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EMERGING TRENDS IN

MACROECONOMICS, INTERNATIONAL ECONOMICS, PUBLIC ECONOMICS AND FINANCIAL ECONOMICS

Bartłomiej Lisicki. SPORT ANOMALIES ON THE WORLDWIDE FINANCIAL MARKETS: CASE OF THE LAST FIFA WORLD CUPS

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Abstract

Research purpose. The research problem addressed in this paper is to find a connection between the uniqueness of a football event and investors' beliefs through financial instruments' price behaviour. The main aim of it is to verify the impact of matches during the last two FIFA World Cups (2018 & 2022) on the domestic stock indices of the participating countries. In contrast to the above-mentioned prior considerations on the impact of large-scale sport events on financial markets, attention were focused exclusively on the days adjacent to individual matches taking place during the both FIFA World Cups. Author's main intention was to verify whether this type of global sport event has a short-term impact on the decisions taken by investors on local financial markets.

Design / Methodology / Approach. To achieve the main aim of the paper the event study methodology has been used. Finally, 238 cases (understood as participant in a match between two national teams) were qualified to the research sample. Each of them was assigned a stock exchange national index appropriate to the country that played a specific match during the FIFA World Cups 2018 & 2022. The event window covered three session days, beginning with the day preceding the match (t_{-1}), including the matchday (t_0) and the day immediately afterwards (t_{+1}). Furthermore, it was decided to divide the research sample into three additional parts: for matches taking place within individual phases of the tournament (group stage, play-off), for the different results of matches (victory, draw, loss) and according to the classification based on the continental football federation of the national team (AFC, CAF, CONCACAF, CONMEBOL, UEFA).

Findings. The main results showed that for the whole research sample, there is no statistically significant change in national stock exchange indices. Only the defeat of the national team during the indicated FIFA World Cups was a statistically significant (negative) impact for local stock exchanges. For such a defeat, there are clearly lower than zero average abnormal return on the matchday and next one. Cumulative abnormal return covering the whole three-day event window also indicated a significant negative market reaction. Moreover, it was pointed out that a significant factor differentiating the reactions of national stock market indices may be the tournament phase (with a stronger impact during the play-offs) or the affiliation of teams to continental football federations affiliated with FIFA (stronger reaction was observed in countries affiliated with CONMEBOL).

Originality / Value / Practical implications. Conducted research indicated that in some cases, it was possible to achieve above-average returns on investments referring to the sport events. However, they also showed that building investment strategy based on large-scale sport events is considerably challenging and bears a high level of risk. Thus, the search for answers as to the impact of sport events on financial markets should remain the subject of considerations for researchers in the fields of finance and economics, especially in times of many market turbulences that we have been dealing with in recent years.

Keywords: stock markets indices; financial market anomalies; sport events; event study; FIFA World Cup

JEL codes: G11; G17; G41.

Alexey Litvinenko[1], Samuli Saarinen[2]. TRANSITIONING ECONOMIC FILTERING TECHNIQUES FROM MATLAB TO R: ENHANCING ACCURACY, EFFICIENCY, AND RELIABILITY IN MACROECONOMIC FORECASTING

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Abstract

Research purpose. This research investigates how the transition of classic economic cycle filtering techniques from proprietary MATLAB environments to the open-source R ecosystem improves the accuracy, efficiency and reliability of macroeconomic forecasting. Specifically, it examines whether the implementation of well-established filters in R enhances trend-cycle decomposition, reduces sensitivity to data inconsistencies, and strengthens the reproducibility of empirical economic analysis. The study aims to contribute to more robust and transparent economic forecasting practices through revisiting foundational filtering approaches within a modern computational framework.

Design / Methodology / Approach. The research replicates and extends the methodological framework proposed by Canova and Ferroni by implementing a set of economic filtering techniques in R. The empirical design employs macroeconomic time-series data and applies polynomial filtering, Hodrick-Prescott, Baxter-King, Christiano-Fitzgerald, and Hamilton filters. Particular emphasis is placed on improving data preprocessing, handling of missing values, and parameter stability. The R implementation leverages advanced statistical and visualisation packages to enhance computational efficiency, facilitate sensitivity analysis, and ensure methodological transparency. Comparative evaluation focuses on numerical stability, error tolerance, and interpretability relative to traditional MATLAB-based implementations.

Findings. The findings show that the transition to R significantly mitigates several limitations commonly observed in MATLAB-based filtering, particularly those related to data preprocessing rigidity and sensitivity to missing observations. The R-based framework enables more precise extraction of trend and cyclical components, improves numerical stability across filter specifications, and enhances the robustness of real-time macroeconomic analysis. Overall, the results confirm that open-source implementations yield more reliable and reproducible forecasting outcomes without sacrificing methodological rigour.

Originality / Value / Practical implications. This study offers methodological value by systematically demonstrating the advantages of open-source statistical environments for economic cycle analysis. Its originality lies in refining classical filtering techniques through improved data handling and computational design rather than proposing entirely new filters. Practically, the findings support wider adoption of R by researchers, central banks, and policymakers seeking transparent, cost-effective and reproducible tools for macroeconomic forecasting. The study thus contributes to both methodological advancement and applied economic decision-making.

Keywords: economic cycle forecasting; time-series filtering; macroeconomic analysis; R programming

JEL codes: C22; C32; E32

Aušrinė Černienė[1], Daiva Jurevičienė[2]. MEASURING MACROECONOMIC CHANGE CAUSED BY INTERNATIONAL FINANCIAL INSTITUTIONS' FINANCIAL ASSISTANCE USING A COMPOSITE INDEX

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Abstract

Research purpose. This paper develops a composite index to measure macroeconomic change during episodes of financial assistance by international financial institutions (IFIs). Such programmes are often examined using individual macroeconomic variables or regression-based approaches, which typically focus on selected outcomes rather than multidimensional change. The study, therefore, proposes an aggregated measurement framework focused on directional change in macroeconomic conditions before and after support episodes.

Design / Methodology / Approach. The paper introduces the Transformation and Policy Performance Index (TPP Index), a dynamic composite index constructed to capture pre–post changes across key macroeconomic dimensions. The empirical analysis covers the period 2000–2019 and focuses on World Bank development programmes aimed at country-level adjustment, excluding sector-specific, climate-related, or post-conflict operations. The index combines indicators related to Growth, External Flows, and Stability. Its construction follows a transparent sequence of steps, including outlier treatment, direction harmonisation, bounded normalisation, equal weighting, and geometric aggregation to limit full compensability across dimensions. The framework is designed to trace macroeconomic trajectories rather than establish causal impact.

Findings. Application of the index shows marked differences in adjustment paths across countries and episodes. In many cases, favourable movements in individual indicators occur alongside persistent weaknesses in other dimensions, suggesting that single-variable improvements do not necessarily reflect broader structural change.

Originality / Value / Practical implications. The study contributes a structured measurement approach that shifts attention from static macroeconomic levels to multidimensional change around IFI financial assistance episodes. The TPP Index complements existing evaluation tools by providing a transparent analytical signal of the macroeconomic trajectory, which may be helpful to policymakers, analysts, and financial decision-makers concerned with overall adjustment patterns rather than isolated outcomes.

Keywords: international financial institutions; financial assistance; macroeconomic change; composite index; structural adjustment

JEL codes: E60; F35

Dorota Witkowska[1], Krzysztof Kompa[2]. LIFE SATISFACTION IN EUROPEAN POST-COMMUNIST COUNTRIES

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Abstract

In recent years, happiness, wellbeing and life satisfaction have been subjects of research across several scientific disciplines. A major force driving this broad interest is the association of life satisfaction with health, socio-economic situation, work-life balance and private life. There is no doubt that life satisfaction is hard to define and measure since its assessment depends on several factors among which many are not measurable and even are not directly observable. There are also some attempts to measure these phenomena and rank countries or regions in terms of wellbeing constructed by different global and local institutions.

Research purpose. This study aims to examine the level of life satisfaction in sixteen post-communist countries that have undergone political and economic transformations since 1989. These countries began their transition from a centrally planned economy to a market economy at a low level of economic development. Therefore, it is natural to ask how these dynamic socioeconomic changes have affected life satisfaction in these countries.

Design / Methodology / Approach. Happiness and well-being are subjective evaluations of quality of life. Regardless of how these concepts are defined, they are undoubtedly complex phenomena influenced by many factors. In our research, we use several indicators based on the World Happiness Index, the Human Development Index, and the Global Creativity Index and their components. We also construct an original social index for the countries under study using a linear ordering measure. Additionally, we analyze the impact of key factors on happiness assessments, such as GDP per capita, healthy life expectancy, social support, freedom to make life choices, generosity, and perceptions of corruption, on respondents' life satisfaction rates in these countries.

Findings. The study showed that a multidimensional approach using taxonomic methods yields more comprehensive information about life satisfaction than other methods. A ranking of the surveyed countries in terms of life satisfaction and socioeconomic development was developed.

Originality / Value / Practical implications. The work is pioneering, as it is the first study of its kind in countries of the former Soviet bloc. The research provides a solid foundation for studying the long-term effects of economic and social policy.

Keywords: world happiness index; human development index; global creativity index; linear ordering; synthetic taxonomic measure

JEL codes: I31; D60; O57

Asya Surmalyan. MACROECONOMIC SHOCKS AND GEOPOLITICAL RISK IN INTERNATIONAL RESERVE MANAGEMENT

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Abstract

Research purpose. This study explores the influence of macroeconomic disturbances and geopolitical tensions on the management of international reserves and the performance of fixed income portfolios. It seeks to develop a holistic framework linking fiscal and monetary dynamics, banking sector limitations, and political risk to asset allocation decisions. The research emphasizes that structural transformations in global finance—including unconventional monetary policies, elevated public debt, and fragmentation in international markets—play a decisive role in shaping risk perceptions, portfolio resilience, and strategic reserve diversification. By moving beyond conventional metrics of liquidity, credit quality, and market depth, the study investigates how central banks and sovereign reserve managers must reassess what constitutes a truly "safe" asset in a rapidly evolving environment.

Design / Methodology / Approach. The paper employs a conceptual macro-financial approach, integrating insights from sovereign debt management, central banking operations, and financial intermediation theory. It examines the transmission of macroeconomic shocks through banking balance-sheet constraints, endogenous money creation, and liquidity channels. Additionally, the study incorporates an analysis of strategic asset allocation trends, highlighting the renewed prominence of nontraditional reserve instruments and gold. Using a combination of qualitative assessment, historical data on reserve compositions, and evaluation of geopolitical developments, the framework identifies how macroeconomic, institutional, and political factors jointly shape fixed income performance and reserve management strategies.

Findings. The analysis shows that macroeconomic shocks and geopolitical risks operate across multiple interconnected channels, producing nonlinear effects on interest rates, credit spreads, and market liquidity. Traditional safe assets, once considered reliable solely based on creditworthiness and marketability, are increasingly vulnerable to fiscal dominance, political instability, and systemic disruptions. Reserve managers are thus expanding their assessment criteria to include legal security, political neutrality, and resilience to sanctions or capital controls. Gold has re-emerged as a strategic component of international reserves, offering protection against counterparty risk and geopolitical leverage. Empirical evidence indicates that central bank purchases of gold have risen sharply, and its share in reserves is growing, reflecting a shift toward assets capable of preserving value under both financial and geopolitical stress.

Originality / Value / Practical implications. This paper contributes an original integration of macroeconomic, financial, and geopolitical considerations within the context of international reserve management. It highlights the limitations of conventional strategic asset allocation approaches and offers a multidimensional framework for assessing risk. The findings provide practical guidance for policymakers and reserve managers seeking to design robust portfolios capable of withstanding both macroeconomic shocks and geopolitical disruptions. By emphasizing structural forces and systemic interactions rather than isolated market events, the study advances understanding of reserve strategy in an increasingly fragmented global financial system, offering actionable insights for building resilience in sovereign portfolios.

Keywords: reserve management; macroeconomic shocks; geopolitical risk; fixed income markets; gold

JEL codes: F3; G1

Agnė Jaunuolytė[1], Tomas Pečiulis[2]. COMPARATIVE ANALYSIS OF AI AND ECB MODELS IN FORECASTING THE IMPACT OF INTEREST RATE CHANGES ON KEY EU ECONOMIC INDICATORS

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Abstract

Research purpose. This study aims to determine which category of models — conventional or AI-based — produces more accurate forecasts of the impact of ECB interest rate changes on key EU economic indicators. The central research problem addresses how AI-based models compare to conventional models in providing accurate forecasts of the impact of ECB interest rates on GDP, unemployment, HICP, and the Housing Price Index (HPI) in the Euro Area.

Design / Methodology / Approach. A systematic literature review was conducted to establish the theoretical background of AI and traditional forecasting models used by central banks, followed by quantitative analysis implemented in Python on the Google Colab environment. Five models were evaluated: DSGE — representative of the ECB's New Area-Wide Model approach — Vector Autoregression (VAR), ARIMAX/SARIMAX, Random Forest (RF), and Artificial Neural Networks (ANN). The dataset was sourced from the ECB and Eurostat, covering 75 usable quarterly observations from Q3 2005 to Q2 2024. Forecast accuracy was assessed at 4-, 8-, and 12-quarter horizons using MAE, RMSE, and MAPE.

Findings. No single model dominates across all indicators and horizons. The DSGE model produced the most accurate short-term inflation forecasts, while ARIMAX/SARIMAX excelled in short-term GDP forecasting. Random Forest demonstrated the strongest overall performance, achieving the lowest errors across most indicators and all horizons for the Housing Price Index. The ANN model produced unreliable results for most variables, attributed to overfitting caused by the limited 75-quarter training dataset. Contrary to expectations drawn from the literature, AI-based models did not consistently outperform traditional ones, a finding attributed primarily to the constrained sample size.

Originality / Value / Practical implications. No prior studies were identified that apply forecasting models specifically to predict how key economic indicators respond to ECB interest rate changes, making this study unique in its focus. The findings recommend a complementary multi-model approach for monetary policy forecasting: DSGE for inflation, ARIMAX for short-term GDP, and Random Forest for housing prices. The study is limited to the DSGE as the sole ECB model representative and to the constrained Euro Area quarterly dataset.

Keywords. ECB; DSGE; ARIMAX; Random Forest; macroeconomic forecasting

JEL codes: C45; C53; E43; E52; E58

Valeriia Yakovenko[1], Milena Serzante[2]. EARLY EVIDENCE ON CBAM AND EXPORT COMPETITIVENESS IN ECONOMIES WITH DIFFERENT CARBON PROFILIES

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Abstract

Research purpose. This study looks at how the EU Carbon Border Adjustment Mechanism changes the ability of countries with different carbon and energy patterns to sell goods abroad. It aims to find the structural reasons that decide how much each country feels the effect of trade rules linked to carbon. The focus is on carbon intensity, energy efficiency, industrial makeup and how open trade is, rather than on whether a country is classed as developed.

Design / Methodology / Approach. CBAM has existed for only few years – the study does not suppose that producers and governments have finished long-term structural adaptation. A multi-criteria assessment with the COPRAS method builds an export competitiveness index and ranks countries for 2022, before CBAM and again for 2024, after CBAM. The short span allows only an initial structural comparison - it does not support conclusions about long-run dynamics. To probe the links behind the rankings, Pearson correlation and multiple linear regression measure how export performance relates to carbon intensity, energy intensity, industry value added and trade openness.

Findings. The results show that both carbon intensity and energy intensity have an even negative effect on how well countries export. The EU introduced the Carbon Border Adjustment Mechanism, and the negative effect became stronger. In countries where industry accounts for a large share of GDP and trade is highly open, export performance remains steady, even as carbon-related trade rules tighten. The COPRAS assessment highlights clear differences in the ability to adapt. Countries that emit less carbon per unit of output, and use energy more efficiently, hold or improve their competitiveness rankings. In contrast, countries that rely on energy-heavy production see their export stability fall. The study finds that the main factor deciding how vulnerable a country is to CBAM is the structure of its economy and the level of its technology, not whether it is officially labelled as developed or developing.

Originality / Value / Practical implications. This study presents a new approach by assessing export competitiveness while carbon rules apply, and it does so, joining correlation analysis, regression modelling, and the COPRAS method in one frame. The study provides policy-relevant insights for decision makers designing industrial modernisation strategies, improving energy efficiency, and reducing the carbon intensity of export-oriented sectors under increasingly stringent climate and trade regulations.

Keywords: CBAM; export competitiveness; carbon intensity; energy efficiency; trade policy

JEL codes: F14; Q56

Kseniia Kizilova[1], Daiva Jurevičienė[2]. ECONOMIC CONVERGENCE IN THE BALTIC STATES: HARROD-DOMAR ANALYSIS

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Abstract

Research purpose. The purpose of the research is to examine the determinants of economic growth in the Baltic States during their high-income convergence phase from 2002 to 2024, using the Harrod-Domar model as the core framework. Because the following countries achieve rapid GDP growth but face institutional development gaps, governance constraints, and internal vulnerabilities, it is crucial to determine the factors promoting their economic development. Consequently, there is a need for a systematic and structural overview to assess the analytical relevance, limitations, and potential areas for improvement.

Methodology. This study employs a mixed-methods quantitative design, integrating a theoretical literature review, descriptive statistics, correlation analysis, multivariate regression analysis, and comparative country analysis. The economic growth by Harrod-Domar serves as the dependent variable, and the key regressors are FDI, the unemployment rate, inflation, exports, and imports. The panel dataset covers the period of 2002–2024 and assesses the models against structural, institutional, and macroeconomic conditions.

Findings. The analysis reveals that the Harrod-Domar economic growth model captures broad GDP trends but struggles to accurately predict in volatile, fast-growing countries because it omits key factors. The Harrod-Domar economic growth model incorporates structural factors such as investment in human capital and trade openness, which provide a more robust explanation of growth dynamics. The analysed model shows a strong positive effect of FDI and trade openness; however, inflation and unemployment are negatively associated with economic growth in Baltic countries.

Practical implications. This study contributes to the literature by offering a structured evaluation of the Harrod-Domar economic growth model in the context of small, open, and rapidly developing economies during their EU integration phase. It provides policymakers and researchers with insights, explaining FDI, exports and imports, and the impact of inflation control on economic growth, and bridging theoretical frameworks with practical realities. The findings show limitations of the standard model and emphasise the need for context-sensitive adjustments. The validated framework enables calculations of economic growth for other growing countries, adapting Baltic estimates.

Keywords: economic growth; developing economies; macroeconomic models

JEL codes: O11; O40; E10

Andrejs Limanskis. FOREIGN DIRECT INVESTMENTS FROM THE NETHERLANDS IN LATVIA AS THE DRIVER OF SUSTAINABILITY AND DIGITISATION

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Abstract

Research purpose. To examine the transformative role of Dutch foreign direct investment (FDI) in Latvia's sustainable development and digital transformation.

Design / Methodology / Approach. Drawing on recent theoretical frameworks in sustainable FDI and digital economy investment patterns, this study approaches Dutch capital flows with the NACE-sectoral analysis and Herfindahl-Hirschman Index (HHI). Firms' Environment, Social and Governance (ESG) alignment and potential as digitisation drivers are evaluated. Aggregation of NACE classes to divisions is used to single out the major industries. The integration of quantitative and qualitative methods constructs an explanatory sequential design, wherein statistical patterns identified through FDI flow analysis are then explained and contextualized through detailed case examination. This approach balances breadth of coverage with depth of understanding.

Findings. The research discloses the Netherlands' unprecedented rise to become Latvia's second-largest foreign investor in 2026, with cumulative investments in 142 NACE industries reaching €1.35 billion. The HHI of 3565 indicates a highly concentrated structure. The explicit ESG and digitisation alignment is found to contrast with the more volatile, fragmented investment patterns from neighbouring Baltic states. Greater trend stability (R^2 = 0.8214 vs. 0.678 for Estonian FDI) is documented. Dutch investments exhibit distinctive characteristics: high sectoral concentration, large average transaction size, explicit sustainability focus through certified forest management and circular retail practices, and sophisticated digital integration across operations. Thus, Dutch FDI is a potential catalyst for Latvia's green transition and digital transformation, though concentration risks and dependence concerns are noticeable. 85% year-on-year increase is primarily driven by strategic sustainability-oriented investments, particularly Ingka Investments' €629 million commitment to sustainable forestry operations and IKEA's retail digitalization initiatives.

Originality / Value / Practical implications. This research is a pioneering one in highlighting an unprecedented jump of FDI from the Netherlands to the rank 2 in Latvia in conjunction with a rich NACE structure. The methodology of NACE-sectoral analysis paves the way for the coming AI-assisted big data involvement in the FDI studies. This research contributes to the emerging literature on how developed-economy FDI can accelerate sustainability and digital transitions in small open economies within the European Union framework. Practical implications modernise the policy of attracting FDI.

Keywords: Foreign Direct Investment; NACE code; Latvia; The Netherlands; ESG

JEL codes: F21; F15

Vilma Kazlauskienė[1], Algirdas Justinas Staugaitis[2]. GREEN BOND ISSUANCE AND EMISSIONS REDUCTION: WESTERN–EASTERN DIFFERENCES IN THE EUROPEAN UNION

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Abstract

Research purpose. The rapid expansion of green bond markets has positioned green finance as a key instrument for advancing the European Union's climate objectives. While prior literature extensively examines the determinants of green bond issuance, empirical evidence on their effectiveness in reducing greenhouse gas emissions remains limited, particularly with respect to regional disparities within the EU.

Design / Methodology / Approach. This study investigates the relationship between green bond issuance and greenhouse gas emissions across 24 European Union countries over the period 2018–2023, with a specific focus on differences between Western and Eastern Europe. Using balanced panel data, the analysis employs a two-way fixed-effects model to account for unobserved country heterogeneity and common time effects. Lagged green bond issuance is incorporated to capture delayed environmental impacts, while potential endogeneity is addressed through a two-stage panel estimation as a robustness check. Regional heterogeneity is examined through subgroup analysis of Western and Eastern European countries, controlling for relevant macroeconomic, fiscal, and environmental factors.

Findings. The results indicate a statistically significant negative association between green bond issuance and greenhouse gas emissions at the EU level. However, the effect is substantially stronger and more robust in Western Europe, while remaining weaker and less consistent in Eastern member states. These differences point to variation in the transmission mechanisms through which green bond financing translates into real emission reductions, potentially reflecting disparities in project selection, implementation capacity, and supporting policy frameworks across regions. Overall, the findings suggest that the environmental effectiveness of green bonds depends on broader institutional and financial conditions, including market maturity and governance quality.

Originality / Value / Practical implications. The study contributes to the sustainable finance literature by providing new evidence on the emissions-mitigation potential of green bonds and highlighting the importance of regional context in EU climate finance policy design. The findings are relevant for policymakers seeking to strengthen the role of green bonds within the EU's climate policy framework, particularly in less mature financial markets. The results also underline the importance of aligning green bond development with broader institutional reforms to enhance their environmental impact.

Keywords: green bonds, greenhouse gas emissions, sustainable finance, panel data, European Union, Western and Eastern Europe

JEL codes: Q54; G18

Angelė Lileikienė. THE ROLE OF STARTUP ECOSYSTEMS IN THE DIGITAL ECONOMY

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Abstract

Research Objective. This study examines the development of startup ecosystems, the policies supporting innovation, the spread of technological advancements, the rise of "unicorn" startups, strategies for international expansion, and the creation of digital clusters.

Methodology. Startups are widely recognized as central drivers of innovation and technological progress within the digital economy. They facilitate the adoption of new business models, contribute to the growth of venture capital markets, and improve both regional and global competitiveness. At the same time, the performance of startups depends heavily on the maturity of the surrounding ecosystem, including regulatory frameworks, funding access, collaboration between universities and companies, availability of skilled talent, and digital infrastructure.

This research highlights the importance of analyzing startup ecosystems in terms of policy measures for innovation support, technology diffusion, the emergence of high-value startups, international growth strategies, and the establishment of digital clusters. Particular attention is given to lessons learned from ongoing initiatives, including those supported by the European Union, which foster digital entrepreneurship and promote sustainable economic development.

Findings. Startups play a significant role in driving innovation and economic growth. They operate not in isolation, but as part of an interconnected network including businesses, academic institutions, investors, government entities, and skilled professionals. As such, startups contribute to economic development by fostering innovation, attracting and nurturing talent, promoting collaboration networks, and enhancing regional competitiveness. Key elements of the ecosystem include government policy, financial resources (venture capital and business angels), culture, human capital, support mechanisms (incubators, accelerators, mentorship programs), infrastructure (digital systems, technology parks, coworking spaces), and market opportunities.

Originality / Value / Practical implications. Lithuania hosts a number of successful startups, such as Vinted, specializing in e-commerce; Bolt, providing mobility and transport services; Tesonet, focused on cybersecurity technologies; and Dexter Capital, offering fintech solutions in investment services. These examples illustrate the practical impact of a well-functioning startup ecosystem on innovation and economic development.

Keywords: startup, startup ecosystem, innovation, venture capital, incubator, accelerator, mentorship

JEL Codes: L26; O31; L26

Česlovas Christauskas[1], Algirdas Justinas Staugaitis[2]. DIGITAL DIVIDE AND FINANCIAL VULNERABILITY ACROSS EUROPEAN UNION COUNTRIES

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Abstract

Research purpose. Digitalisation has become a key driver of economic participation, access to services, and social inclusion across the European Union. At the same time, persistent digital inequalities may contribute to financial vulnerability by limiting individuals' ability to manage financial resources, access digital financial services, and cope with economic risks. This study aims to examine the relationship between the digital divide and financial vulnerability across European Union countries, with particular attention to differences between urban and rural populations.

Design / Methodology / Approach. The study is based on a quantitative analysis of large-scale data from the European Social Survey, collected in 2024–2025 across a selection of European Union countries. The analysis uses selected indicators related to digital skills and internet use, digital confidence, financial security, and perceived financial vulnerability. Urban–rural differences are examined using respondents' place of residence, while cross-country variation is analysed at the national level. The empirical strategy combines descriptive statistics, correlation analysis, and multivariate regression models to assess the association between digital skills and financial vulnerability, controlling for key socio-demographic characteristics such as age, education, employment status, and income.

Findings. The results indicate that lower levels of digital skills and limited digital engagement are associated with higher perceived financial vulnerability across EU countries. Individuals with weaker digital competencies are more likely to report difficulties in meeting unexpected expenses, concerns about future financial security, and greater exposure to economic risks. Urban–rural differences remain evident, with rural residents generally facing higher levels of digital exclusion and financial vulnerability, although the magnitude of these gaps varies across countries. Overall, the findings suggest that the digital divide constitutes an important structural factor shaping financial vulnerability in the European Union.

Originality / Value / Practical implications. This study contributes to the literature on digital inequality and financial vulnerability by providing cross-country evidence from the European Union using harmonised survey data. By linking digital skills with financial vulnerability, the findings highlight the broader social and economic implications of the digital divide. From a policy perspective, the results underscore the importance of integrating digital inclusion strategies with financial capability and social sustainability policies in order to reduce vulnerability and promote inclusive development across EU countries.

Keywords: digital divide, financial vulnerability, digital skills, urban–rural differences, European Union

JEL codes: D14; J24; O33; I32

Kristina Astikė[1], Ieva Jankauskienė[2]. THE IMPACT OF CULTURE AND EDUCATION ON ECONOMIC GROWTH: PANEL REGRESSION ANALYSIS IN THE BALTIC STATES

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Abstract

Research purpose. Empirically assess the impact of the interaction between culture and education on economic growth in the Baltic countries using panel regression analysis.

Design / Methodology / Approach. The study is based on a quantitative approach and uses secondary statistical data from the Eurostat database. The period analyzed covers 2015–2024, and the object of analysis is the indicators of Lithuania, Latvia, and Estonia. Panel regression analysis is used to process the study data.

Findings. The results of the research show that investments in knowledge creation and innovation are consistently linked to more advantageous economic development in a country. Meanwhile, the negative correlation between lifelong learning coverage and gross domestic product growth may be linked to the countercyclical or relatively endogenous dynamics of this indicator, which become more pronounced during periods of economic downturn. This interpretation remains preliminary, and further research is needed to assess the effects of time series and to more clearly distinguish correlational relationships from possible causal effects.

Originality / Value / Practical implications. This research contributes to the scientific literature by using panel regression methods to examine the interaction between culture and education in shaping economic growth in the Baltic countries. Unlike previous studies, which mostly analyze education or culture separately, this article focuses on their combined impact and provides a comparative, country-level analysis for Lithuania, Latvia, and Estonia for the period 2015–2024. The results provide new empirical insights into how investments in culture and education, as well as their interaction, are related to economic growth in the context of small open economies. The study refines the concept of human capital formation by including cultural participation and cultural infrastructure in the analysis, thus broadening the traditional, education-only approach to growth. The results of the study provide evidence-based guidelines for policymakers in the Baltic countries on how to develop integrated cultural and educational policies that promote sustainable economic growth. By identifying which cultural and educational indicators and combinations thereof are most strongly associated with growth, the study lays the groundwork for better prioritization of public investment, allocate EU structural funds more effectively, and strengthen cross-sectoral cooperation between education, culture, and economic development institutions.

Keywords: economic growth, interaction between culture and education, panel regression analysis, Baltic countries, human capital

JEL codes: I25; Z10

Andriew Lim. ACADEMIC – INDUSTRY PARTNERSHIP DRIVING AI IN HOSPITALITY

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Abstract

Research purpose. This research aims to examine how an academic-industry partnership can drive the adoption and practical value of AI in hospitality industry by collaboratively testing the AI-based solutions within a real-world hotel environment.

Design / Methodology / Approach. The research is designed as a qualitative case study design using experiment pilot test at a training hotel. Data were collected through operational performance metrics, system usage observations, and guest feedback gathered during the pilot test. The approach emphasized real-world experimentation, iterative system refinement, and evaluation of AI impacts on operational efficiency and guest experience.

Findings. The findings indicate that the academic-industry collaboration enabled effective implementation of AI solutions, resulting in measurable improvements in operational efficiency and enhanced guest satisfaction through more personalised and responsive hotel services.

Originality / Value / Practical implications. The study contributes original value by demonstrating how an academic-industry partnership can perform as a living laboratory to enhance innovation in the hospitality industry. The pilot provides empirical evidence derived from real-world implementation of an emerging technology solution within a training hotel, thereby bridging the gap between academic research and industry practice. The findings highlight the value of collaborative experimentation in reducing adoption barriers, refining AI solutions through iterative feedback, and aligning technological innovation with operational realities.

Keywords: Artificial Intelligence (AI); academic-industry partnership; start-up; operational efficiency; guest experience; digital innovation; hospitality industry

JEL codes: L26; I23; L83; L86; M13; O32

EKONOMIKAS UN KULTŪRAS AUGSTSKOLA

EMERGING TRENDS IN

SUSTAINABLE DEVELOPMENT AND CIRCULAR ECONOMY

Agnieszka Wójcik-Czerniawska[1], Zbigniew Grzymała[2]. CIRCULAR AND ETHICAL ECONOMIES: REDESIGNING MARKETS FOR PLANETARY WELLBEING

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Abstract

The accelerating climate crisis, deepening inequalities, and pressure on finite resources show that linear economic models are no longer compatible with long-term human and planetary wellbeing. Circular and ethical economies propose an integrated redesign of markets that merges resource-efficient circularity with fairness, transparency, and social justice. Circular strategies—such as eco-design, reuse, repair, regenerative production, and product-as-a-service—reduce material flows but risk reinforcing inequalities if not grounded in strong ethical frameworks. Ethical governance improves fairness and accountability, yet requires circular, low-resource systems to support lasting value. This work develops a unified framework showing how circular and ethical principles function as mutually reinforcing pillars of future markets.

Research purpose. The purpose of this research is to examine how circular economic principles and ethical governance frameworks can be jointly integrated to redesign contemporary markets in ways that support long-term planetary wellbeing. The study aims to identify the institutional, technological, and behavioral mechanisms that enable markets to shift from linear, extractive models toward regenerative and socially just systems.

Design / Methodology / Approach. This study adopts a multi-method, interdisciplinary research design combining conceptual, empirical, and comparative approaches to examine how circular and ethical principles can be integrated into future market systems. Cases are selected based on diversity of geography, sector, and governance models to capture a broad spectrum of market redesign strategies.

Findings. The research reveals that circular and ethical transformations are most effective when pursued as interdependent systems, rather than separate sustainability agendas. Evidence from case studies and policy analyses shows that circularity initiatives—such as reuse, repair, product-as-a-service, and regenerative supply chains—deliver the greatest ecological benefits when embedded within transparent, accountable, and socially inclusive governance frameworks. The findings also demonstrate that institutional alignment is a key predictor of success.

Originality / Value / Practical implications. he accelerating climate crisis, rising inequalities, and pressure on finite resources show that linear economic models can no longer support long-term human and planetary wellbeing. Circular and ethical economies offer an integrated redesign of markets by combining resource efficiency with fairness, transparency, and social justice. While circular strategies—eco-design, reuse, repair, regenerative production, product-as-a-service—reduce material flows, they risk deepening inequalities without strong ethical safeguards. The research introduces the notion of circular-ethical market architectures—systems aligning technology, governance incentives, and community participation to support regeneration and social responsibility.

Keywords: circular economy; ethical governance; sustainable markets; regenerative systems; planetary wellbeing

JEL codes: Q01; Q56

Indre Aglinieks[1], Indre Lapinskaite[2]. RETHINKING THE ROLE OF FINANCIAL DERIVATIVES IN SUSTAINABLE DEVELOPMENT: A META-ANALYSIS

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Abstract

Research purpose. Despite the growing prominence of sustainability-related financial derivatives in global markets, their actual linkage with sustainable development outcomes remains empirically underexplored and conceptually fragmented. Existing studies often suggest a positive association between financial derivatives and sustainability-related indicators. However, the evidence remains scattered, methodologically inconsistent, and far from conclusive.

Design / Methodology / Approach. To address this gap, a systematic and bibliographic review was conducted, followed by a meta-analysis of 71 models assessing the correlation between financial derivatives and sustainability-related variables, including environmental, social, and governance (ESG) indices and green financial instruments.

Findings. The meta-analysis revealed statistically significant results across several models, supported by robust multivariate and multi-level model performance. However, high heterogeneity and indications of publication bias suggest methodological inconsistencies and a need for broader data inclusion.

Originality / Value / Practical implications. These findings reveal that the role of financial derivatives in advancing sustainable development remains conditional, context-dependent, and insufficiently theorised.

Keywords: financial derivatives; sustainability; sustainability-related derivatives; systematic & bibliographic review; meta-analysis

JEL codes: G10; G20

Kristina Razminienė[1], Daiva Jurevičienė[2]. CIRCULAR LITERACY RESEARCH AS A BASIS FOR ASSESSING SOCIETAL READINESS FOR THE CIRCULAR ECONOMY

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Abstract

Research purpose. As the transition to a circular economy (CE) accelerates, increasing attention is being paid not only to technological and institutional solutions but also to society's capacity to understand and implement circular principles. According to the European Commission, this model is one of the key elements for implementing the Sustainable Development Goals, especially in transforming consumption and production. Although material flow and economic indicators, such as the circularity index, are widely used to measure circularity, there is still a lack of tools to assess the population's readiness to act in line with the principles of the circular economy. This literature analysis is part of a project that aims to develop and test the Circular Literacy Index (CLI) as a novel indicator to assess society's readiness to implement the principles of the circular economy. Research objectives include defining the concept of circular literacy based on recent literature; conducting a comprehensive, systematic, and logical analysis and synthesis of the theoretical frameworks of circular literacy; and thereby identifying the need to develop a circular literacy measurement instrument.

Design / Methodology / Approach. The study applies a Systematic Literature Review (SLR) and VOSviewer analysis to define the concept of circular literacy and identify gaps in existing assessment approaches. The review also provides a structured overview of indicators employed in prior research and the methodological approaches used to measure literacy in related fields, enabling a comparative perspective and highlighting areas requiring further development.

Findings. The results clarify the knowledge, competencies, and values underpinning societal readiness for the CE transition. The SLR identified relevant indicators for inclusion in the Circular Literacy Index and highlighted methodological options for constructing the index. These insights will help to provide evidence-based recommendations for policymakers and other stakeholders.

Originality / Value / Practical implications. The research adds value by addressing an underexplored aspect of circular economy transitions – societal readiness – which is not captured by prevailing circularity indicators focused on material flows and economic performance. By systematising the concept of circular literacy and analysing existing measurement practices, the study lays a theoretical and methodological background for the creation of a Circular Literacy Index (CLI) or similar instruments. Such tools can inform policymakers, educators, and organisations seeking to promote circular practices, help tailor interventions to specific societal needs, and ultimately accelerate the cultural and behavioural shifts required for sustainable, long-term circular economy transformation.

Keywords: circular literacy, circular economy, sustainability, eco-literacy, digitalisation.

JEL codes: Q01, Q56

Kristina Astikė[1], Kristina Razminienė[2]. UNDERSTANDING CIRCULAR LITERACY AS A DRIVER OF CIRCULAR ECONOMY TRANSITIONS

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Abstract

Research purpose. The circular economy (CE) has emerged as a pivotal framework for advancing sustainable resource utilisation, grounded in the continuous circulation of materials through reduction, reuse, and recycling principles. Its overarching goal is to preserve the value of products and materials for as long as possible, minimise resource inputs and waste generation, and ultimately return materials to the economic system to create new value. While this vision has spurred substantial economic and technological initiatives – often tracked through material flow metrics, innovation indicators, and industrial performance – such measurements primarily reflect systemic capacity rather than societal engagement. Consequently, existing indicators alone do not adequately capture society's readiness to participate in this transformative shift. One contributing factor is the limited public understanding of circularity principles. Effective participation by citizens, organisations, and institutions requires a foundational set of knowledge, values, and behaviours increasingly conceptualised as circular literacy. The aim of this research is to review the existing literature on circular economy, circular literacy, and eco-literacy to consolidate conceptual developments and propose a roadmap for future research.

Design / Methodology / Approach. Using a bibliometric analysis approach, the study examines publications indexed in the Web of Science and Scopus databases to identify key themes, research trends, influential works, leading journals, and prominent authors contributing to this emerging discourse.

Findings. The findings indicate a growing academic interest in circular literacy, including its role as an enabler of societal readiness for circular economy adoption. Based on the bibliometric results, the article outlines a research roadmap that positions circular literacy as an essential socio-cultural dimension alongside technological and economic CE strategies.

Originality / Value / Practical implications. The study contributes originality and value by synthesising the evolving conceptual landscape, identifying theoretical and empirical gaps, and delineating interdisciplinary linkages between CE, literacy studies, and sustainability transitions research. In practical terms, it provides a conceptual foundation for future empirical models and policy frameworks that may support the development of targeted educational initiatives, public engagement strategies, and institutional interventions. In doing so, it highlights the potential of circular literacy to accelerate the cultural and behavioural transformations necessary for a long-term and socially embedded transition to the circular economy.

