK FOR DATA-DRIVEN MANAGEMENT OF FUEL RETAIL STATIONS

The increasing digitalization of fuel retail operations creates new opportunities for improving managerial decision-making through the systematic use of data generated by Internet of Things (IoT) technologies. Modern fuel stations produce substantial volumes of operational data related to fuel inventory, dispensing activities, equipment performance, transaction patterns, and

environmental conditions. However, transforming these heterogeneous data into actionable managerial knowledge remains a significant challenge for fuel retail operators. This study aims to develop a conceptual framework for data-driven operational decision-making in refined oil product retailing, with particular emphasis on the potential of IoT-generated data to improve the efficiency and responsiveness of fuel station operations. The research focuses on identifying key operational decision areas, relevant data sources, and analytical approaches that can support inventory management, demand forecasting, equipment maintenance, and resource allocation. Methodologically, the study adopts an exploratory research approach combining a structured review of relevant literature with the conceptual mapping of IoT data sources and operational decision processes. Particular attention is given to the relationships between data availability, information quality, analytical capabilities, and managerial decision effectiveness. The proposed framework conceptualizes the transformation of raw IoT data into operational insights through data integration, analytical processing, and decision-support mechanisms. It also identifies potential barriers, including data fragmentation, technological limitations, and organizational readiness. The expected contribution is a theoretical and methodological foundation for subsequent empirical research using operational data collected from fuel retail stations. By connecting IoT-enabled data collection with specific managerial decisions, the study seeks to advance understanding of how data-driven approaches can enhance operational efficiency and support the digital transformation of refined oil product retailing.

Sergejs Ignatjevs, Atis Papins (LATVIA)

**TERRITORIAL IMAGINEERING IN REGIONAL DEVELOPMENT:
AN AI-ASSISTED DIAGNOSIS OF REPRESENTATION GAPS IN
LATGALE**

Regional development is commonly assessed through economic, demographic, infrastructural and institutional indicators. Less attention is paid to whether the public representation of a region reflects the characteristics, capacities and constraints documented in development policy. Territorial imagineering is understood in this study as an evidence-based process that examines how territorial characteristics are selected, connected and converted into representations capable of informing development choices. The study identifies representation gaps between the documented characteristics of Latgale and the region's official public-facing representation. It uses an exploratory qualitative desk study based on selected regional planning and development documents, official statistics, OECD regional assessments, national policy materials

concerning Latvia's eastern border, and official tourism, investment and innovation communication. Artificial intelligence supports document classification, thematic coding and comparison across source groups. The researchers retain responsibility for source verification, contextual interpretation and conclusions. The findings indicate a clear representational asymmetry. Nature, lakes, cultural heritage, traditions and hospitality form a coherent and highly visible image of Latgale. Development and policy sources describe a more complex territory. They also emphasise higher education, entrepreneurship, innovation capacity, investment needs, connectivity, demographic decline and the strategic role of the eastern border. These dimensions are documented but remain fragmented and less visible in the region's general public representation. The identified gap does not mean that Latgale is represented incorrectly. Rather, a limited set of authentic territorial characteristics has become dominant, while several development-relevant dimensions remain weakly connected to the regional image. Territorial imagineering provides a diagnostic approach for identifying this imbalance. The results suggest that regional positioning should connect Latgale's established natural and cultural strengths with its contemporary economic, educational and strategic functions. Such analysis can inform subsequent strategy design and empirical testing with residents, institutions and external audiences.

Kamil Kotliński (POLAND)

VARIATION IN HUMAN CAPITAL LEVELS ACROSS EUROPEAN UNION MEMBER COUNTRIES

Human capital is a complex and multidimensional concept. It is understood in very broad terms: as education, knowledge, and skills, but also as health and social ties. Human capital is a key driver of productivity growth, innovation, and economic competitiveness. The aim of the study was to rank European Union member countries according to their level of human capital, from highest to lowest. A synthetic human capital index was constructed based on 10 indicators grouped into three areas of human capital assessment: education, healthcare, and social activity. We employed a linear ordering method using a common development pattern and anti-pattern. The resulting synthetic index allows for the ranking of entities from "best to worst" with respect to the phenomenon under study. The data source is the Eurostat Database. The spatial scope of the research is all 27 member states of the European Union. The results indicate that Denmark has the highest level of human capital, followed by Sweden in second place, Finland in third, and the Netherlands in fourth. Romania ranks last—

27th—meaning it has the lowest level of human capital in the European Union. Latvia holds 26th place, making it second to last. Poland is in twenty-fifth place. A sufficiently high level of human capital enables societies to better adapt to changing economic conditions and positively influences the implementation of the sustainable development concept. Higher levels of human capital facilitate faster technological advancement, more efficient resource utilisation, and more sustainable economic growth. The study's findings speak highly of the effectiveness of the Danish, Swedish, and Finnish development models, as well as their education and healthcare systems. This may be a source of competitive advantages for these countries and an indication that this is where we should look for role models.

Jānis Kudiņš (LATVIA)

