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CONTENTS

SECTION

“Economy, Entrepreneurship, Safety and Real Estate Management”

SUBSECTION

“Business Engineering, Economics, Finance and Management”

EX-POST PHASE IN BUSINESS NEGOTIATION PROCESS AND LINKAGE TO BUSINESS OBJECTIVES <i>Birkena L.</i>	8
QUALITATIVE RESEARCH STUDY OF TRADITIONAL MASCULINITY IN ADVERTISING: ANALYSIS OF CONSUMER PERCEPTIONS <i>Kreichbergs T.</i>	9
ACHIEVING SELF-SUSTAINABILITY OF THE VENTURE CAPITAL MARKET IN LATVIA <i>Matisone A., Lāce N.</i>	10
VISUAL PROFILING OF SME GOVERNANCE APPROACHES <i>Millers M., Gaile-Sarkane E.</i>	11
THE RESPONSE OF GENERATIONS X AND Y CONSUMERS TO THE COVID-19 PANDEMIC <i>Oganisjana K., Kozlovskis K., Andersone I.</i>	12
DIVERSITY MANAGEMENT AS A KEY ELEMENT OF BUSINESS PROCESS MANAGEMENT FOR ENSURING ORGANIZATIONAL SUSTAINABILITY <i>Pīpiķe R.</i>	13
ECOLOGIES OF BIOPHARMA BUSINESS MODELS AND ASPECTS OF SUSTAINABILITY <i>Segers J-P., Franco D., Miķelsone E.</i>	14
EVALUATION METHODOLOGIES APPLIED IN EX-ANTE AND EX-POST REPORTS OF LATVIA PUBLIC INVESTMENT POLICY <i>Voroņenko L., Voronova I.</i>	15
THE ASSESSMENT OF THE ESG MATURITY IN THE BALTIC COMPANIES <i>Zumente I., Bistrova J.</i>	16

SUBSECTION

“Innovation and Quality Technologies”

INCREASING THE QUALITY OF THE PROFESSIONAL COMPETENCE ASSESSMENT PROCESS: AN INNOVATIVE APPROACH <i>Kavosa M., Lapiņa I.</i>	18
ESTABLISHING A DATA DRIVEN APPROACH FOR CONSUMER JOURNEY MAPPING AND MEASUREMENT <i>Kokins G.</i>	19
THE STRATEGY DEVELOPMENT PROCESS: INTEGRATION OF AN ADAPTED DECISION-MAKING MODEL <i>Medne A., Lapiņa I., Zeps A.</i>	20