Keywords: circular literacy, circular economy, eco-literacy, societal readiness, sustainability transitions

JEL codes: Q01, Q56

Zhansaya Temerbulatova[1], Aknur Zhidebekkyzy[2], Akmaral Smatayeva[3]. MEASURING RENEWABLE ENERGY EFFICIENCY IN POST-SOVIET COUNTRIES: A COMPOSITE INDEX APPROACH

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Abstract

Research purpose. The rapid expansion of renewable energy sources has become a central component of low-carbon transition strategies in post-Soviet economies; however, the effectiveness of renewable energy integration remains uneven across countries. Existing research predominantly focuses on isolated indicators such as installed capacity or renewable shares in electricity generation, which fail to capture the multidimensional nature of renewable energy performance. The purpose of this study is to develop and apply a composite Renewable Energy Efficiency Index (RE-EFF) that systematically evaluates the economic, environmental, and social efficiency of renewable energy utilization across post-Soviet countries, enabling cross-country comparison and identification of structural strengths and weaknesses in national energy systems.

Design / Methodology / Approach. The RE-EFF index is constructed using a system of standardized indicators covering renewable electricity generation, installed renewable capacity, capacity utilization rates, renewable energy intensity relative to economic output, carbon intensity of electricity production, avoided CO_2 emissions, and renewable electricity generation per capita. All indicators are normalized using a min–max transformation to ensure comparability and aggregated through a geometric mean approach, reflecting balanced contributions of each dimension to overall efficiency. The empirical analysis uses panel data on post-Soviet countries for the period 2015-2023, allowing for both temporal dynamics and cross-country heterogeneity.

Findings. The results reveal substantial disparities in renewable energy efficiency across post-Soviet economies. Countries with higher renewable capacity utilization and lower carbon intensity demonstrate significantly stronger efficiency performance, whereas fossil-fuel-dependent energy systems exhibit persistently low efficiency despite recent capacity additions. The analysis indicates that improvements in operational performance and system integration play a more decisive role in enhancing renewable energy efficiency than capacity expansion alone. Moreover, efficiency dynamics suggest a gradual, yet uneven, convergence process among selected countries.

Originality / Value / Practical implications. This study introduces a novel multidimensional index specifically tailored to assess renewable energy efficiency in transition economies, moving beyond conventional capacity-based metrics. The proposed framework provides policymakers with a practical monitoring tool to evaluate renewable energy performance, identify policy gaps, and design targeted interventions to improve system efficiency and accelerate decarbonization. The index also offers a robust empirical foundation for further econometric analysis of the determinants of renewable energy efficiency in emerging energy markets.

Keywords: renewable energy efficiency; composite index; post-Soviet countries; energy transition; decarbonization.

JEL codes: Q42; Q56

Nelson Duarte[1], Cristóvão Sousa[2], Carla Pereira[3], Bruno Silva[4]. ENABLING OR DELAYING CIRCULARITY? INDUSTRY 4.0 AND 5.0 TECHNOLOGIES IN THE IMPLEMENTATION OF THE 10 R'S AND CIRCULAR BUSINESS MODELS

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Abstract

Research purpose. The transition towards a circular economy has intensified scholarly and managerial interest in circular business models and in operational frameworks that support their implementation, such as the extended 10 R's hierarchy. At the same time, rapid advances in digital technologies associated with Industry 4.0 and the emerging Industry 5.0 paradigm are frequently presented as key enablers of circular strategies. However, the literature remains fragmented regarding how these technologies concretely support—or, in some cases, hinder—the implementation of circular business models and specific R-based strategies. This paper aims to systematically review and synthesize existing research at the intersection of the 10 R's framework, circular business models, and digital technologies, identifying dominant trends, gaps, and tensions in the literature.

Design / Methodology / Approach. The study adopts a systematic literature review methodology following the PRISMA guidelines. A comprehensive search was conducted across major academic databases using predefined inclusion and exclusion criteria. Peer-reviewed journal articles focusing on circular economy strategies, circular business models, and Industry 4.0 and 5.0 technologies were selected and screened. The final sample was analysed through qualitative content analysis, with studies coded according to the R-strategies addressed, types of circular business models, categories of digital technologies, and the nature of their reported impacts (enabling, constraining, or ambivalent).

Findings. The findings reveal that digital technologies and tools such as the Internet of Things, big data analytics, artificial intelligence, and digital platforms are predominantly associated with lower-order R-strategies, particularly Reduce, Reuse, and Recycle, often through efficiency gains, monitoring, and optimization. Higher-order strategies, such as Refuse, Rethink, and Redesign, remain comparatively underexplored. While Industry 4.0 technologies are largely framed as enablers of circularity, the review also identifies delaying effects, including rebound effects, increased energy consumption, data governance challenges, and organizational capability gaps. Emerging Industry 5.0 perspectives introduce a more human-centric and sustainability-oriented narrative but are still weakly integrated into circular business model research.

Originality / Value / Practical implications. This paper contributes by offering an integrative synthesis that connects digital technologies to specific R-strategies within circular business models. It provides a structured overview of enabling and constraining mechanisms, highlights under-researched areas, and proposes directions for future research. For practitioners and policymakers, the results support more informed decisions regarding digital investments aligned with circular economy goals.

Keywords: circular economy; circular business models; 10 R's framework; Industry 4.0; Industry 5.0

JEL codes: O30

Yevheniia Ziabina[1], Serhii Solodovnikov[2], Yin Tingting[3]. DIGITAL INCLUSION AND GREEN ECONOMIC GROWTH: EVOLUTION OF THE SCIENTIFIC LANDSCAPE

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Abstract

Research purpose. The purpose of the study is to identify key trends, thematic shifts, and interdisciplinary linkages in the development of theories of digital inclusion and green economic growth within the global scientific discourse. Particular attention is paid to the evolution of the conceptual framework, the integration of economic, social, and humanities approaches, and the formation of new research clusters at the intersection of digitalization, sustainable development, and environmental policy.

Design / Methodology / Approach. The empirical basis of the study was formed through a bibliometric analysis of publications indexed in the Scopus database using the keywords "digital inclusion", "green economic growth", and "green economic". The total sample comprised more than 4,500 scientific publications. During the analysis, over 15,600 terms were generated, of which approximately 1,500 terms were selected based on a minimum occurrence threshold of seven times. The visualization of the keyword co-occurrence network was carried out using VOSviewer, with the construction of an overlay visualization map reflecting the temporal evolution of terms during 2019-2024. The methodological approach made it possible to identify dominant clusters, including "digital inclusion – digital divide – accessibility – internet", "green economy – sustainable development – economic development", as well as inter-cluster connections through concepts such as "digitalization", "government", "policy implementation", and "COVID-19". The analysis of the color-gradient dynamics of the map indicates a shift in research focus from the problem of the digital divide toward a broader conceptualization of digital inclusion as a tool for ensuring sustainable and green economic growth.

Originality / Value / Practical implications. The scientific originality lies in the comprehensive combination of bibliometric mapping and conceptual analysis of the evolution of digital inclusion and green economic growth theories in the context of socio-economic transformations. The study demonstrates the gradual integration of the humanities dimension (human-centered issues, inequality, education, social behavior) with economic and environmental discourses, forming a new interdisciplinary scientific landscape. The practical value of the results lies in their potential application in the development of digital inclusion policies, green economic recovery strategies, and educational and governance programs aimed at fostering inclusive and sustainable development.

Keywords: digital inclusion; green economic growth; sustainable development; digitalisation

JEL codes: O33; O44; Q56

This research was funded by the Ministry of Education and Science of Ukraine within the grant project: 0126U000546 "Digital Transformation of Ukraine in the Context of Green Economic Development: Convergence with the EU and Challenges of Inclusive Digitalisation".

Liu Kenang[1], Olena Chygryn[2]. GREEN COMPETITIVENESS AND SOCIAL RESILIENCE IN CONTEMPORARY SCIENTIFIC DISCOURSE

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Abstract

Research purpose. The study aims to explore the structural and semantic environment of the categories "green competitiveness" and "social resilience" within the contemporary scientific discourse. The research seeks to identify dominant thematic clusters, conceptual interrelations, and the evolution of these categories in the context of sustainable development and global economic transformation. Special attention is devoted to examining how these concepts are integrated into interdisciplinary research fields and whether they demonstrate convergence within emerging sustainability paradigms.

Methodology. The research is based on bibliometric and scientometric analysis using Scopus Analytics tools and VOSviewer software. A structured dataset of publications indexed in Scopus was compiled using keyword queries for "green competitiveness" and "social resilience." The analysis included keyword co-occurrence mapping, citation network analysis, clustering, and temporal trend visualisation. VOSviewer was applied to construct bibliometric maps that reveal structural connections between research domains, thematic clusters, and influential authors. The methodological approach allowed for identifying knowledge gaps and detecting the degree of conceptual integration between the studied categories.

Findings. The results demonstrate that "green competitiveness" is predominantly associated with themes such as sustainable innovation, environmental performance, circular economy, ESG frameworks, and green growth strategies. In contrast, "social resilience" is more frequently linked to community adaptation, governance, crisis management, institutional capacity, and social capital. The bibliometric mapping reveals emerging intersections between these domains, particularly in research addressing sustainability transitions, institutional support mechanisms, and post-crisis recovery models. However, the integration of both categories within a unified theoretical framework remains limited, indicating fragmentation in the academic discourse. The temporal analysis shows increasing publication growth after 2018, reflecting intensified scholarly interest in resilience and sustainability issues.

Originality. The study contributes to the systematisation of the conceptual landscape of green competitiveness and social resilience by providing a structured bibliometric overview of their interconnections. The findings offer a foundation for developing integrative research models that combine economic, environmental, and social dimensions of competitiveness. The results support policymakers and researchers in designing evidence-based strategies for sustainable economic development, particularly in contexts characterised by structural transformations and external shocks.

Keywords: green competitiveness; social resilience; bibliometric analysis; sustainability; VOSviewer

JEL codes: Q56; O44

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Raimonds Udačs[1], Natālija Cudečka-Puriņa[2]. BARRIERS AND ENABLING FACTORS FOR LATVIAN SMES' ACCESS TO SUSTAINABILITY-FOCUSED EU STRUCTURAL AND INVESTMENT FUNDS

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Abstract

The transition toward sustainable economic development has become a central priority of the European Union, particularly within the framework of the European Green Deal. Small and medium-sized enterprises (SMEs) play a crucial role in achieving sustainability goals, yet the uptake of sustainability-oriented funding programmes remains limited.

Research purpose. The purpose of the research is to identify and analyse institutional and firm-level barriers that restrict SMEs' access to sustainability-oriented European Structural and Investment (ESI) funds in Latvia, and to evaluate potential solutions to improve this access.

Design / Methodology / Approach. The research applies a mixed-methods approach combining quantitative and qualitative analysis. Quantitative analysis is based on secondary data from the ex-ante market assessment for EU funds for the 2021–2027 programming period and the Flash Eurobarometer 549 survey on SMEs, resource efficiency, and green markets. Descriptive statistics, relative indicator analysis, and comparative methods are used to examine SMEs' sustainability practices and access to funding. Qualitative insights are obtained through a semi-structured interview with a representative of a responsible institution and analysed using thematic interpretation. The study is theoretically grounded in the institutional perspective, the resource-based view, and the diffusion of innovation theory.

Findings. The research findings highlight that a combination of institutional, financial, and capability-related barriers constrains SMEs' access to sustainability-oriented ESI funds in Latvia. Key challenges identified by the research include administrative complexity, strict eligibility requirements, limited internal resources and competencies, as well as risk aversion toward long-term green investments. Simultaneously, factors such as institutional support mechanisms, improved information availability, advisory services, and strengthened organisational capabilities can significantly enhance SMEs' ability to access and effectively implement sustainability-oriented projects. This study contributes to the literature by providing an integrated analysis of institutional and company-level determinants affecting SMEs' access to sustainability-related EU funding. By combining quantitative secondary data with qualitative institutional insights, the research offers a more comprehensive understanding of the interaction between policy instruments and SMEs' internal capacities in the Latvian context.

Originality / Value / Practical implications. The findings provide evidence-based recommendations for policymakers and financial institutions aimed at improving the accessibility and effectiveness of sustainability-oriented ESI funds. Suggested measures include simplifying administrative procedures, strengthening advisory and capacity-building support for SMEs, and improving the alignment between public funding instruments and SMEs' operational realities. Enhancing these mechanisms could increase SME participation in sustainability investments and contribute to the achievement of national and EU climate and sustainability objectives.

Keywords: green transition; sustainable development; sustainable finance

JEL codes: O38; Q56

Lelde Vinkalna[1], Edgars Cerkovskis[2], Jelena Titko[3]. OPPORTUNITIES FOR THE INTEGRATION OF CIRCULAR ECONOMY PRINCIPLES IN EVENT MANAGEMENT IN LATVIA

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Abstract

Research purpose. Circular economy principles are increasingly recognized as an important approach for improving sustainability and reducing resource consumption. The event management industry involves intensive use of materials, logistics and temporary infrastructure, which creates opportunities for applying circular solutions. However, the integration of these principles in event management remains limited and insufficiently researched in Latvia. The purpose of this study is to analyze opportunities for integrating circular economy principles in the event management sector in Latvia and to identify the key factors influencing their implementation.

Design / Methodology / Approach. The research is based on a mixed-method approach combining qualitative and quantitative methods. The study includes analysis of academic literature and secondary sources related to circular economy and sustainable event management. Empirical data are collected through structured interviews with representatives of the event management sector and an online survey targeting event organizers, organizations commissioning events and event attendees. Quantitative data are analyzed using descriptive statistics, graphical analysis and correlation analysis, while qualitative data are analyzed using content analysis.

Findings. The results indicate that awareness of circular economy principles in the event management sector is increasing, but practical implementation remains limited. Although stakeholders recognize potential benefits such as reduced resource waste, improved reputation and long-term efficiency, implementation is often constrained by lack of practical knowledge, limited availability of sustainable suppliers and absence of clear industry guidelines. Respondents also highlight that stronger client demand and clearer guidelines could encourage wider adoption of circular solutions.

Originality / Value / Practical implications. The study contributes to research on circular economy implementation in service industries by focusing on the event management sector in Latvia. By combining perspectives of organizers, event clients and attendees, the research provides insight into factors influencing the adoption of circular practices. The results may support the development of practical guidelines for integrating circular economy principles into event planning and organization.

Keywords: circular economy; event management; sustainable events; resource efficiency; Latvia

JEL codes: Q56; L83

Katalin Nagy-Kercsó. BEYOND THE GREEN ILLUSION: SUSTAINABILITY BURNOUT IN THE TRANSYLVANIAN MARKET

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Abstract

Research purpose: The primary objective of this study is to explore and compare consumer attitudes towards sustainability and the phenomenon of greenwashing within the Transylvanian region, specifically focusing on the local Hungarian and Romanian-speaking populations. The research aims to understand how these coexisting demographic groups perceive green marketing claims, how these perceptions influence their everyday purchasing decisions across food products, and the cognitive mechanisms underlying their skepticism towards corporate sustainability efforts.

Design / Methodology / Approach: The study employs a mixed-methods approach based on focus group interviews conducted with a diverse demographic sample of both Hungarian and Romanian consumers living in Transylvania. The qualitative textual analysis of the transcripts is complemented by quantitative text mining techniques, including word frequency analysis, bigram networks. This dual methodology allows for a deep exploration of both the explicit narratives and the underlying semantic networks associated with consumer decision-making and greenwashing within this specific multicultural context.

Findings. The results reveal a profound and pervasive skepticism towards corporate green claims in both consumer groups. Within the Hungarian speaking sample, consumers experience sustainability burnout due to the high cognitive load of constantly verifying environmental claims, leading to a rationalized disappointment rather than emotional outrage. A clear sectoral divide was identified: in the food sector, sustainability is linked to health and trust, whereas in the fast fashion sector, convenience and price override ethical concerns. Similarly, the Romanian-speaking participants exhibit high price and quality sensitivity, perceiving bio and eco labels as expensive marketing ploys. However, they demonstrate a practical, grassroots approach to sustainability and demand systemic solutions such as standardized labeling and strict state regulations. Both groups ultimately place their trust in local production and tangible transparency, effectively overriding corporate marketing.

Originality / Value / Practical implications: This research contributes to the literature by highlighting the concept of sustainability burnout and demonstrating that consumer reactions to greenwashing are characterized more by cognitive fatigue than by extreme emotional shifts. The comparative analysis of two distinct cultural groups coexisting within the Transylvanian market provides valuable, context-specific insights for policymakers and corporations. The findings suggest that superficial green marketing is highly counterproductive. Instead, companies must adopt transparent, verifiable communication and focus on tangible actions. Furthermore, policymakers are urged to implement standardized labelling systems to restore consumer trust and alleviate the cognitive burden of sustainable consumption.

Keywords: greenwashing; sustainable consumption; text mining; consumer behaviour, food, Transylvania

JEL codes: D12; Q56; M31

Ugnius Jakubelskas[1], Viktorija Skvarciany[2]. EVALUATING EU CIRCULAR ECONOMY PERFORMANCE USING A FAHP-WEIGHTED COMPOSITE INDEX

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Abstract

Research purpose. Assessing circular economy performance across European Union countries remains a challenging task due to the limited availability of country-level composite measures and uncertainty regarding the relative importance of circular economy indicators. This study aims to address this gap by developing a composite circular economy index aligned with the European Union Circular Economy Monitoring Framework.

Design / Methodology / Approach. The study combines expert-based weighting with quantitative country-level data. Expert judgments, including business and academia representatives, were collected through pairwise comparisons and used to derive weights for both pillars and indicators using the Fuzzy Analytic Hierarchy Process (FAHP). These weights were then integrated with the latest available Eurostat data, and the final country scores and rankings were generated using the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) method.

Findings. The results indicate that Competitiveness and innovation is the most important pillar of circular economy performance, followed by Global sustainability and resilience, Secondary raw materials, Waste management, and Production and consumption. Among the individual indicators, the highest weights were assigned to employment in circular economy sectors, material import dependency, and gross value added. Based on the composite index, Estonia, Latvia, Czechia, and Finland emerge as the highest-performing countries, while Germany, Belgium, and the Netherlands rank lowest within the sample.

Originality / Value / Practical implications. The study contributes to the literature by proposing a transparent and structured composite measure of circular economy performance at the country level, while explicitly addressing uncertainty in indicator importance through FAHP. By combining the European Union Circular Economy Monitoring Framework with expert-based weighting, the study not only provides a benchmarking tool for comparing circular economy development across EU member states, but also offers practical guidance for policy prioritization. The derived weights can help policymakers determine which areas should be tracked most closely and where intervention may be most effective. Since Competitiveness and innovation receives the highest pillar weight, national CE strategies may place greater emphasis on strengthening innovation capacity, supporting circular business models, and scaling circular technologies, while still monitoring other pillars to avoid blind spots. In addition, the highest-weighted indicators can serve as priority headline metrics for target-setting, progress communication, and policy evaluation.

Keywords: circular economy; European Union; composite index; FAHP; TOPSIS

JEL codes: Q00; Q01; Q56

Zanna Cernostana[1], Irina Kuzmina-Merlino[2], Innola Novykova [3], Ganna Resina[4]. A DATA DRIVEN ANALYTICAL FRAMEWORK FOR CROSS INSTITUTIONAL FINANCIAL SUSTAINABILITY ASSESSMENT IN HIGHER EDUCATION INSTITUTIONS

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Abstract

Research purpose. Classical approaches to assessing the financial sustainability of higher education institutions (HEIs) are primarily based on accounting ratios and indicators of solvency, liquidity, and budgetary balance. While such measures provide insight into short-term financial stability, they are weakly linked to institutional strategic objectives and, critically, to the requirements associated with ensuring and maintaining educational quality. Moreover, existing approaches are characterized by substantial methodological fragmentation: there is no unified or generally accepted framework that would allow for consistent assessment and meaningful comparison of financial sustainability across institutions and national systems. The purpose of this paper is to develop a data-driven analytical framework for cross-institutional financial sustainability assessment in higher education by systematically identifying, classifying, and synthesizing financial indicators embedded in accreditation and external quality assurance systems across multiple countries. By treating accreditation-based financial requirements as an empirical data source, the study aims to derive a coherent and comparable indicator structure that links financial capacity to strategic objectives and educational quality provision.

Design / Methodology / Approach. This study adopts a qualitative–quantitative, data-driven comparative research design. Rather than relying on predefined theoretical classifications of financial sustainability, the methodological approach is grounded in the empirical extraction and analysis of financial criteria embedded in regulatory and accreditation documentation. Using structured content analysis, financial criteria are systematically identified and grouped into analytically coherent categories. The research design is structured around three sequential stages: data collection, indicator extraction and coding, and cross-system comparative analysis.

Findings. The findings indicate that accreditation-based financial indicators provide a more strategically grounded and quality-oriented perspective on financial sustainability than classical financial ratios, as they explicitly link financial capacity to staffing levels, infrastructure provision, and continuity of educational services. At the same time, the absence of a unified set of indicators or common assessment principles undermines their analytical and comparative potential. Without methodological harmonization, financial sustainability remains a fragmented construct that cannot be consistently measured across institutions or countries.

Originality / Value / Practical implications. This paper makes three main contributions. First, it provides a systematic, data-driven inventory of financial indicators used in accreditation systems across countries, highlighting the extent of methodological fragmentation in current practice. Second, it demonstrates that financial sustainability in higher education is operationalized primarily in terms of resource adequacy for quality provision rather than short-term financial performance. Third, it establishes a conceptual basis for developing integrated assessment frameworks capable of reconciling financial analysis with strategic management and quality assurance.

Keywords: financial sustainability assessment; HEI; data-driven approach; strategy, KPI

JEL codes: I2; M41

Kristine Uzule[1], Vita Zarina[2], Agita Doniņa[3], Margarita Platace[4]. **A RELATIONSHIP BETWEEN SOCIAL IMPACT AND TOURISTS' SUSTAINABILITY VALUES: THE CASE OF ACOMMODATION PRACTICES IN LATVIA**

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Abstract

Research purpose. The study aims to examine the relationship between tourists' sustainability values and social impact behaviour in the context of accommodation practices. Social impact was conceptualized through two dimensions: personal social responsibility for social well-being and support for the local community. The research seeks to identify how these dimensions relate to sustainable practices and self-assessed sustainable behaviour, as well as whether differences exist between gender groups.

Design / Methodology / Approach. The study is based on a quantitative survey of tourists using Likert-scale items to measure sustainable practices, self-assessment of sustainable behaviour, personal social responsibility, and support for the local community. The questionnaire contained 17 questions targeting sustainability values and social impact behaviour. Sustainability values were measured through practices and attitudes in relation to energy use, water use, waste management, as well as self-assessment question of own sustainable behaviour, whereas social impact questions focused on the use of local produce and green practices as well as workload on hotel staff (social well-being). The answers were measured on the Likert scale 1-6, where 1 referred to the lack of practice and 6- regular practice. The questions focused on travelling around Latvia. In total, 161 people participated in the survey over the period of 2022-2025, with most responses have been obtained in 2022. Descriptive statistics was used for data analysis.

Findings. The analysis of the survey data revealed that, on average, tourists reported moderate engagement in sustainable practices ($M = 2.64$), while self-assessed sustainable behaviour was ranked higher ($M = 3.15$). Personal social responsibility for social well-being was relatively high ($M = 5.60$), which resulted in lowering workload on staff, while support for the local community was moderate ($M = 2.53$). Overall, the combined social impact score, reflecting both personal social responsibility and community support, was 4.07, indicating a generally positive social impact behaviour associated with tourists' sustainability behaviour.

Originality / Value / Practical implications. The study reveals that tourists demonstrate moderate to low engagement in sustainable practices and support for local communities. While self-assessed sustainable behaviour is slightly higher, overall engagement remains below strong practice levels. Personal social responsibility for social well-being shows the highest level among the measured dimensions, suggesting that tourists may be more attentive to immediate social impacts, such as the workload on accommodation staff, than to broader community support. These patterns indicate that while tourists show some concern for sustainability and social impact, there is considerable room for improvement in promoting more consistent and active responsible tourism behaviours.

Keywords: social impact; sustainable tourism; accommodation practices; personal social responsibility

JEL code: M10

Oleksii Lyulyov[1], Tetyana Pimonenko[2]. ENVIRONMENTAL COMMUNICATION IN HIGH-STRESS CONTEXTS: IMPLICATIONS OF WAR-RELATED STRESS FOR ECO-MESSAGE DESIGN

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Abstract

Research purpose. Environmental communication is traditionally based on assumptions of rational, text-oriented information processing, where individuals are expected to read, evaluate, and compare environmental arguments. However, under conditions of prolonged societal disruption and chronic stress, these assumptions may weaken. War-related stress generates persistent uncertainty, cognitive overload, and emotional strain, which can fundamentally alter how eco-messages are perceived. This study aims to examine how chronic war-related stress affects attention allocation and emotional responsiveness to green messages, and whether it is associated with a shift from analytical, text-based processing toward faster, visually and affectively driven mechanisms. The study seeks to provide evidence-based guidance for adapting eco-message design to high-stress communication contexts.

Design / Methodology / Approach. A controlled experimental design with multimodal biometric measurement was applied. Visual attention and physiological arousal were assessed using eye tracking and galvanic skin response (GSR). Participants viewed a standardized set of eco-message cards representing informational, normative, and emotionally salient formats, each containing predefined areas of interest for textual and visual elements. War-related chronic stress was measured using a brief self-report index capturing perceived instability and resource constraints. Eye-tracking metrics included dwell time, fixation count, fixation density, and time to first fixation, while GSR captured autonomic arousal during message exposure.

Findings. Higher levels of war-related chronic stress were associated with reduced engagement with textual elements, reflected in shorter dwell times and lower fixation density on text. Highly stressed participants oriented their attention more rapidly toward visual components and devoted a greater share of attention to non-textual cues. Physiological data showed that emotionally salient messages elicited stronger arousal under higher stress, whereas informational messages were processed more analytically and with lower arousal among participants reporting lower stress. These results indicate a stress-related reorganization of eco-message processing in which affective and visual pathways gain priority over deliberative reading.

Originality / Value / Practical implications. The study provides biometric evidence that chronic war-related stress directly reshapes mechanisms of eco-message perception. Practically, the results suggest that eco-messages relying heavily on dense textual information may lose effectiveness in high-stress environments. Environmental communication targeting populations exposed to prolonged uncertainty should prioritize visual clarity, emotional salience, and rapid perceptual accessibility. The findings offer actionable implications for policymakers, NGOs, and public institutions designing environmental communication under conditions of societal stress.

Keywords: green communication; chronic stress; eco-message design; eye tracking; galvanic skin response; neuromarketing; sustainable development

JEL codes: D91; Q56; Z13

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Evangelia Kyriakou[1], Antonis A. Zorpas[2]. THE IMPORTANCE OF COMMUNICATION STRATEGIES IN THE FRAMEWORK OF SUSTAINABILITY AND CIRCULARITY

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Abstract

Research Purpose: This study examines the slow transition toward a circular economy in Europe, as highlighted by the European Court of Auditors (2023). It aims to identify key gaps in current policies and practices, with particular focus on circular communication, and to propose strategies that can accelerate progress and stakeholder engagement.

Design / Methodology / Approach. The research is based on analysis of EU policy frameworks and performance indicators, namely the Waste Generation Index and the Circular Material Use Rate. It also reviews funding allocations under the Circular Economy Action Plan (2020) and evaluates existing strategic approaches. A case-study methodology is applied through the BIOLEA project to illustrate practical implementation of digital tools. The The BIOLEA project (which funded under the RESTART 2016–2020 Programmes for Research, Technological Development, and Innovation of the Research and Innovation Foundation (RIF) of the Republic of Cyprus) aims to develop a scalable, sustainable, and eco-friendly leather alternative made from Opuntia cladode trimmings (aka prickly pear cacti), positioning it as a high-impact solution within the alternative leather market in fashion industry.

Findings: Findings confirm that despite significant investments exceeding €10 billion and ambitious EU targets, progress remains limited. Member States continue to prioritize waste management over prevention and circular design. Additionally, monitoring frameworks lack indicators for circular product design, and there is insufficient emphasis on citizen engagement. A major gap identified is the absence of structured circular communication strategies, which limits public participation and systemic change.

Originality / Value / Practical implications. The study proposes the development of a circular communication strategy based on interactive, multi-directional engagement among stakeholders (citizens, industry, academia, and policymakers). Key tools include digital product passports (DPP), serious games, and emerging technologies. Considering the BIOLEA case study the research demonstrates how a digital product passport can be designed, specifying the type of data required to enhance transparency, traceability, and circularity in bio-based products.

Keywords: circular communication; digital product passport; fashion industry; biobased; circular bioeconomy

JEL codes: Q53, Q57, O38, D83, O33

EMERGING TRENDS IN

ECONOMICS AND SUSTAINABILITY (ONLINE)

Dominika Gajdosikova[1], Katarina Valaskova[2]. BEYOND SINGLE RATIOS: A PATTERN-BASED VALIDATION OF FINANCIAL RISK RESILIENCE IN VISEGRAD ECONOMIES

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Abstract

Research purpose. The growing frequency of macroeconomic shocks has reignited interest in the financial risk resilience of enterprises and their ability to absorb adverse disturbances. Existing empirical research relies predominantly on particular financial ratios to depict resilience, thus overlooking the overall impact of leverage and liquidity. The main aim of this paper is to empirically validate a pattern-based framework of financial risk resilience that encompasses combined liquidity-leverage configurations and to examine whether the distribution of these patterns differs systematically across post-transition economies. Focusing on enterprises operating in the Visegrad Group (V4) countries, the study investigates whether national financial environments contribute to persistent heterogeneity in financial risk resistance beyond firm-specific characteristics.

Design / Methodology / Approach. Using a large cross-country dataset of enterprises from Slovakia, the Czech Republic, Poland, and Hungary, enterprises are classified into four financial risk resistance patterns based on median thresholds of leverage and liquidity. The non-parametric Kruskal-Wallis tests, along with Dunn's post-hoc comparisons, are utilized to examine cross-country differences in financial constraints, supplemented by effect size estimates using epsilon squared to determine economic relevance. A multinomial logistic regression model is developed to test the robustness of the non-parametric findings and to account for firm-level heterogeneity while controlling for firm size and sectoral affiliation.

Findings. The findings reveal significant differences in financial risk resistance patterns across V4 economies. Hungarian and Polish enterprises have a higher prevalence of high-leverage and low-liquidity configurations, whereas Czech firms are predominantly characterized by low leverage and strong internal liquidity. Although non-parametric studies demonstrate statistically significant cross-country differences in leverage and liquidity, effect sizes imply that these differences are economically modest. The multinomial regression analysis shows that country affiliation remains a significant predictor of pattern membership even after controlling for firm size and sectoral composition.

Originality / Value / Practical implications. This study contributes to the literature by extending beyond single-ratio approaches and providing large-scale empirical validation of a pattern-based financial risk resilience framework in post-transition economies. The findings underscore the importance of considering combined liquidity–leverage configurations for measuring firm resilience and proposing policy interventions. From a practical perspective, the pattern-based classification facilitates the identification of financially vulnerable enterprises and encourages enhanced regulatory and risk management strategies.

Keywords: financial risk resilience; liquidity; leverage; firm-level analysis; Visegrad economies

JEL codes: C14; G32; G33; L25

Ece Yakisik[1], Astra Auzina-Emsina[2]. FORECASTING THE EXPORT POTENTIAL OF EU WHEAT: A SCENARIO-BASED ANALYSIS OF PRICE VOLATILITY AND MARKET DEPENDENCE

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Abstract

Research purpose. The aim of this study is to assess the export potential of EU wheat by analyzing historical export dynamics and developing future development scenarios. The study examines the relationship between global market prices and export revenues while identifying strategic areas for maintaining competitiveness in an increasingly volatile global market.

Design / Methodology / Approach. This study employs a mixed-methods design to evaluate the structural and predictive determinants of EU cereal exports. The quantitative phase utilizes longitudinal trade data (2010–2024) to assess specialization and growth through Revealed Comparative Advantage (RCA) and Compound Annual Growth Rate (CAGR) indices. Inferential statistics, including Pearson correlation and linear regression, are applied to quantify revenue elasticity relative to global wheat price volatility and to perform modelling development scenarios through 2030. These results are triangulated with qualitative insights from semi-structured interviews with grain export managers from leading Baltic agricultural cooperatives to validate operational resilience and strategic adaptation frameworks.

Findings. The empirical results demonstrate that while the EU maintains a significant 14% global market share in wheat, its export revenue is characterized by extreme sensitivity to external price shocks. Statistical modelling reveals a strong positive correlation ($r = 0.913$) between global wheat prices and EU export value, indicating that approximately 83% of export revenue variance can be statistically explained by international price fluactuations rather than export volume dynamics. Scenario-based projections for 2024–2030 suggest that without strategic intervention, the EU's reliance on price-sensitive markets in North Africa and the Middle East poses a significant risk to long-term trade stability. The findings emphasize that the export potential is currently constrained by regional dependency and a lack of value-added diversification, which leaves the sector vulnerable to low-cost competitors from other regions, including the Black Sea region.

Originality / Value / Practical implications. This study contributes to the field of international economics by integrating predictive econometric modeling with strategic management frameworks specifically for the cereal trade. The practical implications include a tripartite strategic proposal: first, the urgent diversification of export destinations toward Southeast Asia and Latin America to mitigate regional risks; second, the transition toward a *Value-over-Volume* model focusing on sustainable and organic cereal premiums; and third, the implementation of digital traceability systems to solidify the EU's brand as a high-quality, reliable supplier. These findings offer actionable intelligence for policymakers and trade stakeholders to enhance the resilience of the EU's agricultural export architecture.

Keywords: EU wheat exports; export potential; price volatility; market sensitivity; scenario forecasting

JEL codes: C53; F14; F17; Q17

Kaloyan Kolev[1], Vanya Hristova[2]. ECONOMIC UNCERTAINTY AND THE ANCHORING HEURISTIC IN PRE-EURO BULGARIA: EVIDENCE ON HOUSEHOLDS' SENSITIVITY TO NUMERICAL CUES IN INFLATION EXPECTATIONS

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Abstract

Understanding how households adjust their inflation expectations in response to numerical information is essential for assessing expectation formation under elevated macroeconomic uncertainty.

Research purpose. This study investigates whether Bulgarian households adjust their inflation expectations toward an externally provided numerical anchor and whether this adjustment reflects an assimilation effect. It further examines which characteristics predict susceptibility to anchoring in the pre-euro environment, where uncertainty is high and expectation management is central to policy communication. Beyond standard demographic segmentation, the analysis evaluates whether situational and behavioral factors better explain who assimilates their expectations to the anchor.

Design / Methodology / Approach. Using microdata from the June 2025 wave of the EC Consumer Survey for Bulgaria, the study employs an experimental module with a neutral inflation-expectation question followed by a randomized numerical anchor of 10%. Redistribution patterns of pre- and post-anchor expectations are examined across initial-belief groups (low, high and uncertain priors). Descriptive statistics, chi-square tests and independent-sample t-tests assess the extent of assimilation and its association with demographic and behavioral variables. The study focuses on associations rather than causal identification.

Findings. The redistribution analysis shows a clear assimilation toward the 10% anchor. Respondents with initially lower expectations exhibit the strongest adjustment: over 40% move their post-anchor responses into the 5-10% range. Even among those with higher priors, about one quarter shift toward the anchor, indicating a weaker but detectable assimilation effect. Individuals who initially could not form an expectation also partially structure their beliefs around the anchor, with roughly one fifth adopting the 5-10% interval. Across all groups, the magnitude of assimilation increases the further initial expectations lie below the anchor. Behavioral and situational characteristics - not demographics or human-capital proxies - are most predictive of adjustment.

Originality / Value / Practical implications. This study provides the first evidence for behaviorally grounded determinants of anchoring in Bulgarian inflation expectations. By demonstrating that assimilation depends primarily on situational exposure to prices rather than socioeconomic profiles, the findings refine the understanding of how households form expectations under uncertainty. The results imply that numerical communication strategies are most effective among households with weaker priors and low-price salience, whereas those with strong internal reference points remain resistant to external cues. This distinction is essential for designing expectation-management strategies throughout the euro-adoption process.

Keywords: inflation expectations; anchoring heuristic; assimilation effect; economic uncertainty; households' behaviour

JEL codes: E71; E31; E52; D84

Anna Wichowska. DEMOGRAPHIC AND ECONOMIC DISPARITIES OF POST-SOCIALIST AND WESTERN EUROPEAN REGIONS IN THE LIGHT OF SYSTEMIC TRANSFORMATIONS

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Abstract

Research purpose. The aim of the study was to identify the scale of shrinkage in post-socialist regions and assess the demographic and economic differences between them and Western European regions.

Methodology. The research method adopted was an analysis of population dynamics and economic variables based on Eurostat data, as well as the nonparametric Kruskal-Wallis test, which was used to assess the statistical significance of differences between the analyzed regions. Due to data availability, the research period covered 2014–2024 and illustrates the current and enduring consequences of the systemic transformation. The territorial scope of the study covered European Union countries, divided into Western European Union countries and those that, after World War II, were part of the Soviet Union or were politically dependent on it.

Findings. The research demonstrated persistent disparities between regions located in post-socialist and Western European countries. This applies both to their demographic situation, confirmed by the significantly larger number of shrinking regions in post-socialist countries, and to the observed population instability. The largest disparities were visible in economic variables (GDP per capita and labor productivity). A particularly unfavorable situation in this regard occurred in the shrinking regions of Central and Eastern Europe, as confirmed by lower economic indicators than in the non-shrinking regions of Western Europe. More similar indicators for total employment were observed across regions, which was relatively low in the shrinking regions of Western Europe, suggesting that labor market problems in post-socialist countries are not solely due to the long-term effects of systemic transformation. It is also worth noting that the populations in the regions of Central and Eastern Europe are relatively younger, while those in Western Europe are experiencing an aging population. The research results may suggest that the effects of systemic transformation continue to have a significant impact on the demographic and economic situation in the EU.

Practical implications. The presented research results allow for several practical conclusions. There is a continuing need to support the economic development of Central and Eastern European regions, particularly in infrastructure and innovation, to reduce their lag behind Western Europe. These actions should be undertaken at both the local and EU levels. Furthermore, it is crucial to support the labor markets of post-socialist countries in retraining workers and developing human capital. However, these actions should be coordinated with a conscious and long-term demographic policy, tailored to the diverse challenges of shrinking and non-shrinking regions.