MĀKSLĪGĀ INTELEKTA IEVIEŠANA UN UZŅĒMUMU ORGANIZATORISKĀ PĀRSTRUKTURĒŠANA EIROPAS SAVIENĪBAS VALSTĪS

Šajā pētījumā tiek analizēts, vai mākslīgā intelekta (MI) tehnoloģiju arvien plašāka ieviešana ir saistīta ar izmērāmiem organizatoriskās pārstrukturēšanas procesiem uzņēmumos visā Eiropas Savienībā (ES). Lai gan līdzšinējie pētījumi galvenokārt ir koncentrējušies uz MI ieviešanu ietekmējošajiem faktoriem un tā ietekmi uz uzņēmumu darbības rezultātiem, MI integrācijas organizatoriskās sekas joprojām ir nepietiekami izpētītas. Lai novērstu šo pētniecisko nepilnību, pētījumā ir izstrādāts uz uzņēmumu spējām balstīts konceptuālais ietvars, kas sasaista uzņēmumu iekšējās spējas, MI ieviešanas mehānismus un organizatoriskās pārstrukturēšanas rezultātus. Empīriskā analīze ir balstīta uz salīdzinošām Eurostat datu kopām, kas aptver ES dalībvalstis un ietver rādītājus par digitālajām spējām, organizatoriskajām inovācijām, MI ieviešanu un vidējā līmeņa vadītāju nodarbinātības struktūru. Metodoloģiski pētījumā tiek izmantota divpakāpju kvantitatīvā pieeja, apvienojot K-vidējo (K-means) klasteru analīzi un lineārās regresijas analīzi. Klasteru analīze tiek izmantota, lai identificētu relatīvi viendabīgas ES valstu grupas atbilstoši MI virzītas organizatoriskās transformācijas vides attīstības līmenim, savukārt regresijas analīze ļauj novērtēt saistību starp ar MI saistītajiem skaidrojošajiem mainīgajiem un izmaiņām vidējā līmeņa vadītāju nodarbinātībā. Pētījuma rezultāti atklāj būtiskas atšķirības starp ES valstīm digitālās integrācijas, organizatorisko inovāciju un MI ieviešanas intensitātes ziņā. Iegūtie rezultāti turklāt liecina, ka MI virzīta organizatoriskā pārstrukturēšana neizpaužas kā vienkārša vadītāju aizstāšana. Tā vietā uzņēmumu analītiskās spējas, jo īpaši biznesa analītikas (Business Intelligence, BI) programmatūras izplatība, ir pozitīvi saistītas ar izmaiņām

vidējā līmeņa vadības struktūrās digitāli attīstītākā organizatoriskajā vidē. Pētījums sniedz ieguldījumu zinātniskajā literatūrā, pārorientējot uzmanību no pašas MI ieviešanas uz tās organizatoriskajām sekām, kā arī piedāvājot netiešu kvantitatīvu novērtējumu MI virzītai uzņēmumu organizatoriskajai pārstrukturēšanai Eiropas Savienībā.

Jūlija Liodorova, Ināra Repša (LATVIJA)

MOAR MODELIS FINANŠU-EKONOMISKAJĀ IZPĒTĒ: EKSPERTĪZES METODOLOĢIJAS PRINCIPI ANALĪTIKĀ

Finanšu-ekonomiskā izpēte tiek veikta grāmatvedības ekspertīzē, auditā, finanšu izmeklēšanā, finanšu izlūkošanā, risku novērtēšanā un datu analītikā. Grāmatvedības ekspertīzē (forensic accounting) īpaši skaidri izpaužas secība: konkrēts jautājums, izpētes objekts un materiāli, atbilstoša metode un pamatots rezultāts. Līdzīga loģika identificējama arī citās profesionālajās jomās, lai gan to juridiskais statuss, kompetence, metodes un gala produkti atšķiras. Pētījuma aktualitāti nosaka nevis analīzes metožu trūkums, bet nepieciešamība nodrošināt loģisku atbilstību starp to, kas jānoskaidro, kas jāpēta, kāda metode konkrētajā situācijā ir piemērota un ko no izpētes iespējams pamatoti secināt. Pētījuma mērķis ir izstrādāt un sākotnēji aprobēt konceptuālu finanšu-ekonomiskās izpētes modeli, kas sasaista Mērķi, Objektu, Analīzi un Rezultātu (MOAR). Pētījuma objekts ir finanšu-ekonomiskās izpētes process, bet priekšmets – tā galveno elementu savstarpējā loģiskā atbilstība. Pētījuma jautājums ir, kā šo atbilstību sistematizēt vienotā modelī, kas būtu izmantojams dažādās profesionālās darbības jomās. Pētījumā analizēta zinātniskā literatūra, Latvijas un starptautiskais normatīvais regulējums un profesionālie standarti, tostarp Tiesu ekspertu likums, Kriminālprocesa likums, Iekšējā audita regulējums, AICPA (Amerikas Sertificēto publisko grāmatvežu institūts) un ACFE (Sertificēto krāpšanas izmeklētāju asociācija) pieejas, FATF (Finanšu darījumu darba grupas) rekomendācijas, Starptautiskie standart – ISA (Starptautiskie revīzijas standarti), IIA (Iekšējo auditoru institūta (IIA) Globālie iekšējā audita standarti), ISO 31000 (Starptautiskās Standartizācijas organizācijas standarts “Riska pārvaldība. Vadlīnijas”), IEC 31010 (Starptautiskās Elektrotehnikas standartizācijas komisijas standarts “Riska pārvaldība. Riska novērtēšanas metodes”) un CRISP-DM (Starptautisku datizrači procesa modelis). Izmantota salīdzinošā analīze, kontentanālizē, konceptuālā modelēšana, gadījuma analīze, ekspertu vērtējums. Zinātniskie pētījumi audita, grāmatvedības ekspertīzes, AML (Noziedzīgi iegūtu līdzekļu legalizācijas novēršana) un datu analītikas jomā apliecina, ka rezultātu ietekmē ne tikai metode, bet arī uzdevuma formulējums, datu atlase un profesionālā interpretācija. MOAR netiek piedāvāts

kā jauna analīzes metode. Tā novitāte ir dažādās profesionālajās jomās pastāvošo principu sistematizācija vienotā loģiskās atbilstības modelī un MOAR matricas izstrāde. Sākotnējā aprobācijā paredzēts vērtēt vienu prakses piemēru. Praktiski modelis var būt noderīgs ekspertam un analītiķim, kā arī uzdevuma noteicējam – izmeklētājam, prokuroram, audita vadītājam – un rezultāta lietotājam, palīdzot formulēt uzdevumu, noteikt izpētes robežas, izvērtēt secinājuma pamatotību un pārnest metodoloģisko pieredzi starp institūcijām.