DESIGN THINKING TO REINVENT VALUES IN A BUSINESS MODEL: A 4-STEP APPROACH <i>Miķelsone E., Segers J-P.</i>	21
HIGHER EDUCATION AND INDIVIDUAL ENTREPRENEURIAL ORIENTATION: EMPIRICAL EVIDENCE FROM BUSINESS STUDENTS IN LATVIA AND POLAND <i>Ņikitina T., Licznarska M., Ozoliņa-Ozola I., Lapiņa I.</i>	22
EXPLORATION OF THE NATIONAL OPINION ON THE USE OF STANDARDS AND PARTICIPATION IN STANDARDS DEVELOPMENT <i>Pīlēna A., Pilmanis I., Mežinska I., Lapiņa I.</i>	23
DIGITAL TRANSFORMATION AND THE CHANGING SHAPE OF QUALITY MANAGEMENT PRACTICES <i>Robertsons G., Lapiņa I.</i>	24
SUBSECTION	
“Internal Security and Civil Protection”	
RISK SOURCES (EVENTS) FOR FIRE RISK ASSESSMENT IN ORDER TO PLAN NECESSARY MEASURES IN URBAN AREAS <i>Baltmanis M., Bazone G.</i>	26
THE CONCEPT OF SUSTAINABLE ECONOMIC DEVELOPMENT AND SOCIAL RESPONSIBILITY IN THE EUROPEAN UNION <i>Bartušauskis J., Jokuma E., Plotka K., Jirgena B., Liepa E., Viržbickis J.</i>	27
IMPROVEMENT OF LABOR PROTECTION SYSTEM AT THE CARGO HANDLING COMPANY IN THE PORT <i>Bazone G., Ambražēvičs A., Urbāne V.</i>	28
NEW WORKING ENVIRONMENT RISK ANALYSIS MODEL WHEN PERFORMING REMOTE WORK <i>Bazone G., Ieviņš J.</i>	29
TRUE <i>KPI</i> IN EVALUATING CURRENT CUSTOMS PERFORMANCE AND THE ENVIRONMENT <i>Čevers A., Krastiņš A., Rudzītis N.</i>	30
FIRE-FIGHTING TECHNOLOGY INNOVATIONS USING WATER <i>Kisļaks J., Roenko V.</i>	31
DEVELOPMENT OF LABOUR PROTECTION REQUIREMENTS FOR OFFICIALS OF THE STATE FIRE AND RESCUE SERVICE BY PERFORMING PREVENTIVE, PREPAREDNESS, RESPONSE AND MITIGATION MEASURES IN CASE OF LEAKAGE OF DANGEROUS CHEMICALS AT INCREASED HAZARD OBJECTS <i>Latņikovs S., Ziemeļis M., Malahova J.</i>	32
CITES AND SUPPLY CHAIN SECURITY <i>Lazdiņa I., Rudzītis N., Čevers A., Gulbis A.</i>	33
HEALTH SYSTEM PERFORMANCE ASSESSMENT FOR IMPROVEMENT OF THE PUBLIC FINANCIAL MANAGEMENT SYSTEM <i>Pētersone M., Ketners K.</i>	34

TRENDS IN THE DEVELOPMENT OF FIRE FIGHTING AND RESCUE EQUIPMENT AND SPECIAL EQUIPMENT. ANALYSIS AND IMPROVEMENT OF THE NORMS SET BY THE REGULATORY FRAMEWORK <i>Politika V., Ļabis J., Malahova J.</i>	35
---	----

DIFFERENCES IN THE APPLICATION OF METHODS FOR ASSESSING THE EFFECTS OF ACCIDENTS AND THE IMPACT ON THE RISK LEVEL AT THE INCREASED HAZARD OBJECT <i>Urbans M., Malahova J., Jemeļjanovs V.</i>	36
---	----

SUBSECTION

“Decision making in logistics and business management”

EU-WIDE POLICY MEASURES AND LOGISTICS IN THE COVID-19 ERA: EXPECTATIONS, STATISTICS AND MODELING RESULTS <i>Auziņa-Emsiņa A.</i>	38
---	----

THE CHALLENGES OF PUBLIC ADMINISTRATION DURING COVID-19 PANDEMIC: THE ROMANIAN CASE <i>Bercu A-M.</i>	39
--	----

TRANSPORT INVESTMENT ASSESSMENT USING ANALYTIC NETWORK PROCESS <i>Jurgelāne-Kaldava I., Hudenko J., Ozoliņa V., Skribans V.</i>	40
--	----

HOW DIGITAL ARE ALBANIAN ENTERPRISES: A MICROECONOMIC ANALYSIS <i>Kalaj E., Merko F.</i>	41
---	----

DECISION-MAKING IN THIRD PARTY LOGISTICS: DEVELOPMENT OF THEORETICAL FRAMEWORK <i>Kotļars A., Skribans V.</i>	42
--	----

USING THE BALANCE SCORECARD FOR OUTGOING ACCOUNTS AS A METHOD FOR STRATEGIC DECISION SUPPORT <i>Lipták K., Musinszki Z.</i>	43
--	----

A CHOICE OF LOGISTICS RESEARCH METHODOLOGY <i>Počs R.</i>	44
--	----

MODELLING THE SPREAD OF THE COVID-19 IN LATVIA <i>Skribans V.</i>	45
--	----

ECONOMIC GROWTH AND ENERGY CONSUMPTION: AN EMPIRICAL STUDY OF SELECTED DEVELOPED COUNTRIES <i>Uçan O., Budak H., Aktekin E.D.</i>	46
--	----