Keywords: regions; systemic transformations; demography; regional politics; European Union

JEL codes: H72; J11; R51

Jan Hunady[1]**, Veronika Chylakova**[2]**. DIGITAL FINANCIAL INCLUSION: DETERMINANTS AND DISPARITIES IN THE EU**

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Abstract

Research purpose. The paper aims to examine the relationship between digital financial services and financial inclusion. It analyses the socio-economic determinants of the adoption of basic and advanced digital financial services and investigates whether their use reduces financial exclusion or reflects existing inequalities. By distinguishing between different levels of digital financial engagement, the study seeks to understand better whether digitalisation broadens access to finance or primarily benefits already advantaged groups.

Design / Methodology / Approach. Using micro-level survey data from countries of the European Union, the study employs logistics and ordered regression models to examine the socio-economic determinants of digital financial service adoption and to evaluate whether their use is associated with financial inclusion or exclusion. The empirical approach allows for comparing basic services, such as mobile banking and digital payments, with more advanced tools, including digital investments. In addition, robustness checks and alternative model specifications are used to ensure the stability of the findings across different measures of financial inclusion.

Findings. The results show that the adoption of digital financial services varies strongly across socio-economic groups, with older individuals, those with lower levels of education, and economically inactive respondents more likely to experience digital financial exclusion. These patterns suggest that digital finance remains embedded in broader socio-economic structures rather than acting as a universally accessible tool. While the use of basic digital financial services is associated with lower financial exclusion, more advanced services appear to be used mainly by already advantaged groups, suggesting they do not necessarily promote broad financial inclusion. This result indicates that digital finance may simultaneously support inclusion at the basic level while reinforcing disparities at higher levels of financial engagement.

Originality / Value / Practical implications. By linking digital financial service adoption to financial inclusion outcomes, the study provides new evidence on the limits of digitalisation as an inclusion strategy. Unlike much of the existing literature, it jointly examines both the determinants of adoption and their consequences for financial inclusion. The results suggest that policies should focus not only on expanding digital financial technologies but also on reducing socio-economic barriers that shape their use, particularly in relation to digital skills, financial literacy, and access to digital infrastructure. Such targeted approaches are likely more effective in ensuring that digital finance contributes to inclusive economic participation rather than reproducing existing inequalities.

Keywords: digital finance; financial inclusion; socio-economic disparities; digital financial services

JEL codes: G21; O33

Tolegen Mukushev[1], Aliya Mukusheva[2], Ceslovas Christauskas[3]. STATE POLICY FOR DEVELOPING SMALL AND MEDIUM-SIZED ENTERPRISES IN THE REPUBLIC OF KAZAKHSTAN IN THE CONTEXT OF HUMAN RESOURCE TRANSFORMATION

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Abstract

Research purpose. This study aims to conduct an in-depth analysis of the state policy for the development of small and medium-sized enterprises in the Republic of Kazakhstan in the context of human resource transformation and proposes recommendations for improving its implementation.

Design / Methodology / Approach. The research methodology includes a comprehensive methodological approach that ensures the objectivity of the analysis of state policy for SMEs' development. The theoretical and methodological basis of the study is based on the principles of a systematic approach, the dialectical method, and induction and deduction techniques. The synthesis of the calculated data made it possible to form a comprehensive picture of the relationship between the quality of human resources and the contribution of the SME sector to the socio-economic development of Kazakhstan's regions.

Findings. The study revealed a critical contradiction: despite the formal growth in the number of SMEs in Kazakhstan, human resource quality stagnates. The main growth is provided bysource of growth is thedividual entrepreneurs in low-tech sectors (mainly trade), where human capital is exploited rather than developed. It was found that the medium-sized business segment, which has the potential to become a driver of productivity, is stagnating due to an acute shortage of qualified managers and specialists of the "new order". It was established that the current state support measures (subsidies and guarantees) are ineffect because as they are aimed at supporting current turnover. It is necessary to take into account the transformation of the workforce and the automation of labour. Regional analysis has revealed deep disparities; for example, megacities are adapting to the shortage of personnel through digitalisation. Regions are facing a "brain drain", which requires a differentiated approach to regional SME policy.

Originality / Value / Practical implications. The study consists of justifying the need to transition to a human-centered model of public policy. Recommendations for integrating educational tracks and retraining programs directly into SME financial support instruments. The value of the article lies in identifying the correlation between personnel's level of digital literacy and SMEs' ability to scale up (transition to the "medium-sized business" category). The practical significance is confirmed by the development of a model for assessing the "human resource maturity" of Kazakhstan's regions for a more accurate distribution of budget limits.

Keywords: small and medium-sized enterprises, human resource, state entrepreneurship policy, regional economic disparities, Kazakhstan

JEL codes: L26; J24; O15; R58; H81

Tomas Kvietkus[1], Alina Studžienė[2]. NOWCASTING PRIVATE CONSUMPTION: CHALLENGES AND SOLUTIONS

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Abstract

Research purpose. The ability to evaluate current economic conditions is crucial for forecasting, policy making, and investing. However, many economic indicators are released at low frequencies, typically in the form of quarterly, semi-annual, or annual data. Moreover, due to various data gathering and calculation processes, the actual indicators are released with significant lags. For example, in Lithuania, the first GDP estimate is being published 30 days after the end of the quarter. While the final GDP estimate is not available until 60 days after the end of the quarter Therefore economists, financial institutions, and policy makers have a gap of information between quarters, making it difficult to estimate the current situation and react in a timely manner. To solve this issue, researchers use nowcasting – a forecast of the present or very near future or past. The aim of this study is to develop a nowcasting private consumption model. Timely and accurate nowcasts on private consumption can improve further research, inform policymakers in a timelier manner, and improve the precision of more frequent GDP forecasts, given that consumption is the largest component of the GDP.

Design / Methodology / Approach. This study uses a quantitative approach to nowcast Lithuanian private consumption using alternative indicators. Based on the literature review, Mixed Data Sampling (MIDAS) was selected as it is one of the most commonly used models for nowcasting. For exogenous variables, both alternative and conventional data were used. Alternative variables include mobility data, electricity consumption and price, and Google Trends data. While conventional data includes interest rates and Nasdaq Vilnius data. The accuracy of the MIDAS model built was then compared with AR and Naïve method benchmarks by comparing root mean squared error (RMSE) and mean absolute percentage error (MAPE).

Findings. The results show that the MIDAS model can effectively nowcast Lithuanian private consumption, outperforming both the AR and Naïve benchmarks. Alternative indicators, particularly electricity consumption and price, proved to be valuable variables when nowcasting Lithuanian private consumption even during economic uncertainty. Overall, this research provides and showcases that it is possible to nowcast Lithuanian private consumption with relatively good results compared to the AR and Naïve benchmarks.

Originality / Value / Practical implications. Most of the nowcasting research focuses on large and developed economies, leaving a gap in the literature describing how these nowcasting techniques apply to smaller economies like Lithuania. This study fills this gap by providing a framework for constructing a nowcasting model for private consumption, an area which is not widely explored worldwide, and even less explored in the context of smaller economy countries like Lithuania.

Keywords: nowcasting; private consumption; alternative indicators, MIDAS

JEL codes: C53; E21; E27

Katarzyna Maj-Serwatka[1], Katarzyna Stabryła-Chudzio[2]. THE IMPACT OF THE UNSTABLE GEOPOLITICAL SITUATION ON THE FINANCING OF DEFENCE POLICY IN THE BALTIC COUNTRIES BELONGING TO THE EUROPEAN UNION

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Abstract

Research purpose. The aim of the study is to try to assess the level of public spending in the Baltic countries compared to other European Union countries and their changes after Russia's aggression against Ukraine, and to try to answer the question whether in the new financial perspective 2028-2034 the structure of the European Union budget will change by supporting investment expenditure, taking defence policy as an example.

Design / Methodology / Approach. The research methods used include analysis of legal acts and reports of European Union institutions, a review of the subject literature and a comparison of data relating to EU expenditure based on European Defence Agency documents and Eurostat.

Findings. Geopolitical changes in the EU's neighbourhood, especially Russian invasion on Ukraine, along with the growing threat of terrorism, cyberattacks, and energy insecurity, have contributed to an increased emphasis on shared security. Increased defence expenditure and joint investments are intended to address the current underfunding of defence in EU member states, shortages in military stockpiles, and insufficient production capacity of the defence industry. There are significant differences in the level of national defence spending in individual EU countries, which are mainly due to their geographical location The increase in defence expenditure must also be viewed in the context of fiscal policy.

Originality / Value / Practical implications. Factors destabilizing the global economy are forcing EU institutions and member states to take constructive action, posing significant implications for ongoing research. This study attempts to examine defence spending from the perspective of domestic and international policy, combining both perspectives and focusing on changes in the size and structure of public expenditure, as well as budget balance. Global security instability has exposed the neglect of defence policy in the European Union. As a result, the research treats external security as an example of a national and supranational public good. In the latter case, it is demonstrated that integration efforts can occur on the part of states seeking to unite in the face of a common threat.

Keywords: defence policy; general government expenditure on defence; Baltic countries; European Union finance; Multiannual Financial Framework 2028-2034

JEL codes: F5; H41; H56; H87

Hao He[1], Arnis Sauka[2].**TAX INCENTIVES AND THE CONVERSION OF INNOVATION OUTPUT INTO FIRM PERFORMANCE: EVIDENCE FROM CHINA**

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Abstract

Research purpose. Innovation is widely regarded as a key driver of firm competitiveness; however, the economic returns to innovation output remain uncertain, particularly in emerging economies characterized by commercialization frictions and financial constraints. While prior studies have largely focused on innovation input, less attention has been paid to the post-innovation stage in which technological outputs are transformed into observable financial performance. This study examines the dynamic relationship between innovation output and firm performance and investigates whether tax incentives condition this conversion process in the Chinese context.

Design / Methodology / Approach. The analysis is based on panel data of 5,278 Chinese A-share listed firms from 2012 to 2023, comprising 42,917 firm-year observations. Innovation output is measured by patent applications, firm performance by return on assets (ROA) and return on equity (ROE), and tax incentives by the effective tax rate (ETR). Firm fixed-effects models with year dummies are employed to control for time-invariant heterogeneity and macroeconomic shocks. Dynamic specifications including lagged innovation variables are estimated to capture intertemporal effects, and interaction terms between innovation output and tax incentives are introduced to test moderating mechanisms.

Findings. The results show that innovation output is associated with short-term declines in accounting profitability, consistent with post-innovation adjustment costs and commercialization pressures. Dynamic estimations indicate that these negative effects may persist in subsequent periods, suggesting limited long-term performance persistence. However, firms facing lower effective tax burdens experience a significantly weaker negative impact of innovation on profitability. This evidence supports a buffering role of tax incentives in easing transitional financial pressures rather than generating sustained profitability gains. Additional mechanism analysis suggests that innovation activity is linked to improved internal cash-flow capacity and reduced leverage, partially offsetting short-term performance stress.

Originality / Value / Practical implications. This study contributes to the literature by shifting attention from innovation production to innovation conversion and by highlighting the stage-dependent role of fiscal policy. The findings suggest that tax incentives influence the timing and magnitude of innovation returns but do not guarantee long-term profitability improvements. For policymakers, the results imply that fiscal support should be complemented by measures that strengthen commercialization capacity. For managers, the evidence underscores the importance of financial planning and organizational coordination during the post-innovation phase.

Keywords: tax incentives; innovation output; firm performance; dynamic effects; China

JEL codes: O31; H25

Eglė Mėta Šimkūnienė[1], Jurgita Sekliuckienė[2]. TOWARDS THE THEORETICAL MODEL OF RESILIENCE IN GLOBAL VALUE CHAINS

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Abstract

Research purpose. With the rise of global value chains in recent decades, it has become common for different stages of production to take place across multiple countries. In the current rapid evolving environment, industries that once operated within clear global value chains and well-defined boundaries have become interconnected across sectors and regions, implementing innovative governance solutions. Thus, the ecosystem view provides a structural context that extends beyond the boundaries of the global value chain itself, underpinning its operational effectiveness. Furthermore, it underscores the necessity for the international supply chain to engage with the broader community to ensure long-term viability and resilience. Ecosystems are addressed as extension of the global value chain as they perform the facilitation of exchange of goods and services among firms that not typically do so in global value chains, these firms are integrating resources for maintaining the necessary level of supply. Therefore, the aim of this study is to analyse determining factors of resilience of firms operating in global value chains in the perspective of complementarities of ecosystem theory.

Design / Methodology / Approach. The synthetic literature review and content analysis was adopted for the purpose of the research, which allowed to evaluate, analyse and integrate the previous studies in the field of the research. The theoretical discussion is followed with establishing of the theoretical framework.

Findings. The study identified two groups of factors determining resilience outcomes of firms operating in global value chains, such as firm level factors of resilience and network level factors of resilience. What is more, the mentioned determining factors of resilience increase the efforts of the firms to adopt complementarities in order to increase their resilience.

Originality / Value / Practical implications. The lack of studies that analyse resilience of firms operating in global value chains under the perspective of complementarities of ecosystem theory signals a major void within the area of research. Therefore, the research incorporating ecosystem theory perspective will equip business managers and policy makers to identify and examine the impact of complementarities in order to enhance resilience of firms operating in global value chains as well as to make timely decisions. What is more, the study broadens understanding about complementarities of ecosystem theory by proposing conceptual model and acts a basis for further research by the scholars.

Keywords: global value chains; resilience; ecosystem theory; complementarities

JEL codes: F23

Kristine Uzule[1], Nellija Titova[2], Marija Bockarjova[3]. A CONCEPTUAL MODEL FOR COMMUNICATING SOCIAL IMPACT OF SUSTAINABILITY PRACTICES CONSISTENT WITH THE INTEGRATED REPORTING FRAMEWORK

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Abstract

Research purpose. Organizations are expected to communicate not only their financial performance or general sustainability outcomes but also their social impacts to their stakeholders. The research aim was to design a conceptual model for communicating social impact emerging from sustainability practices. As any model, this one was aligned with a specific framework - Integrated Reporting, which integrates both financial and non-financial information and emphasizes long-term value creation. This framework was selected due to its alignment with the purposes of sustainability practices. While most prior research focused on social impact creation, measurement and assessment, this study addressed communication aspects.

Design / Methodology / Approach. The research aim was attained by applying quantitative and qualitative research methods, specifically corpus study and conceptual model design. The first research method was quantitative. To be able to identify the components that create social impact that will subsequently be embedded into the model, there was created a corpus containing 70 papers on social impact in business and economics that were published from 2017 to 2025 and that are currently available on the scientific platform "ScienceDirect". This corpus was subsequently analysed applying the distant reading method. The next step in the analysis was qualitative and it focused on the conceptual model construction. The model was constructed in the following stages: (1) identifying relevant concepts, theoretical frameworks, or constructs; (2) selecting an appropriate analytical perspective; (3) conceptualizing the target phenomenon and clearly defining its core elements; and (4) integrating the selected concepts through logical reasoning.

Findings. First, the created corpus contained 760,842 lexical tokens. The analysis revealed that social impact is not defined through a clear or operationalized set of indicators. Instead, it is associated with concepts such as measurement, stakeholder engagement, value creation, sustainable development, and financial performance, these links remain broad and general rather than precise. Thus, social impact appears as a widely used but loosely defined, multidimensional construct, shaped more by contextual and conceptual associations than by a unified framework for evaluation. Second, the conceptual model based on integrated reporting was created. The model is organized into three interconnected blocks: Sustainability, Integrated Reporting Aspects, and Social Impact. By capturing the complexities of interconnections of six capitals – intellectual, human, social & relationship, manufacturing, financial and environmental – as well as needs of stakeholders, the model helps organizations not only measure sustainability development but also understand and communicate the multidimensional consequences of their sustainability efforts. It encourages a move beyond simplistic storytelling towards integrated thinking that acknowledges both gains and sacrifices in pursuit of long-term stakeholder value and transparency.

Originality / Value / Practical implications. The developed model is novel in its intention to focus on communicating social impact to stakeholders and its choice to use the Integrated Reporting as a foundation. Crucially, the model introduces the idea that social impact is not a result of one or two isolated indicators but emerges from a mosaic of interrelated indicators that reflect capital-level changes as experienced by specific stakeholder groups. These indicators, be them quantitative or qualitative, help to surface the dynamics of how organizational actions alter capacities, relationships, and resources across the six capitals.

Keywords: social impact; communication; conceptual model; stakeholders; integrated reporting

JEL codes: M00; M10; M14

EMERGING TRENDS IN

HUMAN RESOURCE MANAGEMENT

Ugnė Jurkutė[1], Alina Studžienė[2]. WORKING HOURS IMPACT ON WAGES IN BALTIC COUNTRIES

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Abstract

Research purpose. Examine the impact of working hours on wages in Baltic countries on macro economical level.

Design / Methodology / Approach. This study uses a yearly panel dataset for Estonia, Latvia, and Lithuania covering the period from 2014 to 2024 to examine the impact of working time on wages. It also includes control variables such as unemployment, job vacancy rate, labour market slack, minimum wage, gross domestic product, labour productivity, gross profit share, population age, and education level. The calculations include a normality check by Jarque-Bera probability test, unit root tests, correlation check, Granger causality testing and finally, ARDL-ECM approach is applied to analyse both short-run and long-run relationships.

Findings. The results show that hours worked in the main job do not have a significant long-run effect on wages. However, in the short run, a one-point change in working hours is associated with an increase of 31,069.51 points in yearly wage. Moreover, a cointegrating relationship is found between working hours in the second job and wage, although the estimated effects of second job working hours are not statistically significant in either the short run or the long run. This suggests that changes in second job working time do not have a direct measurable impact on wages.

Originality / Value / Practical implications. Reduction of working hours has received increasing attention in recent years. Employees expect shorter working time while maintaining the same wage. This creates pressure on firms to find resources to ensure wage levels do not decrease. Employers' ability to pay higher wages depends on multiple factors such as macroeconomic conditions, firm characteristics, labour market factors, and regulatory frameworks.

Keywords: working hours; wage

JEL codes: J01; J30

Ekaterina Klishina[1], Annaleena Kolehmainen[2], Anne Pimiä[3]. BRIDGING SUSTAINABILITY COMPTENCES AND ORGANIZATIONAL CULTURE: A PATH TO SOCIAL SUSTAINABILITY

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Abstract

Research Purpose. This study examines how sustainability competences can be advanced through social sustainability initiatives by aligning competence development with organizational culture in accordance with the European sustainability framework GreenComp. While social sustainability is conceptualized as organization´s capacity to foster inclusion, ethical responsibility and long-term commitment to sustainability goals, it can also strengthen organization´s economic resilience and performance based on Environmental, Social and Governance (ESG) framework. Building on the Competing Values Framework, the study positions organizational culture as a structural factor shaping the way the sustainability competences are embedded into organizational practices with particular focus on innovation-oriented (adhocracy) cultures.

Design / Methodology / Approach. The study adopts quantitative and qualitative research methods, establishing the research design in qualitative semi-structured interviews, complemented by quantitative survey correspondingly conducted across different industries and multiple organizational levels. The research assessed organizational culture profiles and examined how cultural archetypes shape the development and integration of sustainability competences. The analysis was focused on identifying key sustainability competences in organizational cultural contexts to reveal systemic tensions, competence gaps and contextual determinants influencing implementation of ESG initiatives.

Findings. Organizational culture significantly shapes the sustainability competences according to the research findings. Therefore, adhocracy cultures demonstrate potential in fostering adaptive and system-focused capabilities encouraging implementation and experimentation of sustainability initiatives for improved organizational performance. However, remaining gaps between operational-level practices and strategic sustainability goals may hinder the effectiveness of competence development within the organizational culture context and its variations. As the results indicate, firmer alignment between competence development and organizational culture promotes the achievement of socially sustainable outcomes.

Originality / Value / Practical Implications. This study contributes to the existing sustainability and organizational development research by introducing novel insights on how organizational culture impacts the development and implementation of sustainability competences, ultimately enabling achievement of company´s sustainability goals. Additionally, the study encourages HR practitioners and business leaders to design more culturally aligned competence development initiatives that support the achievement of organization´s social sustainability goals.

Keywords: ESG; HR; social sustainability; organizational culture; sustainability competencies

JEL codes: M14; J24

Algirdas Justinas Staugaitis [1], Daiva Makutėnienė[2]. THE ROLE OF DIGITAL AND PROFESSIONAL COMPETENCIES IN SUSTAINABLE AGRICULTURAL DEVELOPMENT

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Abstract

Research purpose. The rapid digital transformation of agriculture, driven by artificial intelligence (AI), data analytics, and smart technologies, has significantly changed the competency requirements for agricultural specialists. At the same time, sustainable agricultural development increasingly depends on the integration of environmental, social, and economic considerations into professional practice. This study aims to examine the role of digital and professional competencies in supporting sustainable agricultural development, with a particular focus on how agricultural specialists perceive the importance of these competencies for their professional activities and labour market competitiveness.

Design / Methodology / Approach. The study is based on a quantitative research design using a structured questionnaire survey conducted in 2025–2026 in Poland, Lithuania, and Latvia. The survey targets students and professionals whose studies or work are related to agriculture and related fields, such as agronomy, bioeconomy, agricultural engineering, and environmental management, with 850 questionnaires distributed. The questionnaire captures respondents' digital and professional competency levels, patterns of artificial intelligence (AI) use in learning and professional activities, perceived benefits and risks of AI, and attitudes towards sustainability-related competencies. The empirical analysis combines descriptive statistics, reliability analysis, correlation analysis, and multivariate regression models to examine relationships between digital and professional competencies, perceptions of sustainable agricultural development, and labour market relevance.

Findings. The results indicate that respondents generally perceive digital competencies, particularly the ability to use AI-based tools, as an important component of modern professional competence in agriculture. Digital skills are associated with higher perceived efficiency, improved decision-making, and enhanced competitiveness in the labour market. At the same time, sustainability-related competencies—such as environmental responsibility, ethical awareness, and social accountability—are viewed as essential for long-term agricultural development. The findings suggest that digital and professional competencies are complementary rather than substitutive, jointly contributing to the implementation of sustainable agricultural practices.

Originality / Value / Practical implications. This study contributes to the literature on sustainable agricultural development by empirically linking digital and professional competencies with sustainability objectives from the perspective of agricultural specialists. The findings provide practical insights for higher education institutions, policymakers, and employers by highlighting the need to integrate digital skills, AI literacy, and sustainability principles into agricultural education and training programs. Strengthening these competencies may support a more resilient, innovative, and sustainable agricultural workforce.

Keywords: digital competencies; professional competencies; sustainable agriculture; artificial intelligence; labour market

JEL codes: Q01; Q16; J24

Aziz Ali Afzaly[1], Shavina Goyal[2]. MENTAL HEALTH AND TURNOVER INTENTION AMONG HUMANITARIAN AID WORKERS

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Abstract

Research purpose: Afghanistan has emerged as one of the most complex humanitarian contexts globally. Decades of armed conflict, political instability, natural disasters, and economic fragility have left the country heavily dependent on humanitarian assistance. In 2025, nearly half of the population, approximately 22.9 million people, require humanitarian assistance. This country continues to experience one of the most severe hunger crises globally, with one in five individuals uncertain about their next meal, and 9.5 million people experiencing severe level of food insecurity. Humanitarian organizations, while assisting vulnerable populations, face multiple structural and operational challenges. Among them, one of the major challenges for humanitarian organizations is high employee turnover. Turnover leads to loss of experience, skills, and organizational memory and has substantial direct and indirect costs. In addition, aid workers, who operate in high-risk environments to provide essential humanitarian assistance, are frequently exposed to trauma, which contributes to mental health issues. Mental health challenges negatively impact the effectiveness of humanitarian organizations in providing aid and retaining staff. Addressing this issue, the present study aims to examine the impact of mental health challenges (anxiety, depression and post-traumatic stress disorder) on employee turnover intention among the humanitarian aid workers in Afghanistan.

Design / Methodology / Approach. This study employs a quantitative and cross-sectional research design. Data were collected using a structured questionnaire through an online survey from 252 aid workers employed by national and international NGOs and United Nations agencies providing humanitarian assistance in Afghanistan. To test the hypotheses, partial least squares structural equation modelling (PLS-SEM) is used.

Findings. The result of the present study revealed that mental health challenges, including anxiety, depression, and post-traumatic stress disorder (PTSD), positively and significantly influence employee turnover intentions among the humanitarian aid workers operating in Afghanistan.

Originality / Value / Practical implications. This study makes a significant contribution to the existing body of knowledge by highlighting the role of mental health in employee retention in the humanitarian sector. To the best of our knowledge, this is the first study to examine the influence of employee mental health on turnover intention among humanitarian organizations in Afghanistan.

Keywords: humanitarian aid workers; mental health challenges; turnover intention; Afghanistan

JEL codes: M; M12

Stephan Weinert[1], Burkhard Schmidt[2]. FROM NICHE TO MAINSTREAM: THE THEMATIC AND PUBLICATION EVOLUTION OF SUSTAINABLE HRM

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Abstract

Research purpose. Sustainable human resource management (SHRM) represents an evolution of classic personnel management by systematically integrating economic, social, and ecological objectives to secure the long-term reproduction of human resources. Although its relevance has grown significantly, SHRM remains conceptually heterogeneous in research and practice. This study aimed to systematically and quantitatively map the SHRM research landscape from 2005–2025, focusing on four questions: (1) the development of publication output, (2) key journals and influential authors, (3) central sub-themes, and (4) thematic shifts over time.

Design / Methodology / Approach. Based on 2,437 English-language academic journal articles from Web of Science, a bibliometric analysis was conducted using bibliometrix and biblioshiny. The methodology combined performance analyses (e.g., publication and citation trends), network analyses (e.g., co-authorship, co-citation, country collaborations), and content-analytical techniques such as keyword-co-occurrence clustering and thematic evolution.

Findings. Results show that SHRM publications initially remained low, with clear growth only from 2016 onward. After 2018, publication activity increased sharply, leading to near-exponential growth from 2020, indicating strong scientific momentum. The journal Sustainability dominates publication activity, followed by HR and management journals, reflecting the field's interdisciplinary character. Moreover, it can be shown that a few researchers strongly shape the discourse. The keyword-co-occurrence analysis identified two major clusters: Cluster 1 focuses on work and organizational psychology topics such as leadership, motivation, commitment, and engagement. Cluster 2 centers on sustainability, performance, and strategic HRM, integrating concepts such as corporate social responsibility, environmental management, green HRM, and competitiveness. Thematic evolution Analysis shows HRM as the most stable core theme across all periods. While sustainability topics such as environmental management gained prominence between 2016–2020, the most recent period (2021–2025) reflects a consolidation toward HRM, with leadership and personnel psychology themes becoming more influential.

Originality / Value / Practical implications. Overall, the study provides a systematic overview of the structure and development of the SHRM field. The findings highlight its interdisciplinary nature, integrating sustainability, management, HR, and psychology. Psychological mechanisms such as fairness, identification, meaning, and green identity play a crucial role in the effectiveness of sustainability-oriented HR practices. SHRM thus offers a key domain where evidence-based psychological insights on leadership, culture, and behavioral change can directly support ecological and social sustainability goals.

Keywords: sustainable human resource management; sustainability; hrm; bibliometric analysis

JEL codes: M14

Marcin Komańda[1], Wiktor Zygosz[2], Masoud Hajizade[3], Honorata Książek[4]. EXPENDIENCY OF USE OF EMPLOYEES' KNOWLEDGE IN MARKET-IMMATURE SMEs IN POLAND

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Abstract

Research purpose. The Knowledge Management (KM) literature draws on multiple perspectives to describe this issue. Articles published on the research problem are located at the intersection of market experience, enterprise size, and knowledge sources. Among the topics related to knowledge sources, both internal and external ones are highlighted. However, their inherent characteristics can influence the difficulty and cost of acquiring/creating them. This can pose numerous development challenges for smaller enterprises. Therefore, it becomes crucial to identify knowledge resources that are critical to the enterprise and within its reach. The article title asks whether, in small- and medium-sized enterprises with limited market experience, employees can be a primary source of knowledge in selected areas (in the perception of managers).

Design / Methodology / Approach. The research project was conducted through a survey of the opinions of individuals in managerial positions responsible for achieving goals and managing employee teams. For this purpose, a survey was conducted among 139 managers from different SMEs operating in Poland. SMEs were market-immature entities (running for up to 5 years). Respondents provided answers on a seven-point scale. The questions concerned the frequency of using knowledge from employees who interact with customers in seven specific areas identified in previous studies (i.e., ongoing reporting, phenomenon prediction, cooperation within the enterprise, cooperation with contractors, cooperation with customers, cost reduction, and revenue increase). The obtained data was statistically processed using factor analysis.

Findings. The obtained results suggest that there are two main purposeful areas of employee knowledge utilization in emerging SMEs. These are: collaboration with external partners and within the company to reduce operating costs (1), and reporting and planning to increase revenue (2). Therefore, these areas can be identified as both operational and strategic.

Originality / Value / Practical implications. This article proposes a cognitive perspective grounded in a research gap: the lack of findings on how small and medium-sized, market-immature companies can effectively approach knowledge management. The research findings may translate into a more attentive attitude among managers towards the knowledge of customer-facing employees. Such knowledge may be considered a crucial factor in strategic planning. As a result, it may lead to the development of specific, formal organizational procedures and practices in market-immature SMEs.

Keywords: knowledge management; SMEs; employees

JEL codes: M01; M019

Masoud Hajizade[1], Marcin Komańda[2], Simin Masoudi[3], Wiktor Zygosz[4], Honorata Książek[5]. **THE EFFECTS OF ORGANIZATIONAL CULTURE AND EMOTIONAL INTELLIGENCE ON JOB PERFORMANCE. CASE OF IRANIAN PUBLIC UNIVERSITIES**

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Abstract

Research purpose. The main objective of this research is to examine the effects of organizational culture and emotional intelligence on job performance while considering the mediating role of tacit knowledge sharing. The study aims to indicate if emotional intelligence and organizational culture can affect job performance and if tacit knowledge sharing can mediate these relationships. This investigation particularly focuses on the higher education sector, where the vital role of non-academic staff is often disregarded despite their significance in institutional operations.

Design / Methodology / Approach. The study employed a Structural Equation Modelling (SEM) approach to investigate non-academic staff in public universities. The data was collected via a survey using standardised questionnaires from public universities in four eastern provinces in Iran: North Khorasan, Razavi Khorasan, South Khorasan, and Sistan and Baluchestan. The final sample, selected by stratified sampling and Morgan's table, consists of 313 responses from a total population of 1700 employees. The data was analysed using SPSS and Smart PLS software to test the reliability, validity and hypotheses of the conceptual model.

Findings. The results indicate that tacit knowledge sharing is significantly affected by organizational culture and emotional intelligence. Furthermore, tacit knowledge sharing mediates the relationship between organizational culture, emotional intelligence and job performance. Specifically, this study confirms that emotional intelligence and organizational culture affect job performance through the mechanism of tacit knowledge sharing in higher education institutes and among non-academic staff.

Originality / Value / Practical implications. This research is designed to shed light on the path of knowledge management and job performance in public universities and examine the relationship between organizational culture, emotional intelligence, tacit knowledge sharing and job performance. Connecting these variables, this article contributes to the literature on knowledge management. Practical implementations suggest that public universities should pay an especial attention to the organizational culture and emotional intelligence trainings to enhance tacit knowledge sharing and then job performance among their non-academic staff.

Keywords: organizational culture; emotional intelligence; Tacit Knowledge Sharing; job performance; non-academic Staff.

JEL codes: M10

Natalja Verina[1], Tatjana Staube[2], Gita Actina[3]. MEASURING THE DIMENSIONS OF EMPLOYEE DIGITAL WELL-BEING: A CASE STUDY OF LATVIA'S PUBLIC SECTOR

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Abstract

Research purpose. The study aims to measure and empirically examine the three-dimensional structure of employee digital well-being – mental, physical, and emotional – in the context of digitalisation in the Latvian public sector, to determine which aspects of employee well-being are most affected in digital transformation processes, and to identify the key factors that shape sustainable digital work practices.

Design / Methodology / Approach. The research is based on the statistically representative online survey of Latvia's public-sector workforce. It was carried out in 2023 voluntarily and fully anonymously without a request for a personal identifier. The questionnaire contained 5-point Likert or Likert-like scale questions, supplemented by background and open-ended questions. Data examination is performed in a few stages, including correlation, frequency, thematic analyses, and non-parametric methods. Also, the reliability and validity of the factors are inspected in the research.

Findings. The literature analysis shows that the context in which digitalisation is implemented plays a crucial role in shaping the wellbeing of public sector employees. Many studies highlight increased risks of digital overload, emotional exhaustion, and elevated stress levels, especially when technological changes are introduced unexpectedly and without adequate support. Conversely, when digitalisation is carried out with strong organisational backing, employee involvement, and sufficient training, it does not necessarily harm emotional wellbeing and may even improve it. Physical health aspects have been examined less extensively, yet some research points to risks related to tiredness, physical strain, and extended periods of sitting. Overall, the findings suggest that implementing digitalisation without appropriate supportive measures can negatively affect employee wellbeing. The research has a scientific and practical investigation into the impact of digitalisation on the mental, physical, and emotional aspects of public servants' digital wellbeing. The majority of participants' daily time in front of screens exceeds 9 hours, which is more than a standard working day time. The survey highlights that the main benefits of digital transformation are enhanced productivity and improved persistence. While stress is the main subjective factor for almost all the respondents while being online.

Originality / Value / Practical implications. Digital Well-Being Scale by Gomes et al. (2023) three dimensions were tested within a broad survey among the Latvian public administration institutions. According to this, the digital wellbeing of the public servants is determined by effect of the mental factors the most. Emotional factors are the least influencing the digital wellbeing of the public servants in Latvia. And there are obvious obstacles to maintaining physical health. The respondents with higher stress levels demonstrated negative physical consequences. The tactical actions list for the employees and their managers to solve the detected problems is given in the research.

Keywords: digital wellbeing; digitalization; public administration employee survey; digital being factors

JEL codes: I31; H75; H83; J82; C83; C38

Wiktor Zygosz[1], Kristine Uzule[2]. IDENTIFYING THE CORE COMPONENTS OF GENERATION Z EMPLOYMENT VALUES: INSIGHTS FROM CORPUS RESEARCH

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Abstract

Research purpose. The entry and retention of Generation Z in the labor market has sparked a broad discussion on the shifting paradigm of motivation and expectations towards employers, which poses a significant challenge for contemporary human resource management. This generation differs substantially from its predecessors, necessitating a deeper understanding of their specific values and the identification of similarities and differences compared to older cohorts. The importance of this group is fundamental; they are individuals born in the era of universal access to the internet and democracy, which directly determines their value system. Unlike earlier generations, they grew up in a world free of censorship restricting their worldview. Understanding how these democratic upbringing shapes their professional requirements is key to organizational success. Although the literature on the subject provides many empirical studies on this topic, there is still a lack of a synthetic view of the conceptual constructs around which researchers' attention is most frequently focused, highlighting a clear research gap in this field. The aim of this research is to identify the dominant employment values of Generation Z regarding well-being and career development through a corpus text analysis of full scientific research papers.

Design / Methodology / Approach. The research approach is quantitative, and the research method is the distant-reading method which deploys key concept frequency analysis and the link analysis of key concepts. The analysis will be run on the open-access text analysis platform **-** *Voyant Tools*. The created corpus includes scientific papers available in Web of Science and Scopus databases for the period of 2020-2026. The papers were selected consistent with the simultaneous inclusion of the following concepts in the paper title: Z-generation and employment values.

Findings. Preliminary results of the frequency and lexical link analyses revealed that the dominant value of Generation Z focus on maintaining a balance between private and professional life. Less dominant values included well-being and career development aspects. The last category of concepts encompassed financial components. Within the area of well-being, a significant density of terms related to mental health protection and the avoidance of stressful and toxic work environments (toxic, stress), indicating the priority of psychological safety for this cohort. The career development concept primarily focused on autonomy and flexibility.

Originality / Value / Practical implications. The originality of this study lies in its attempt to tap into ranking of components forming employment values of Z-generation through the analysis of a corpus of scientific papers on the relevant theme. This approach moves beyond traditional qualitative literature reviews by applying quantitative method to literature analysis, which objectively reveals the importance of the studied concepts for both the researchers and the subjects researched. Practical implications include providing HR managers with evidence-based guidelines for designing talent attraction strategies that prioritize psychological safety and flexibility, addressing the identified information gap in human resource management.

Keywords: Generation Z; work values; well-being, career development

JEL codes: M12; M14

The research was conducted by the first author under the supervision of the second author at EKA University of Applied Science, Latvia, within the framework of a research internship program financed by the Polish National Agency for Academic Exchange (NAWA) under the STER programme - Internationalization of Doctoral School of Opole University of Technology, Poland, contract no. BPI/STE/2023/1/00022/U/00001, action no. 2.

Veronika Hedija[1], Renata Skýpalová[2], Jana Vávrová[3]. EQUAL PAY FROM AN EMPLOYEE PERSPECTIVE: THE ROLE OF SECTOR AND GENDER

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Abstract

Research purpose Equal pay for equal work constitutes a fundamental principle of labor market justice and a core element of responsible human resource management, with important implications for employee motivation, performance, and perceived organizational justice, and it is increasingly emphasized within the ESG framework and the EU Pay Transparency Directive. The purpose of this study is to examine employees' perceptions of internal pay equity and to assess whether and how perceived pay equality for equal work varies by gender and sector of employment (public versus private).

Design / Methodology / Approach. The analysis draws on a representative survey of 1,300 employees conducted in January 2025 in the Czech Republic. Perceived pay equity is measured using a four-category outcome (paid equally; paid better; paid worse; does not know). The study applies a multinomial logit model with robust standard errors, including gender, sector of employment, and their interaction as key explanatory variables. The models control for occupation, education, age group, region, and size of place of residence.

Findings. The results reveal statistically significant differences in perceived pay equity by both gender and sector. Women are less likely than men to report being paid equally for the same work. Employees in the public sector exhibit higher perceived pay equity than those in the private sector. However, gender differences in perceived pay fairness vary across sectors: the gender gap is substantially larger in the public sector, where women report markedly lower probabilities of perceiving equal pay compared to men. This indicates that formally standardized pay systems do not necessarily translate into equal perceptions of pay fairness across gender groups.

Originality / Value / Practical implications. The study contributes to the literature by moving beyond objective wage gaps and focusing on perceived internal pay equity. It highlights the importance of sectoral contexts and organizational justice mechanisms for understanding how pay transparency policies are experienced by employees. From a practical perspective, the findings implies that formal pay standardization alone is insufficient and should be accompanied by systematic monitoring of internal pay equity, transparent promotion criteria, and communication practices that strengthen employees' perceptions of procedural fairness.