Valērijs Makarevičs (LATVIA)

A SYSTEMS APPROACH TO ASSESSING THE LEVEL OF SUSTAINABLE DEVELOPMENT IN LATVIA

The concept of sustainable development is embraced by civilized society today. Debate centers on the criteria used to determine a society's capacity for such development. The vast majority of proposed criteria are linear in nature, failing to account for the systemic characteristics that emerge from the interaction of a system's structural components. This is where the systems approach comes into play. In the field of sustainable development, this approach is proposed by the German scientist Bossel. His methodology makes it possible to identify which aspects of social, economic, and environmental development meet sustainability criteria and which do not. This presentation aims to analyze these criteria in detail.

Aļona Ozola, Dace Štefenberga (LATVIJA)

LĪDERĪBA UZŅĒMĒJDARBĪBĀ UN TĀS LOMA REĢIONĀLAJĀ ATTĪSTĪBĀ

Reģionālās attīstības izaicinājumi šajā sarežģītajā laikā saistīti ar depopulāciju, cilvēkkapitāla pārvietošanos no reģioniem uz lielajām pilsētām un centriem, kā arī sabiedrības novecošanos. Iepriekš uzskaitītie procesi rada nepieciešamību pēc risinājumiem, kas šīs problēmas varētu uzlabot un viena no tām ir ekonomiskās aktivitātes veicināšana, kuru būtu iespējams īstenot ar uzņēmējdarbību. Šajā kontekstā ļoti būtiska ir arī līdera loma, kas ne tikai pieņem lēmumu par uzņēmējdarbības uzsākšanu vai attīstīšanu, bet arī sadarbības veicināšanu ar citiem reģiona uzņēmējiem un citām iesaistītajām pusēm, piemēram, pašvaldību. Efektīva līderība sekmē uzņēmējdarbības attīstību un tas, savukārt, jaunu darba vietu veidošanu un cilvēkkapitāla piesaisti reģionos. Ņemot vērā iepriekš minēto, ir svarīgi domāt ne tikai par to kā attīstīt

reģionus, bet arī par to kāda nozīme šajā jomā ir uzņēmējdarbības līderiem. Pētījuma mērķis ir izpētīt līderības lomu uzņēmējdarbībā un tās ietekmi uz reģionālo attīstību, nosakot būtiskākos faktorus, kas veicina uzņēmējdarbības izaugsmi. Pētījuma teorētiskais pamatojums un metodes: zinātniskās literatūras un politikas dokumentu analīze (Reģionālās politikas 2021. - 2027. analīze, līderības tendences un teorijas, līderības nozīme organizācijā).

Atslēgas vārdi: līderība, uzņēmējdarbības attīstība, reģionu izaugsme.

**Stanislavs Vaisla, Olga Lavriņenko,
Alina Daņileviča (LATVIA)**

SOCIO-ECONOMIC SECURITY CONVERGENCE IN CENTRAL AND EASTERN EUROPE: EVIDENCE FROM AN INDEX-BASED ANALYSIS

The most intensive global studies on convergence were carried out in the 1980s and 1990s. However, in certain Central and Eastern European countries, this topic became popular upon their accession to the EU, as these countries became beneficiaries of the cohesion policy – a regional policy of the European Union aimed at increasing the level of economic, social, and territorial cohesion. The article discusses the aspect of convergence based on the Socio-Economic Security Index in the EU countries. Ensuring socio-economic security has become one of the main goals of both domestic and foreign policies not only in the countries of Central and Eastern Europe (CEE), but also in other EU countries. Initiatives in this area have been undertaken with full awareness of the changes occurring in the international arena. The lack of a unified framework for assessing socio-economic security complicates the processes of economic stabilization and territorial development. The concept of economic security is complex, multifaceted, and has many distinctive features. Therefore, the use of a multifactor approach in assessing economic security is justified in the research. The aim of the article is to develop a methodology for assessing socio-economic security, evaluate the socio-economic security in Central and Eastern European countries in the EU context in the period from 2012 to 2022, and analyse the convergence process in these countries based on the Socio-Economic Security Index and its related sub-indices.

Lizhi Wang (CHINA), Dzintra Iliško (LATVIA)

**GREEN TRANSFORMATION OF ENERGY ENTERPRISES IN
LATVIA AND CHINA: A COMPARATIVE STUDY OF
INSTITUTIONAL AND ENERGY-SECTOR CONTEXTS FOR
REGIONAL DEVELOPMENT**

Energy transitions are restructuring the conditions of regional development: they redistribute growth, employment and energy access unevenly across territories, and their success depends on how firms, labour markets and local institutions adapt. This paper examines the regional-development implications of the low-carbon transition of the energy sector by comparing two contrasting regions — Latvia, a small EU-embedded economy, and China, a large state-coordinated system. Drawing on longitudinal statistical series, national energy and climate strategies, policy documents and sectoral assessments, we trace how the population of energy-related enterprises, environmental outcomes, renewable uptake and institutional arrangements have evolved in each setting. The evidence reveals two distinct pathways with different regional consequences. In Latvia, transformation is incremental: the enterprise population expands moderately, market-based entities gain prominence, and renewables already supply a considerable share of public combined heat and power, while decentralised actors strengthen the regional fabric of energy supply. In China, transformation is rapid and centrally orchestrated: the number of energy-related firms grows quickly, emissions from electricity and heat generation decline markedly, and non-thermal sources expand within a still dominant thermal base, reshaping employment and industrial structure across regions. These pathways are anchored in contrasting governance settings — an EU-embedded framework of targets and directives in Latvia, and a multi-level system of coordinated planning in China — which place different pressures on regional competitiveness, human capital and energy security. For regional development policy, the findings imply that one-size-fits-all prescriptions are ill-suited to either context: policy must be matched to inherited energy structures, institutional capacities and local labour-market conditions. The study also opens up further work on the human and organisational dimensions of low-carbon restructuring, where skills, workforce transitions and enterprise capabilities meet regional adaptation needs.

Jing Zeng (CHINA)

**DIGITAL DISRUPTION AND DESTINATION VISIBILITY:
LONGITUDINAL PATTERNS OF ONLINE ATTENTION TO
EUROPEAN CULTURAL AND NATURAL HERITAGE SITES**

Digital technologies are increasingly reshaping the ways in which tourists encounter, perceive, and engage with cultural and natural heritage destinations. Beyond conventional online information and social media, the growing use of virtual reality (VR), 3D reconstruction, digital twins, and other immersive technologies has expanded the possibilities for experiencing destinations in digital environments. These developments raise an important question concerning the relationship between digital engagement and destination visibility: rather than simply replacing or complementing physical tourism, digital tourism may reshape patterns of attention toward destinations over time. This study examines longitudinal patterns of online attention to selected European cultural and natural heritage destinations between 2020 and 2025. It addresses two research questions: first, how online attention to selected destinations has evolved during this period; and second, what temporal and seasonal patterns can be identified across different types of heritage destinations. The empirical design combines destination-level online attention data with a thematic analysis of 150 user reviews collected from mainstream virtual travel platforms, including BRINK Traveler and Wander. By integrating longitudinal digital indicators with qualitative evidence from users' virtual tourism experiences, the study seeks to identify changes in destination visibility and variations in patterns of digital engagement. The study contributes to the emerging discussion on digital and virtual tourism by shifting attention from the conventional substitution-versus-complementarity debate toward the temporal dynamics of destination visibility. It also provides a basis for understanding how digital engagement may influence the evolving relationship between tourists and heritage destinations, with implications for destination management, digital tourism strategies, and the sustainable promotion of cultural and natural heritage.

The study has been conducted and funded within the Daugavpils University's (Latvia) research project No 14-95/2026/12 "Economic Effect for Regions from Unusual Forms of Tourism: An Examples of Virtual and Spiritual Tourism".

TIESĪBU ZINĀTNE / JURISPRUDENCE

Jurijs Fjodorovs (LATVIJA)

PROCESUĀLO PĀRKĀPUMU IETEKME UZ LĒMUMU TIESISKUMU ADMINISTRATĪVĀ PĀRKĀPUMA PROCESĀ

Satversmes 1. pantā ietvertā demokrātiskas un tiesiskas valsts jēdziena izriet valsts pienākums savā darbībā ievērot tiesiskas valsts pamatprincipus, tostarp tiesiskās palāvības principu un tiesiskās noteiktības principu. Ar tiesiskuma nodrošināšanu tiek panākta personu likumīgo tiesību un interešu efektīva aizsardzība, bez kā nevar nodrošināt demokrātiskuma pastāvēšanu. Tiesiskums ir arī viens no administratīvā pārkāpuma procesa pamatprincipiem. Ar šī principa ievērošanu administratīvā pārkāpuma procesā tiek nodrošināts, ka personas, kas veic administratīvā pārkāpuma procesu, darbojas normatīvajos aktos noteikto pilnvaru ietvaros un savas pilnvaras var izmantot tikai atbilstoši pilnvarojuma jēgai un mērķim. Līdz ar to no tiesiskuma principa izriet prasība realizēt procesuālās pilnvaras, stingri ievērojot normatīvo aktu prasības. Tiesiskuma nodrošināšana administratīvā pārkāpuma procesā nav iedomājama arī bez procesa dalībnieku pamattiesību aizsardzības pret to personu prettiesiskajām darbībām, kuras veic administratīvā pārkāpuma procesu. Juridiskajā zinātnē šādus pārkāpumus dēvē par procesuālajiem pārkāpumiem. Konstatējot šādus likumīgo interešu apdraudējumus, ir jāpanāk taisnīguma atjaunošana, kas nereti nav iespējama bez prettiesiskā lēmuma atcelšanas. Procesuālo pārkāpumu konstatēšana un to novērtēšana ir viena no svarīgākajām darbībām administratīvā pārkāpuma procesā, kuru veic augstāka amatpersona vai tiesa lēmumu pārsūdzēšanas stadijā. Šis process nav formāls, bet gan komplicēts un vispusīgs, jo katrs procesuālais pārkāpums ir jāvērtē pēc tā ietekmes uz lietas iznākumu. Tā rezultātā objektīvi rodas domstarpības par konkrētu pārkāpumu būtiskumu. Līdz ar to šī problēma ir aktuāla, un autors analizēs jautājumus, kas var rasties procesuālo pārkāpumu konstatēšanas un novērtēšanas gaitā.

Inese Geida (LATVIJA)

**SABIEDRISKĀS KĀRTĪBAS NODROŠINĀŠANAS TIESISKAIS
REGULĒJUMS UN MILICIJAS INSTITUCIONĀLĀ ATTĪSTĪBA
DAUGAVPILĪ PĒCKARA SOVJETIZĀCIJAS PERIODĀ**