Keywords: equal pay; perceived pay fairness; gender; public and private sector; pay negotiation

JEL codes: J31; J16; M12

EMERGING TRENDS IN

BUSINESS ADMINISTRATION, MANAGEMENT AND CORPORATE FINANCE

Akdana Abuzhalitova[1], Madina Smykova[2], Aiman Kazybayeva[3], Elmaira Orazgaliyeva[4].

COMPARATIVE NEUROMARKETING ANALYSIS OF OUTDOOR ADVERTISING PERCEPTION FACTORS: GENDER ASPECT, SPATIAL POSITIONING, AND RECIPIENT ROLE

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Abstract

Research purpose. The study aims to objectively assess the effectiveness of digital billboards (DOOH) by analyzing the gap between potential exposure and actual visual reception. The main objective is to identify differences in the attention patterns of drivers and passengers depending on spatial location, content format, and socio-demographic characteristics.

Design/methodology/approach. The study was conducted with n=38 respondents (drivers and passengers, aged 25–45) in a real urban environment (Almaty) using mobile eye-tracking systems (Tobii Pro). The methodology is based on the theoretical framework of the "exposure-reception-retention link." Five digital billboards were analyzed.

Findings. It was found that passengers notice billboards twice as often as drivers (average Respondent Ratio: 14.9% vs. 7.4%). Significant gender dimorphism was identified: female passengers show higher engagement (13%) than males (5.3%). The 30/70 format (with a navigation block) demonstrated maximum effectiveness, attracting the attention of 73.3% of passengers and 64.3% of drivers. An "illumination paradox" was discovered: despite respondents' subjective reports of a preference for evening hours, objective eye-tracking data show a decrease in the frequency of fixations in the evening due to light noise and visual fatigue. T-shaped intersections were recognized as the optimal location, where the recipient's gaze physiologically rests on the stimulus.

Originality /Value/Practical implications. This work is one of the first comparative neuromarketing studies conducted in real traffic conditions, namely in the absence of direct comparative experiments between drivers and passengers, as well as in the absence of data on the parametric influence of distance and lateral location of stimuli on memory. Particular attention is paid to testing the hypothesis of gender differences. In addition, the article considers the factor of illumination, suggesting that digital billboards have higher physiological visibility at night, but daytime is characterized by better cognitive efficiency due to reduced visual stress. The results allow for the optimization of media planning algorithms and increased informativeness of widgets.

Keywords: outdoor advertising; digital billboards; visual attention; eye-tracking; drivers' and passengers' perception

JEL codes: M37; M31; D87

Tea Valishvili[1], Ilze Krumina[2], Lia Genelidze[3], Sandra Venta[4]. BRAND COMMUNICATION AND FASHION INDUSTRY AMONG GEN Z GEORGIA VS LATVIA

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Abstract

In the 21st century, especially in recent times, increased attention to the ecological and social aspects of production has led to a transformation of brand communications. Sustainability is no longer just an ethical category; it has become a key element of competitive positioning (Forbes, 2021). This issue is particularly relevant in the global fashion industry, which is traditionally considered one of the most resource-intensive and environmentally burdensome sectors. Generation Z, distinguished by its high sensitivity to social justice, ecological responsibility, and business transparency, plays a specific role in shaping the new consumption model (Drapers, 2022). Despite the research available in the international literature, a comparative analysis of Georgia and Latvia in terms of the perception of sustainable brand communication is practically absent, which increases the relevance of the research.

Research purpose. The study aims to compare the perception and choice factors of sustainable brand communication in the fashion industry among Generation Z consumers in Georgia and Latvia. What do the younger generation think about sustainability, and what motivates them to become the ambassadors of their favorite brands?

Design / Methodology / Approach. The study utilizes both quantitative and comparative analysis. Over 400 Generation Z respondents were interviewed using an online questionnaire specifically designed for the study, with 210 participants from Georgia and 212 from Latvia. The survey was conducted anonymously, and participation was voluntary. Data analysis was carried out based on descriptive statistics and cross-group comparative analysis.

Findings. Georgian respondents rated fashion importance as 3 or 4 (scale 1-5), while Latvian respondents chose more 4 and 5. Style, price, and reputation were key influences. While sustainability was rated highly (4 or 5), respondents were generally unwilling to pay more, showing a price-sensitive mindset for both countries. The results are contextualized using Hofstede's dimensions (Hofstede, 2011): While Georgia is traditionally characterized by higher Power Distance and stronger Collectivism than Latvia (Hofstede Insights), the findings among Generation Z indicate a generational shift. Georgian Gen Z, similar to their Latvian counterparts, prioritizes individual style and global trend-alignment, suggesting cross-national value convergence that differs from traditional cultural patterns. Both nations show high Uncertainty Avoidance, reflected in the skepticism toward "green" claims and a preference for established global brands over less transparent local alternatives.

Originality / Value / Practical implications. The results indicate that different age groups require different communication strategies: influencer-based for those under 20, and informative social responsibility for the 21-30 group. This research provides fashion brands with actionable insights into localized nuances of the Baltic and Caucasian markets.

Keywords: brand communications; fashion brands; sustainability; Gen Z; customer behaviour

JEL codes: M31; M37

Jincymol Joseph[1], Astra Auziņa-Emsiņa[2]. DECISION-SUPPORT MODEL FOR E-MAIL MARKETING AUTOMATION TO ENHANCE CUSTOMER RETENTION IN THE FASHION INDUSTRY

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Abstract

Research purpose. The purpose of the study is by analyzing e-mail marketing in the fashion industry to develop a decision-support model for improved planning of e-mail marketing automation for enhanced retention across borders with its key focus on reducing unsubscribe rates from e-mails in a period where brands mainly focus on expensive customer acquisition tactics ignoring possibilities of improving customer retention techniques. Additionally, the study examines how e-mail automation practices can affect customer retention in fast-paced industry such as fashion, unlike other studies which give priority to customer acquisition. So, by combining theory and data, the study offers a decision-support model for brands to keep customers loyal.

Design / Methodology / Approach. Employing a mixed-methods approach, the study analyzes theoretical foundations, major industry trends in India as one of the leading countries in fashion products manufacturing, international practices, additionally primary data from a survey of 149 Indian fashion consumers and pivot table analysis of e-mails collected from major fashion brands, alongside expert interviews with industry professionals.

Findings. Key results indicate that customer retention is significantly influenced by four factors: e-mail frequency, content relevance, content type, and data trust. Statistical analysis confirms that excessive frequency (reported by 60.2% of respondents) is a primary driver of unsubscribe behaviour. The study proposes an integrated decision-support model featuring AI-based optimisation and preference centres. Economic evaluation demonstrates a benefit-to-cost ratio of 3.21, confirming the model's financial efficiency. These findings provide a scalable framework for marketers to reduce churn and sustain long-term customer relationships across both domestic and international markets.

Originality / Value / Practical implications. The research has practical implications that as the results are based on consumer behaviour obtained from survey of fashion consumers rather that recorded company metrics, it is generalizable only to a conceptual level and not as operational level. While the developed decision-support model for retention is applicable for large-scale fashion brands and other sectors having e-mail marketing automation, its use is limited for smaller or medium companies as they struggle with technology adoption as well as data management required for the model due to limited financial resources and available support is the main practical implication of the developed model.

Keywords: e-mail marketing automation; customer retention; unsubscribe behaviour; decision-support model; international marketing

JEL codes: F00; L67; M31; M37

Liliana Fontes[1], Adalmiro Pereira[2], Tânia Teixeira[3]. CORPORATE GOVERNANCE AND SUSTAINABILITY IN CONSTRUCTION COMPANIES IN PORTUGAL

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Abstract

Research purpose. This work analyzes the relevance of corporate governance as a determining factor for the sustainability and economic performance of companies in Portugal. The main objective is to assess how the quality of corporate governance influences the economic profitability of Portuguese companies, understood as an indicator of financial and operational sustainability.

Design / Methodology / Approach. Quantitative methodology allows for the quantification of observed phenomena and the empirical testing of formulated hypotheses, ensuring objectivity, replicability, and statistical validity. We use a statistical linear regression. The sample used in this study consists of Portuguese companies in the civil construction sector. The choice of this sector is justified by its economic relevance, strong impact on employment, and history of challenges in terms of sustainability and corporate governance. Economic profitability (%) is the dependent variable and represents the return obtained on the company's total assets. Economic profitability is used as a performance indicator, reflecting the efficiency in the use of total assets. Explanatory variables include indebtedness (degree of financial leverage), general liquidity (short-term solvency capacity), equity (financial autonomy), total assets (company size), and number of employees (operational scale).

Findings. Econometric results showed that capital structure and company size are relevant determinants of economic profitability, albeit with varying intensities throughout the study period. In contrast, the variables Total Assets and Equity showed a positive influence on economic performance in several years, although not always with uniform statistical significance. General Liquidity revealed a reduced impact without consistent statistical significance, which may reflect the specificities of the construction sector, where long execution cycles and low asset turnover make current liquidity a less representative indicator of overall performance.

Originality / Value / Practical Implications. In summary, the results confirm that good corporate governance practices and prudent financial management are associated with higher economic profitability, while excessively indebted capital structures compromise the sustainability of the sector. The originality is the use of this method on this Portuguese sector. In practical terms, the results offer relevant guidance for managers, investors, and regulators. The importance of balanced financial policies, transparency in decision-making, and strengthening equity capital as pillars of economic sustainability and competitiveness is highlighted. Companies that adopt sound governance practices demonstrate a greater capacity to adapt to uncertain contexts and better operational performance.

Keywords: corporate governance; sustainability; economic profitability; ESG; IPCG.

JEL codes: M14; M21

Nikoloz Maglaperidze. SIMULATION-BASED MANAGERIAL DECISION-MAKING UNDER UNCERTAINTY: A MONTE CARLO APPROACH USING R

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Abstract

Research purpose. Managerial decision-making often occurs under uncertainty, complexity, and rapidly changing conditions, where analytical solutions are limited. Simulation is recognized in management science as a powerful technique, allowing experimentation with complex systems and providing insights into potential outcomes and risks. This study proposes a Monte Carlo simulation framework implemented in R to support managerial decision-making and strengthen management education. The framework enables evaluation of a range of outcomes and risks while helping students and future managers develop data-driven decision-making skills, probabilistic reasoning, and strategic thinking.

Design / Methodology / Approach. This study employs a quantitative, computer-simulated approach to model business scenarios and analyze outcomes under uncertainty. Key business variables are represented using probability distributions. The framework, implemented in R, enables efficient execution of multiple simulation iterations, systematic scenario comparisons, and clear visualizations, including histograms, probability distributions, and cumulative outcome charts. The approach allows exploration of diverse scenarios, demonstrating flexibility, practical applicability, and pedagogical value. Business case problems are utilized to illustrate the practical applicability of the framework in managerial decision-making contexts.

Findings. The Monte Carlo simulation framework generates probabilistic distributions of outcomes that enable comprehensive evaluation of expected performance, variability, and risk exposure across alternative scenarios. The results demonstrate that the R-based approach provides high flexibility in adjusting assumptions, testing strategic alternatives, and visualizing uncertainty through advanced graphical outputs. The framework supports transparent and reproducible analysis, strengthening evidence-based managerial decision-making. In educational contexts, its application helps students understand probabilistic modeling, assess risks, and apply data-driven reasoning, effectively connecting theory with practical decision-making challenges.

Originality / Value / Practical implications. This study advances the fields of management and education by showing how an open-source, programming-driven simulation framework can strengthen managerial decision-making skills and analytical capabilities. Practically, it provides managers with a tool that can handle both simple and complex decision problems, adapt quickly to changing assumptions and scenarios, and deliver professional-level simulation capabilities. Academically, it supports the integration of modern simulation tools within management programs, enhancing analytical skills, digital literacy, and readiness for data-driven decision-making in complex organizational environments.

Keywords: Monte Carlo simulation; managerial decision-making; R programming; management education; risk analysis

JEL codes: C15; C63; A23; M15

Piotr Dzik. MANAGEMENT AND THE CONCEPT OF MARKETIZATION OF THE PUBLIC SPHERE: A CRITICAL PROBLEMATIZATION OF THE DISTINCTION BETWEEN 'PLACE/TERRITORIAL MANAGEMENT' AND 'PLACE BRAND MANAGEMENT' IN THE LIGHT OF NEOLIBERALISM AS AN IDEOLOGY

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Abstract

Research purpose. This article undertakes a critical and multifaceted analysis of the relationship between general territorial management and Place Brand Management (PBM). The primary objective is to challenge the theoretical and functional autonomy of PBM, which is often presented in contemporary literature as a genuine and indispensable management innovation. The study seeks to investigate whether PBM constitutes a distinct managerial discipline or if it is merely a terminological derivative of existing territorial management frameworks. Furthermore, the paper aims to expose the ideological underpinnings of PBM, situating its rapid expansion within the broader context of the neoliberal transformation of public administration and the marketization of the public sphere.

Design/Methodology/Approach. The research employs a problematizing literature review method, moving beyond a mere descriptive summary of existing studies toward a critical interrogation of the field's foundational assumptions. This approach utilizes the principle of reflexivity and a selective, purposeful selection of sources that represent dominant paradigms in place branding. The analysis is conducted through the lens of logical consistency and semiotic accuracy, focusing specifically on the deconstruction of the influential definition of place branding provided by Zenker and Braun. The study adopts a critical perspective to identify how linguistic constructs and 'terminology mania' shape the perceived organizational reality in territorial governance.

Findings. The paper demonstrates that the leading definition of Place Brand Management proposed by Zenker and Braun suffers from a fundamental logical fallacy, namely circulus in definiendo (circular reasoning), which renders it scientifically non-falsifiable and tautological. The analysis reveals that the distinction between substantive territorial management and place brand management is often intentionally blurred. PBM is identified not as a neutral administrative tool, but as a potent ideological 'overlay' within the neoliberal Zeitgeist. It serves as a mechanism for social control and the legitimation of market-oriented logic in the public sphere, often prioritizing image-making and marketing spectacles over substantive, democratic, and evidence-based territorial development processes.

Originality/Value/Practical Implications. The study contributes to the field by introducing a novel demarcation framework based on the principle of monomiality. The author proposes a radical reduction of the PBM domain to the strictly communicative-perceptual sphere, defined as 'Label and Associations,' which remains subordinate to the overarching processes of territorial management. This conceptual realignment allows for the elimination of parasynonymous constructs and restores the primacy of substantive management. For practitioners and decision-makers, this framework provides a tool to distinguish between genuine development activities and mere promotional efforts, potentially leading to more transparent and accountable public resource allocation in cities and regions.

Keywords. place/territorial management; place brand management; ideology; terminology mania; problematizing literature review

JEL codes: M31; R58; H83

Katarina Valaskova[1], Marek Nagy[2]. THE ARCHITECTURE OF MARKET MASTERY: A DEEP BENCHMARKING STUDY OF FOREX AND EQUITY STRATEGIES

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Abstract

Research purpose. The foreign exchange (Forex) market plays a pivotal role in global finance, yet navigating its complexity requires a deep understanding of trading strategies and market dynamics. Prior studies highlight fragmented insights into technical, fundamental, and sentiment-based approaches, underscoring a need for integrated analysis.

Design / Methodology / Approach. A mixed-method approach is employed, comprising an extensive literature review, secondary data analysis, and comparative modelling using hypothetical data. Key performance metrics (including average returns, volatility, and Sharpe ratios) are used to benchmark each strategy's risk-adjusted returns. Additionally, a clustering analysis is performed on simulated strategy outcomes under different market regimes (bullish vs bearish) to identify groupings based on performance and risk profiles.

Findings. The analysis reveals that technical trading strategies tend to outperform in bullish markets, capitalising on positive trends, whereas fundamental strategies prove more resilient in bearish conditions by focusing on intrinsic value. Sentiment-based strategies show high volatility, excelling in optimistic scenarios but suffering in downturns. Risk-adjusted benchmarking indicates that technical analysis offers a slightly higher Sharpe ratio (efficiency per unit risk) than fundamental or sentiment strategies. The clustering results further distinguish fundamental analysis as a standalone, lower-risk approach, while technical and sentiment strategies form a high-volatility cluster, reinforcing the idea that no single strategy dominates in all conditions. By synthesising historical context, regulatory frameworks, and empirical strategy evaluation, this work provides a holistic perspective on Forex trading. It bridges theoretical insights with practical strategy performance analysis, offering traders and scholars value in understanding which strategies add the most value under specific market conditions. The recommendations and visualisations presented can inform more robust, adaptable trading strategies and future research into multi-strategy integration.

Originality / Value / Practical implications. This article aims to provide a comprehensive examination of the Forex market's evolution and to conduct a comparative analysis of various Forex trading strategies, including technical, fundamental, and sentiment trading, evaluating their performance across market conditions. By doing so, it seeks to offer evidence-based recommendations for more effective trading practices.

Keywords: Forex market; stock market trading; currency pairs; trading strategies; trading risks; market regulation

JEL codes: R53; H54; M21

Oļegs Ņikadimovs. CORPORATE SOCIAL RESPONSIBILITY AS A DRIVER OF CONSUMER VALUE AND COMPETITIVE ADVANTAGE OF SMALL AND MEDIUM-SIZED ENTERPRISES IN LATVIA

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Abstract

Research purpose. The study examines how corporate social responsibility (CSR) contributes to competitive advantage in small and medium-sized enterprises (SMEs) by integrating consumer perceptions and SME-reported CSR practices. The study aims to explain how CSR shapes consumer value while also identifying how SMEs prioritise, implement, and experience CSR as a strategic and competitive factor.

Design / Methodology / Approach. This study employs a mixed-method empirical design using two datasets: the consumer dataset (n = 502) assesses perceptions of CSR, legitimacy, brand trust, long-term sustainability, and perceived CSR value. Principal Axis Factoring is employed to construct and verify the CSR composite index and its associated constructs. The PROCESS macro facilitates mediation analysis to evaluate both direct and indirect effects of CSR on consumer value. The SME dataset (n = 848) provides insights into the implementation of CSR, perceived benefits, trust, internal and external drivers, and barriers to CSR. A comparative analysis assesses the convergencies and divergences between consumer expectations and the CSR practices reported by SMEs.

Findings. The findings suggest that CSR has a significant impact on consumer value and contributes to the competitive advantage of SMEs. In the consumer model, CSR exhibits both direct and indirect effects through legitimacy and brand trust, establishing these mechanisms as fundamental pathways for value creation. Ethical and economic responsibilities have the most significant impact on overall CSR evaluations, whereas legal and philanthropic dimensions act as supportive factors. Results at the SME level demonstrate that companies implementing CSR experience enhancements in reputation, customer loyalty, employee engagement, and operational efficiency. A comparison of datasets indicates a partial alignment: consumers prioritise ethical aspects and responsible resource use, while SMEs focus on economic and reputational benefits. This alignment reinforces the business rationale for CSR while also identifying areas for improvement in communication and implementation.

Originality / Value / Practical Implications. This study presents the first comprehensive consumer-SME perspective on the strategic role of CSR, supported by empirical evidence in Latvia. This study presents a validated approach to measuring CSR and illustrates its role as a driver of consumer value and a source of competitive advantage for SMEs. The findings suggest that SME managers should prioritise transparent communication, ethical practices, environmental initiatives, and stakeholder engagement to enhance legitimacy, foster trust, and improve competitive positioning in the market.

Keywords: corporate social responsibility; competitive advantage; sustainable development; small and medium-sized enterprises; consumers; Latvia

JEL codes: M14; M31; L21; Q56

Samuli Saarinen[1], Alexey Litvinenko[2]. ASSESSING SOCIAL MEDIA'S INFLUENCE ON ASSET PRICE SYNCHRONIZATION: AN ECONOMETRIC ANALYSIS OF PRIVATE INFORMATION IMPACT

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Abstract

Research purpose. This paper examines a measurable impact of public information, particularly from social media, on the integration of private information into asset prices with a focus on periods of high price non-synchronisation. It addresses how non-traditional information sources, such as Reddit discussions, influence asset price formation and systemic risk. By analysing how private information disseminated through social media platforms may substitute or complement traditional financial signals, the study seeks to clarify the evolving role of decentralised information flows in modern asset pricing mechanisms.

Design / Methodology / Approach. Employing a multiple linear regression model and correlation analysis, the study analyses a unique dataset combining Reddit-based private information proxies (e.g., rocket emoji usage) with stock price data of GME and BBY, along with market and industry indexes. Robustness tests, including VIF, Durbin-Watson, and Jarque-Bera, ensure the validity of econometric models.

Findings. The results reveal that traditional financial indicators poorly explained GME stock behaviour during the observation period, whereas social media-derived private information had statistically significant predictive power. GME exhibited a higher price non-synchronisation coefficient (0.98) compared to BBY (0.709), confirming the hypothesis that the higher price non-synchronisation correlates with a stronger role of private information in price variance.

Originality / Value / Practical implications. By operationalising private information through a novel proxy – rocket emoji frequency – this research extends prior literature on market efficiency and highlights the role of investor sentiment in price formation. The findings suggest that social media signals, even simple ones, can meaningfully influence asset prices. This holds practical relevance for investors, analysts, and regulators seeking to better understand the dynamics of price formation in digitally connected financial ecosystems.

Keywords: price non-synchronisation; asset pricing; social media; investment behaviour

JEL codes: E31; G12; D83; L86; G11; D14

Indrė Knyvienė. COST-VOLUME-PROFIT ANALYSIS: THE CASE OF A LITHUANIAN MANUFACTURING COMPANY

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Abstract

Research purpose. Companies constantly face challenges when trying to increase their sales and profits while managing the complex relationships between quantity, price, unit variable costs, and unit fixed costs. Price, costs, and quantities are interrelated and influence each other, depending on competition, customer response, and the need to better utilize existing production capacity. This article examines a solution to the complex problem of the interaction between these variables in order to increase overall operating profit. The main objective is to introduce and compare some different financial indicators, such as the fixed cost ratio, sales ratio, safety margin, net profit margin, and operating profit. The indicators can be used to reveal which indicators determine financial results.

Design / Methodology / Approach. The study will be based on an analysis of existing scientific literature and analysing Lithuanian manufacturing company. This will seek to understand the reasons why the company is interested in increasing competition. The limitations of the study are related to the fact that only one Lithuanian manufacturing company is analysed.

Findings. The study showed that company need to run an aggressive marketing campaign in the coming years to maintain its current growth. In preparation for next year's marketing campaign, the company's employees provided data on variable, direct production, variable overhead costs, as well as fixed costs. By evaluating various costs, gross profit and the break-even point are estimated.

Originality / Value / Practical implications. This study stands out because it analyses price, costs, and quantities are interrelated and influence each other, depending on competition, customer response, and the need to make better use of existing production capacity. The results of the study will be useful for manufacturing company seeking to maximize profits.

Keywords: cost- volume-profit analysis; financial indicators; costs

JEL codes: A10; M41; O33

Marietta Balázsné Lendvai [1], Eszter Knúlné Pál [2], Ákos Nagy [3], Krisztina Pecze [4].

COMPARING THE CONCEPT OF CUSTOMER EXPERIENCE FROM AN ACADEMIC PERSPECTIVE AND FROM THE PERSPECTIVE OF HUNGARIAN SMES

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Abstract

Research purpose. Customer experience management has become one of the key strategic focus areas in recent years, as a growing body of international research confirms that it significantly contributes to strengthening the sustainable competitiveness of businesses and enhancing their innovation and adaptive capabilities. In increasingly dynamic and customer-driven markets, companies can no longer rely solely on product quality or price advantages; instead, they must create complex, memorable, and emotionally engaging experiences throughout the entire customer journey. The aim of this study is to explore how the concept of customer experience is presented in international and domestic academic discourse, and how it is interpreted by the managers and owners of Hungarian small and medium-sized enterprises (SMEs) in their own business practices.

Design / Methodology / Approach. The theoretical overview presents the main scientific approaches to the definition of customer experience and supports the strategic importance of the concept. This is followed by an empirical study analyzing the content elements, motives, and meanings that Hungarian SME decision-makers associate with the concept of customer experience. This theoretical foundation is followed by an empirical study that examines the content elements, associations, motives, and meanings that Hungarian SME decision-makers attribute to the concept of customer experience. The primary research is based on a structured telephone survey conducted in December 2025 using a quantitative methodology. The survey relies on a representative sample of 300 Hungarian small and medium-sized enterprises, ensuring that the findings provide a comprehensive and generalizable picture of the sector. In addition to closed-ended questions measuring attitudes and practices, the research paid particular attention to open-ended questions, which enabled respondents to articulate their own interpretations of customer experience in their own words.

Findings. The analysis of these qualitative responses provided deeper insight into how entrepreneurs conceptualize customer experience. The systematization, coding, and comparative analysis of the textual responses were supported by NVivo qualitative data analysis software, which allowed for the identification of recurring themes and patterns.

Originality / Value / Practical implications. The results highlight the intersections between scientific customer experience concepts and practical interpretations by SMEs, as well as areas of interpretation and gaps that must be recognized and developed in order to implement effective and long-term successful customer experience management.

Keywords: customer experience, Hungary, SME

JEL codes: M10; L26

Renāte Indrika[1], Vita Zariņa[2]. EVALUATION OF THE BUSINESS ENVIRONMENT IN LATVIA: AN INSTITUTIONAL PERSPECTIVE

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Abstract

Research purpose. The quality of the business environment is a key determinant of entrepreneurial activity and economic sustainability, particularly in small open economies. As an EU Member State, Latvia operates within a harmonized regulatory framework but faces structural challenges related to administrative burden, tax complexity, regulatory predictability, and access to resources. The purpose of this study is to evaluate entrepreneurs' perceptions of the Latvian business environment and to examine how institutional conditions shape overall evaluation and recommendation behavior.

Design / Methodology / Approach. The study applies a quantitative cross-sectional design. Data are collected through a structured online survey distributed to entrepreneurs across Latvian regions and firm sizes. The instrument is grounded in institutional theory and entrepreneurial ecosystem frameworks and uses a five-point Likert scale to measure perceptions of business registration efficiency, tax clarity, regulatory predictability, bureaucratic burden, access to financing, labor availability, and overall environment favorability. Statistical analysis includes reliability testing and multivariate modeling techniques.

Findings. The study develops an integrative analytical model linking perceived institutional quality to overall evaluation of the business environment and entrepreneurial recommendation intentions. It is expected that administrative burden, tax environment, and regulatory predictability significantly influence entrepreneurial satisfaction, while access to resources positively affects recommendation behavior.

Originality / Value / Practical implications. The research contributes empirical evidence on institutional quality and entrepreneurship in a small open EU economy. The findings are expected to provide policy-relevant insights for improving regulatory stability, reducing administrative complexity, and strengthening financial accessibility to enhance Latvia's competitiveness.

Keywords: business environment; institutional quality; entrepreneurship; regulatory burden; Latvia

JEL codes: L26; D02

Renāte Indrika. BRIDGING THE STRATEGY-EXECUTION GAP THROUGH DATA INTEGRATION: A COMPARATIVE ANALYSIS OF THE STRIDE FRAMEWORK AS A CYCLICAL ARCHITECTURE OF STRATEGIC MANAGEMENT

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Abstract

Research purpose. Contemporary strategic management literature has developed rich but largely specialized streams addressing strategy formulation, resource configuration, dynamic capabilities, execution systems, and data-driven decision-making. Despite these advances, persistent fragmentation remains between strategic intent, operational execution, and analytical validation. The purpose of this study is to develop and conceptually justify STRIDE as an integrative cyclical architecture of strategic management capable of structurally aligning these dimensions.

Design / Methodology / Approach. The study adopts a conceptual theory-building design grounded in structural comparative analysis. Representative strategic management frameworks are examined across six predefined architectural dimensions: strategic intent, tactical translation, resource alignment, implementation mechanisms, data integration, and evaluation. The comparison serves to identify structural discontinuities and integrative gaps within dominant paradigms.

Findings. The analysis suggests that existing frameworks tend to specialize in particular structural components rather than provide a fully integrated governance architecture. Based on this architectural assessment, STRIDE is developed as a synthesis model that embeds strategic direction, operational coordination, analytical validation, and evaluative recalibration within a unified recursive system.

Originality / Value / Practical implications. The study contributes to strategic management theory by introducing architectural completeness as a criterion for systemic alignment. Rather than extending a single paradigm, STRIDE integrates fragmented domains into a coherent cyclical governance framework, offering a structured foundation for future empirical validation and practical application.

Keywords: strategic management; strategy-execution gap; data integration; managerial architecture; conceptual framework

JEL codes: L10; M10; D23

Simona Survilaitė[1], Vladimirs Šatrevičs[2], Viktorija Skvarciany[3]. EVALUATION OF FACTORS AFFECTING REMOTE WORK IN FINTECH COMPANIES

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Abstract

Research purpose. The COVID-19 pandemic significantly transformed work organisation and accelerated the adoption of remote work across international companies. Although remote work existed before the crisis, its large-scale implementation has not been sufficiently systematised in academic research. The purpose of this article is to define the concept of remote work, identify the main factors influencing its efficiency and effectiveness in FinTech companies.

Design / Methodology / Approach. The empirical part of the study is based on expert evaluation and the Analytic Hierarchy Process (AHP) methodology. First, the key factors influencing remote work efficiency were identified through a structured literature review. Second, a panel of experts with managerial experience in remote work practices was formed. Experts performed pairwise comparisons of the identified factors using the AHP method to assess their relative importance. The consistency ratio was calculated to ensure the reliability of judgments. Based on the aggregated expert evaluations, priority weights were determined, enabling a ranking of the most significant factors affecting remote work effectiveness.

Findings. The results of the expert evaluation under the AHP approach indicate that the most significant factors influencing remote work effectiveness are social isolation and insufficient cooperation, which directly affect communication quality, teamwork, and employee engagement. Work–life balance and work hours were also identified as highly important determinants, highlighting the need for clear boundaries between professional and personal life. Economic and demographic characteristics, such as income and tenure, moderately influence adaptation to remote work, while household size and the availability of a suitable workspace are defined as crucial factors. Commuting was evaluated as a comparatively less critical factor. Overall, the findings confirm that remote work performance depends on a complex interaction of social, organisational, and personal conditions.

Originality / Value / Practical implications. The article contributes by systematising the determinants of remote work efficiency into an integrated framework. It provides practical recommendations for managers, including investment in digital tools, strengthening communication practices, clarifying performance expectations, and supporting employee well-being. The findings are particularly relevant for organisations seeking to institutionalise remote or hybrid work models beyond crisis conditions.

Keywords: remote work; FinTech companies; expert evaluation; AHP.

JEL codes: J24

Elina Petrovska[1], Inese Ratanova[2], Gundars Berzins[3]. FINANCIAL SUSTAINABILITY IN STATE-OWNED ENTERPRISES: A PANEL DATA ANALYSIS

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Abstract

Research purpose. The purpose of this study is to evaluate the financial sustainability of selected Latvian state-owned enterprises (SOEs) by analysing key financial indicators over a nine-year period from 2016 to 2024 and identifying factors characterising their financial stability. Ensuring the financial sustainability of SOEs is important for maintaining economic stability as well as effective public governance, as SOEs play a significant role in various industries and public services.

Design / Methodology / Approach. The study applies a quantitative research methodology based on financial data analysis. The empirical analysis uses a panel dataset consisting of information on eleven Latvian SOEs over a nine-year period from 2016 to 2024. The selected time frame and SOEs reflect the period following the introduction of supervisory boards as a part of corporate governance reforms in the largest Latvian SOEs. Data were obtained from publicly available annual reports and financial statements. The analysis focuses on SOEs indicators related to financial sustainability, including equity, liquidity, debt ratio, total assets, investments and number of employees. Descriptive statistical analysis and comparative evaluation are used to assess the financial characteristics and dynamics of the analysed SOEs.

Findings. The study results reveal heterogeneity among the analysed SOEs in terms of finances, size and investment intensity. The findings indicate that most SOEs maintain a relatively stable financial position, which is reflected in moderate level of financial leverage and sufficient liquidity. At the same time, there are differences in the investment activity and size of the SOEs, which indicates different development strategies and industry characteristics of these SOEs. Overall, the analysed SOEs demonstrate a generally stable financial structure over the nine-year period from 2016 to 2024.

Originality / Value / Practical implications. The study contributes to the existing scientific literature on SOEs by providing new empirical evidence on the financial sustainability of Latvian SOEs. The study provides insight into the financial characteristics of selected SOEs. The findings may support policymakers and stakeholders involved in the governance and supervision of SOEs in assessing their financial stability and long-term sustainability.

Keywords: state-owned enterprises; financial sustainability; annual financial report; financial indicators; corporate governance

JEL codes: G32; L32; H11; M41

Balázs Bács[1], Beáta Kádár[2], Katalin Nagy-Kercsó[3]. KEEPING MINORITY YOUTH AT HOME: A SYSTEM-BASED PLACE MARKETING MODEL FOR THE SECLERLAND REGION

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Abstract

Research purpose. The outmigration of young people represents a major demographic and socio-economic challenge in many peripheral regions of Central and Eastern Europe. This issue is particularly significant in minority regions such as Seclerland in Romania, where youth mobility may also affect cultural continuity and community sustainability. The aim of this research is to develop a system-based model that can be integrated into place marketing strategies in order to support the local retention of minority youth. The study assumes that migration decisions are shaped by the interaction of multiple social, economic and identity-related factors rather than by economic conditions alone.

Design / Methodology / Approach. The research applies a mixed method approach. In the first phase, expert interviews are conducted with regional stakeholders, including local leaders and professionals involved in youth development and regional policy. These interviews aim to explore current local initiatives, perceived challenges, and strategic perspectives regarding youth retention. Based on the insights gained, a quantitative survey is conducted among young people living in the Seclerland region. The empirical investigation is structured around a conceptual system model consisting of five key pillars: existential security, place identity, community embeddedness, future perspective, and meaning-making. The survey instrument operationalizes these pillars through a set of indicators measuring satisfaction with local conditions, cultural attachment, community participation, perceived opportunities, and personal aspirations.

Findings. Preliminary results suggest that youth retention cannot be effectively addressed through isolated policy measures. Instead, the interaction between economic opportunities, social belonging, cultural identity, and perceived future prospects plays a decisive role in shaping the intention to remain in the region. The system perspective highlights the presence of feedback mechanisms between these factors, suggesting that strengthening one dimension, like community engagement or local identity, may indirectly reinforce others, including perceived future opportunities.

Originality / Value / Practical implications. The study contributes to the literature on place marketing by proposing a systemic framework that connects territorial marketing strategies with youth retention dynamics in minority regions. The model offers a practical analytical tool for local governments and regional development actors by identifying strategic intervention points within the local ecosystem. By integrating socio-cultural and economic dimensions into a coherent system model, the research provides a new perspective on how place marketing can support long-term demographic and community sustainability.

Keywords: place marketing; youth retention; minority regions; system model

JEL codes: M31; R11

Aleksandra Lezgovko. BUSINESS BLIND SPOTS AS HIDDEN RISK DRIVERS IN DECISION-MAKING

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Abstract

Research purpose. The purpose of this study is to identify and conceptualize business blind spots as hidden risk drivers that significantly influence organizational decision-making. While traditional risk management focuses on identifiable and measurable risks, many critical vulnerabilities remain unnoticed due to cognitive biases, structural limitations, and implicit assumptions within organizations. The study aims to examine and explain how these blind spots emerge and how they affect the quality of managerial decisions. The relevance of the study is particularly evident in dynamic and uncertain business environments, where unnoticed risks can lead to significant long-term consequences for organizational performance.

Design / Methodology / Approach. The research is based on a conceptual analytical approach, combining insights from risk management theory, decision-making research, and practical observations derived from business case analysis grounded in recurring practical situations from business consultancy and training practice. The study synthesizes recurring patterns observed in small and medium-sized enterprises, focusing on three key domains: financial flows, human resource dependencies, and informal agreements. The approach integrates qualitative analysis and applied examples to structure a framework for identifying blind spots. The study also adopts an interdisciplinary perspective, integrating elements of organizational behavior and managerial decision theory to enhance the analytical depth of the framework.

Findings. The study identifies that business blind spots commonly arise in situations where processes appear stable but lack transparency or formalization. Key types of blind spots include over-reliance on single clients or employees, unclear decision-making boundaries, and informal agreements without defined accountability. These hidden factors increase the likelihood of repeated problems and amplify operational, financial, and reputational risks. The findings suggest that blind spots function as latent risk amplifiers rather than isolated issues. Additionally, the analysis highlights that blind spots tend to persist over time if not systematically addressed, becoming embedded in organizational routines and decision-making practices. This suggests that blind spots should be considered not only as isolated managerial issues but as systemic organizational phenomena.

Originality / Value / Practical implications. The study contributes by proposing a novel conceptualization of business blind spots as an integral part of risk management. It bridges the gap between academic risk frameworks and practical decision-making challenges faced by organizations. The proposed approach offers practical value by enabling managers to identify hidden vulnerabilities and incorporate them into risk assessment processes. The results can be applied in managerial practice, training, and the development of decision-support tools. The study also opens avenues for future empirical research aimed at validating and operationalizing the concept of business blind spots.

Keywords: business risk; decision-making; blind spots; risk management; organizational behavior

JEL codes: D81; M21; G32

Adrian-Gabriel Corpădean. ROMANIA'S SUPPORT TO THE REPUBLIC OF MOLDOVA FOR THE ENHANCEMENT OF AN EU-GEARED PROJECT MANAGEMENT CULTURE

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Abstract

Research purpose. The study aims to examine the nature and scale of Romania's support to Moldova in developing the administrative and managerial capacities needed for effective use of EU structural funds. It also seeks to understand how shared cultural affinities facilitate this transfer of expertise and promote mutual learning between the two countries. The research also explores how Romania's own trajectory, marked by early difficulties, institutional learning, and eventual improvement in EU fund absorption, shapes the type of assistance it can credibly offer Moldova. By situating this support within the broader context of renewed EU enlargement dynamics, the study highlights why strengthening administrative capacity has become a strategic priority for new candidates such as Moldova. It further aims to clarify how practical cooperation, informed by Romania's accumulated experience, can help Moldova prepare for the far more demanding framework of EU structural funds beyond pre-accession instruments.

Design / Methodology / Approach. The research relies on direct engagement with decision-makers and beneficiaries involved in managing EU funds in both Romania and Moldova. It combines this experiential insight with an analysis of official documents and relevant literature containing financial data and evidence of administrative and managerial capacity development. This mixed approach allows for a grounded understanding of how support is structured and transferred between the two countries.

Findings. The research indicates that Romania provides Moldova with substantial technical, administrative, and managerial support for EU fund absorption, facilitated by strong cultural ties that make this transfer of expertise both feasible and mutually beneficial. It also shows that Romania's own evolution in managing EU funds, marked by setbacks during its first multiannual cycles as an EU member, and later institutional strengthening, directly shapes the type of practical guidance it is now able and willing to share with Moldova.