Pēc Otrā pasaules kara Daugavpilī sabiedriskās kārtības nodrošināšanas sistēma tika veidota Latvijas teritorijas atkārtotas padomju okupācijas un sovjetizācijas apstākļos. Līdz ar padomju varas institūciju atjaunošanu tika pārveidota arī tiesībsardzības sistēma, aizstājot neatkarīgās Latvijas tiesiskajai sistēmai raksturīgos policijas darbības principus ar PSRS pārvaldes modelim atbilstošu milicijas organizāciju. Tādējādi sabiedriskās kārtības nodrošināšana pēckara Daugavpilī vērtējama ne tikai kā tiesībsardzības institūciju praktiskās darbības jautājums, bet arī kā būtiska valsts varas un tiesiskās sistēmas transformācijas sastāvdaļa. Pētījuma ietvaros analizējams sabiedriskās kārtības nodrošināšanas tiesiskais regulējums, īpašu uzmanību pievēršot normatīvajiem aktiem, kas noteica milicijas institucionālo padotību, kompetenci, amatpersonu pilnvaras un sabiedriskās kārtības aizsardzības uzdevumus. Būtisks izpētes virziens ir tiesiskā regulējuma un tā faktiskās piemērošanas savstarpējā mijiedarbība. Milicijas darbība pēckara periodā bija saistīta ne tikai ar noziedzības apkarošanu un sabiedriskās kārtības uzturēšanu, bet arī ar padomju valsts noteiktās pārvaldes un kontroles sistēmas funkcionēšanu. Tādēļ nepieciešams nošķirt vispārējās sabiedriskās kārtības nodrošināšanas funkcijas no darbībām, kas bija saistītas ar sovjetizācijas politikas īstenošanu. Daugavpils situācijas izpēte ļauj analizēt šo procesu lokālā mērogā, noskaidrojot, kā vispārējais PSRS un Latvijas PSR tiesiskais regulējums tika īstenots konkrētas pilsētas administratīvajā un sociālajā vidē. Pētījums var sniegt ieguldījumu Latvijas tiesību vēstures izpratnē, atklājot tiesiskā regulējuma, institucionālo pārmaiņu un tiesību piemērošanas mijiedarbību totalitāra režīma valsts pārvaldes apstākļos, kas ir ļoti svarīgi, lai izprastu kaimiņvalstu Krievijas un Baltkrievijas totalitāro režīmu un to policijas darbību mūsdienu ģeopolitikas apstākļos.

Inese Geida (LATVIJA)

UZ SABIEDRĪBU VĒRSTA POLICIJAS DARBA TIESISKIE UN PRAKTISKIE ASPEKTI NELIKUMĪGAS VALSTS ROBEŽAS ŠĶĒRSOŠANAS RADĪTO IZAICINĀJUMU APSTĀKĻOS LATGALES REĢIONĀ

Latgales reģiona ģeogrāfiskais novietojums pie Eiropas Savienības ārējās robežas nosaka īpašu sabiedriskās drošības vidi, kurā nelikumīgas valsts robežas šķērsošanas radītie izaicinājumi skar ne tikai robežkontroles īstenošanu, bet arī sabiedriskās kārtības nodrošināšanu, noziedzīgu nodarījumu novēršanu un vietējo iedzīvotāju drošības interešu aizsardzību. Šādos apstākļos būtiska nozīme ir Valsts policijas, Valsts robežsardzes, pašvaldību un citu kompetento institūciju koordinētai darbībai, vienlaikus ievērojot normatīvajos aktos noteikto kompetenču sadalījumu. Uz sabiedrību vērsta policijas darba pieeja paredz, ka drošības nodrošināšana nav īstenojama tikai reaģējot uz jau notikušiem likumpārkāpumiem. Tā ietver preventīvu darbu, vietējās drošības problēmu identificēšanu, sadarbību ar iedzīvotājiem un citām institūcijām, informācijas apmaiņu un sabiedrības uzticēšanās veicināšanu. Nelikumīgas valsts robežas šķērsošanas radīto izaicinājumu apstākļos šie principi iegūst īpašu nozīmi pierobežas teritorijās, kur iedzīvotāji var būt nozīmīgs informācijas avots iespējamu drošības risku identificēšanā. No juridiskā aspekta būtiski izvērtēt, vai spēkā esošais tiesiskais regulējums nodrošina pietiekami skaidru institūciju kompetenču nodalījumu un vienlaikus rada priekšnoteikumus rezultatīvai starpinstitutionālajai sadarbībai. Īpaša uzmanība pievēršama informācijas apmaiņas tiesiskajam pamatam, personas datu aizsardzībai, preventīvo pasākumu īstenošanai un pamattiesību ievērošanai. Latgales reģiona specifika pamato nepieciešamību uz sabiedrību vērsta policijas darba principus sasaistīt ar konkrētās teritorijas drošības situācijas regulāru izvērtēšanu. Valsts policijas sadarbība ar pašvaldībām un vietējiem iedzīvotājiem var sekmēt savlaicīgu risku identificēšanu, sabiedrības informētību un preventīvo pasākumu mērķtiecīgāku īstenošanu. Tādējādi uz sabiedrību vērsta policijas darba pilnveidošana Latgales reģionā vērtējama kopsakarā ar tiesiskuma, institucionālās sadarbības, samērīguma un pamattiesību aizsardzības principiem, nodrošinot līdzsvaru starp valsts drošības interesēm un personu tiesību aizsardzību.

**NOZIEDZĪGI NODARĪJUMI VESELĪBAS APRŪPĒ:
KRIMINĀLTIESISKAIS UN KRIMINOLOĢISKAIS TVĒRUMS**

Veselības aprūpe ir joma, kurā līdzās ārstniecības un pacientu tiesību jautājumiem pastāv arī ar noziedzīgu rīcību saistīti riski. Noziedzīga rīcība veselības aprūpē var izpausties gan kā ārstniecības procesā vai saistībā ar profesionālo darbību izdarīti noziedzīgi nodarījumi, gan kā noziedzīga rīcība, kas vērsta pret ārstniecības personām, pacientiem vai veselības aprūpes sistēmu. Šo parādību izpētei nepieciešama gan krimināltiesiska, gan kriminoloģiska pieeja. Pētījuma mērķis ir analizēt noziedzīgas rīcības veselības aprūpē krimināltiesisko un kriminoloģisko tvērumu, krimināltiesiskajā aspektā raksturojot noziedzīga nodarījuma sastāva un kriminālatbildības priekšnoteikumus, bet kriminoloģiskajā aspektā raksturojot noziedzīgas rīcības izpēti tvērumu, lai pamatotu medicīniskās kriminoloģijas kā atsevišķi atpazīstama noziedzības izpēti virziena konceptuālo saturu un institucionalizācijas priekšnoteikumus Latvijā. Krimināltiesiskajā aspektā noziedzīga rīcība veselības aprūpē analizējama, ņemot vērā konkrētu noziedzīgu nodarījumu sastāvu un ārstniecības personu kriminālatbildības priekšnoteikumus. Latvijas medicīnas tiesību pētniecībā šiem jautājumiem pievērsies Aldis Lieljuksis, analizējot ārstniecības personu atbildību, tostarp krimināltiesisko atbildību (Lieljuksis et al., 2022). Attiecībā uz ārstniecības personu izdarītiem noziedzīgiem nodarījumiem pret personas veselību Krimināllikuma XIII nodaļā ietvertajās normās saskatāma daudzveidība noziedzīgu nodarījumu sastāvu uzbūvē, proti, tajā ietverti gan materiāla, gan formāla sastāva noziedzīgi nodarījumi. Materiāla sastāva gadījumā jākonstatē cēloņsakarība starp personas nodarījumu un noziedzīga nodarījuma sastāvā paredzētajām kaitīgajām sekām. Ar ārstniecību saistītās lietās cēloņsakarības problemātiku kriminālprocesā analizējis Aldis Lieljuksis (2021). Krimināltiesiskais skatījums ļauj noteikt robežas starp profesionālās darbības pārkāpumu, civiltiesisku vai administratīvu pārkāpumu un noziedzīgu nodarījumu. Savukārt kriminoloģiskais skatījums ietver plašāku tvērumu – ne tikai nodarījuma sastāvu, bet noziedzīgas rīcības cēloņu un veicinošo apstākļu, izplatības un struktūras, faktoros, noziedznieka raksturojumu, viktimizācijas, latentuma, kā arī radītā kaitējuma jeb noziedzības cenas un prevencijas izpēti. Veselības aprūpes vidē tas attiecināms gan uz noziedzīgu rīcību pret pacientiem un ārstniecības personām, gan uz noziedzīgiem nodarījumiem, kas saistīti ar ārstniecības personu profesionālo darbību vai vērsti pret veselības aprūpes sistēmu. Šo jautājumu kriminoloģiska analīze aktualizē nepieciešamību pēc specializēta noziedzības izpēti virziena. Starptautiskajā zinātniskajā literatūrā šādā kontekstā tiek lietoti jēdzieni medicīnas kriminoloģija (medical

criminology) un veselības kriminoloģija (health criminology). Jēdziens medicīnas kriminoloģija zinātniskajā literatūrā lietots jau kopš 20. gadsimta 70. gadiem; piemēram, Pols E. Dīcs (Paul E. Dietz) 20. gadsimta 70. gados publicēja darbu sēriju “Medicīniskās kriminoloģijas piezīmes” (Medical Criminology Notes). Mūsdienās medicīniskās kriminoloģijas problemātiku attīstījis Džons Mārtins Čemberleins (John Martyn Chamberlain), pievērsoties medicīniskajai nolaidībai, profesionālajai darbībai, medicīnas profesijas regulējumam, profesionālās darbības pārkāpumiem un noziedzībai. Viena laiku zinātniskajā literatūrā tiek attīstīts plašāks jēdziens veselības kriminoloģija. Fija S. Teksmena ar kolēģiem (Faye S. Taxman et al., 2025) norāda, ka veselības kriminoloģija ir jauna, attīstoša zinātnes joma, kas veidojas veselības un kriminoloģijas saskares telpā. Žurnāla “Veselība un justīcija” (Health & Justice”) 2025. gada desmitgades jubilejas publikācija apliecina jaunas zinātnes jomas attīstību un pieaugušo nozīmi starptautiskajā zinātniskajā aprītē, ko pašlaik dēvē par veselības kriminoloģiju. Latvijas kriminoloģijas pētniecībā medicīniskās kriminoloģijas ideja jau iepriekš ir iezīmēta. Kriminologi Aldona Kipāne un Andrejs Vilks (2023), analizējot jaunu kriminoloģijas izpētes virzienu veidošanos, medicīnisko kriminoloģiju minēja kā iespējamu kriminoloģijas apakšvirzienu. Viena laiku Latvijas pētniecībā pastāv atsevišķi ar šo problemātiku saistīti medicīnas tiesību, krimināltiesību un pacientu tiesību izpētes virzieni, taču tie līdz šim nav konceptuāli apvienoti medicīniskās kriminoloģijas ietvarā. Autore ieskatā, medicīniskā kriminoloģija ir noziedzības izpētes virziens, kas pēta noziedzību medicīnas un veselības aprūpes vidē, tostarp ārstniecības personu izdarītus noziedzīgus nodarījumus, noziedzīgus nodarījumus pret ārstniecības personām un citus ar medicīnas un veselības aprūpes vidi saistītus noziedzīgus nodarījumus, kā arī to cēloņus, veicinošos apstākļus, viktimizāciju, latentumu, kā arī noziedzības un viktimizācijas prevencija ārstniecības un veselības aprūpes vidē, tostarp pasākumi, kurus iespējams īstenot ar ārstniecības personu, ārstniecības iestāžu un veselības aprūpes sistēmas iesaisti. Pētījuma rezultātā paredzēts izstrādāt medicīniskās kriminoloģijas kā noziedzības izpētes virziena konceptuālo ietvaru un identificēt tā turpmākās attīstības un institucionalizācijas iespējas Latvijā. Pētījumā izmantota zinātniskās literatūras, tiesību avotu un judikatūras analīze, tiesību normu interpretācijas, sistēmiskā un salīdzinošā metode. Krimināltiesiskajā aspektā analizētas tiesību normas, to interpretācija un judikatūra, lai raksturotu noziedzīgas rīcības veselības aprūpē krimināltiesisko tvērumu, savukārt kriminoloģiskajā aspektā, analizējot zinātnisko literatūru un izmantojot sistēmisko un salīdzinošo metodi, raksturots medicīniskās kriminoloģijas izpētes tvērums, priekšmets un galvenie izpētes virzieni.