Originality / Value / Practical implications. This research offers a distinctive contribution by examining EU fund management through the lens of Romania–Moldova cooperation, a relationship often noted culturally but rarely analysed in terms of administrative transfer. Its value lies in revealing how shared linguistic and institutional affinities can accelerate capacity-building for candidate countries preparing for EU structural funds. The insights generated can inform policymakers seeking to design more effective technical assistance frameworks that leverage regional partnerships for smoother EU integration processes.

Keywords: Romania-Moldova cooperation; EU structural funds; administrative capacity-building; enlargement policy; technical assistance

JEL codes: H77; O19

EMERGING TRENDS IN LAW

Nana Mchedlidze. ENVIRONMENTAL PROTECTION AND HUMAN RIGHTS UNDER THE EUROPEAN CONVENTION ON HUMAN RIGHTS: BALANCING COMPETING INTERESTS

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Abstract

Research purpose. The paper analyses how the European Court of Human Rights (ECtHR) addresses environmental harm through the interpretation of the rights under the European Convention on Human Rights (ECHR) – primarily Articles 2 and 8 and Article 1 of Protocol No. 1 – and how the ECtHR balances environmental protection measures against competing individual interests. It examines the states' positive obligations and where the limits of the protection under the ECHR lie when applicants complain of environmental nuisance.

Design / Methodology / Approach. The analysis is doctrinal and case-law based. It maps the structured tests under Articles 2 and 8 of the Convention and Article 1 of Protocol No. 1. Under Article 2, it traces the threshold for engaging the right to life in environmental-risk contexts and the associated positive obligations to establish an adequate regulatory framework and to take preventive operational measures where authorities knew or ought to have known of a real and immediate risk. Under Article 8, it examines the applicability threshold, the scope of positive obligations and the fair-balance assessment conducted through proportionality and the margin of appreciation. Under Article 1 of Protocol No. 1, it situates environmental measures and environmental harm within the 'three-rule' structure.

Findings. The case-law shows a consistent expectation that States organise effective regulatory and procedural guarantees. In environmental-risk settings engaging Article 2, the Court focuses on whether authorities maintained an adequate regulatory framework and took preventive operational measures once a real and immediate risk was known or ought to have been known. Where authorities tolerate prolonged nuisance or fail to act on clear regulatory breaches, the Court is more willing to find a violation of Article 8. Under Article 1 of Protocol No. 1, the Court's scrutiny turns on the classification of the interference and whether the measure pursued a legitimate public interest and struck a fair balance.

Originality / Value / Practical implications. The paper offers a compact "balancing checklist" for domestic courts and administrations handling environment-related complaints with Convention implications: (i) identify the concrete interference with home/private life and/or the level of risk to life and health; (ii) verify the adequacy of information, participation, and reasons; (iii) assess enforcement and remedial effectiveness; (iv) classify any property dimension under Article 1 of Protocol No. 1 (peaceful enjoyment/deprivation/control of use) and articulate a fair-balance analysis; and (v) present proportionality in a way that is reviewable in Strasbourg. This framework supports legally robust environmental governance while reducing the risk of violations under Articles 2 and 8 and Article 1 of Protocol No. 1.

Keywords: ECHR; environmental nuisance; positive obligations; margin of appreciation; fair balance

JEL codes: K32; K33; K38

Lidija Jula[1], Silvestrs Selickis[2], Romans Putans[3]. ALGORITHMIC PRICE PERSONALIZATION IN EU DIGITAL MARKETS: REGULATORY DESIGN, CONSUMER FAIRNESS AND THE LIMITS OF TRANSPARENCY

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Abstract

The rapid deployment of algorithmic price personalization in digital markets challenges both traditional economic assumptions about price discrimination and the regulatory architecture of EU consumer protection law. While economic theory often treats price differentiation as potentially efficiency-enhancing, AI-driven individualized pricing based on behavioral profiling alters the balance of information and bargaining power between traders and consumers.

Research purpose. This study examines whether the EU's current transparency-based regulatory model adequately safeguards consumer autonomy, market fairness, and trust in digital environments.

Design / Methodology / Approach. The paper applies an interdisciplinary law-and-economics approach. It combines doctrinal analysis of EU consumer law, data protection regulation, and post-Omnibus Directive transparency obligations with economic concepts such as information asymmetry and surplus extraction. The study distinguishes dynamic pricing linked to market conditions from individualized pricing based on consumer profiling. Empirical support is drawn from a cross-country survey (n>100; CI 95%, MoE ±9.60%) evaluating consumer awareness and perceptions of fairness regarding personalized pricing practices.

Findings. The analysis demonstrates that algorithmic price personalization is not prohibited under EU law but is primarily regulated through disclosure requirements. However, transparency alone appears insufficient in highly data-driven markets where pricing algorithms can predict and exploit individual willingness to pay. Survey findings reveal limited consumer awareness and significant perceptions of unfairness, particularly when personalization relies on socio-economic characteristics or behavioural tracking. The regulatory framework remains fragmented, addressing consumer protection, unfair commercial practices, and data governance separately rather than as an integrated system of digital market oversight.

Originality / Value / Practical implications. The paper reconceptualizes algorithmic price personalization as a structural governance issue and argues that effective regulation requires coordinated legal standards that address both economic power asymmetries and normative principles of fairness. Strengthened disclosure rules, clearer opt-out mechanisms, and harmonized EU-level guidance are proposed to preserve legitimacy and trust in AI-driven digital markets.

Keywords: algorithmic pricing; consumer protection; digital markets; regulatory governance; price discrimination

JEL codes: K20, K22, K24, D82, L41

Ilona Lejniece[1], Marina Kameņecka-Usova[2], Jānis Žīdens[3], Signe Luika[4]. **STADIUMS OF LEGITIMACY: SPORT INFRASTRUCTURE, REPUTATIONAL POWER, AND SPORTSWASHING**

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Abstract

Research purpose. This article examines sportswashing as a reputational strategy through which states, cities, and corporate actors leverage sports mega-events to enhance international image, legitimize contested political agendas, and attract foreign investment. Drawing on evidence from mega sport event research, it argues that sportswashing is not only produced through media narratives, branding, and public diplomacy, but is also materially embedded in the built environment. Stadiums, arenas, fan zones, transport corridors, and wider urban redevelopment projects operate as infrastructural evidence of modernization, capacity, and global integration. The abstract conceptualizes sport infrastructure as a material mechanism of sportswashing and explains how infrastructural spectacle can reinforce and stabilize preferred political narratives while diverting attention from ethical controversies, governance deficits, labor issues, displacement, and the deepening of urban inequalities. By centering infrastructure, it highlights how mega-event legacies function not merely as outcomes of event delivery, but as strategic instruments in reputational politics.

Design / Methodology / Approach. The analysis synthesizes key theoretical contributions on sportswashing, soft power, and legitimacy, drawing on evidence from a systematic review of sport mega event research. It shows how infrastructure megaprojects and spatial redevelopment function as instruments of reputation building and as resources for political narrative construction. The study adopts a conceptual-analytical approach, drawing on comparative case logic widely used in the field to explain how infrastructural investments are mobilized for state-led image management and international positioning in and through sport mega events.

Findings. Sport infrastructure emerges as a highly visible and politically legible mechanism of sportswashing in sport mega event contexts in three interlinked ways. First, sports mega event venues and associated mobility systems operate as architectural signifiers of modernization and global integration, signalling state capacity and competence to both domestic and international audiences. Second, construction and redevelopment generate quantifiable indicators (e.g., capital outlays, employment figures, visitor volumes) that can be selectively mobilized within technocratic narratives to legitimize image-building and reframe reputational projects as development policy. Third, these initiatives often function as dual-use infrastructure: they support international spectacle and domestic political consolidation while producing contested legacies, including underutilized facilities, opaque financial governance, environmental pressures, and intensified spatial inequalities. Taken together, this evidence reinforces a core paradox in sport mega event research: infrastructure is showcased as development and progress, yet it can simultaneously obscure uneven outcomes and the socio-political costs of event-led urban transformation.

Originality / Value / Practical implications. The practical contribution of the study helps policymakers, sports governing bodies, sponsors, and civil society identify where narratives of sports infrastructure modernization may hide ethical risks, governance deficits, and distributional harms.

Keywords: sportswashing; mega sport event; soft power; sport governance; sport infrastructure

JEL codes: K33; R58; Z20; Z28

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Krzysztof Kiszluk. REGULATORY SANDBOXES AS A MECHANISM FOR TRUSTWORTHY ARTIFICIAL INTELLIGENCE: A CRITICAL ANALYSIS OF THE AI ACT'S PROVISIONS AND THEIR IMPLEMENTATION

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Abstract

Research Purpose. The primary goal of this paper is to explore the regulatory sandboxes, one of the tools provided in the EU Artificial Intelligence Act, that are supposed to facilitate development of safe, secure and trustworthy AI systems. The study has three specific objectives. Firstly, it analyzes the legal provisions in the AI Act for sandboxes. Secondly, the research investigates existing instances of such frameworks to evaluate their practical functioning. By doing so, it seeks to identify the specific challenges and difficulties associated with the management of these environments. Finally, the study creates practical recommendations and guidelines to help authorities manage new regulatory sandboxes in the future.

Design / Methodology / Approach. The study uses a staged methodological framework. The first stage employs a formal-dogmatic approach, involving a detailed interpretative analysis of the AI Act's specific provisions to clarify the legal status of regulatory sandboxes. This is complemented by a comparative analysis of currently existing sandboxes across European Union. Through the examination of available case studies and preliminary reports, the research identifies common structural problems and operational challenges. Finally, the study applies inductive reasoning to combine the empirical data and legal analysis in order to form a set of recommendations for future projects.

Findings. The results indicate a gap between the AI Act's theory and its practical use. The main problems fall into three categories. Firstly, although the sandboxes are supposed to create a safe environment both for the providers and deployers of AI systems, they do not lift the burden of liablity off the providers' shoulders. Secondly, a dissonance may occur between the results of a sandbox testing and the real-life deployment of a given AI system. Finally, sandboxes are, in principle, inherently small-scale and may not translate to broader, market-wide benefits.

Originality / Value / Practical Implications. The originality of this paper lies in its detailed analysis of the AI Act's regulatory sandbox provisions at a critical point of their legislative implementation. While existing literature often discusses AI regulation in broad, theoretical terms, this study offers distinct value by bridging the gap between general research and the operational realities of sandboxing. The practical implications of the research are threefold. First, it provides regulators and policy-makers with a roadmap to avoid common pitfalls in the establishment of these frameworks. Second, it offers AI developers and stakeholders a clearer understanding of how to meet the legal requirements for participation. Ultimately, this work serves as a resource for ensuring that regulatory sandboxes become engines of innovation rather than mere compliance hurdles.

Keywords: Artificial Intelligence Act; regulatory sandboxes; AI governance; innovation policy; legal compliance

JEL codes: K24; K33

Loreta Stūrmane[1], Jolanta Dinsberga[2]. THE LEGAL REGULATION OF SURROGACY IN THE EUROPEAN UNION AND ITS DEVELOPMENT PROSPECTS IN LATVIA

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Abstract

Research purpose. In many European Union Member States, the institution of surrogacy is gaining increasing prominence, while in Latvia such an institution does not exist. However, it must be acknowledged that it has practical significance in cases where conception within a family is not possible through traditional means. The aim of the study is, through an analysis of the legal regulation of surrogacy in the Member States of the EU and an evaluation of the Latvian legal situation, to develop proposals for the introduction of a regulatory framework for surrogacy in Latvia. The study places particular emphasis on the model of altruistic surrogacy and the protection of the Rights of the Child.

Design / Methodology / Approach. The descriptive method- for a detailed analysis of the development and functioning of the institution, based on the collected information. The analytical method- through examination of the obtained data and clarification of the concepts addressed in the study. The inductive method-by assessing individual facts in conjunction with the legal framework and its potential amendments. The deductive method- by examining the impact of possible legislative changes on the legal situation in the state and on legal doctrine. A comparative analysis was also conducted between the prohibitive, restrictive, and permissive regulatory models of the European Union Member States, and the case law of the European Court of Human Rights, as well as cross-border surrogacy cases, were analysed.

Findings. The study indicates that Latvia does not have an explicit prohibition of surrogacy, however, the existing regulation of maternity and paternity effectively prevents the legal recognition of the intended parents, thereby also infringing the rights of the child. The experience of European countries demonstrates that the regulation of altruistic surrogacy ensures protection of the parties involved. It is concluded that there is a need in Latvia to improve the legal framework by providing for the determination of parental status, contractual relations, medical supervision, and the recognition of cross-border cases in situations involving surrogacy.

Originality / Value / Practical implications. The practical significance of the study lies in the developed proposals for improving the Latvian regulatory framework, providing for the introduction of altruistic surrogacy, the determination of parental status prior to the birth of the child, and the prioritised protection of the rights of the child.

Keywords: surrogacy; altruistic surrogacy; human rights; children's rights; cross-border surrogacy

JEL codes: K1; K3

Agita Holste[1], Jolanta Dinsberga[2]. LEGAL PROTECTION AND ISSUES REGARDING THE BIOLOGICAL FATHER'S RIGHT TO BE INFORMED OF THE CHILD'S EXISTENCE

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Abstract

Research purpose. The biological father's right to be informed about the existence of a biological child stems from the right to privacy and family life. In Latvian regulatory framework, the duties and rights of parents are primarily regulated after the establishment of maternity and paternity facts. The regulatory acts do not stipulate the obligation of the child's mother to inform the biological father about the child's birth. In cases where the child's mother deliberately conceals information about the child's birth, not only the legal interests of the biological father but also the child's legal interests are violated. In such situations, the father's rights to family life, the child's right to know their origin, and the right to both parents' involvement in upbringing are infringed. Considering the aforementioned, it can be concluded that the biological father's rights in Latvia are not legally protected, especially in cases where the fact of the child's birth is deliberately concealed without objective justification.

Design / Methodology / Approach. The descriptive or monographic research method was used for the analysis and development of the family law institute, the biological father's right to be informed about the existence of a biological child, based on the collected information. The analytical method was used to analyze the obtained information, explaining the concepts discussed in the work and their essence. The inductive method allowed for a consideration of individual facts in conjunction with legal regulation and its possible changes. The deductive method was used to study the impact of possible changes in normative acts on the implementation of the biological father's rights and the development of the family law institute. Additionally, the quantitative data collection method – survey.

Findings. As a result of the analysis of the legal framework, legal doctrine and survey data, it has been concluded that supplementing the institution of family law with the obligation of the child's mother to disclose the fact of the child's birth to the child's biological father would not only eliminate the existing problems of the legal framework, but would also positively affect the equal protection of parental rights and the observance of the best interests of children.

Originality / Value / Practical implications. The study has both theoretical and practical significance. The work is significant because it examines not only legal aspects but also practical examples and justified legal benefits that would arise from supplementing Latvian regulatory framework with the mother's obligation to disclose the fact of the child's birth to the child's biological father.

Keywords: paternity; paternity institute

JEL codes: K15; K36

Jekaterina Stepanova[1], Jolanta Dinsberga[2]. THE PRACTICAL SIGNIFICANCE OF MEDIATION IN THE RESOLUTION OF CIVIL LAW DISPUTES AND THE RELATED ISSUES

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Abstract

Research purpose. Mechanisms for resolving civil disputes manifest in various procedural and out-of-court forms. In the modern legal system, mediation is assuming an increasingly significant role as an alternative dispute resolution method based on cooperation between the parties and voluntary agreement. However, despite the advantages of mediation as a modern and effective dispute resolution instrument, its practical use in Latvia remains relatively low. This is also confirmed by studies conducted in Latvia, which show that the majority of respondents are not informed about mediation as a method of resolving civil disputes. The aim of the research is to analyse the legal framework of mediation and its practical significance in the resolution of civil disputes, to identify problems related to its application, and to propose possible directions for improving the legal regulation.

Design / Methodology / Approach. The descriptive (monographic) method was used to examine the concept of mediation and its application in practice. The analytical method was applied to evaluate data, to study the interaction of legal acts, and to clarify the substantive scope of concepts. The logically constructive method was used to formulate conclusions and proposals. In the interpretation of legal norms, grammatical, systemic, historical, and teleological methods of interpretation were employed to determine the content, purpose, and limits of application of the legal regulation of mediation.

Findings. As a result of analysing the legal framework, legal doctrine, case law, and statistical data, it was concluded that mediation is an effective and promising mechanism for resolving civil disputes. At the same time, it was established that the development of mediation is hindered by insufficient public awareness and shortcomings in the regulatory framework. Therefore, the improvement of the mediation institution requires targeted amendments to legal acts as well as consistent public information measures.

Originality / Value / Practical implications. The research has both theoretical and practical significance. From a theoretical perspective, the essence of mediation, its fundamental principles, and its implementation mechanism in the context of civil disputes have been clarified. From a practical perspective, issues related to the application of mediation have been identified and proposals for their resolution have been developed.

Keywords: mediation; mediator; civil disputes; issues

JEL codes: K150; J520

Karina Zalcmane. EXTRAORDINARY DEVIATIONS IN SPORT: A CRIMINOLOGICAL AND LEGAL ANALYSIS OF VIOLATIONS OF COMPETITIVE INTEGRITY

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Abstract

Research purpose. This study aims to examine extraordinary deviations in sport through a criminological lens, focusing on the underlying behavioural patterns, motivational structures, and situational dynamics that give rise to atypical violations of competitive integrity. Rather than conceptualising such incidents as isolated or anomalous rule breaches, the research situates them within broader theories of deviant conduct in highly regulated competitive environments. In parallel, the study analyses the legal implications of these deviations, with particular attention to the autonomy of sports regulation, the structural limits of self-governance, and the interaction between disciplinary mechanisms and general legal principles. The research further explores how integrity-related violations challenge the normative order of sport and assesses the extent to which existing regulatory frameworks adequately address atypical forms of deviance. By integrating criminological theory with sports law perspectives, the study contributes to a deeper understanding of deviant behaviour in sport as a distinct category of norm violation situated at the intersection of private regulation and public law.

Design / Methodology / Approach. The methodological approach is primarily analytical and interpretative, focusing on the examination of normative structures, regulatory logics, and behavioural dimensions of deviance in sport. By integrating criminological theory with legal analysis, the study seeks to bridge disciplinary perspectives traditionally treated in isolation.

Originality / Value / Practical implications. The findings may assist regulators, integrity bodies, and disciplinary institutions in re-evaluating existing approaches to misconduct, particularly in cases that fall outside conventional categories of violations.

Keywords: sport integrity; deviant behaviour in sport; extraordinary rule violations; sports governance and regulation; biomedical enhancement in sport

JEL codes: K14; K15; K33; K42

Elina Greine[1], Marina Kamenecka-Usova[2]. LEX SPORTIVA AND LEGAL COMPLEXITY IN EASTERN EUROPEAN FOOTBALL

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Abstract

Research purpose. Eastern European football operates at the intersection of international sports law, national regulations, and private contractual relations. Although regional competitions and cross-border transfers are expanding, the legal framework governing dispute resolution remains fragmented and underexamined. The interaction between the jurisprudence of the Court of Arbitration for Sport (CAS), domestic federation rules, and EU legal instruments raises concerns about legal certainty, procedural fairness, and enforceability. This study analyses how recent CAS case law and national regulations shape dispute resolution in Eastern European football and assesses whether existing mechanisms adequately protect clubs, players, and federations.

Design / Methodology / Approach. The research employs a doctrinal and comparative legal methodology. Primary sources include selected CAS awards, national legislation, EU regulations, and federation statutes. A purposive case-study approach examines landmark disputes involving Eastern European actors, particularly cases related to sporting succession and regulatory liability. Comparative analysis evaluates differences in domestic enforcement practices. A qualitative synthesis of case law and regulatory materials identifies recurring trends, inconsistencies, and structural legal risks.

Findings. The analysis identifies several systemic challenges. CAS jurisprudence increasingly applies the doctrine of sporting succession to impose financial liability on acquiring clubs, prioritising regulatory continuity over corporate separation. Enforcement of CAS awards in domestic courts remains inconsistent, particularly regarding jurisdiction and public policy. National association rules often lack clear procedural pathways and appeal mechanisms, generating uncertainty. Although EU instruments such as Regulation 1215/2012 and the Rome I Regulation provide a framework for cross-border disputes, their practical application in football cases remains limited due to the perceived autonomy of lex sportiva.

Originality / Value / Practical implications. This study contributes to the limited scholarship on Eastern European sports governance by linking CAS jurisprudence with domestic enforcement realities. It highlights tensions between the transnational autonomy of sports law and principles of legal certainty. The findings offer practical guidance for clubs involved in acquisitions or restructuring, legal practitioners handling cross-border disputes, and federations seeking clearer regulatory frameworks. By identifying gaps in transparency and enforceability, the research supports the development of more predictable dispute-resolution mechanisms in regional football governance.

Keywords: keyword; football governance; lex sportiva; sports law; Eastern Europe; sports disputes

JEL codes: K12; K33; K40

Atis Bičkovskis. DECLARED VS ACTUAL CONSTRUCTION PRACTICES: SELF-PERFORMED WORKS, UNREGISTERED TEAMS AND TAX COMPLIANCE ISSUES

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Abstract

Research purpose. The aim of this research is to examine the discrepancy between formally declared self-performed construction works and their actual implementation, where construction specialists are involved who do not consistently comply with their tax obligations.

Design / Methodology / Approach. The research uses the grammatical, historical, systemic, descriptive and teleological interpretation of legal norms research methods.

Findings. The study reveals that, in practice, construction works are frequently formally declared as self-performed, whereas in reality they are executed by unregistered construction teams, the majority of which are not listed in the Register of Construction Merchants. Such teams typically do not engage in formal economic activity and fail to comply with tax obligations established by regulatory enactments, including the payment of personal income tax and mandatory state social insurance contributions. As a result, this contributes to the expansion of the shadow economy in the construction sector. Taking into account the identified issues in the construction sector, Measure 3.2.1 was included in the Shadow Economy Restriction Plan for 2024–2027 - in the case of the construction of a residential house, reduction of the area of the construction site where the builder can construct the house on his or her own without involving a construction contractor from 400 m2 to 170 m2.

In order to implement the measure specified in the policy planning document, on 22 July 2025 the Cabinet of Ministers adopted the "Amendments to Cabinet of Ministers Regulations No. 529 of 2 September 2014, 'Regulations on the Construction of Buildings'", supplementing subparagraph 107.1 with the phrase "with a total area not exceeding 200 m^2", up to which the builder can construct the house on his or her own without involving a construction contractor. These regulations entered into force on 1 January 2026.

However, on 7 January 2026, the legislator adopted the "Amendments to the Construction Law", stipulating in Section 19.1, Paragraph 3, Point 1, that "an individual may construct, place, rebuild, renovate, preserve, or demolish a first-group building or a second-group residential building with one or two apartments, or an ancillary building, with a total area of up to 400 square meters, as well as outdoor improvement elements, first-group engineering structures, and the necessary appurtenances for these constructions within the boundaries of their land plot and access roads." Thereby effectively reverting to the original situation.

Originality / Value / Practical implications. The study identifies a significant issue in the construction sector, whereby natural persons formally declare construction works as self-performed, while simultaneously engaging construction contractors or specialists who do not consistently comply with their tax obligations.

Keywords: construction sector; self-performed construction works; unregistered construction teams; tax compliance; shadow economy

JEL codes: H26; K34; L74; O17

EMERGING TRENDS IN EDUCATION AND YOUTH STUDIES

Vilma Tamošauskaitė-Rimydienė[1], Laima Jesevičiūtė-Ufartienė[2]. **MANAGEMENT CHALLENGES IN HIGH-STANDARD SERVICE ORGANIZATIONS: EVIDENCE FROM FINE DINING RESTAURANTS**

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Abstract

Research purpose. High-standard service organizations, particularly fine dining restaurants, operate in environments where service excellence relies heavily on specialized human competencies, precision, and consistent delivery of exceptional guest experiences. Despite their strategic importance in the hospitality sector, fine dining restaurants face significant management challenges in attracting, developing, and retaining qualified personnel. These challenges are intensified by the absence of formal educational pathways for fine dining specialists, the need for internal skill development, and limited career progression opportunities within small organizational structures. The purpose of this study is to identify and analyze key management challenges in high-standard service organizations and to examine how leadership, human capital development, and organizational practices influence employee retention and service consistency in fine dining restaurants.

Design / Methodology / Approach. The research applies a multiple-case study methodology, focusing on selected fine dining restaurants as representative high-standard service organizations. The study integrates organizational statistical indicators (employee turnover, retention patterns, and training investments) with qualitative data derived from operational service situations, managerial practices, and organizational observations. This approach enables in-depth analysis of management processes, leadership involvement, and workforce sustainability within real-life service environments.

Findings. The findings demonstrate that service consistency in high-standard service organizations depends predominantly on effective human-factor management rather than formal procedures alone. Standardized service protocols are insufficient without continuous staff coaching, development of emotional intelligence, and active leadership presence during service delivery. Leadership engagement significantly improves guest satisfaction, accelerates service recovery, and enhances perceived service professionalism. Furthermore, employee retention is strongly influenced by structured learning opportunities, professional skill development, and meaningful role identity associated with the cultural and experiential value of fine dining service. The study also reveals that operational effectiveness requires balancing strict service standardization with situational flexibility, allowing staff to respond adaptively to dynamic guest expectations and operational complexities.

Originality / Value / Practical implications. This study contributes to management and hospitality literature by addressing the unique workforce sustainability and management challenges inherent in high-standard service organizations characterized by small team structures and high skill specialization. The findings offer practical implications for managers of fine dining and other high-standard service organizations by providing evidence-based guidance on talent development, leadership involvement, and retention-oriented management practices essential for maintaining sustainable service quality and organizational performance.

Keywords: fine dining restaurants; employee retention; service leadership; human capital development; service quality

JEL codes: M51; L83

Beata Šeinauskienė[1], Martynas Talmontas[2], Jūratė Maščinskienė[3], Laima Jesevičiūtė-Ufartienė[4]. **FROM BRAND AUTHENTICITY TO ATTACHMENT: THE ROLE OF CONSUMER SELF-CONGRUITY**

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Abstract

Research purpose. The findings of various academic studies on the relationships between brand authenticity, consumer self-congruity, and brand attachment are mixed. Some studies report that consumer self-congruity is significantly related to both brand authenticity and brand attachment, whereas others find no significant associations among these constructs. Moreover, certain studies indicate that only actual self-congruity demonstrates a significant relationship with brand authenticity and consumers' attachment to the brand. These contradictory research findings highlight the need for further investigation into the relationships between brand authenticity, consumer self-congruity, and brand attachment. The existing theoretical and empirical literature does not allow for a reliable conclusion regarding a clear and unambiguous relationship among these constructs or the causal mechanisms underlying their interconnections. Considering the above arguments, the scientific problem of this study is formulated as follows: *How do brand authenticity and consumer self-congruity influence brand attachment?* Accordingly, this study aims to examine the effects of brand authenticity and consumer self-congruity on brand attachment.

Design / Methodology / Approach. This study employed a quantitative research design using an online questionnaire. Data were collected from a convenience sample of adults, including respondents from Lithuania and other countries (N=482, from Lithuania 74.9%, 25.1% responded in English (England 22, Scotland 7, Germany 6, US 5); women = 71%; men = 27%; other = 2%; age mean = 26). The study constructs were measured using pre-existing 7-point Likert-type scales, adapted to the current research's focus. To test research hypotheses, CFA and SEM (SPSS AMOS) were performed.

Findings. Research findings indicate that brand authenticity has a positive and statistically significant effect on both consumer self-congruity and brand attachment. In addition, the results reveal that consumer self-congruity positively and significantly influences brand attachment. Furthermore, the study confirms that consumer self-congruity partially mediates the relationship between brand authenticity and brand attachment. Overall, the findings suggest that the more authentic a brand is perceived to be by consumers, the more likely they are to identify with it and, ultimately, to develop an attachment to it.

Originality / Value / Practical implications. The results suggest that marketing practitioners and brand managers should place greater emphasis on strengthening brand authenticity by highlighting a brand's heritage, core values, and unique characteristics. By gaining a deeper understanding of target consumers' personality traits, marketers can align brand personality with consumer personality, thereby enhancing consumer self-congruity and fostering stronger brand attachment. Furthermore, brand authenticity should be leveraged as a central element of brand communication strategies to build strong and emotionally meaningful relationships with target audiences.

Keywords: brand authenticity; brand attachment; consumer self-congruity; consumer behaviour; brand management

JEL code: M31

Giedrė Slušnienė[1], Kamilė Kesylė[2]. TECHNOSTRESS IN TEACHERS' PROFESSIONAL ACTIVITY: A NEEDS ASSESSMENT IN EARLY CHILDHOOD EDUCATION IN LITHUANIA

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Abstract

Research purpose. This study aims to examine the manifestation of technostress and to assess the need for measures to reduce it in the professional activity of early childhood and pre-primary teachers in Lithuania.

Design / Methodology / Approach. A narrative literature review was conducted to systematise theoretical perspectives on technostress, digital competence, and teacher well-being and to identify research gaps in early childhood education. Based on established technostress and digital competence frameworks, a quantitative needs assessment questionnaire was developed and administered to early childhood and pre-primary teachers across Lithuania. The instrument examined technological, organisational, and individual factors contributing to technostress, as well as teachers' perceived needs for institutional, technological, and professional support measures. Data were analysed using descriptive statistical methods, including frequencies, percentage distributions, and other descriptive indicators.

Findings. The findings reveal that more than 60% of teachers frequently or occasionally experience technostress in their professional activity. Respondents identified multiple contributing factors, including technological overload, constant system updates, insufficient digital competencies, and limited institutional support. The results also indicate that technostress is associated with teachers' fatigue and difficulties in work organisation, reflecting its negative impact on professional functioning and well-being. Overall, the findings confirm the manifestation of technostress in early childhood education institutions and highlight a clear need for targeted organisational, technological, and professional development measures aimed at reducing technology-related strain.

Originality / Value / Practical implications. This study provides empirical evidence on the manifestation of technostress in a Lithuanian early childhood education context where empirical research remains limited and offers a needs-based diagnostic foundation for developing systematic measures aimed at strengthening digital competencies, improving work organisation, and supporting teachers' psychological well-being. The findings contribute to a better understanding of technology-related challenges in teachers' professional activity and may inform institutional policies, organisational support practices, and professional development strategies designed to reduce technostress in educational practice.

Keywords: technostress; digital technologies; early childhood education; digital transformation; needs assessment

JEL codes: I21; I31; O33

Jevgenija Dehtjare[1], Anna Strazda[2]. REFRAIMING UKRANIAN UNIVERSITIES AS THIRD PLACES

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Abstract

Research purpose. This study considers the ability to reframe Ukrainian universities within the concept of emerging third places. Third places can be described as informal, inclusive, learning-oriented spaces that complement formal teaching and learning opportunities and serve as a connection tool among the triple helix stakeholders. The purpose of the research is to investigate how Ukrainian academic staff perceive informal learning spaces and stakeholder engagement as enablers of third-place existence within HEIs.

Design / Methodology / Approach. The methodology of the research considers an analysis of a quantitative cross-sectional survey of Ukrainian academic staff`s perceptions. Two four-item scales were used to investigate integration of such informal learning opportunities as support for student clubs, networking events, recognition of extracurricular entrepreneurial activity and stakeholder`s engagement in curriculum, such as regular review of stakeholder involvement, diverse partnerships etc. into the process of education and its management, aimed to emphasize ability to use concept of a third place in the context of the HEI.

Findings. The findings revealed that most of the surveyed academic staff members perceived that both informal learning opportunities and stakeholders' engagement are present in the current operational activities of the Ukrainian HEIs, suggesting that both components are tightly linked to how staff perceive the university's third-place role.

Originality / Value / Practical implications. The study contributes to pedagogy and education by linking third-place theory to organisational practices that enable informal learning and curriculum co-creation. In the Ukrainian context, these practices can strengthen belonging, support learning continuity, and expand collaborative learning with external partners what is especially important in the present geopolitical circumstances.

Keywords: third places; informal learning; stakeholder engagement; higher education; Ukraine

JEL codes: I23; I21; O31

Sandra Tetere[1], Ana Živković[2], Zane Griškoveca[3]. BRIDGING THE DIGITAL SKILLS GAP: BUSINESS-ORIENTED DIGITAL TOOLS AND AI IN MANAGEMENT AND ADMINISTRATION EDUCATION

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Abstract

Research purpose. This study examines the alignment between labour market digital competence requirements and management and administration higher education, with a specific focus on business-oriented digital tools and artificial intelligence (AI) technologies. It aims to conceptualise and empirically identify the digital skills gap between labour market expectations and curriculum-embedded competencies and to develop evidence-based recommendations for curriculum innovation. The empirical research is conducted in Latvia and Croatia, providing a comparative perspective within the European higher education area.

Design / Methodology / Approach. The study uses a convergent mixed-methods design combining job advertisement analysis, focus groups, and expert validation interviews. Cross-sector content analysis identified system-level and software-specific digital requirements, categorised using the DigComp 2.2 and 3.0 frameworks. The digital skills gap was defined as the divergence between labour market demand for applied digital tool proficiency and its representation in higher education. Methodologically, the study integrates labour market indicators with qualitative validation to capture technical and structural dimensions of the competence gap.

Findings. Preliminary findings indicate that cross-sector labour market requirements emphasise foundational digital tools, including productivity software and enterprise systems such as CRM and ERP platforms. Employers often prioritise knowledge of system types rather than specific products, highlighting transferable digital competencies. Sectoral differentiation is evident: in regulated and finance-related environments, requirements tend to be more technical and software-specific, whereas marketing and communication roles demand more adaptive and analytical capabilities linked to dynamic platforms and data-driven decision-making. Qualitative insights further suggest that employers increasingly value digital resilience, critical thinking, and responsible AI use alongside operational proficiency. Overall, the digital skills gap emerges as a multidimensional alignment issue encompassing technical, cognitive, and adaptive dimensions rather than a uniform deficit in digital literacy.

Originality / Value / Practical implications. Conceptually, the study reframes the digital skills gap as a sectorally differentiated alignment problem. By integrating labour market analysis, competence frameworks, and qualitative validation across two national contexts, it offers an evidence base for curriculum development in management and administration education. The findings suggest that curriculum innovation should combine exposure to enterprise systems and data-driven tools with the development of adaptive, critical, and AI-related competences. This approach enhances graduate employability and digital resilience in evolving labour market environments.

Keywords: digital skills gap; digital competence

JEL codes: I23; J24; O33; M10

Sandra Tetere[1], Ketevan Kukhianidze[2]. ENHANCING ENTREPRENEURIAL COMPETENCE DEVELOPMENT IN HIGHER EDUCATION: A COMPARATIVE STUDY OF LATVIA AND GEORGIA

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Abstract

Research purpose. In the context of contemporary economic and social transformation, universities increasingly emphasize entrepreneurship education to better prepare graduates for evolving labour market conditions. This shift reflects the growing necessity to foster innovative thinking, self-efficacy, and value-creation skills aligned with the demands of knowledge-based economies. The topic is particularly significant for Latvia and Georgia, where higher education systems seek to strengthen students' entrepreneurial competences, stimulate economic growth, and enhance national competitiveness. The study aims to conduct a comparative analysis of strategies and practices for entrepreneurial competence development across higher education institutions in both countries, identifying shared trends, contextual differences, and effective models that may inform future policy and institutional development. The analysis is conceptually informed by the European Entrepreneurship Competence Framework (EntreComp) and the Digital Competence Framework for Citizens (DigComp 2.2; DigComp 3.0), ensuring alignment with European competence-based education standards.

Design / Methodology / Approach. Quantitative data were collected through structured surveys of students, academic staff, and local entrepreneurs, enabling assessment of knowledge, attitudes, and competence development mechanisms. Data were analysed using comparative and descriptive statistical methods. Document analysis and literature review supported interpretation of the findings.

Findings. The findings demonstrate an increasing commitment to integrating entrepreneurship education across both contexts, though the level of institutional development differs. The study demonstrates that advancing entrepreneurial competence requires reinforcing institutional frameworks, implementing innovative pedagogical practices, investing in academic staff capacity building, and fostering stronger collaborations between universities and the business sector. Collectively, these measures are projected to enhance youth employability and support the emergence of an innovation-driven economy.

Originality / Value / Practical implications. This study provides an original comparative analysis of entrepreneurial competence development in Latvia and Georgia, addressing a relatively underexplored regional perspective in higher education research. By integrating insights from students, academic staff, and entrepreneurs, it identifies institutional strengths and developmental gaps in entrepreneurship education. The findings offer practical value for policymakers and universities by supporting the improvement of study programmes aimed at strengthening entrepreneurial skills, promoting structured institutional strategies, academic staff development, and enhanced university–industry collaboration to foster youth employability and innovation-driven economic growth.

Keywords: entrepreneurial competences; entrepreneurship; Georgia; Latvia

JEL codes: I23; L26; M13; O15

Marina Tyutyunnikova[1], Galiya Yelubayeva[2], Bauyrzhan Yedgenov[3], Alima Ibrasheva[4], Adil Ashirbekov[5], Aida Sagintayeva[6], Zakir Jumakulov[7]. **YOUTH OCCUPATIONAL PREFERENCES, VOCATIONAL EDUCATION AND NEET RISK: EXPERIMENTAL EVIDENCE FROM KAZAKHSTAN**

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Abstract

Research purpose. This study examines how wage incentives and social exposure shape youth occupational preferences between white-collar and blue-collar employment, and how these preferences may contribute to vocational under-enrolment and potential transitions to NEET. Despite the availability of fully subsidised technical and vocational education and training (TVET) programmes in Kazakhstan, youth participation remains limited, while the proportion of young people not in employment, education or training (NEET) continues to present structural challenges to the labour market. This study aims to identify whether wage incentives and social exposure influence occupational choice, and to evaluate the impact of individual characteristics on these preferences.

Design / Methodology / Approach. The empirical analysis is based on a randomised laboratory experiment conducted using the o-Tree platform, with 118 participants from two major cities taking part. Participants were assigned to one of three treatment groups: (1) wage information only; (2) social exposure (public revelation of occupational choices); and (3) a combination of the above. The experiment consisted of ten repeated rounds in which wages were determined via a supply-demand adjustment rule. Treatment effects were estimated using panel regression models with individual-level controls, which allowed for the identification of effects across social and demographic factors.

Findings. The results reveal a consistent preference for white-collar occupations, even when blue-collar wages are equal to or higher than those in white-collar occupations. This indicates the presence of a non-monetary occupational bias. While social exposure does not generate a robust average treatment effect, it does interact with gender and regional background. Prior vocational education experience significantly increases the likelihood of selecting blue-collar employment. These findings suggest that occupational choice is influenced by economic incentives, status perceptions, and social norms.