Žanna Oščenkova (LATVIJA)

ISSUES REGARDING THE RECOVERY (COMPENSATION) OF DAMAGES IN LATVIAN CRIMINAL LAW

This paper examines the legal framework governing the recovery and compensation of damages in Latvian criminal law and criminal procedure, focusing on the practical challenges faced by victims in obtaining effective compensation. It analyses the distinction between the determination of compensation and its actual recovery, the assessment and proof of material and non-material damage, and the effectiveness of existing enforcement mechanisms. The study also examines the role of state compensation, civil proceedings, and the recovery of criminally acquired assets in protecting victims' rights, the paper identifies key shortcomings, including difficulties in proving damages, inconsistencies in compensation assessment, offenders' insufficient financial resources, and fragmentation of compensation procedures. It concludes that improving victims' access to effective compensation requires more consistent judicial practice, earlier identification and seizure of assets, better coordination between legal mechanisms, and stronger measures to ensure the actual payment of compensation.

Keywords: victim compensation, damages recovery, criminal proceedings, material damage, non-material damage, Latvian criminal law.

Nikita Sinkevičs (LATVIJA)

TIESISKĀS PRETDARBĪBAS IZAICINĀJUMI NOZIEDZĪGAI TIRDZniecĪBAI TIEŠSAISTĒ PĀRROBEŽU VIDES UN REĢIONĀLĀS ATTĪSTĪBAS KONTEKSTĀ

Noziedzīgas tirdzniecības tiešsaistē fenomens negatīvi ietekmē reģionālo attīstību, jo apdraud valstu tautsaimniecības intereses un sabiedrības drošību. Noziedzīgas tirdzniecības tiešsaistē gadījumā pārdevējs var atrasties vienā valstī, pircējs – otrā, platforma, kurā prece tiek piedāvāta, – trešā, savukārt pati prece – ceturtā. Turklāt šāda veida tirdzniecība var notikt ne tikai slēptajā tīklā (Darknet), bet arī publiski pieejamā tiešsaistes vidē, piemēram, sociālajos tīklos, sludinājumu portālos, ziņapmaiņas lietotnēs u. c. Pārrobežu aspekts būtiski ietekmē gan personas saukšanu pie kriminālatbildības, īpaši ņemot vērā, ka noziedzīga tirdzniecība tiešsaistē nav paredzēta kā patstāvīgs noziedzīgs nodarījums, gan arī vainīgo personu identificēšanu un attiecīgo pierādījumu iegūšanu. Tas savukārt aktualizē nepieciešamību izvērtēt tradicionālo tiesisko

pieeju piemērotību noziedzīga nodarījuma izdarīšanas vietas, jurisdikcijas un personas kriminālatbildības noteikšanai, kā arī pārrobežu sadarbības mehānismu efektivitāti, īpaši reģionālās attīstības kontekstā.

Igors Tomaševs, Marina Sumbarova (LATVIJA)

ĪPAŠAS AIZSARDZĪBAS NEPIECIEŠAMĪBA CIETUŠO TIESĪBU AIZSARDZĪBA

Cietušā īpaša aizsardzība kriminālprocesā ir nepieciešama, lai nodrošinātu ne tikai formālu, bet arī efektīvu cietušā tiesību īstenošanu visā kriminālprocesa gaitā. Īpašas aizsardzības pasākumi palīdz mazināt risku, ka cietušais procesa laikā atkārtoti piedzīvo psiholoģisku, emocionālu vai cita veida kaitējumu, kā arī novērst sekundāru viktimizāciju, ko var radīt neatbilstoša nopratināšana, atkārtota saskarsme ar iespējamo vainīgo personu vai citi procesa apstākļi. Tādēļ cietušā aizsardzība ir būtisks priekšnoteikums viņa cieņas, drošības un pilnvērtīgas līdzdalības kriminālprocesā nodrošināšanai. Ne visi cietušie spēj vienlīdz efektīvi izmantot savas procesuālās tiesības, tādēļ īpašas aizsardzības nepieciešamība ir vērtējama individuāli, ņemot vērā cietušā personiskās īpašības, vecumu, veselības stāvokli, atkarības attiecības ar iespējamo vainīgo personu, kā arī noziedzīgā nodarījuma raksturu un izdarīšanas apstākļus. Īpaša uzmanība pievēršama bērniem, personām ar invaliditāti, cilvēku tirdzniecības upuriem, seksuālās un ar dzimumu saistītās vardarbības upuriem, vardarbībā ģimenē vai tuvās attiecībās cietušajiem, kā arī naida noziegumu un terorisma upuriem. Šo personu ievainojamība var būt saistīta gan ar paaugstinātu atkārtotas vai sekundāras viktimizācijas risku, gan ar grūtībām pilnvērtīgi piedalīties kriminālprocesā, tādēļ viņu tiesību efektīvai nodrošināšanai var būt nepieciešami īpaši procesuālie aizsardzības pasākumi. Cietušā aizsardzībai kriminālprocesā jāaptver ne tikai fiziskās drošības nodrošināšana, bet arī viņa psiholoģiskās labklājības, privātuma un cieņas aizsardzība visā procesa gaitā. Cietušajam kriminālprocess pats par sevi var radīt papildu emocionālu slodzi, īpaši gadījumos, kad personai atkārtoti jāatstāsta traumatiski notikumi, jāsaskaras ar iespējamo vainīgo personu vai jāsniedz liecības apstākļos, kas pastiprina bailes, kaunu vai bezpalīdzības sajūtu. Tādēļ būtiska nozīme ir tādu procesuālo pasākumu piemērošanai, kas mazina nevajadzīgu atkārtotu nopratināšanu, ierobežo tiešu kontaktu ar iespējamo vainīgo personu un nodrošina cietušajam atbilstošu atbalstu. Vienlaikus aizsardzībai jāietver arī cietušā privātuma ievērošana, nepieļaujot nepamatotu sensitīvas informācijas izpaušanu par viņa personisko dzīvi, veselības stāvokli vai noziedzīgā nodarījuma apstākļiem. Īpaši nozīmīgi tas ir attiecībā uz bērniem, seksuālās vardarbības, vardarbības ģimenē un cilvēku tirdzniecības upuriem. Cieņpilna