Originality / Value / Practical implications. This study provides the first experimental evidence from Central Asia on the behavioural determinants of occupational segregation. The findings emphasise the importance of tackling cultural stigma, raising the status of vocational careers and creating gender-sensitive labour market policies. These findings are relevant to the design of vocational education policies aimed at reducing distortions in occupational preferences and improving alignment between education systems and labour market demand.

Keywords: youth employment; vocational education; NEET; experimental economics; occupational choice

JEL codes: C91; J24; I21; Z13

Olena Shestakova[1], Jevgenija Dehtjare[2], Tatyana Shtal[3], Oleksiy Dzenis[4], Marina Celika[5]. RETHINKING UNIVERSITY COMPETITIVENESS METRICS IN EUROPE: STRUCTURAL LIMITS OF RANKING FRAMEWORKS UNDER GLOBAL DISRUPTION

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Abstract

Research purpose. The contemporary landscape of European higher education is being reshaped at a fundamental level by unprecedented global disruptions. The consequences of the COVID-19 pandemic and the large-scale geopolitical destabilisation caused by military aggression in Ukraine have created cascading effects that are being felt across the European continent. Historically, university competitiveness assessment relied on stability-oriented paradigms, effectively operationalised by major global rankings: Times Higher Education (THE), Quacquarelli Symonds (QS) and Academic Ranking of World Universities (ARWU). These ranking systems offer powerful methodological tools for measuring accumulated academic capital, giving priority to retrospective indicators (publication activity, citation, reputation). However, multiple shocks and heightened uncertainty in external environment create an objective need for their evolutionary adaptation, as current models insufficiently capture institutions' capacity to withstand systemic shocks. The purpose of the article is to justify a conceptual expansion of dominant competitiveness assessment systems to harmonise them with the realities of a crisis-prone environment.

Design / Methodology / Approach. The study is structured as an exploratory conceptual analysis. It compares the indicator architectures of THE, QS and ARWU using their published scoring methodologies and applies a theory-informed gap analysis to determine which dimensions of institutional continuity and adaptive capacity are weakly represented or absent in dominant ranking constructs. To anchor the argument in high-disruption conditions, the experience of Ukraine's higher education sector is used as an illustrative extreme case of sustained systemic shock, conceptually stress-testing the adequacy of ranking-based competitiveness proxies without making causal claims or statistical generalisations.

Findings. The analysis identifies vectors for improving existing assessment systems and suggests that prevailing competitiveness models require a conceptual integration of institutional resilience indicators structured around two pillars: institutional continuity and adaptive capacity. In particular, the paper substantiates the feasibility of supplementing traditional metrics with new indicators that capture universities' capacity to withstand and respond to crises. Such an expansion is expected to provide a more comprehensive and objective reflection of the real viability of higher education institutions.

Originality / Value / Practical implications. The proposed approach to expanding traditional metrics through an institutional resilience indicator extension (structured around institutional continuity and adaptive capacity) provides a scientific basis for modernising assessment systems and equips higher-education stakeholders with a coherent conceptual tool for strategic decision-making. The article demonstrates the need to transition towards a macro-assessment framework that recognises both accumulated academic achievements and disruption-relevant institutional capabilities in conditions of persistent volatility.

Keywords: higher education management; university competitiveness; institutional resilience; institutional continuity; adaptive capacity

JEL codes: I23; H12

Innola Novykova. INTEGRATING MICRO-QUALIFICATIONS AND SHORT COURSES CREDITS INTO UNDERGRADUATE PROGRAMS IN HIGHER EDUCATION INSTITUTIONS

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Abstract

Research purpose. The modern labor market demands skills that change faster than educational standards can be updated. The concept of "flexible education"—short-term courses—allows for the integration of relevant industry content into the conservative university structure. Key advantages of this concept include: curriculum adaptability; interdisciplinarity; and access to global expertise. The main objective of this article is to justify the feasibility of introducing short courses into undergraduate programs at higher education institutions, not simply as a "digitalization" of lectures, but as a strategic transition to a blended learning model, and to propose methodological tools for developing this model.

Design / Methodology / Approach. A combination of theoretical, empirical, and specialized pedagogical research methods was used to study this topic. Theoretical methods helped form the scientific foundation and analyze the existing regulatory framework. A blended approach combines quantitative and qualitative data to obtain a comprehensive picture. Specific and innovative methods were used, including bibliometric analysis, learning analytics, and methods for assessing the results of informal learning through testing, portfolios, and demonstrations of practical skills.

Findings. Developing a methodology for integrating micro-qualifications and short courses into undergraduate programs will help overcome the "geographical inequity" of higher education: students in any country receive knowledge from leading global professors. The ability to choose microcourses allows for the creation of a personalized educational trajectory that differentiates graduates from competitors in the labor market.

Originality / Value / Practical implications. This article makes a key contribution. The average lifespan of in-demand skills in modern technology industries is less than five years. Traditional four-year bachelor's degree programs risk producing specialists with an "invisible" knowledge base. Short courses provide a flexible approach to curriculum development. The developed methodological framework will allow universities to implement elements of the model without additional financial outlay. The academic value of a short online course is ensured by three components: Practice: more than 40% of time is spent actively solving problems. Control: digital identification eliminates academic dishonesty. Peer review: an international peer review system develops critical thinking.

Keywords: educational development; higher education; short courses

JEL codes: I23; A22

Kristine Uzule[1], Jevgenija Dehtjare[2], Jelena Budanceva[3]. **THE RELATIONSHIP BETWEEN STUDENT BURNOUT AND PERSONAL PSYCHOLOGICAL RESPONSIBILITY FOR STUDY SATISFACTION**

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Abstract

Research purpose. Burnout is a widespread condition caused by chronic stress and excessive workload. Students, particularly those who combine work and study responsibilities, are at elevated risk due to high activity demands, multitasking, and continuous performance pressure. This study aims to examine the relationship between working student burnout and personal psychological responsibility for study satisfaction, a construct reflecting students' perceived ability to manage their own emotional and cognitive needs in the study environment. By assuming personal psychological responsibility, students are more likely to take active steps towards improving own mental well-being and positively influencing own quality of life.

Design / Methodology / Approach. A quantitative research method was used – a survey. The questionnaire included 3 content blocks: (1) a burnout measure of the Oldenburg Burnout Inventory covering work-related burnout; (2) a burnout measure adapted from the Oldenburg Burnout Inventory to measure study-related burnout, and (3) questions assessing personal psychological responsibility for study satisfaction environment. Data were analyzed using a correlation and regression analyses to determine associations between burnout and psychological responsibility. The survey was conducted in May–June 2023 among 392 students from various higher education institutions in Latvia.

Findings. A Spearman correlation analysis revealed a statistically significant positive relationship between total burnout and total psychological factors ($\rho = .265$, $p < .001$), indicating that higher levels of burnout were associated with higher levels of psychological difficulties. A linear regression analysis run for averaged scale indicators further showed that burnout significantly predicted psychological factors ($\beta = 0.634$, $SE = 0.140$, $t = 4.53$, $p < .001$). The model was statistically significant, $F(1, 242) = 20.5$, $p < .001$, explaining 7.8% of the variance in psychological factors ($R^2 = .078$).

Originality / Value / Practical implications. This study examines the relationship between working students' burnout and their perceptions of personal psychological responsibility for study satisfaction. By linking burnout levels to students' reported perceptions, this study identifies which aspects of personal responsibility students view as most relevant for coping with stress, maintaining focus, managing time, and handling anxiety. The findings highlight the potential for higher education institutions to raise students' awareness of personal psychological responsibility, helping students understand how taking ownership of their coping strategies can enhance their focus, manage stress, and improve the quality of their study experience.

Keywords: student burnout; personal psychological responsibility; study environment satisfaction

JEL codes: I23; I12; I31; J24

Anna Strazda. RESEARCH INTEGRITY RISKS IN BUSINESS SCHOOLS: AN ORGANISATIONAL PERSPECTIVE

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Abstract

Research purpose. Research integrity has attracted growing attention in higher education; however, the discussion is still largely centred around individual characteristics and behaviour of researchers. Although some studies recognise that organisational and institutional environments influence research misconduct, this perspective remains relatively underdeveloped in the literature. Most discussions of research integrity and research ethics are rooted in natural science disciplines, particularly medicine, biomedical research, and other experimental sciences, which provide only partial insight into integrity challenges in business schools. Yet the organisational and evaluative environment of business schools differs in several important aspects. These institutions operate within highly competitive and performance-oriented systems characterised by strong publication pressures, field-specific journal ranking frameworks, and close links with industry. In this context, the study aims to identify key research integrity risks in business schools and examine them through an organisational perspective.

Design / Methodology / Approach. The study applies PRISMA-based systematic literature review to identify and synthesise research on integrity-related issues in business and management scholarship. The review examines how individual, organisational, and systemic factors interact to influence research integrity practices. Building on these insights, the study adopts Schein's organisational culture model as a conceptual lens and applies a mid-range theorising approach to structure the identified factors and relationships.

Findings. The analysis demonstrates that research integrity risks in business schools cannot be explained solely by individual motivations. Instead, they emerge from the interaction of factors operating at three levels: individual (e.g., ethical awareness and research competencies), organisational (e.g., mentoring systems, evaluation practices, institutional policies), and systemic (e.g., journal ranking systems, funding structures, and competitive academic environments). The findings show that organisational culture plays a central role in moderating these influences and shaping everyday research practices in business schools.

Originality / Value / Practical implications. This study contributes to the literature by shifting the focus of research integrity analysis from individual misconduct to organisational culture and institutional environments. By synthesising existing evidence, it provides a structured organisational perspective on research integrity risks in business schools and highlights the importance of culture-oriented approaches for strengthening responsible research practices in academic institutions.

Keywords: research integrity; business schools; organisational culture; systematic literature review

JEL codes: M10; I23

Inga Šīna[1], Vita Zariņa[2]. THE ROLE OF CREATIVE CULTURAL PRODUCTS AS EDUCATIONAL RESOURCES SUPPORTING INTERCULTURAL LEARNING IN MANAGEMENT EDUCATION PROGRAMS

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Abstract

Research purpose. This paper explores how creative industry products, particularly international cinema, can function as pedagogical tools in intercultural education. The study investigates how films produced within the creative industries can facilitate cultural literacy, critical cultural awareness, and intercultural competence in educational contexts. Using selected films frequently incorporated into cultural studies and intercultural education curricula – including Parasite, Persepolis, Roma, and Slumdog Millionaire – the paper analyzes how cinematic narratives can support pedagogical frameworks designed to promote intercultural understanding. A notable limitation of the study is the fact that it takes only cinematic cultural products into account, thus the analysis only connects to one area of the creative industries. Furthermore, the paper stipulates those films are an acceptable form of in-class learning in management programs, as teaching methods and aides can vastly differ across different cultures and academic environments.

Design / Methodology / Approach. The study adopts a qualitative interdisciplinary research design combining cultural studies, media education theory, and intercultural pedagogy. Using a case-study approach, the research examines how selected films are used in university courses and cultural education programs to teach themes such as cultural identity, migration, social inequality, and globalization. The methodology includes content analysis of cinematic narratives, examination of pedagogical models inspired by theories developed by Stuart Hall and Michael Byram, and analysis of media education approaches developed by scholars such as Henry Jenkins and David Buckingham.

Findings. The research is expected to demonstrate that films produced within the creative industries provide effective pedagogical tools for intercultural education because they communicate cultural experiences through narrative and visual storytelling. Cinematic narratives enable students to engage emotionally and critically with cultural perspectives different from their own, encouraging reflection on cultural identity, social inequality, migration, and global cultural dynamics. The use of international cinema in educational settings can therefore foster empathy, critical media literacy, and intercultural competence among learners.

Originality / Value / Practical implications. This paper contributes to research on creative industries by expanding their analytical scope beyond economic and cultural policy perspectives. By focusing on the pedagogical applications of international cinema, the study highlights the role of creative cultural products as educational resources capable of supporting intercultural learning and critical cultural analysis. The findings may inform educators, curriculum designers, and cultural program managers about strategies for integrating creative media into educational programs that promote cultural literacy and intercultural competence. Educational institutions may use international cinema and other creative media as innovative tools for developing interdisciplinary approaches to intercultural education.

Keywords: creative industries; intercultural education; film pedagogy; media literacy; cultural studies

JEL codes: I20

Laima Jesevičiūtė-Ufartienė[1], Raminta Andrėja Ligeikienė[2]. STRATEGIC PLANNING OF NON-FORMAL LANGUAGE LEARNING: ORGANIZATIONAL DEVELOPMENT GUIDELINES IN THE CONTEXT OF QUALITATIVE RESEARCH

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Abstract

Research purpose. Non-formal language learning institutions operate in an increasingly dynamic environment, shaped by demographic change, multilingual labor-market demands, digital transformation, and shifting learner preferences. In such a context, traditional administrative planning approaches are insufficient to ensure sustainable growth and competitive positioning. This study addresses the need for a structured yet flexible strategic planning approach by developing organizational development guidelines grounded in qualitative empirical evidence.

Design / Methodology / Approach. The research is based on a qualitative case study of a non-formal language school, employing focus group discussions with diverse stakeholder groups, including management, teachers, parents, and learners. Through thematic analysis, the study explores how organizational values, service structures, market positioning, and stakeholder expectations influence long-term strategic direction.

Findings. The findings indicate that the institution's competitive foundation lies in learner-centered teaching practices, teacher autonomy and innovation capacity, diverse multilingual programs, and the creation of a safe, community-oriented learning environment. At the same time, the analysis reveals strategic vulnerabilities, including limited external visibility, insufficient formalization of development priorities, geographic concentration of services, and the absence of systematically communicated performance indicators.

Originality / Value / Practical implications. Building upon these insights, the study formulates organizational development guidelines that emphasize strategic clarity, differentiated market positioning, expansion of hybrid and digital delivery formats, stronger engagement with business and integration-oriented segments, and enhanced communication of educational outcomes. The proposed framework underscores the importance of aligning internal capabilities with broader socio-economic trends, including multilingualism, migration patterns, and evolving consumer expectations in the education sector.

By offering an empirically grounded and practice-oriented set of development guidelines, this study contributes to the strategic management discourse in non-formal education and provides a transferable reference model for language learning institutions seeking long-term adaptability and institutional resilience.

Keywords: non-formal language education; strategy; planning; organizational development; educational management

JEL codes: D02; I21

Thushira Chamika Fernando Udiriappu Waduge [1], Vladimirs Šatrevičs[2], Irina Voronova [3], Rita Greitāne [4]. **THE DEVELOPMENT OPPORTUNITIES OF THE MUSIC INDUSTRY IN LATVIA THROUGH YOUTH ENGAGEMENT STRATEGIES**

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Abstract

The classical music industry in Latvia is a vital part of the nation's cultural identity and heritage, yet it faces increasing challenges that are threatening its sustainability and relevance in the long term. In Latvia, these challenges are especially acute when the traditional audiences are getting older, and younger generations show little interest in classical music performances and institutions. In the past decades, classical music institutions in Europe, such as orchestras, conservatoires, and cultural festivals, have undergone a major change due to demographic changes, financial constraints, and changing tastes and preferences of the audience. Although the need for youth involvement in cultural institutions is becoming more widely understood by cultural policy makers and practitioners, little systematic research has been conducted examining how youth involvement strategies can be used to increase not only the levels of audience participation at the grassroots, but also the long-term cultural sustainability in Latvia.

Research purpose. The aim of the research is to investigate how youth engagement strategies can enhance participation in classical music and contribute to long-term cultural resilience in Latvia.

Design / Methodology / Approach. The research part using a mixed-method design, combining a quantitative survey of young people and qualitative interviews with music professionals to identify motivations, barriers, and enabling institutional/policy conditions for youth engagement in Latvia's classical music industry.

Findings. The most important conclusions and recommendations resulting from the research are the following: Latvian classical music sustainability requires systematic youth-oriented audience development supported by stronger digital engagement, more accessible and participatory programming formats, and improved coordination among key stakeholders.

Originality / Value / Practical implications. The gap in the existing scholarship is the basis of the current study, which aims to investigate the role of young people as not only the beneficiaries of cultural programming but also as the active agents of cultural development and institutional renewal in the classical music industry in Latvia. The paper is relevant to the cultural development of Latvia because it produces knowledge that can inform the country's cultural policy and ultimately make classical music a living cultural tradition rather than a museum artifact.

Keywords: music industry; classical music; youth engagement; cultural ecosystem

JEL codes: L21; L31; L83; M31; O31; Z11

Elmaira Orazgaliyeva[1], Madina Smykova[2], Gulsanat Bekenova[3], Akdana Abuzhalitova[4].
MAPPING THE INTERSECTION OF DIGITAL MARKETING AND YOUTH PREVENTIVE HEALTH: A BIBLIOMETRIC REVIEW

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Abstract

Research purpose. This study aims to conduct a bibliometric analysis of the global research landscape at the intersection of youth preventive health behavior, digital environments, and social marketing. Given the global burden of non-communicable diseases (NCDs), it is critical to understand how digital platforms can be leveraged to promote sustainable health habits among young adults.

Design/methodology/approach. The review will follow the Scientific Procedures and Rationales for Systematic Literature Reviews (SPAR-4-SLR) protocol. Metadata of peer-reviewed articles will be extracted from the Scopus database (1998-2025). The study will utilize the bibliometrix R-package (Biblioshiny) for performance analysis and science mapping.

Findings. The study intends to map evolutionary publication trends, identify the main conceptual clusters, and reveal prominent knowledge gaps in the current literature. Particular attention will be paid to the geographic representation of research, specifically assessing the gaps and lack of interventions tailored to low- and middle-income countries (LMICs).

Originality / Value / Practical implications. This study will provide a foundational bibliometric synthesis of youth preventive behavior through the lens of digital social marketing. The anticipated findings will offer a roadmap for developing targeted digital campaigns.

Keywords: preventive health behavior; digital marketing; social marketing; youth; bibliometric analysis, science mapping

JEL codes: I12; I18; M31; M37; O33; C88

Oksana Lentjušenkova[1], Jeļena Budanceva[2]. **DOES FINANCIAL LITERACY REDUCE FINANCIAL STRESS? LINKING KNOWLEDGE, BEHAVIOR, AND WELL-BEING IN LATVIA**

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Abstract

Research purpose. Research purpose. Financial literacy is increasingly viewed as a social-impact capability that shapes households' resilience and quality of life. Building on an integrated framework (human capital, planned behavior, and life-course perspectives), this study examines whether stronger financial literacy is associated with lower perceived financial stress and higher psychological well-being among adults in Latvia.

Design / Methodology / Approach. A cross-sectional survey (N=103) was conducted in Latvia in 2025. Financial literacy was operationalized through self-reported financial capability behaviours (ability to cover unexpected expenses, future orientation, positive cash flow, and timely payments), complemented by attitudes linking responsible money management to well-being. Financial stress was proxied by the perceived extent to which personal finances control one's life. Psychological well-being was measured with five items capturing positive affect, calmness, energy, rest, and interest in daily life. Relationships were tested using correlations and OLS regression with demographic controls (age, gender, education).

Findings. Respondents reported moderate-to-high financial capability (M=3.68/5) and moderate financial stress (M=2.89/5). Higher financial capability was associated with lower perceived financial stress ($r=-0.35$, $p<0.001$) and higher psychological well-being ($r=0.28$, $p=0.004$). In multivariate models, financial capability remained a significant predictor of lower financial stress ($\beta=-0.55$, $p<0.001$) and higher psychological well-being ($\beta=0.39$, $p=0.003$), while age and education effects were weaker. The results support the theoretical proposition that well-being gains emerge when financial knowledge is translated into consistent behaviours. The evidence also highlights the importance of "applied literacy": attitudes are generally positive (M=3.57/5), but outcomes depend on day-to-day financial practices, consistent with the behavioural pathway emphasized in the theoretical framework.

Originality / Value / Practical implications. The paper reframes financial literacy as a social-impact mechanism for reducing everyday financial strain, not only as a knowledge deficit. For Latvia, an ageing, digitally transforming society, findings suggest prioritizing behavior-focused interventions (budgeting and cash-flow tools, emergency-fund routines, timely payment supports) and integrating them into workplace and community programs to strengthen household resilience and reduce stress.

Keywords: financial literacy; financial stress; financial well-being; household resilience; Latvia

JEL codes: D14; G53; I31

Kristīne Užule[1], Jevgenija Dehtjare[2]. FINANCIAL DIMENSIONS IN INCLUSIVE HIGHER EDUCATION RESEARCH: INSIGHTS FROM THE BIBLIOMETRIC ANALYSIS

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Abstract

Research purpose. Inclusive higher education has become a central focus in higher education research as universities strive to create environments that support diverse student populations. While social values such as equity, diversity, and social responsibility are frequently discussed, the financial aspects that enable inclusive practices have received comparatively less attention. Understanding these financial dimensions is important, as they directly influence the feasibility, scope, and quality of inclusive initiatives. Therefore, this study aims to examine which financial dimensions are represented in research on inclusive higher education, identify publication patterns, highlight thematic emphases, and uncover gaps in the literature that point to underexplored areas for future investigation. This approach provides a more comprehensive perspective on the interplay between social and financial factors in fostering inclusive higher education environments.

Design / Methodology / Approach. This study employs a bibliometric research design to examine publications related to social values in inclusive higher education. The data were retrieved from the Scopus database due to its extensive size and good quality of publications. The analysis covers the period 2016–2026 in order to capture recent research trends in the field. Publications were identified through the following keyword search applied to titles, abstracts, and author keywords: finance*, values, inclusivity, higher education, inclusive higher education. The retrieved records were exported and analyzed using *VOSviewer* for bibliometric mapping and network visualization, while Microsoft Excel was used to organize the dataset and calculate descriptive indicators.

Findings. The bibliometric analysis indicates a steady growth of publications on inclusive higher education over the past decade, with research predominantly focusing on social values such as equity, diversity, and access. However, financial aspects of inclusivity—including funding mechanisms, affordability, and institutional resource allocation—appear significantly less represented in the literature. The results suggest that while inclusivity is widely discussed as a normative and social objective, its financial dimensions remain underexplored, highlighting an important gap for future research.

Originality / Value / Practical implications. This study addresses a largely neglected dimension of inclusive higher education research: financial considerations beyond being mentioned as barriers. It contributes by highlighting gaps in the literature where financial aspects remain underexplored, pointing to areas that require deeper conceptual and empirical investigation. By drawing attention to these underexamined financial dimensions, the research encourages a shift in scholarly focus toward understanding how economic factors interact with institutional priorities in inclusive higher education practices.

Keywords: inclusivity; higher education; values; financial dimensions; bibliometric analysis

JEL codes: I23; I24

Wiktor Zygosz[1], Marcin Komańda[2], Masoud Hajizade[3], Honorata Książek[4]. **THE AXIOLOGICAL DISTANCE OF GENERATION Z IN POLAND: COMPARING WORK-RELATED VALUE EXPECTATIONS WITH THE GLOBE MODEL'S SOCIETAL PRACTICES AND VALUES**

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Abstract

Research purpose. The subject literature indicates the growing importance of culture fit in human capital management. The aim of the article is to identify the axiological profile (values) of Generation Z representatives in the work environment and to measure the cultural distance between this group and the national cultural patterns for Poland as defined in the GLOBE model. The article asks in which dimensions of organizational culture the expectations of the Generation Z respondents are divergent from general societal values (Societal Values), and in which they stand in contradiction to practices (Societal Practices) dominating in Polish enterprises.

Design / Methodology / Approach. The research was carried out using the diagnostic survey method (CAWI) based on a non-probability purposive sampling strategy targeting Generation Z representatives (born 1995-2012), possessing professional experience or entering the labour market. The research tool was based on the theoretical framework of the GLOBE project (Global Leadership and Organizational Behaviour Effectiveness). Respondents determined the desired level of nine dimensions of organizational culture. The obtained primary data were compared with reference data (GLOBE project results) for the Polish population in two aspects: the actual state (As Is) and the desired state (Should Be). Differences between the primary data and the GLOBE reference data were analysed using comparative statistical procedures to determine the significance and magnitude of cultural distance.

Findings. The conducted analysis enables the identification of key areas of tension on the employee-organization and employee-society lines. The results suggest the existence of a statistically significant cultural misfit between the idealistic vision of the workplace declared by Generation Z and the operational reality of Polish companies. Observable discrepancies were noted, among others, in areas related to hierarchy and Gender Egalitarianism, which confirms the thesis regarding the cultural specificity of this cohort.

Originality / Value / Practical implications. The article proposes a new cognitive perspective, filling the research gap regarding the application of the GLOBE model to diagnose the axiological profile of a new cohort of employees in the Polish context. The applicative value of the work includes guidelines for HR managers, allowing for the conscious shaping of organizational culture. Understanding the identified differences is crucial for redefining motivational systems and increasing the attraction and retention of Generation Z workforce.

Keywords: Generation Z; GLOBE model; organizational culture; work values; cultural misfit

JEL codes: M12; M14

EMERGING TRENDS IN
INFORMATION TECHNOLOGIES AND DIGITALISATION

Inese Āboliņa. ANALYSIS OF CURRENT CYBERSECURITY MANAGEMENT SYSTEMS IN LATVIA

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Abstract

Research purpose. The purpose of this article is to analyse the current cybersecurity management systems in Latvia by examining their institutional structure, legal foundations, and operational practices. The study seeks to assess how cybersecurity is governed and managed at the national level and to what extent existing arrangements correspond to contemporary risk-based and resilience-oriented approaches promoted within the European Union. By focusing on Latvia as a small EU member state, the article aims to contribute to a broader understanding of how national cybersecurity management systems are shaped by legal obligations, institutional capacity, and evolving threat environments.

Design / Methodology / Approach. The study employs a qualitative research design based on systematic document analysis. The empirical material includes national legislation, cybersecurity strategies, policy documents, and publicly available reports produced by responsible institutions. These sources are analysed to identify key governance arrangements, coordination mechanisms, and management practices, as well as to examine the distribution of responsibilities among public authorities involved in cybersecurity management. The analytical approach is descriptive and interpretative, allowing for an institutional and policy-oriented assessment rather than a technical evaluation of cybersecurity tools.

Findings. The analysis shows that Latvia has developed a centralized and increasingly formalized cybersecurity management system, supported by an updated legal framework and strengthened coordination mechanisms at the national level. The establishment of clearer institutional roles and reporting obligations has contributed to greater structural coherence. At the same time, the findings reveal persistent challenges related to implementation capacity, uneven organizational maturity across sectors, and sustained pressure resulting from a high level of cyber incidents. These factors limit the overall effectiveness of cybersecurity management and place increasing demands on public administration.

Originality / Value / Practical implications. The article provides an empirically grounded overview of cybersecurity management in Latvia that is relevant for both academic and policy-oriented audiences. Its value lies in offering a structured analysis of cybersecurity management as a governance and public administration issue rather than a purely technical domain. The findings support comparative research on cybersecurity governance in small states and may inform policymakers by highlighting structural strengths and limitations that should be addressed in future policy development.

Keywords: cybersecurity management; cybersecurity governance; public administration; national security; Latvia

JEL codes: H56; O38

Primož Pevcin[1], Katja Debelak[2], Rok Hržica[3]. **STRUCTURING EXPERT JUDGMENTS FOR AI ADOPTION IN PUBLIC ADMINISTRATION: ASSESSMENT OF AN AHP-BASED DECISION-SUPPORT FRAMEWORK**

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Abstract

Research purpose. The study aims to develop and validate a comprehensive multi-criteria decision-making model to assess organizational readiness for adopting artificial intelligence (AI) in public administration. Motivated by the growing demand for evidence-based tools that support public organizations in navigating digital transformation, this research identifies the key systemic and individual factors that shape AI readiness and develops a structured, replicable decision-making approach specifically tailored to the municipal context.

Design / Methodology / Approach. The model is built using the Analytic Hierarchy Process (AHP) and applies a dual-level structure consisting of four main readiness categories and subordinate criteria within each category. Group decision-making is supported by aggregating pairwise comparison matrices from multiple experts into consolidated priority structures, ensuring both methodological rigor and robustness. Expert validation was grounded in construct validity theory, cognitive psychology of expertise, and systems thinking. It was implemented through a proof-of-concept deployment, an expert panel review, and a field-based evaluation. Experts evaluated the coherence of the model structure, clarity of statements, scale suitability, interpretability of results, and practical utility.

Findings. The results highlight the central importance of both systemic readiness factors (data quality, technological infrastructure, innovation capacity, and organizational change readiness) and individual-level determinants (social influence and voluntariness of use). Across participating municipalities, organizational culture, top-management support, and perceived usefulness emerged as the most influential criteria. Experts agreed that the model is suitable for diagnosing municipal readiness and emphasized that, beyond legal compliance, data protection, and technical security, entrenched organizational practices and work routines represent significant barriers to AI adoption.

Originality / Value / Practical implications. Methodologically, the study demonstrates how AHP can be applied to structure expert judgments in complex public sector decision environments and to generate actionable insights for AI-related planning. The hybrid methodological design, combining multi-criteria modelling with expert validation, offers a robust foundation for future readiness assessments. Practically, the model serves as a decision-support tool enabling municipal leaders to evaluate their preparedness, benchmark organizational capabilities, and guide strategic investments in AI adoption. It offers a replicable framework for public administrations seeking to align technological initiatives with organizational capacity, governance needs, and long-term digital transformation objectives. The model thus provides a structured, transparent, and actionable method for identifying capability gaps and prioritizing improvements.

Keywords: expert validation; decision-support models; AHP; AI adoption; public administration

JEL codes: C38; C93; D73

Vilma Morkūnienė. ICT-DRIVEN DATA ANALYTICS: A CROSSOVER STUDY IN BUSINESS STUDIES

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Abstract

Research purpose. The rapidly growing use of digital analytics platforms and artificial intelligence tools is fundamentally transforming business students' learning and decision-making processes. In contemporary business education, ICT solutions play an increasingly important role by enabling automated data analysis, modelling, and visualisation of results. The purpose of this study is to examine how ICT-supported analytical environments influence business students' ability to structure managerial problems, interpret automated outputs, and make data-driven decisions within a project-based learning context.

Design / Methodology / Approach. The study employed a crossover research design involving business students working with real micro- and macroeconomic datasets as well as survey-based data collections. Two ICT environments were compared: a limited-automation setting, where students used basic digital tools, and a full-automation setting, where advanced analytical software and AI-supported functions were allowed. Students completed project-based tasks in both conditions in reversed order to minimise the impact of individual differences. Data were collected through analysis of student project artefacts, structured evaluation rubrics, and a "black-box" task that required critical evaluation of automatically generated data analysis interpretations.

Findings. The findings indicate that ICT solutions substantially reshape the nature of students' analytical work. Automated environments reduce technical workload and encourage greater focus on interpreting results and justifying decisions. Students generate business insights more easily when using visualisation and automated modelling tools; however, some tend to rely excessively on system-generated conclusions. The "black-box" task revealed that critical evaluation of automated outputs does not develop automatically, even when students actively use advanced ICT tools.

Originality / Value / Practical implications. The study contributes to research on ICT integration in business students' research skills by demonstrating that digital analytics tools do not replace analytical thinking but rather transform it into higher-level interpretative and managerial competence. From a practical perspective, the results highlight the need to integrate real-data projects, critical evaluation tasks, and reflective use of AI within business curricula. The study provides insights into how ICT environments can strengthen data-driven decision-making in business education while reducing the risk of overreliance on automated solutions.

Keywords: ICT solutions; data analytics; business studies; automated analysis

JEL codes: C8; M15

Elvis Dibanins[1], Ilona Lejniece[2]. RETHINKING STUDENT ENGAGEMENT IN HIGHER EDUCATION THROUGH A USER EXPERIENCE (UX) PERSPECTIVE

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Abstract

Research purpose. This paper proposes a User Experience (UX)-based approach to assessing student engagement in higher education by analysing the student journey across academic, administrative, and digital touchpoints. Conventional quality assessment tools, such as course evaluations and alumni surveys, provide useful aggregate indicators, but they often do not reveal where, when, and why disengagement emerges during the study process. The paper aims to develop a conceptual framework that complements existing quality assurance practices by identifying experiential barriers and improvement opportunities across the student journey.

Design/Methodology/Approach. The paper is a conceptual pilot and methodological in nature. It synthesises insights from UX research, service design, and student engagement literature and proposes student journey mapping as the core analytical instrument. The approach structures student experience into sequential stages (e.g., pre-entry, onboarding, participation, assessment, support, progression, and completion) and examines actions, expectations, emotions, and pain points at each stage. The framework is intended for further empirical testing through mixed methods, including interviews, focus groups, and process analysis.

Findings. The proposed approach is expected to reveal critical friction points in the student journey that remain insufficiently visible in aggregate survey data, including communication gaps, unclear procedures, and digital usability barriers. It is also expected to identify positive practices that support student engagement and persistence. Student journey maps can provide visual, stage-specific evidence for prioritising institutional improvements.

Originality/Value/Practical implications. The paper contributes by integrating UX and student engagement perspectives in higher education quality assessment and by adapting journey mapping from service design to an educational context. Practically, the framework can support cross-functional collaboration, targeted interventions, and more actionable quality improvement decisions aimed at strengthening student engagement and reducing dropout risk.

Keywords: higher education; user experience (UX); student engagement; student journey mapping; service design

JEL codes: I23; I21; I28; O33

Jegors Fjodorovs. DECISION SUPPORT UNDER UNCERTAINTY USING NON-PARAMETRIC STOCHASTIC MODELS

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Abstract

Research purpose. The purpose of this study is to develop and analyse a decision support approach for management and business applications operating under uncertainty, where classical parametric assumptions about data distributions and linear dynamics are often violated. The paper focuses on estimating the time required for key economic or financial indicators to reach predefined critical thresholds, which represent decision-relevant risk limits or operational boundaries.

Design / Methodology / Approach. The proposed approach is based on non-parametric stochastic modelling combined with copula-based dependence structures. Marginal distributions of observed processes are estimated empirically, while temporal dependence is modelled using a copula-based Markov framework. Monte Carlo simulation is employed to generate synthetic trajectories of the process and to estimate first-passage-time distributions for crossing upper and lower thresholds. The methodology does not require strong distributional assumptions and allows flexible modelling of asymmetric and tail-dependent behaviour.

Findings. The results demonstrate that the proposed non-parametric decision support model provides reliable estimates of the probability and expected timing of threshold crossings under uncertainty. Simulation outcomes highlight the importance of dependence structure and tail behaviour for managerial risk assessment. The model successfully captures rare but critical events that are typically underestimated by linear or Gaussian-based approaches.

Originality / Value / Practical implications. The main contribution of the study lies in integrating non-parametric stochastic modeling with simulation-based decision support. The approach offers practical value for managers and policymakers by transforming complex stochastic dynamics into interpretable time-to-risk measures. It can be directly applied in financial risk management, strategic planning, and educational decision support systems where robustness and transparency are essential.

Keywords: decision support; uncertainty; non-parametric models; stochastic simulation; risk analysis

JEL codes: C15; C53; G17

Alina Danileviča[1], Aina Čaplinska[2]. DIGITAL TRANSFORMATION AND E-COMMERCE IN LATVIAN SMES

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Abstract

Research purpose. The digitization of small and medium-sized enterprises (SMEs) represents one of the most transformative forces shaping the contemporary economic landscape. One of the opportunities of SMEs based on digitalization is e-commerce. This allows SMEs to increase competitiveness, accessing untapped markets and customers. The paper synthesizes the survey of Latvian SMEs, highlighting the use of digital technologies in business in the context in e-commerce and the extant literature on e-commerce issues in Latvia.

Design / Methodology / Approach. To access the capacity of SMEs to use the digital technologies, the study utilized a dataset derived from a survey of Latvian entrepreneurs conducted by authors. Surveyed 252 entrepreneurs in Latvia through an online survey. Assessment of digital technologies adoption in Latvian SMEs lists several dimensions – SMS marketing, messenger groups, bill payments, companies website and e-meil, online purchasing – with response categories that indicate frequency or extent of use (e.g., always, often, medium, rarely, never). The study complemented by a systematic review of relevant literature to contextualize findings.

Findings. Companies e-mail access shows highest adoption 48,8% (38.1% "always" and 10,7% "often"), followed closely by use of a company website at 47,6% (28.6% "always" and 19,0% "often"). Next comes mobile purchasing capabilities at 42.8% (32.1% "always" and 10,7% "often"). However, 32.2% of respondents remain non-users (17,9%) or infrequent users (14,3%) of online purchasing, highlighting substantial growth potential. Medium usage stands at 25%, suggesting a transitional segment ripe for targeted intervention. The influence of digitization on SMEs is profound, multidimensional, and deeply contingent on firm-level, sectoral, and regional contextual factors. Digitization offers SMEs transformative opportunities in operational efficiency, market access, innovation, and resilience. Research directions of e-commerce in Latvia focus on factors influencing e-commerce adoption, digital marketing and technology integration, logistics and delivery solutions, digital security, consumer behaviour.

Originality / Value / Practical implications. The findings suggest that Latvian SMEs should accelerate e-commerce adoption, invest in user-friendly online purhasing, digital marketing, and digitize core operations reduction of costs and improve delivery time. Policymakers should support digital readiness through training, subsidies, and improved infrastructure, while regulators simplify e-commerce compliance and promote digital literacy. Financial institutions should gauge creditworthiness by digital maturity and offer financing for platform upgrades and cybersecurity.

Keywords: digital economy; e-commerce; small and medium-sized enterprises (SMEs); Latvia

JEL codes: L81; M15; M21; O32; O33

Erika Zelca[1], Galina Robertsone[2], Inga Lapina[3]. DIGITAL MATURITY ASSESSMENT AS A FOUNDATION FOR PHARMACEUTICAL QUALITY SYSTEM DIGITALIZATION

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Abstract

Research purpose. Digital transformation has become a strategic priority within the pharmaceutical industry, driven by growing data integrity requirements, regulatory expectations, and the need for more efficient and integrated quality management processes. Implementing electronic quality management systems (eQMS) requires a structured understanding of an organization's digital readiness, as insufficient preparation increases the risk of fragmented digital environments, hybrid processes, and insufficient integration between quality and other enterprise systems. This study aims to evaluate digital maturity as a foundation for pharmaceutical quality system digitalization by applying the International Society for Pharmaceutical Engineering (ISPE) Digital Maturity Framework to assess current and target maturity levels and digital readiness, and to identify digitalization gaps.

Design / Methodology / Approach. The theoretical framework is based on a literature review examining the architecture and regulatory context of a pharmaceutical quality system, the eQMS's functional role, and the importance of system integration. The empirical context consists of a case study of a structured digital maturity assessment using the ISPE Digital Maturity Framework to evaluate key quality processes and supporting digital infrastructure. A comparative gap analysis is performed between the current and targeted maturity states to identify areas requiring integration and digitalization improvements, providing a structured basis for digitalization planning.

Findings. The results confirm that digital maturity assessment provides a systematic and objective mechanism for assessing digital readiness and identifying structural limitations to digital transformation. The case study indicates that pharmaceutical quality systems operating in hybrid process environments exhibit uneven digital maturity, with significant limitations in data accessibility and system interoperability, highlighting a critical gap between digitalization execution, its integration with organizations' operational systems, and its digital governance capabilities. The study demonstrates that digital maturity assessment establishes a strong structured baseline for planning of quality system digitalization and supports efficient transition towards a fully integrated eQMS.

Originality / Value / Practical implications. The study provides practical evidence of the ISPE Digital Maturity Framework application for evaluating digitalization readiness within a regulated manufacturing environment. The findings offer practical value for pharmaceutical companies by providing a methodological basis for assessing the digital maturity, identifying priorities, and achieving regulatory-compliant digital transformation. It also contributes to a broader understanding of digital maturity assessment as a strategic enabler for sustainable digital governance of pharmaceutical quality systems.

Keywords: pharmaceutical quality system; digital maturity; digital transformation; digital integration; eQMS

JEL codes: L15; O33; M15

Mārcis Pinnis. EVALUATING LARGE LANGUAGE MODELS FOR SMALLER LANGUAGES WITH TILDEBENCH

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Abstract

Research purpose. Large language models (LLMs) have become the main tools for natural language processing. However, their performance varies considerably across languages, with significantly better results typically observed in well-resourced languages such as English than in smaller languages such as Baltic and Finnic languages. In addition, there is a quality gap between commercial cloud-based models and locally deployable open-weight models. The purpose of this study is to evaluate these disparities using TildeBench, a multilingual benchmark designed to assess LLM capabilities on various natural language processing tasks, with particular attention to languages with limited resources.

Design / Methodology / Approach. The study evaluates multiple commercial and locally deployable LLMs using the TildeBench evaluation suite. The benchmark includes several tasks: zero-shot multiple-choice question answering, one-shot sentence-level machine translation, zero-shot document-level machine translation, translation robustness evaluation, and analysis of tokenizer efficiency. The benchmark covers a broad set of European languages, including Baltic, Slavic, Germanic, and Finnic languages. The evaluation examines model performance across languages and tasks, with particular focus on differences between high-resource languages and smaller languages.

Findings. The evaluation results show that commercial LLMs generally achieve higher performance than locally deployable open-weight models across most tasks. However, performance differences vary depending on the task and language. The gap between high-resource and smaller languages remains substantial, particularly for tasks requiring deeper linguistic understanding. In machine translation tasks, directions involving English typically yield higher-quality outputs than those involving lower-resourced languages. The results also highlight variability in model robustness and formatting accuracy in structured tasks such as multiple-choice question answering. The results of TildeBench are available online at https://tilde-nlp.github.io/.

Originality / Value / Practical implications. This work introduces TildeBench, a multilingual benchmark designed to systematically evaluate LLM capabilities for smaller European languages, and presents its results. By covering multiple tasks and languages, the benchmark provides insights into how current LLMs perform beyond high-resource language settings. The findings contribute to a better understanding of LLMs' current limitations in less-resourced languages and provide a foundation for future research.

Keywords: large language models; benchmarking; machine translation; in-context question-answering; low-resource languages

JEL codes: O33; C88

Jurijs Radionovs[1], Maksims Zigunovs[2], Tea Todua[3]. THE IMPACT OF WEATHER ON STUDENTS' STUDY ATTENDANCE: A PREDICTIVE APPROACH

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Abstract

Research purpose. This study aims to examine the impact of weather conditions on students' study attendance. The research seeks to identify patterns and determine whether certain weather factors, such as temperature, precipitation, or daylight hours, can predict fluctuations in students' presence at classes. Predicting student attendance can be especially important for optimizing energy-efficient use of university spaces.

Design / Methodology / Approach. A predictive approach was employed using historical attendance records from students alongside corresponding local weather data. Statistical analysis, including regression models and machine learning techniques, was used to evaluate the relationship between weather variables and attendance rates.

Findings. Results indicate that specific weather conditions, such as heavy rainfall or extreme temperatures, are associated with decreased attendance. Conversely, moderate weather conditions tend to correlate with higher attendance rates. The predictive model demonstrates reasonable accuracy in forecasting attendance based on weather data.

Originality / Value / Practical implications. Understanding the influence of weather on student attendance can help educational institutions plan more effectively, implement attendance support strategies during adverse weather, and enhance overall learning outcomes. Additionally, accurate predictions of student presence are highly practical for universities and can be applied in several ways: energy-efficient management of facilities, logistical planning, optimization of the teaching process, and improved allocation of food, technical, and administrative resources, etc.

Keywords: Student attendance; Predictive modeling; Educational planning; Climate impact; Machine learning

JEL codes: I2; I23

Uwe Busbach. DIGITAL SOVEREIGNTY IN GERMANY – REALITY OR HYPE

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Abstract

Research purpose. This study examines the concept of digital sovereignty within the context of German public administration. Motivated by Schleswig-Holstein's decision to migrate approximately 30,000 public-sector workplaces to open-source office systems to reduce dependency on U.S. technology corporations, the research investigates whether digital sovereignty is a realistically achievable objective or primarily a political narrative. The purpose is to clarify the meaning of digital sovereignty for public-sector organizations and to assess the feasibility of its implementation based on developments of the past 25 years.

Design / Methodology / Approach. The study applies a qualitative research design combining case study analysis and literature review. Case studies include the Schleswig-Holstein open-source migration initiative and the failed LiMux project in Munich. The literature review draws on academic definitions of digital sovereignty (e.g., European Commission, Floridi) and policy documents, including federal coalition agreements and governmental reports on open-source adoption. This dual approach enables a critical assessment of both conceptual foundations and empirical implementation challenges.

Findings. The analysis reveals that digital sovereignty is defined in the literature along two main dimensions: Technological autonomy, understood as the ability to avoid dependencies on external digital infrastructures and proprietary technologies (European Commission, 2020); Normative governance capacity, referring to the ability to shape digital ecosystems according to political, ethical, and societal values (Floridi, 2020).

While open-source systems are intended to enhance transparency, interoperability, innovation capacity, and strategic independence, empirical evidence shows persistent obstacles. The Munich LiMux case demonstrates that political resistance, insufficient standardization, and organizational fragmentation can undermine open-source initiatives. At the federal level, repeated commitments to open source in coalition agreements have resulted in limited implementation, indicating structural and cultural barriers. Overall, the findings suggest that despite strong political rhetoric, Germany has struggled to achieve meaningful progress toward digital sovereignty over the past 25 years.

Originality / Value / Practical implications. This study provides a critical, evidence-based assessment of digital sovereignty in German public administration by integrating conceptual definitions with real-world implementation outcomes. It highlights the gap between political ambition and administrative reality and identifies the technical, organizational, and political factors that hinder progress. The associated conference presentation will discuss whether digital sovereignty is a feasible strategic objective for public administration or remains largely a "hype," and what conditions must be met to transform current aspirations into sustainable practice.

Keywords: digital sovereignty; open-source; IT-infrastructure; public administration

JEL codes: D73; H10; L17; M15; O32; O38

Patriks Morevs[1], Jurijs Radionovs[2], Olga Ovtšarenko[3]. MODERN TRENDS OF EDUCATION IN INFORMATION TECHNOLOGIES: INTRODUCTION OF WEB PROGRAMMING BASICS TO STUDENTS THROUGH CREATION OF 2D AND 3D GAMES FROM SCRATCH USING PURE JAVASCRIPT AND HTML/CSS ONLY.

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Abstract

This research is devoted to an experimental teaching approach within the course Web Programming I for Bachelor students of the study program "Information Technologies". This course is devoted to introduction of HTML, CSS and JavaScript basics to students of the first study year. Within the research the course has been read to first year students three times as well as a compact version of the course has been introduced to students of various universities in the form of a short mobility for studies. Feedback from various groups of students has been received and processed and the course contents has been improved. At present improvement of the course is going on as well as the materials for the course Web Programming II are being elaborated taking into account the findings of the research.

Research purpose. To understand the efficiency of teaching web programming from scratch using game development.

Design / Methodology / Approach. Introduction and implementation of the author's elaborated teaching approach to real environment. Performance of experiments. Surveys.

Findings. More than 80% of students in each group showed eagerness and involvement, were ready to continue next stages of learning in similar manner, obtained experience in the field of teamwork, were able to cope with difficulties independently and received positive emotions during the course.

Originality / Value / Practical implications. The paper and the study materials are useful for colleagues and students. The results of the paper can be used for further research and improvement of other courses.

Keywords: JavaScript; game creation; 3D game engine; basics of programming

JEL codes: C60; I20

Jeļena Pundure[1], Tatjana Tambovceva[2], Viktorija Politika[3], Andrejs Šišovs[4]. IMPACT OF SECURITY ASPECTS ON SUSTAINABLE DEVELOPMENT OF LATVIAN BUSINESS AND THE WELFARE OF RESIDENTS IN THE CONTEXT OF ICT SOLUTIONS

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Abstract

Originality / Value / Practical implications. In today's digital age, information and communication technology (ICT) solutions are becoming an important factor affecting both the sustainable development of business and the safety and welfare of residents. In the context of Latvia, security issues are increasingly linked to the digital environment, in which companies, public administration and society as a whole use technological solutions in everyday processes. Security aspects therefore cover not only physical and social dimensions, but also dimensions of cyber security, data protection and information reliability.

Research purpose. The aim of the study is to analyse the main factors that influence the sense of security, trust and well-being of residents in Latvia, simultaneously evaluating the role of ICT solutions in ensuring the sustainable development of business. Particular attention is paid to the impact of digital tools, data security and access to information on the business environment, management processes and education system.

Design / Methodology / Approach. The study uses international scientific literature and empirical data to identify both theoretical models and practical trends in security and ICT correlation. The empirical part analyses the results of the author's questionnaire and compares the conclusions of international studies. The diversity of Latvian society – the different social, cultural and educational aspects affecting both the perception of security and the level of digital skills – is taken into account.

Findings. The results of the study confirm that efficient and secure ICT solutions are an essential prerequisite for sustainable business development, quality management and modern education. At the same time, the sense of security in the digital environment directly affects the well-being and trust of the residents in institutions. Understanding this correlation provides an opportunity to develop integrated strategies that promote Latvia's competitiveness and development of society as a whole.

Keywords: ICT solutions; sustainable development; welfare; cyber security; digital tools

JEL codes: O33; Q01; D83

Maksims Žigunovs. NEURAL NETWORK SYMBIOSIS AND KNOWLEDGE TRANSFER WITHOUT TRAINING THROUGH BIO-INSPIRED MUSHROOM SIGNAL COMMUNICATION PATTERNS

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Abstract

Research purpose. The purpose of this research is to find a way to transfer knowledge from several already trained neural networks to another separate neural network that has not been trained at all, using mushroom communication signal patterns. In this case, the receiving network does not need to go through its own training process. Previous studies have already shown that mushroom communication signal templates can be used for optical character recognition, and that changing these signals can affect how a neural network works. In this research, I investigate whether a symbiotic architecture inspired by natural mycelial communication networks can allow separate neural networks to exchange knowledge with each other. The main idea is that three neural networks, each independently trained for optical character recognition, transmit their learned knowledge to a fourth untrained network through structured signal sequences based on the mushroom communication vocabulary. As a result, the fourth network is able to perform classification without being trained directly.

Design / Methodology / Approach. The implemented method uses an architecture where four biologically inspired neural networks are connected together. Three of these networks are independently trained on optical character recognition tasks using mushroom communication signal templates, just like in the previous stages of this research. Each trained network converts its learned knowledge into structured signal sequences, which are made from selected values in the range of [0..1]. These signal sequences are similar to those found in the natural communication vocabulary of mushrooms. The fourth network is not trained on its own. It is connected to the three trained networks through a communication layer inspired by the way mycelial networks transmit signals in nature, creating a kind of symbiotic connection. The knowledge transfer happens by encoding the trained networks' weight data and learned representations into mushroom signal patterns and sending them through this communication layer. To preserve signal quality during transmission, the signal amplification methods from the previous research are also used. The receiving network processes these signals and forms the internal representations needed to perform classification tasks.

Findings. It was found that the fourth neural network, even without its own training, was able to perform optical character classification after receiving signal-encoded knowledge from the three trained networks through the mushroom communication layer. Its results were comparable to those of the individually trained networks. The structured signal sequences used in mushroom communication proved to be a workable medium for encoding and transferring neural network knowledge between separate networks. The vocabulary structure of these signal templates preserved the necessary differences between learned categories, similar to what was observed in the previous research with single-network training. It was also found that this kind of symbiotic architecture makes it possible to combine knowledge from several independently trained networks into one receiving network. In some cases, this combined representation even showed better recognition results than any single source network on its own.

Originality / Value / Practical implications. The value of this paper is based on demonstrating a new form of neural network symbiosis, where knowledge transfer happens without directly training the receiving network. This concept is inspired by biological mycelial communication systems found in nature. The main practical results of the research are: 1) proof that mushroom signal patterns can be used as a medium for knowledge transfer between neural networks, 2) a symbiotic architecture that allows several trained networks to share their learned knowledge with an untrained network, and 3) the receiving network is able to perform classification tasks with good accuracy without going through its own training cycle. These findings open new possibilities for distributed neural network systems, where new network nodes can start working through signal-based knowledge transfer instead of resource-heavy retraining from scratch. This can be especially useful in areas such as edge computing, fast network deployment, and systems where multiple neural networks work together.

Keywords: neural network symbiosis; knowledge transfer; mushroom communication signals; optical character recognition; bio-inspired AI

JEL codes: L86

EMERGING TRENDS IN

CULTURE STUDIES AND INTERNATIONAL CULTURE PROJECT MANAGEMENT

Larissa Turusheva. CONSEQUENCES OF LACK OF CROSS-CULTURAL TRAINING IN ORGANISATIONS

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Abstract

Research purpose. The study aims to determine the role of Cross-cultural communication study course in the curriculum of Business Administration and other Management study programmes at EKA University of Applied Sciences. Additionally, it seeks to explore the effectiveness of the course as a learning tool, providing insights into improving teaching methodologies. The research was conducted with Bachelor and Master level students both in Latvian and foreign students' groups at EKA University of Applied Sciences.

Design / Methodology / Approach. The research is based on sources analysis, quasi experiment, expert interviews, monitoring.

Findings. Globalization has increased diversity in organizations, which means that cross-cultural competence has become a strategic capability. Though, many companies still neglect structured cultural training. Only ~30–40% of global firms offer structured cross-cultural training. The lack of cross-cultural training in organizations can lead to significant challenges, including misunderstandings, conflicts, and inefficiencies in global collaboration. Lack of training leads to hidden costs: poor collaboration, lower performance, failed global ventures.

The results of the study show that even at EKA University of Applied Sciences some training for the academic staff is needed in Cross-cultural communication, as foreign students feel big cultural shock starting their studies at the university because of cultural and educational challenge.

Originality / Value / Practical implications. The scientific novelty of the study lies in the theoretical justification for supplementing Management study programmes with Cross-cultural communication to develop intercultural skills. It also proves that not only students, but also the academic staff working with foreign students need some training in Cross-cultural communication. The practical significance is determined by the potential for both parties to limit problems which are caused by cultural misunderstandings. The study results can also serve as recommendations for the work and study with students from different cultures, better understanding and collaboration with them.

Keywords: cross-cultural competence; multicultural teamwork; cross-cultural training; culture shock

JEL codes: F69; I29

Zane Veidenberga. TRANSLATOR'S CULTURAL BACKGROUND: IMPACT ON THE TRANSLATION END PRODUCT

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Abstract

Research purpose. In literary translation, it is common that the target language is translator's mother tongue, though this is not always the case. This research aims to find out to what extent translator's mother tongue and exposure to the culture of the source language or target language may influence the end product of translation, i. e. – the target text, chosen translation solution, linguistic means etc.

Design / Methodology / Approach. The theoretical background is based on descriptive analysis of Latvian and English linguistic sources viewed from the perspective of translation studies. The language material for analysis has been excerpted from several Latvian source texts (that have at least two different translations into English) and their target texts. Qualitative contrastive and comparative analysis of the excerpted language material have been carried out.

Findings. The process and results of the performed qualitative contrastive and comparative analysis suggest that there is not a single answer to what extent the end product is influenced by the fact whether the translator's mother tongue is the source or target language and what their exposure to the culture of the source or target language is. There are multiple other factors that may influence the end result, e. g., the time when the given piece of literature has been written or translated, its genre, author's style etc.

Originality / Value / Practical implications. The current stage of this research has helped outlining the key research directions and potential research tools to be used, including, audience response surveys of the source text readers and target text readers, Think Aloud Protocols during the translation process and post-translation interviews of translators.

Keywords: translator; translation; cultural background; source language culture; target language culture

JEL codes: not applicable

Aija Poikāne-Daumke. NARRATING FREEDOM: AMINATA DIALO'S LIFE STORY AND IDENTITY IN THE BOOK OF NEGROES BY LAWRENCE HILL

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Abstract

Research Purpose. The research purpose of this paper is to examine literacy, memory, and storytelling as modes of resistance that allow the protagonist of the novel *The Book of Negroes* (2007) by Lawrence Hill – Aminata – to assert herself as a human being while being subjected to chattel slavery in the United States of America. It also traces the development of a Black female identity, thus in a way disrupting masculinist and Eurocentric traditions of historical narration

Design / Methodology / Approach. With the help of a literary analysis of the novel, the paper highlights and also challenges dominant historiographies of slavery, displacement, and freedom. In addition, the particular novel blends archival history with fictional testimony to recover voices systematically erased from official records. This is being highlighted through close reading of the text.

Findings. The novel demonstrates that historical fiction may serve as an archive documenting the history of a group of specific human beings, in this case African slaves shipped to the United States of America. It also reveals that literacy and story telling emerge as crucial forms of resistance and survival. Aminata- the protagonist of the novel reassures her existence and claims historical presence. Moreover, the analysis elucidates that the novel bridges history and imagination in order to confront the brutal legacy of slavery and to affirm both the dignity and humanity of Black American slaves. Finally, the book exposes chattel slavery as a collective historical trauma passed from one generation onto another.

Originality / Value / Practical implications. The originality of this paper lies in the fact that it not merely defines story telling as a mode of resistance but rather as valuable material that may compete with and rewrite offical records of the particular historical period. While existing scholarship often treats storytelling in slave narratives as a symbolic form of resistance, this paper argues that The Book of Negroes gives a new shape to storytelling; namely, it emerges as a counter-archival practice that operates within—and against—imperial documentation.

Key words: Chattel slavery; storytelling; literacy; slave narratives; trauma

JEL codes: not applicable

Ieva Ekena. THE POSTER COLLECTION OF THE NATIONAL LIBRARY OF LATVIA

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Abstract

Research Purpose. The Poster Collection of the National Library of Latvia (NLL) includes more than 10,000 works, covering the period from the 19th century to the present day, that have come to the library both as mandatory copies and as gifts.
Chronologically, the collection can be divided into four parts: 1) Beginnings, 2) Interwar period, 3) Soviet period and 4) Contemporary posters that have come to the library since the restoration of the independence of the Republic of Latvia.
Each of these periods is represented by a wide range of topics, including advertising, political and social issues, information about various artistic and cultural developments. The aim of the research is to give an overview of the collection in correlation with political history and technological development.

Design / Methodology / Approach. The research is based on the document analysis, including the posters from the collection of the Arts and Music Centre of the NLL.

Findings. The formation of the collection is closely linked to the history of the NLL and the state-mandated library collection development policy, which has been influenced by the legislation of ruling political regimes.

The earliest period of the NLL poster collection is represented by printed works, some of which could be classified as playbills or "proto-posters." The oldest posters are dedicated to advertising and cultural events.
The 1920s and 1930s are marked by a wide variety of posters, consisting of commercial advertisements as well as posters dedicated to culture, political, and social issues. The abundant volume of the collection can be explained by both the economic boom characteristic of the peace period and a more purposeful collection development policy.
Posters produced during the Soviet period still constitute the largest and most thematically diverse part of the collection, that clearly reflects the visual and thematic link with the regime's political directions. While the reality of Soviet life made commercial advertising posters unnecessary, the collection contains a few examples of the time. The main part of the collection consists of posters dedicated to political and social issues, as well as cultural and educational events.
With the collapse of the Soviet Union, the poster lost its previous role, returning to the zone of utilitarian everyday design. In the contemporary phase the NLL collection continues to grow; however, the majority of new acquisitions focuses on cultural life.
From the playbills of the 19th century to contemporary digital design, the Poster Collection of NLL characterizes the paradigms, technological development, and historical collisions of their time. Simultaneously, this collection is a vivid testament to the process of collection building itself.

Originality / Value / Practical implications. The paper introduces with the Poster collection of the NLL, which offers a multi-faceted material for future research on collection making, history of advertising, political and societal topics amongst others.

Keywords: art heritage; historical posters; collections; library collections; National Library of Latvia.

JEL codes: not applicable

Aija Dimza. THE SOCIAL IMPACT OF CULTURAL MANAGEMENT IN PUBLIC EVENTS: A CASE STUDY OF COMMUNITY SOLIDARITY, SOCIAL CAPITAL AND LOCAL IDENTITY AT CONCERT HALL "COLLEGIUM MUSICUM RIGA"

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Abstract

The purpose of this study is to explore the social impact of cultural management in public events by examining how participatory cultural initiatives contribute to community solidarity, social capital and local identity. Using Concert Hall "Collegium Musicum Riga" as a case study, the research analyses sing-along events and discussion evening on canine-assisted therapy.

Design / Methodology / Approach. This study adopts a qualitative case study approach to examine the social impact of cultural management practices in public events. The research is based on two participatory event formats implemented at concert hall "Collegium Musicum Riga": community sing-along evening and discussion evenings on canine-assisted therapy. Data collection methods include participant observation, document analysis, and qualitative content analysis of semi-structured interviews conducted with event participants and practitioners. A portion of the empirical data derives from interviews previously collected with a qualification thesis on canine assisted therapy discussion evenings (thesis supervisor: Mg.art. Aija Dimza, author: Luize Ane Vitola), allowing for secondary analysis of audience experiences and perceived social value. The date are analyses thematically, with a focus on indicators of community solidarity, social capital and local identity.

Findings. The findings indicate that participatory cultural events implemented at Concert hall "Collegium Musicum Riga" generate social value beyond their artistic or informational content. Community sing-along evenings with local amateur choirs primarily foster bonding social capital by strengthening emotional connection, collective participation and a shared sense belonging among participants. These events reinforce local cultural identity through active engagement in collective musical practices.

Discussion events addressing canine-assisted therapy contribute mainly to bridging social capital by creating and inclusive space for dialogue between diverse audience groups, practitioners and cultural participants. The findings show that hosting socially sensitive topics in a cultural setting reduces stigma, encourages openness and enhances perceives social relevance of the cultural venue.

Across both formats, cultural management practices – such as accessibility, participatory design and non-formal atmosphere - play a decisive role in shaping audience engagement and perceived social impact. The study demonstrates that cultural venues can function as platforms for social cohesion, education and community-building when cultural management strategies are intentionally aligned with social objectives.

Originality / Value / Practical implications. This study offers an original contribution by integrating cultural management theory with practice-based research grounded in real public events. It combines participatory cultural formats and interdisciplinary discussion-based initiatives within a single case study to demonstrate how different modes of audience engagement generate distinct forms of social capital. The research is particularly valuable in highlighting the role of cultural venues as socially responsive space that extend beyond artistic production to include community-building, education and social inclusion. By drawing on empirical material from practitioner-led initiatives, the study provides practical insights for cultural managers and policymakers seeking to enhance the social impact of cultural institutions.

Keywords: cultural management; social impact; public events; community engagement; local identity

JEL codes: Z10; Z13

Imants Ļaviņš[1], Dace Ļaviņa[2]. THE INFLUENCES OF EASTERN ART IN ROMANS SUTA'S ARTISTIC LEGACY

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Abstract

Research purpose. Eastern themes and motifs, as well as an interest in Eastern culture in general, can be detected in European art long before the mid-19th century. However, until the 19th century, European masters only copied the superficial aspects of Eastern artistic culture, accentuating individual elements. With the advent of modernism, artists' views of other non-European cultures also changed. Under the influence of globalization, Europeans are becoming less European and more open to other cultures. Young Latvian art professionals are actively involved in this process. It is clear from the outset that their view will differ from that of the representatives of the old European school of Orientalists, whose works clearly reflect Europe's political and cultural dominance and superiority. What were the motives behind the artists' view of the East, and did European stereotypes about the East influence their creative process? This study examines the work of Romans Suta (1896–1944) – one of the most outstanding artists of the interwar period, whose oeuvre is largely consistent with the views and perceptions of other artists of his generation.

Design / Methodology / Approach. Employing a qualitative and comparative visual analysis of selected Suta's artistic works aesthetic mechanisms, and ideological functions underpinning Orientalist imagery. The scope encompasses visual and applied art, as well as scenography.

Findings. By analysing and interpreting these works of oriental influence, we can gain new insight into the evolution of artistic thought and cultural perception in the first half of the 20th century.

Originality / No such research has been conducted to date. Previously, only the oeuvre of two artists – Karl Huhn (1831–1877) and Georg Timm (1820–1895), representatives of the Russian classical Oriental school, have been analysed, as well as manifestations of Orientalism in Latvian architecture during the second half of the 19th century.

Keywords: Orientalism; Oriental Art; Exoticism; Impressionism; Romans Suta; Art Deco

JEL codes: N90; Z19

Elizabete Gribuška[1], Imants Ļaviņš[2]. THE LATVIAN MENTALITY AS SEEN BY FOREIGNERS

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Abstract

Research purpose. In recent years, representatives of other nations have settled in Latvia for long-term stays for various reasons (studies, threat of war, etc.), as shown by data from the official statistics portal, and this also affects how and how often other nationalities interact with Latvians. The study contributes to Latvians' understanding of how the Latvian mentality is perceived by representatives of other nations and how mutual communication with them can develop, which influences the image that foreigners gain and spread about Latvia and Latvians. This study also provides a certain perspective on Latvians' self-perception of their mentality, which may also influence the strengthening of Latvian ethnic identity.

Design / Methodology / Approach. The authors draws on data obtained from structured interviews with experts in order to clarify the aspects of mentality influence from the perspectives of different fields: identity researcher Ilze Boldāne-Zeļenkova, social anthropologist Klāvs Sedlenieks, historian Guntis Zemītis, philosopher Velga Vēvere and sociologist Tālis Tisenkopfs.

Authors also summarized analysis of publicly available opinions of foreigners about Latvians available in the media, in order to gain a more complete and realistic insight into the Latvian mentality. Methods used to process the results obtained: transcription, thematic analysis.

Findings. The characteristics of the Latvian mentality were identified, as well as how the Latvian mentality is perceived by representatives of other nations.

Originality / Value / Practical implications. Aim of the work: To identify the characteristics that define the Latvian mentality and how they are perceived by representatives of other nations. In the analytical part of the study, the authors examined and researched explanations of various related concepts and the context of the formation of the Latvian mentality in order to gain knowledge and a theoretical basis on which to build future work. To summarize, conclusions were drawn and proposals were developed with the aim of providing an evaluated view of the Latvian mentality, which will help strengthen Latvian self-confidence. The author of the paper puts forward the following proposals for all stakeholders and NGOs: conduct in-depth research to measure the characteristics of the mentality of all ethnic, professional, and other social groups in Latvia, comparing them within the same ethnic group and with other groups living in Latvia; conduct a survey of non-Latvians living in Latvia on their views of Latvians, paying attention to respondents' awareness of the ethnic diversity of Latvia's population and measuring the nature, frequency and duration of their interactions; conduct a broad "autostereotype breaking" information program for Latvian residents about Latvians and facts that correct self-assessment.

Keywords: mentality; Latvians; intercultural communication; stereotypes

JEL codes: Z10; Z13

Jekaterina Baije. AI CHINOISERIE: THE SIMULATION OF CHINESE SYMBOLIC IMAGERY

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Abstract

Research purpose. The rapid development of generative artificial intelligence has introduced new forms of visual production that increasingly incorporate global cultural motifs. Among these emerging visual phenomena are AI-generated images that imitate elements traditionally associated with Chinese symbolic imagery. This study introduces the concept of *AI chinoiserie* to describe algorithmically generated images that reproduce the stylistic appearance of Chinese cultural symbols while often disregarding their underlying semiotic structure. The purpose of the research is to examine how generative AI simulates Chinese symbolic imagery and how such images relate to the visual codes embedded in Chinese cultural tradition. It specifically investigates the systemic misalignment between technical image synthesis and the preservation of cultural meaning, questioning whether AI can truly replicate the depth of traditional iconography or whether it merely produces superficial aesthetic shells.

Design / Methodology / Approach. The research analyses the visual outcomes produced by a representative range of leading global and regional text-to-image diffusion models. A curated corpus of AI-generated images, based on textual prompts referencing traditional Chinese symbolic motifs, is examined through the framework of visual semiotics. The methodological approach involves a comparative analysis between established cultural symbolic codes and their algorithmically generated counterparts. The study focuses on the relationships between visual style, symbolic motifs, and the cultural logic that traditionally structures Chinese imagery, identifying patterns in which visual signifiers become detached from their historical and philosophical signifieds.

Findings. The study reveals a significant distinction between the replication of visual style and the reproduction of symbolic meaning. While AI systems are capable of generating recognizable motifs associated with Chinese culture, these elements are frequently combined without reference to the cultural logic and semantic relationships that structure traditional symbolic imagery. As a result, AI-generated representations simulate the appearance of Chinese visual culture while detaching symbols from their original cultural and interpretive contexts. The analysis indicates that algorithmic production prioritizes probabilistic surface patterns over deeper symbolic relationships, leading to semiotically attenuated imagery. This results in fragmented representations of cultural heritage that lack the coherent narrative and symbolic resonance characteristic of traditional Chinese art.

Originality / Value / Practical implications. The article proposes the concept of *AI chinoiserie* as a contemporary form of digital orientalism in which algorithmic image production reproduces the surface aesthetics of Chinese culture while transforming or neutralizing its symbolic meanings. The study contributes to discussions on visual culture, intercultural interpretation, and the role of artificial intelligence in the global circulation of cultural imagery. Practically, it highlights the risks of substituting complex cultural narratives with reductive, homogenized algorithmic stereotypes that may distort global perceptions of Chinese tradition and contribute to intercultural misunderstandings. The research underscores the importance of visual cultural literacy and the need for culturally informed approaches to the development and use of generative AI technologies.

Keywords: AI chinoiserie; Chinese symbolic imagery; visual semiotics; generative AI; digital orientalism

JEL codes: Z10; Z11; Z13

Olga Bogonis[1], Artūrs Homins[2]. Inclusive Cultural Project Management in Times of Crisis: Digital Accessibility as a Tool for Resilience in Latvia and Ukraine

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Abstract

Research purpose. This study aims to redefine the role of digital accessibility in cultural project management. It advocates for a paradigm shift from an elective ethical approach to a mandatory operational standard. The research explores how integrating inclusive design from the project's inception serves as a critical resilience tool in both stable (Latvia) and crisis-ridden (Ukraine) environments.

Design / Methodology / Approach. The study employs a comparative case study analysis of cultural projects in Latvia and Ukraine (2022–2025). It examines the intersection of Latvia's systemic compliance with EU accessibility directives and Ukraine's adaptive, technology-driven responses to wartime challenges.

Findings. The research identifies that "Accessibility-First" management models significantly enhance project viability and risk mitigation. The findings demonstrate that making digital inclusion a mandatory requirement, rather than a secondary ethical choice, optimizes resource allocation and ensures broader audience reach during crises.

Originality / Value / Practical implications. The study provides a framework for cultural managers and ICT educators to integrate mandatory accessibility standards into international collaborations. It offers a roadmap for aligning cultural project management with the European Accessibility Act while maintaining the flexibility needed for crisis-response management. This research contributes to the field of International Culture Project management by reframing digital accessibility as a strategic management instrument rather then solely an ethical or regulatory obligation. By comparing the structured policy-driven approach in Latvia with the adaptive, crisis-driven practices in Ukraine, the study provides a novel perspective on how accessibility can function as a resilience mechanism in both stable and emergency context. The paper integrates insights from international culture management, digital inclusion, and crisis response strategies, thereby expanding existing theoretical discussions on inclusive Cultural governance. Practically research offers culture management, Policy makers, and educators a transferable model for embedding accessibility requirements into the early stage of project planning and implementation. The proposed approach supports sustainable audience engagement, strengthens institutional resilience, and aligns cultural project management practices with evolving European accessibility standards.

Keywords: cultural project management, inclusive design, digital accessibility, crisis response, Latvia, Ukraine, social sustainability, mandatory standards, ICT in Culture

JEL codes: O19; 022; H12; H43

Jeļena Budanceva[1], Undīne Perse-Vilerte[2]. THE SATISFACTION GAP IN MUSEUM EXPERIENCES: A COMPARATIVE ANALYSES OF PARENTAL EXPECTATIONS AND PRESCHOOLER ENGAGEMENT

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Abstract

Research purpose. This research investigates the "Satisfaction Gap" in museum visits for families with children aged 0–7. While parents view museums as vital for early cultural development, there is a fundamental disconnect between adult motivations (education, social time) and the child's developmental needs (sensory engagement, movement). The study aims to identify the root causes of this disparity by contrasting visitor feedback with institutional perspectives, pinpointing the psychological and physical barriers that lead to dissatisfaction in Riga's Museum environment.

Design / Methodology / Approach. The study utilizes a mixed-methods approach to analyze the visitor experience from two perspectives. Primary data was gathered through a survey of 119 families with children in the target age group, focusing on their habits, expectations, and perceived obstacles. This was triangulated with qualitative data by 5 semi-structured interviews with museum professionals and cultural policy experts to contrast visitor needs with institutional realities. This dual approach allows for a comparison between the "demand" (parents) and the "supply" (museum institutions).

Findings. The research identifies a critical "perception paradox": while 91% of parents demand tactile, sensory-based elements, most exhibitions remain rooted in a "visual-only" culture. Data shows parents often rate visits higher than children because institutional offerings prioritize adult logistical needs over child engagement. Interviews reveal that this gap is exacerbated by staff lacking specialized training for the 0–7 age group, leading to the use of "adult language" that alienates young visitors. Furthermore, "front-line" staff (guards) often act as a psychological barrier; their protective attitude toward exhibits creates a "culture of anxiety" for parents, directly reducing the quality of the shared family experience.

Originality / Value / Practical implications. The study moves beyond marketing metrics to provide a psychological profile of the "dual-client" visitor unit. It highlights that true museum accessibility is not just physical (ramps and elevators) but cognitive and attitudinal. The practical value lies in the recommendation for "micro-segmentation" within the 0–7 age group and the implementation of specialized staff training to transition from a "preservation-first" to an "experience-first" communication model. This research provides a foundation for cultural institutions to foster long-term loyalty by synchronizing the needs of both the decision-maker (parent) and the end-user (child).

Keywords: museum accessibility; family visitors; audience engagement; museums for children; satisfaction gap

JEL codes: Z11

Zane Saukane[1], Veroniia Martyniuk[2]. DEVELOPING TRANSNATIONAL VET ECOSYSTEMS THROUGH ERASMUS+ CULTURE INITIATIVES

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Abstract

Research purpose. The paper under review deals with the problem of educational ecosystems development. The purpose of this study is to explore the role of Erasmus+ culture initiatives in developing transnational Vocational Education and Training (VET) ecosystems. The research aims to analyse how international collaboration among educational institutions, industry partners, and public organizations contributes to the creation of sustainable VET ecosystems that enhance skills development, innovation, and labour market integration in Europe. Particular attention is given to the mechanisms that facilitate knowledge exchange, mobility, and intercultural cooperation within Erasmus+ projects.

Design / Methodology / Approach. The research is based on a qualitative analytical approach combining literature review, comparative analysis of Erasmus+ interdisciplinary VET projects, and case-based examination of partnership models. The study investigates cooperation among vocational schools, higher education institutions, industry stakeholders, and regional authorities involved in transnational initiatives. Data are derived from project documentation, institutional reports, and examples of best practices implemented within Erasmus+ collaborations. The methodological framework focuses on identifying structural components of VET ecosystems, including stakeholder interaction, knowledge transfer mechanisms, and educational innovation.

Findings. The study demonstrates that Erasmus+ interdisciplinary initiatives significantly contribute to the formation of transnational VET ecosystems by strengthening institutional cooperation and fostering cross-sectoral partnerships. Such ecosystems support the integration of education, research, and industry by promoting joint curriculum development, international mobility, and practice-oriented training. The findings reveal that successful VET ecosystems are characterized by strong stakeholder engagement, shared resources, and continuous knowledge exchange. Furthermore, interdisciplinary collaboration enhances students' cultural awareness, professional competencies, adaptability, and employability in the European labour market.

Originality / Value/ Practical implications. The research contributes to the understanding of transnational VET ecosystem development by highlighting the integrative potential of Erasmus+ interdisciplinary initiatives. It offers a conceptual perspective on how collaborative educational frameworks can evolve into sustainable ecosystems that connect education providers, industry, and regional development actors. The study also expands existing discussions on vocational education internationalization and ecosystem-based educational models.

The results provide practical insights for policymakers, educational institutions, and project managers involved in vocational education development. The findings suggest that strengthening international partnerships, promoting interdisciplinary project design, and integrating industry participation are key factors in building effective VET ecosystems. These outcomes can support the strategic planning of future Erasmus+ initiatives and contribute to improving the quality, relevance, and sustainability of vocational education in Europe.

Keywords: transnational VET ecosystem; Erasmus+ project; interdisciplinary collaboration; educational innovation; culture project; project management; VET skills development

JEL codes: I23; O15; O33

Haidong Feng. REGIONAL IMPORT MARKET POTENTIAL AND CULTURAL CONSIDERATIONS IN NORTHWEST CHINA

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Abstract

Research purpose. This study investigates the import market potential of Northwest China, specifically in Shaanxi, Gansu, Qinghai, Ningxia, and Xinjiang, aiming to understand how regional economic conditions and cultural differences influence trade opportunities. The research seeks to guide international businesses in identifying promising markets and designing effective entry strategies by integrating economic analysis with cultural insights. By combining quantitative and qualitative approaches, the study offers a comprehensive framework to assess trade potential in a region often underexplored in international commerce.

Design / Methodology / Approach. The study employs the Regional Import Market Potential (RIMP) index to evaluate each province's import capacity relative to its population. Economic analysis incorporates 2022 GDP data, while cultural assessment examines language diversity, religious composition, and local business practices. This mixed-methods approach allows for detailed comparison of regional import potential and highlights how cultural factors shape consumer preferences and market receptivity. The methodology ensures that both macroeconomic conditions and local socio-cultural nuances inform strategic decision-making.