attieksme, atbilstoša saziņa un cietušā individuālo vajadzību respektēšana ir būtiski priekšnoteikumi, lai novērstu sekundāru viktimizāciju un nodrošinātu, ka cietušais var pilnvērtīgi un droši piedalīties kriminālprocesā.

Vladas Tumalavičius (LITHUANIA)

ARTIFICIAL INTELLIGENCE AND AUTONOMOUS WEAPONS IN ARMED CONFLICTS: IMPLICATIONS FOR COMPLIANCE WITH INTERNATIONAL HUMANITARIAN LAW

The study aims to analyse the dynamics of the use of autonomous systems, artificial intelligence technologies, and cyberattacks in armed conflicts in 2015–2024. The paper also identifies their impact on compliance with international humanitarian law. A normative analysis of the provisions of the Geneva Conventions, UN documents, the ICRC, and the Group of Governmental Experts (GGE) applied. The empirical part was based on SIPRI, UCDP, and ACLED data. The main emphasis was placed on the analysis of indicators during 2021–2024. These data served as the basis for conducting correlation and regression analysis. The results revealed the relationship between the level of technological participation and the number of violations of IHL ($r = 0.80$ for cyberattacks; $r = 0.65$ for autonomous systems). The highest humanitarian risks are recorded in wars with high lethality and fragmentation rates (Ukraine, Syria, Sudan, and Israel). Hence, the technological evolution of war has formed important legal gaps in the regulation of autonomous and cyber means. Existing IHL norms need to be updated by establishing the principle of "meaningful human control".

Keywords: International Humanitarian Law, Autonomous Systems, Cyberattacks, Technological Warfare, Violations of IHL, Humanitarian Risks.

Aelita Zīle (LATVIJA)

ILGTSPĒJĪGA PIEEJA PAPILĀRLĪNIJU RAKSTU PĒDU VIZUALIZĒŠANĀ

Viena no mūsdienu tehnoloģiju attīstības tendencēm ir ilgtspējība. Videi draudzīgu tehnoloģiju attīstība notiek dažādās jomās, tostarp arī kriminālistikā, kur viens no ilgtspējīgu un videi draudzīgu tehnoloģiju attīstības virzieniem ir bioloģisko pulveru pielietošana pēdu vizualizēšanā. Augu klāsts no kuriem tiek iegūti bioloģiskie pulveri ir ļoti daudzveidīgs gan pēc ģeogrāfiskā izvietojuma, gan pēc ekosistēmas. Tāpat arī iegūto pulveru krāsu daudzveidība ļauj izvēlēties

pēdu uztvērējvirsmai kontrastējošas krāsas pulveri. Tomēr, lai šos pulverus varētu ieviest praktiskā pielietojumā pēdu vizualizēšanai gan laboratorijas apstākļos, gan notikuma vietā ir nepieciešams eksperimentālā kārtā pārbaudīt šo pulveru adhēzijas īpašības uz dažādām virsmām. Pētījuma mērķis ir izpētīt bioloģisko pulveru adhēzijas īpašības. Ņemot vērā bioloģisko pulveru daudzveidību pētījuma ietvarā veiktais eksperiments tika sadalīts vairākos etapos. Kopumā eksperiments tiks veikts izpētot 45 bioloģisko pulveru adhēzijas īpašības. Pirmajā etapā tika pētītas guāra (balts) un ksatāna sveķu (balts), kanēļa (gaiši brūns), kurkumas (dzeltens), paprikas (oranžs), sīpolu (balts), banānu (balts), upeņu (sarkans), agara (balts), spirulīnas (tumši zaļš) un hlorellas (zaļš) bioloģisko pulveru adhēzijas īpašības uz plastmasas, stikla un metāla virsmām. Savukārt otrajā etapā papillārlīniju rakstu pēdu vizualizēšanai uz plastmasas, stikla un metāla virsmām tika pielietoti mežrozīšu (tumši dzeltens), aroniju (bordo), biešu (sarkans), melnās bērza piepes (brūns), liofilizēta pitaija (pūķa auglis) (violets), zilās spirulīnas (zils), liofilizētu acai ogu (bordo), Ķīnas matcha (smalki samalta zaļā tēja) (zaļš), kokosriekstu miltu (balts), kokosriekstu piena (balts), sojas proteīna izolāta (balts) un agaves inulīna (balts) bioloģiskie pulveri. Pulveru uzklāšanai uz eksperimentāli atstātajām pēdām tika pielietota Marabu putna spalvu ota. Eksperimenta otrā etapa gaitā tika analizētas pielietoto pulveru to uzklāšanas tehnika, adhēzijas īpašības un pulveru graudainības ietekme uz adhēzijas īpašībām. Eksperimenta pirmā un otrā etapā iegūtie rezultāti tika atspoguļoti fotoattēlos.

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21. starptautiskās zinātniskās konferences „Sociālās zinātnes reģionālajai attīstībai 2026” tēzes. = Abstracts of the 21st International Academic Conference “Social Sciences for Regional Development 2026”. – Daugavpils: Daugavpils Universitātes Akadēmiskais apgāds „Saule”, 2026. 87 lpp. ISBN 978-9934-39-061-6.

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