Findings. Results reveal that provinces with lower import potential, indicated by higher RIMP values, generally exhibit stronger economic output, whereas provinces with higher import potential, shown by lower RIMP values, often have lower GDP. Cultural diversity significantly affects trade behavior and consumer preferences, influencing the effectiveness of market entry strategies. The findings demonstrate that a purely economic assessment may overlook critical factors, and integrating cultural insights with quantitative measures provides a more accurate understanding of regional trade opportunities.

Originality / Value / Practical implications. This study contributes to the literature by combining economic metrics and cultural considerations to assess regional import potential. The RIMP index, alongside cultural evaluation, offers practical guidance for businesses planning entry into Northwest China. Policymakers and exporters can use these insights to prioritize regions with favorable trade conditions while accounting for cultural nuances, thereby increasing the likelihood of successful market penetration and informed strategic planning in culturally diverse and economically varied regions.

Keywords: regional import potential; Northwest China; GDP; cultural differences; market strategy

JEL codes: F14; F63

EMERGING TRENDS IN
CREATIVE INDUSTRIES, ART AND DESIGN

Elizabete Grudovska. DESIGNING THE DIFFICULT PAST: CREATIVE DECISION-MAKING IN THE VR EXPERIENCE "TALLINN 1939/44".

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Abstract

Research purpose. Immersive technologies, such as virtual reality, increasingly position historical narratives within the domain of creative production rather than traditional heritage mediation. Virtual reality (VR) experiences, such as the case of "Tallinn 1939/44", demonstrate how designers, developers, and cultural producers translate difficult historical material into spatial, interactive, and experiential formats. The difficult past, here, refers to historically traumatic and politically contested heritage **-** in the case of this VR, it relates to the Second World War, the destruction of the city, and successive occupations of Estonia. This paper examines how historical interpretation emerges through creative and design decisions during the production of an immersive VR experience. Rather than analysing heritage representation alone, the study approaches immersive history as a form of creative practice shaped by aesthetic, technological, and narrative constraints.

Design / Methodology / Approach. The study adopts an exploratory and interpretative approach, combining a small number of expert interviews with contextual analysis of the "Tallinn 1939/44" VR experience in order to understand how creative and design decisions shape the translation of difficult history into an immersive format.

Findings. The exploratory analysis suggests that stakeholders play a decisive role in shaping how history is presented within the immersive experience. The findings indicate the importance of examining who participates in these decision-making processes and how their professional backgrounds, institutional contexts, and design intentions influence the final representation of the past, which is of importance within the difficult heritage context.

Originality / Value / Practical implications. The paper contributes to discussions in creative industries and design research by shifting attention from immersive technologies as finished cultural products to the decision-making processes behind their creation. The study highlights how immersive representations of difficult history emerge through design choices rather than technological capability alone. This perspective offers a starting point for more critically examining authorship, responsibility, and stakeholder influence in immersive cultural production.

Keywords: immersive experiences; difficult heritage; virtual reality; experience design

JEL codes: Z11

Elena Tanasescu. THE ROLE OF VISUAL ART IN PEDIATRIC HEALTHCARE SPACE DESIGN: ENHANCING WELL-BEING AND RECOVERY

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Abstract

Research purpose. The purpose of this study is to investigate the role of visual art in pediatric healthcare environments and to evaluate how artistic elements integrated into interior design can enhance children's emotional well-being and support recovery processes. The research aims to move beyond purely functional medical design approaches and highlight the importance of creating therapeutic, engaging, and psychologically supportive spaces for young patients.

Design / Methodology / Approach. The study adopts a qualitative, interdisciplinary methodology that combines principles from interior architecture, environmental psychology, and art theory. It involves a theoretical analysis of key design elements—such as color, shape, texture, and illustration—alongside a comparative examination of relevant international case studies, including Evelina Children's Hospital (London) and Kinderspital Zürich. The research also reviews existing literature on color psychology and sensory design to support the interpretation of spatial strategies used in pediatric environments.

Findings. The findings indicate that the integration of visual art significantly improves the pediatric patient experience by reducing anxiety, stimulating positive emotions, and fostering a sense of comfort and safety. Strategic use of color contributes to emotional regulation, while organic shapes and varied textures enhance sensory engagement. Illustrations and narrative visual elements provide distraction and support spatial orientation. Case studies demonstrate that well-integrated artistic interventions can transform clinical spaces into therapeutic environments that positively influence both psychological well-being and recovery outcomes.

Originality / Value / Practical implications. This research contributes to the field of pediatric healthcare design by framing visual art as an essential, not merely decorative, component of medical environments. Its originality lies in emphasizing the concept of a "visual journey" and the integration of art as a spatial and experiential tool. Practically, the study offers guidelines for architects and interior designers, advocating for interdisciplinary collaboration and the implementation of art-based strategies—such as interactive installations, thematic illustrations, and sensory-rich materials—to create more humane, engaging, and healing healthcare spaces for children.

Keywords: pediatric design, medical aesthetics, functionality, child recovery, art therapy

JEL codes: I12; Z11

Lefteris Heretakis. THE FUTURE OF DESIGN EDUCATION IN THE AGE OF ARTIFICIAL INTELLIGENCE: FORMATION, JUDGEMENT, AND THE IRREDUCIBLE HUMAN

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Abstract

This paper examines the future of design education in the age of artificial intelligence, arguing that the central challenge is not technological adaptation but the preservation of human formation. As generative systems increasingly automate visual production and ideation, design risks being reduced to accelerated output and technical competence. The paper asks what remains irreducibly human in design practice and how education must respond to sustain intellectual depth, ethical responsibility, and cultural agency. Rather than framing AI as either threat or solution, the study positions it as a revealing force that exposes weaknesses within design education, particularly the overemphasis on software proficiency and speed.

Research purpose. The research investigates how design education must evolve in response to AI while safeguarding its formative role. It argues that judgement, ethical discernment, cultural literacy, and reflective formation are core capacities that must define future curricula.

Design / Methodology / Approach. The study adopts a critical and philosophical methodology, drawing on design theory and educational philosophy. Through conceptual analysis and reflective academic practice, it interrogates assumptions about creativity, authorship, and intelligence embedded in AI discourse. It contrasts instrumental models of education centred on productivity with formative models grounded in intellectual maturation and critical autonomy.

Findings. AI intensifies pre-existing weaknesses in design education, particularly the prioritisation of speed and technical execution. When competent outputs can be generated instantly, execution alone no longer defines expertise. Value shifts toward judgement: the capacity to interpret, contextualise, critique, and assume responsibility. Design education must therefore move beyond tool-based instruction toward cultivating epistemic depth, historical awareness, and the ability to frame problems rather than merely solve them.

Originality / Value / Practical implications. The paper repositions design education as a moral and intellectual practice rather than technical training. It proposes curricular recalibration toward critical inquiry, authorship, dialogical studio culture, and assessment models privileging reasoning and process over surface output. By foregrounding judgement and responsibility, it offers a framework for sustaining human agency in an increasingly automated world.

Keywords: design education; artificial intelligence; judgement; human formation; creativity

JEL codes: I23; O33

Krišjānis Určs[1], Sevastian Tsvetkov[2], Jevgenij Martinkevič[3], Szilárd Jakab[4]. MULTIMODAL EFFECTS IN THE PERCEPTION OF HORROR AND SUSPEMSE IN VIRTUAL REALITY

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Abstract

This study investigates suspense as a key factor influencing participants' emotional responses to narrative experiences. A suspenseful narrative was developed in virtual reality based on existing research on narrative suspense, incorporating both story and sound design elements. To ensure that the narrative itself generated suspense, the story was first tested without visual stimuli that could distract participants from the narrative content. Participants' physiological responses were measured using the Empatica E4 bracelet, recording heart rate and electrodermal activity (EDA) as indicators of emotional arousal. The experiment involved 26 participants. Results showed no statistically significant difference in physiological responses between narratives presented with and without distracting visual stimuli.

Research purpose. The purpose of this study is to investigate how visual stimuli that are not directly related to a narrative influence the level of suspense experienced by users in an immersive virtual reality environment. In narrative-driven VR experiences, additional visual elements may either enhance immersion or distract users from the narrative content. This study therefore examines whether such visual distractions affect the emotional engagement of participants during a suspenseful narrative experience.

Design / Methodology / Approach. A between-group experimental design was used to examine the effect of visual distractions on suspense in a virtual reality narrative environment. Twenty-six participants experienced a suspenseful VR narrative under one of two conditions: a control condition without visual distractions and an experimental condition where additional visual stimuli were visible in the environment. Physiological responses were recorded using an Empatica E4 wristband, measuring heart rate and electrodermal activity (EDA) as indicators of emotional arousal. The collected data were analysed using independent statistical tests to determine whether the presence of visual stimuli significantly affected the level of suspense experienced by participants.

Findings. The results showed no statistically significant difference in physiological responses between the two experimental conditions. Although both heart rate and electrodermal activity tended to be higher in the condition with additional visual stimuli, the differences were not statistically significant. Therefore, the findings do not support the hypothesis that visual distractions significantly influence the level of suspense experienced in the tested virtual reality narrative.

Originality / Value / Practical implications. This study contributes to research on immersive storytelling by examining how non-narrative visual stimuli influence suspense in a virtual reality environment using psychophysiological measurements. By combining VR narrative design with physiological measures of emotional arousal, the study provides insights into how multimodal stimuli may affect user engagement in immersive media experiences. The findings may help game developers and VR designers better understand whether additional visual elements enhance or distract from narrative-driven emotional experiences.

Keywords: virtual reality; narrative suspense; emotional arousal; electrodermal activity; heart rate; immersive storytelling

JEL codes: not applicable

Vita Pihtina. INNOVATING TRADITION: AI-POWERED LEARNING OF LATVIAN NATIONAL SYMBOLS IN PRIMARY SCHOOL

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Abstract

The article aims to demonstrate how AI-enhanced tools can create more engaging and personalized learning environment in primary education. By creating and viewing AI-generated images, pupils will develop an understanding of Latvian culture and the ability to recognize national symbols in their surroundings. The article presents and assesses the activities conducted during the lessons based on the ideas of the project Skola2030. It is a national education reform initiative in Latvia aimed at modernizing the general education system through a competence-based approach. Launched in cooperation with the National Centre for Education and supported by the European Structural Funds. Grouping computing lessons with design and technologies reflects this approach by supporting creativity through technology and fostering cultural awareness through digital media. The article presents a number of ideas how the teacher can engage primary pupils to create or modify the representations of Latvian national symbols with AI tools. The lessons are based on Laclau and Mouffe's theory that meaning is not fixed but constructed through the dynamic reconfiguration of elements within a discursive framework. By connecting traditional symbols to contemporary and personal narratives, pupils actively participate in the evolving dialogue of national identity.

Research purpose. This study investigates the integration of AI-based content creation and presentation technologies into Latvian primary education, aiming to establish a theoretically grounded implementation framework supported by methodological guidelines.

Design / Methodology / Approach. The present study adopts a convergent mixed-methods design (Creswell & Poth), integrating qualitative and quantitative data to examine how AI creative tools influence creativity and learning in primary school classrooms.

Findings. AI tools can enrich culture education, but only within a structured, teacher-mediated environment.

Originality / Value / Practical implications. At present in Latvia there are no studies evaluating how to apply to AI-generated educational content or how pupils perceive AI-produced visuals in the primary school context.

Keywords: AI-generated images; national symbols; discursive framework

JEL codes: I21

Tiziana Contino. ENTANGLEMENT

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Abstract

My research has its roots in language and how this can restore a composite meaning to life events by shaping them in a subjective but shareable vision through relationships with others. During one of my interactive multimedia performances in London one of the participants used the word "Entanglement". This made me think, as the word "Entanglement" has specific nuances that distance it from the mere meaning of intertwine and instead transport us into the world of quantum energy. From a linguistic point of view, entanglement refers to a complex situation. It is precisely the complexity that conveys the meaning of my research through language and human relationships which are a broad and varied study tool. One of the uses of the word entanglement is linked to quantum mechanics for which it describes a condition in which two particles, even if light years apart, influence each other. Therefore, starting from this assumption, the energy of the particles would have an invisible bond that crosses space and time. It is no coincidence that the theory of quantum entanglement is the basis of research on teleportation, eliminating the limit of the space-time interval. These initial considerations led me to the construction of objects and drawings that gave a physicality to this concept. Subsequently I began to think of Entanglement as a multimedia and participatory interactive performance that could be articulated with the public, aimed at exploring communication between human and living beings through movement, sound and interactive strings, transforming that concept into a resonance.

Research purpose. My research focuses on the concept of quantum entanglement and how this concept is realized on the tangible and intangible planes, involving organic and inorganic beings. To this end, the theory is translated into a performative experience as an empirical tool for knowledge and psychophysical engagement.

Design / Methodology / Approach. The project uses a mixed theoretical-empirical method aimed at addressing the topic in a multidisciplinary manner. After an initial literature review on quantum entanglement I moved on to an analysis of case studies. I then addressed questions related to the impact of the multimedia and interactive performance I conceived.

Findings. Information technologies within interactive performance can act as facilitators and mediators for the audience's expression and the discovery of complex concepts such as entanglement.

Originality / Value / Practical implications. The originality and value of this research, though based on a personal practice of multimedia and interactive performances that I have been conducting for eighteen years, is expressed in offering a multisensory experience of complex scientific concepts.

Keywords: art; language; performing arts; physics; technology.

JEL codes: Z11; Z13

Graeme Hanssen. TEACHING THE LANGUAGE OF VISUAL DESIGN IN A HOSTILE ENVIRONMENT

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Abstract

Research purpose. Creative Arts are under substantial pressure partly from AI, plus challenges from social media targeting the very age-group that is reflected in a body of 'typical' young students. There is a plethora of competition for attention of a student to the point it has become apparent that undergraduate students are increasingly distrustful of formal teaching, but increasingly reliant on electronic media as a primary source of gaining information. Consequently, the learning environment has become subtly hostile towards conventional delivery of design-knowledge (and most likely hostile towards delivery of knowledge in other fields). Resulting today that a significant section of students struggles to satisfactorily express themselves in defence of their work. A recurring question from educators is how to engage with students when frequently challenged by electronic devices and accompanying media.

Design / Methodology / Approach. A methodology was developed and applied over two years to undergraduate students of Visual Communication Design that required students to embrace their projects to the point of being able to satisfactorily, verbally, express the design criteria and the outcomes. A specific course was developed, known as the Language of Visual Design, primarily for freshmen, which focused on elements of design and required students on a weekly basis to verbally describe the function of each design element in their physical environment.

Findings. The basis of the research was that if a student couldn't describe their work meaningfully, it was unlikely that their design solution would be effective. Enabling a student to speak the language or jargon of the coursework apparently helped focus a student's learning processes, with observable results in improved marks. Students' electronic devices in a classroom, which have been known to distract from a lecturer, became tools of investigation rather than just a mode of social interaction between classmates: abbreviated text messages were replaced with meaningful discussion in the studio. Attendance to the studio work increased.

Originality / Value / Practical implications. The practical implications suggest that when a student can confidently express themselves about a project their engagement with the coursework results generally increased marks. A student is more likely to actually engage with the educator when placed in a position of having to extensively explain their project. By enabling the student to talk satisfactorily about their work it was observed that students were more willing to investigate their subject or project.

Keywords: visual communication design; student engagement; language of visual design

JEL codes: A29; I129

Baris Atiker. SUSTAINING CREATIVITY IN THE ERA OF GENERATIVE ARTIFICIAL INTELLIGENCE

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Abstract

Research purpose. This study investigates the influence of generative Artificial Intelligence (AI) on creative processes across diverse disciplines, addressing emergent concerns regarding its impact on human creativity and originality. The research establishes how creativity can be preserved and integrated as a core quality metric within research methodologies in the AI era. Key objectives include examining the challenges and opportunities posed by generative AI in academic and professional contexts, developing a framework to quantify creative thinking within AI-augmented research methods, and proposing actionable strategies to sustain human-centric creativity.

Design / Methodology / Approach. A mixed-methods research design was employed. Primary data collection involved interviews and focus groups with researchers utilizing generative AI, complemented by surveys assessing perceptions of creative satisfaction. A comparative analysis was conducted on outputs produced with and without AI assistance. Thematic analysis identified patterns in creative engagement, while statistical analysis examined correlations between AI integration and specific creativity metrics. These findings were synthesized into a validated framework emphasizing originality, innovation, and user agency.

Findings. The study results in a practical framework that redefines creativity as a fundamental quality metric rather than an abstract byproduct. Thematic analysis revealed that while generative AI significantly accelerates the 'incubation' and 'illumination' stages of the creative process, it often introduces a 'homogenization risk' where AI-driven suggestions converge toward mediocre or statistically probable outputs, potentially stifling radical originality. Statistical analysis demonstrated a positive correlation between high levels of 'user agency'—defined as the degree of human intervention in AI prompts—and the perceived innovation of the final output. Conversely, over-reliance on automated generation was linked to a decline in creative satisfaction among researchers. The resulting framework provides evidence-based guidelines for maintaining creative autonomy, alongside strategic recommendations for AI developers to design 'human-in-the-loop' tools that prioritize augmentation over total automation.

Originality / Value / Practical implications. This research fills a critical gap in current AI discourse by shifting the focus from technological output to human-centric process sustainability. Its primary value lies in the development of a Creative Quality Metric (CQM), which provides a standardized method for researchers and practitioners to audit the level of human originality in AI-augmented work. Practically, the study offers a roadmap for academic institutions and creative industries to integrate generative tools without eroding the fundamental cognitive skills of their workforce. By defining "User Agency" as a measurable variable, the research provides a framework for future AI policy and software design that prioritizes augmentation over automation, ensuring that creativity remains a distinct and sustainable human capability in a digitized scholarly landscape.

Keywords: creativity; generative ai; framework; sustainability.

JEL codes: O31, O33, D83

Mārtiņš Priedītis. FROM DATA TO EXPERIENCE: AI-DRIVEN MULTISENSORY INTERPRETATION OF CULTURAL HERITAGE

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Abstract

Research purpose. Recent developments in creative artificial intelligence and immersive media reveal growing tensions between the generative capabilities of AI systems and the need for culturally contextualised interpretation of digital heritage. While AI is widely applied in digital art, museums, and creative industries, many practices remain dominated by generative approaches, reinforcing a broader "generative bias" in creative AI research and education. Consequently, critical questions emerge about how AI systems can responsibly interpret cultural memory while preserving contextual and emotional meaning. This research therefore explores how artificial intelligence can function as an interpretative instrument capable of mediating cultural meaning rather than merely generating visual outputs, proposing a shift from generative to interpretative AI in cultural heritage contexts.

Design / Methodology / Approach. The paper introduces machine hermeneutics as artistic practice, a conceptual and methodological framework developed through the author's Master's research in New Media and Audiovisual Art. The study follows a mixed-method approach combining machine hermeneutics, adaptive grounded theory, and case study analysis of mediated collective memory. The methodology was implemented through an AI-driven generative data sculpture interpreting over 260,000 archival photographs from Latvian national collections. Computer vision and language models analyse image and metadata information, validated through historian-curated metadata. Interpretative outputs are translated into visual, spatial, sonic, and mid-air haptic expressions within multisensory environments and immersive installations.

Findings. The research demonstrates how AI systems can function not only as generative tools but also as interpretative agents capable of translating symbolic and emotional dimensions of cultural memory into multisensory experiential forms. The study highlights how embodied perception and mid-air haptics enable interpreted cultural data to be experienced beyond purely visual representation.

Originality / Value / Practical implications. The proposed methodology contributes to emerging discussions on interpretative AI in cultural heritage and creative industries. By combining semiotic analysis, emotion mapping, and multisensory interaction, the research outlines a framework for transforming large-scale archival datasets into immersive cultural experiences. Importantly, the study positions interpretative artificial intelligence as a potential ethical instrument for cultural heritage preservation, addressing challenges such as decontextualization, cultural hegemony, and the loss of emotional and semiotic context in digital archives, in line with UNESCO frameworks for responsible AI. Such systems may support new forms of cultural heritage interpretation in museums, archives, and immersive exhibitions while demonstrating practical potential for creative industries and experience-driven cultural environments.

Keywords: machine hermeneutics; interpretative AI; cultural heritage; multisensory experience; immersive media

JEL codes: Z11; O33; L86

EMERGING TRENDS IN

DIGITAL GAMES, GAMIFICATION, VIRTUAL REALITY

Andrejs Birzgals. THE ROLE AND ANALYSIS OF PHYSICAL EVIDENCE IN CYBERCRIME INVESTIGATIONS

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Abstract

Research purpose. Cybercrime is an increasing global threat, making the proper analysis of physical evidence, including Internet of Things (IoT) devices and disguised data carriers, critical for successful convictions. Physical evidence remains underutilized as investigators frequently overlook atypical digital objects during searches. This study addresses this gap by developing a comprehensive methodology to identify, document, and secure physical evidence in cybercrime investigations. Furthermore, it aims to design and evaluate the effectiveness of an interactive, room-scale Virtual Reality (VR) simulation prototype tailored for training law enforcement investigators in executing these procedures and maintaining the chain of custody.

Design / Methodology / Approach. A mixed-methods design was employed, integrating qualitative and quantitative approaches. The theoretical framework was built upon international forensic standards (ACPO, ENFSI, NIST, SWGDE) and semi-structured interviews with cybercrime investigators. To test the methodology, an experimental study involved 40 participants divided into an experimental group (EG, n=20) and a control group (KG, n=20). The EG trained using a custom VR cybercrime simulation (Meta Quest 3), replicating realistic search scenarios, while the KG used traditional didactic materials. Performance was measured via pre/post-tests and practical identification tasks. Data were analyzed using repeated measures ANOVA, independent t-tests, and Mann-Whitney U tests.

Findings. The results demonstrated that while both groups improved, the VR-trained experimental group showed a statistically significant, superior increase in post-test scores ($p < 0.001$). In practical tasks, the EG successfully identified more hidden digital evidence (6.2 vs. 5.1 out of 7) and committed fewer unjustified item seizures (0.8 vs. 1.4 out of 3) than the control group. VR training significantly enhanced spatial awareness, the ability to detect atypical data carriers like spy gadgets or modified IoT devices and understanding of procedural compliance regarding the chain of custody.

Originality / Value / Practical implications. This study merges traditional crime scene investigation with digital forensics through immersive VR training. Law enforcement agencies and police academies are encouraged to integrate this VR simulation and accompanying checklists into their curricula. This approach standardizes search procedures, reduces the risk of overlooking critical masked devices, and minimizes legal vulnerabilities from poorly documented seizures. The VR solution provides a cost-effective, safe environment for investigators to hone skills, thereby enhancing the overall efficacy of cybercrime investigations.

Keywords: cybercrime investigation; digital forensics; virtual reality; chain of custody; disguised data carriers

JEL codes: K42; O33

Andrejs Birzgals. SUPERPOSITION TECHNOLOGY APPLICATION IN INTERACTIVE MANUAL THERAPY TRAINING SYSTEMS

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Abstract

Research purpose. Growing demands in rehabilitation education highlight a lack of supervised hands-on practice. This hinders students' acquisition of precise anatomical orientation and pressure control, emphasizing the need for technology-driven solutions. This study aims to develop and evaluate an augmented reality (AR) prototype utilizing hand-tracking and “ghost-hand” superposition technology to bridge the theory-practice gap and improve the acquisition of practical skills, spatial anatomical awareness, and pressure control in manual therapy and massage education.

Design / Methodology / Approach. A mixed-methods approach was applied, involving nine manual therapy students. The control group (n=6) received traditional training; the experimental group (n=3) used an AR prototype (Meta Quest 2/3) with real-time visual feedback and anatomical overlays. Both completed theoretical and "blind" AR-based practical assessments (measuring time offset, hand angle, finger position, and pressure errors) before and after a four-week cycle.

Findings. Both groups improved equally in theoretical knowledge. However, the experimental group showed significantly superior practical execution, specifically in reducing hand angle and finger positioning errors. Qualitative data revealed that AR accelerated error recognition, lowered psychological barriers, and boosted motivation, though instructor tactile feedback remains essential.

Originality / Value / Practical implications. The originality of this research lies in validating an interactive simulation that specifically targets manual therapy ergonomics. Practically, a hybrid curriculum combining AR for trajectory accuracy with traditional methods for tactile development reduces instructors' routine correction workload, allowing them to focus on complex clinical reasoning. Future studies should expand the sample size and integrate haptic pressure sensors to evaluate long-term skill retention and clinical safety.

Keywords: augmented reality; hand-tracking; superposition technology; manual therapy education; interactive simulation

JEL codes: I23; O33

Kaspars Steinbergs[1], Anete Berza[2]. FROM COMPETENCE FRAMEWORK TO PLAYABLE MISSIONS: A LATVIA CASE OF GREENCOMP AND CLIMATE LITERACY IN GAMIFIED DIGITAL ESCAPE ROOMS

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Abstract

Research purpose. This study examines the potential of gamified digital escape rooms in supporting climate literacy and sustainability competences in the context of secondary education in Latvia. This research is conducted within the framework of the Erasmus+ project "The Use of Digital Escape Rooms as an Immersive Learning Environment for Advancing Climate Literacy Education in Secondary Schools – Eco-Escaper" that aims to enhance climate literacy among European secondary school students by strengthening teachers' competencies through innovative, gamified learning methods. Drawing on the European Sustainability Competence Framework (GreenComp), this study aims to (1) explore teachers' perceptions regarding the feasibility of implementing escape-room-based learning, (2) examine the barriers and enablers for the adoption of such a teaching approach, and (3) translate the findings from these two steps into design requirements for the development of escape-room scenarios.

Design / Methodology / Approach. An online questionnaire, designed as a structured instrument, is used to gather data from a group of teachers. The questionnaire aims to explore the following aspects: (a) the perceived importance of climate literacy and sustainability education, (b) self-perceived competence across the different domains of the GreenComp framework, (c) past experience with game-based learning, (d) contextual factors that may influence the feasibility of implementing escape-room-based learning in the national education system, and (e) the desired features of an escape room in terms of puzzles, storyline, feedback and hinting mechanisms, collaboration versus competition, and rewards.

Findings. The results of the research on sustainability education highlight the necessity for teachers' professional development. The results of the research on digital education suggest that the level of preparation and infrastructure availability vary. Consequently, the Latvian baseline follows a pragmatic adoption logic. Engagement formats are important, but adoption depends on low preparation burden, access to critical infrastructure, and alignment between curriculum, instruction, and assessment. The results identify three conditions that must be met for Eco-Escaper implementation in Latvia: ready-to-use yet editable missions with low design burden and technical complexity; short activities that fit typical lesson durations and accommodate uneven device availability; and socially interactive scenarios that offer immediate feedback and clear connections between puzzle actions and learning outcomes that align with GreenComp.

Originality / Value / Practical implications. The study connects competence frameworks and gamified learning by focusing on the specific requirements and constraints of teachers, and thus can be considered valuable for the Latvian context and beyond. The study can serve as a practical basis for developing escape room missions specifically designed for climate literacy, and its template can be reused by Latvian and international teachers.

Keywords: climate literacy; GreenComp; digital escape room; gamified learning design; teacher professional development

JEL codes: I21; Q54; O33

Kseņija Žiļcova-Ziņina[1], Ksenija Djačenko[2], Andrejs Stanislavs Kučiks[3], Maksims Lavrentiks[4]. **DEVELOPING AN INTERACTIVE FINANCIAL LITERACY GAME USING VISUAL NOVEL DESIGN: A NARRATIVE-BASED APPROACH TO RISK RECOGNITION**

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Abstract

Research purpose. The project is developing an interactive financial literacy game in the format of a visual novel. The episodes are based on real-life financial situations. The game combines a non-linear narrative with mechanics for identifying risk indicators, allowing the player to analyze situations and reach one of several endings depending on the outcome.

Design / Methodology / Approach. In the project, an interactive financial literacy game is being developed in the format of a visual novel for the needs of the Latvian Bank. The game consists of episodic storylines inspired by real-life events and authentic financial situations, such as fraud cases, investment decisions, and the creation of a financial safety net. It integrates two mutually complementary modes. In the first mode, the player follows a nonlinear narrative, watches cinematic scenes, and makes choices that shape branching storylines. In the second mode, the player actively analyses the financial situation by identifying risk indicators (red flags) on an interactive board featuring note elements. After selecting the appropriate warning signs, the result is visualised as a slider, and the linear storyline concludes with one of three possible endings depending on the player's performance.

Findings. The game design demonstrates that financial literacy content can be delivered in a significantly more engaging and comprehensible way when embedded within a narrative-driven structure. The combination of narrative decision-making and risk-indicator identification enables players not only to observe financial situations but also to actively evaluate them. This dual structure enhances learning by blending emotional engagement with practical reflection, making complex financial concepts easier to recognise and retain.

Originality / Value / Practical implications. The project contributes to the fields of game-based learning, financial education, and narrative-based instructional design. It illustrates how the visual novel format can be effectively adapted for educational purposes beyond pure entertainment, particularly by transforming real-life situations into interactive learning episodes. The two-mode structure provides a valuable model for future research on how different forms of interaction influence comprehension, attention, and risk recognition in financial education.

The game can serve as a practical educational tool for banks, educators, and financial literacy initiatives, helping to explain everyday financial risks in an accessible and relatable format. It is especially suitable for younger audiences or users with limited financial experience, as abstract financial concepts are presented through concrete, real-life scenarios. The interactive format fosters critical thinking, sharpens the ability to spot warning signs, and trains safer decision-making in realistic contexts.

The project's originality lies in its unique integration of a visual novel, nonlinear storytelling, and risk-indicator identification mechanics within a single financial literacy experience. Unlike traditional educational materials, the game draws directly from real-life-inspired episodes and offers both narrative immersion and active analytical engagement. The three possible endings in the second mode add a consequence-based learning dimension, making the overall experience more dynamic, memorable, and impactful.

Keywords: financial literacy; game; visual novel; education

JEL codes: I21; G53

Alise Čukova.WHEN VIRTUAL REALITY BECOMES TOO REAL: HOW ETHICALLY APPROPRIATE IS VIOLENCE IN VR GAMES?

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Abstract

Research purpose. The aim of this research is to analyze the ethical appropriateness of violence in virtual reality games and to examine its potential impact on players' behavior, moral reasoning, and perception of violence in real life.

Design / Methodology / Approach. The study is based on qualitative research methods, including literature review and theoretical analysis. Scholarly sources from the fields of virtual reality studies, psychology, ethics, and posthumanism were analyzed to explore immersion, moral responsibility, and the consequences of violent virtual experiences. Case examples from VR games and immersive narratives were also used to support the theoretical discussion.

Findings. The results indicate that highly immersive VR environments intensify emotional and psychological involvement compared to traditional video games, which can increase desensitization to violence and blur the distinction between virtual and real-world actions. While some studies suggest that violent games do not directly cause violent behavior, evidence shows that repeated exposure to virtual violence may influence empathy, moral judgment, and attitudes toward aggression. The research highlights that virtual crime can have real psychological and social consequences and therefore should be taken seriously from both ethical and legal perspectives. Furthermore, the findings emphasize the responsibility of developers and users to critically evaluate the necessity and representation of violence in VR content.

Originality / Value / Practical implications. This research contributes to the growing body of knowledge on virtual reality ethics by highlighting how immersive environments intensify users' emotional and psychological engagement compared to traditional digital media. The findings suggest that VR-specific factors such as presence, embodiment, and haptic feedback play a critical role in shaping moral perception and responses to violence. The study also expands existing discussions on media violence by emphasizing that the impact of violent content in VR cannot be fully understood through frameworks developed for non-immersive games. Furthermore, it opens directions for future empirical research, particularly experimental studies examining long-term effects of VR exposure on empathy, moral reasoning, and behavioral patterns.

The results underline the need for responsible design practices in VR game development, especially regarding the representation and necessity of violent content. Developers should consider implementing ethical design guidelines, content warnings, and alternative mechanics that do not rely on violence as a primary engagement tool. The study also suggests that policymakers and regulatory bodies may need to adapt existing frameworks to address the unique characteristics of VR experiences, including their psychological intensity. Additionally, educators and parents should be aware of the potential impact of immersive violent content, particularly on younger audiences, and promote critical media literacy when engaging with VR technologies.

This research provides a novel perspective by specifically focusing on the ethical implications of violence within virtual reality environments rather than general video game contexts. Its value lies in integrating interdisciplinary approaches, combining insights from ethics, psychology, posthumanism, and VR studies to address a relatively underexplored issue. By emphasizing the role of immersion and the blurring boundary between virtual and real experiences, the study offers a deeper understanding of how VR may reshape moral frameworks and social norms. It also contributes to ongoing debates about virtual crime and responsibility in digital environments.

Keywords: virtual reality; violence; ethics; immersion; morality; virtual crime

JEL codes: D91

Anete Berza. THE IMPACT OF GAME-BASED LEARNING ON MOTIVATION AND KNOWLEDGE ACQUISITION IN AGILE METHODOLOGY TRAINING

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Abstract

Research purpose. This study aims to compare game-based and didactic learning methods in acquiring knowledge about the Agile approach by analysing participants' motivation, level of engagement, and outcomes, to provide recommendations for curriculum planning in study courses.

Design / Methodology / Approach. Two groups of computer game design students (n=44) were selected for the study. The control group received Agile training using didactic teaching methods, while the experimental group was taught using game-based methods, including two simulation games – Kanban and Scrum. Both groups completed a Kanban and Scrum knowledge test, the Academic Motivation Scale (AMS) questionnaire, and the Utrecht Work Engagement Scale – Student Version (UWE-S) test before and after the training.

Findings. The control group, which acquired Agile knowledge through didactic methods, showed statistically higher results in both the Kanban and Scrum tests compared to the experimental group. Increased Scrum knowledge accompanies an increase in Kanban knowledge, and vice versa. A decrease in motivation is not directly related to improved test results. The experimental group had higher average scores in the intrinsic motivation dimensions: orientation towards achievement and orientation towards stimulating experiences, as well as in the extrinsic motivation dimension: identified regulation.

Originality / Value / Practical implications. In continuation of this research, the authors recommend further evaluating the balance of students' emotional workload and the practical planning of the learning sessions.

An agile course curriculum design is suggested to combine both learning methods. The traditional method offers a stronger theoretical understanding, while the game-based approach enhances emotional engagement and motivation.

The study contributes value by integrating motivation and student engagement, providing a multidimensional view of learning effectiveness. Furthermore, it highlights how different pedagogical strategies impact not only cognitive outcomes (test results) but also affective factors (motivation, engagement), which are critical for long-term learning and application in practice.

Keywords: game-based learning; didactic learning; Agile; Kanban; Scrum

JEL codes: I21

Aleksandrs Priedītis. RISE OF THE METAGAME: SITUATING MODERN VIDEO GAME STRUCTURES IN AESTHETIC FRAMEWORKS

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Abstract

Research purpose. This study aims to situate metagame systems (here understood as gameplay systems surrounding core gameplay, such as character progression or game economies) within existing frameworks for game aesthetics. Contemporary debates on games as art often privilege forms and genres that foreground aesthetic experience within core gameplay, while overlooking the growing prominence of metagame systems. This paper aims to critically examine whether metagames contribute to, transform, or undermine the artistic status of games. It asks whether the pleasures afforded by metagame structures can be meaningfully situated within established aesthetic theory, and whether their increasing dominance signals a shift away from viewing games as artworks toward understanding them as hybrid artefacts combining aesthetic and instrumental functions.

Design / Methodology / Approach. The study follows the tradition of analytic aesthetics and adopts a conceptual methodology from Kantian philosophy of art. First, it draws on Kantian distinctions between the agreeable, the good, and the beautiful, with particular attention to the notion of disinterestedness. Second, it engages with contemporary philosophical theories of games as art, especially C. Thi Nguyen's agency-centered analytic game aesthetics model, in order to test their applicability to metagame-dominated experiences.

Findings. The analysis suggests that metagame systems primarily generate forms of pleasure that are closely tied to instrumentality, rewards, and extrinsically motivated engagement. Unlike core gameplay experiences that may invite reflective or disinterested appreciation, metagames tend to encourage goal-oriented behaviour structured around accumulation and efficiency. As a result, they occupy a marginal or even conflicting position within theories that frame games as artworks. This indicates that the increasing centrality of metagames in contemporary game design complicates the claim that games can be straightforwardly understood as artistic artefacts.

Originality / Value / Practical implications. This paper contributes to ongoing discussions in game studies and aesthetics by foregrounding an underexamined aspect of game design and its philosophical implications. It proposes a conceptual distinction between artistic and non-artistic components within games, offering a more nuanced framework for analysing hybrid digital artefacts. Practically, the findings encourage designers, scholars and critics to assess the role of metagame systems, particularly in relation to player experience and cultural valuation. Moreover, by highlighting metagames as the currently dominating approach to game design, the study provides a critical framework to assess the direction of the games industry.

Keywords: metagame; ludoaesthetics; games as art; Kantian aesthetics; game design

JEL codes: Z11

Jazeps Rutkis. REVIEW OF THE LATVIAN GAME INDUSTRY IN THE BALTIC CONTEXT

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Abstract

Research purpose. This study analyzes the Latvian game industry's evolution since 2014, noting a fourfold turnover increase and a 250-specialist workforce. It compares Latvia's ecosystem and educational programs against Estonia's and Lithuania's as well as placing it in the broader European and Global context.

Design / Methodology / Approach. The study employs a descriptive and comparative analysis of industry data, including turnover, profit, and employee statistics. It evaluates the organizational structure of the Baltic game sectors by examining the roles of national associations, state support mechanisms, and educational opportunities across Latvia, Estonia, and Lithuania.

Findings. Latvia's industry has seen turnover reach new heights after 2022, although profits have trended downward. The sector is characterized by small to medium enterprises producing globally recognized titles such as *Rise of the Golden Idol* and *Spiderheck*. Comparatively, Estonia benefits from robust state support and centralized coworking spaces, while Lithuania's market has expanded significantly due to an influx of developers from neighboring regions, despite fewer local educational opportunities.

Originality / Value / Practical implications. The findings contribute to a better understanding of how small-scale national game industries navigate regional competition. It highlights the importance of "talent migration" and state-level strategic support in shaping the digital economy of the Baltic region.

The study identifies a critical need for sustained state support in Latvia to match the competitive advantages of its neighbors. It also emphasizes the vital role of professional associations like LSIA in fostering industry growth through monthly meetups, annual awards, and events like the Global Game Jam.

This provides a contemporary, data-driven snapshot of the Baltic game development landscape, offering specific insights into the resilience and growth patterns of the Latvian industry relative to Estonia and Lithuania.

Keywords: game industry; Latvia; Baltic states; game development; LSIA; economic analysis

JEL codes: L86; O14; R11; I23