SUBSECTION

“Territorial and Regional Development, Construction Management”

THE ROLE OF CREATIVE INDUSTRIES IN SUSTAINABLE DEVELOPMENT OF SMALL CITIES IN LATVIA <i>Judrupa I., Zemīte I., Kunda I.</i>	48
--	----

ENTREPRENEURSHIP IN THE SYSTEM OF RESOURCES FOR THE URBAN AGGLOMERATIONS DEVELOPMENT: CASE OF KRASNODAR CITY AGGLOMERATION <i>Kolba A., Tereshina M.</i>	49
---	----

RENEWABLE ENERGY PROMOTION WITH ECONOMIC INCENTIVES: A CASE OF THE EU <i>Melnyk L., Kubatko O., Piven V.</i>	50
PROJECT MANAGEMENT IN RUSSIAN FEDERATION PUBLIC AUTHORITIES: DEVELOPMENT FACTORS AND TECHNOLOGIES <i>Miroshnichenko I., Tereshina M., Shpiro L.</i>	51
MARITIME MULTI-USE APPROACH IN THE BALTIC SEA REGION: OFFSHORE WIND ENERGY AND TOURISM CASES <i>Neimane L., Ozoliņa L., Saparniene D.</i>	52
DRIVERS OF GREEN INVESTMENT DEVELOPMENT IN UKRAINE: A RETROSPECTIVE ANALYSIS <i>Pimonenko T., Tambovceva T., Lyulyov O., Us Y.</i>	53
STRATEGIC REGIONAL DEVELOPMENT PLANNING: METHODS AND TOOLS <i>Veckalne R., Tambovceva T.</i>	54
LIFE CYCLE ASSESSMENT (LCA) ASPECT OVERVIEW FOR SUSTAINABLE URBAN PLANNING FOR DEVELOPMENT <i>Zariņš G., Vanags J.</i>	55

SUBSECTION

**“BUSINESS ENGINEERING, ECONOMICS,
FINANCE AND MANAGEMENT”**

EX-POST PHASE IN BUSINESS NEGOTIATION PROCESS AND LINKAGE TO BUSINESS OBJECTIVES

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Abstract]. Aside from the investment in negotiation mastery of managers or other employees representing a company in business negotiations, should there be any other solutions for the contributing success of a company by business negotiations? This question has brought negotiation research in the field of business negotiation management on a corporate level. The aim of this article is to investigate the importance of conformity between business objectives and business negotiation processes by a descriptive linkage model of business negotiation process and business objectives. The article contains analysis of academic literature. Moreover, the article investigates and reveals the nature of the key outcomes of ex-post phase that constitute the linkage of the ex-post negotiation phase to business objectives of a company and contribute to the achievement of them. The direct link between ex-post phase and corporate business objectives manifests in the information flow by shaping the business objectives of the next period. Improvements in the overall negotiation performance of a company gained through the satisfaction of a company`s learning needs, facilitates achievement of corporate goals through better deals and contribution to relationships. Thus, the indirect link from ex-post phase to business objective becomes visible.

Keywords: *Negotiation process, Negotiation phase, Ex-post phase, Business objectives, Negotiation outcome.*

JEL Classification: M100

QUALITATIVE RESEARCH STUDY OF TRADITIONAL MASCULINITY IN ADVERTISING: ANALYSIS OF CONSUMER PERCEPTIONS

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Abstract. The aim of the research is to explore consumer perceptions of traditional masculinity in advertising, determining the effectiveness of these advertising efforts of offering brand's version of masculinity to men. The scientific literature on the subject of masculinity in advertising is increasingly suggesting a cultural shift that is taking place in Western society and the need for brands to adopt more inclusive depictions of masculinity. This research, however, is analyzing the traditional versions of masculinity and the impact of that through advertisers' perspective, by developing a methodology of analyzing consumer perceptions through sentiment, discourse, statistical, and qualitative content analysis. The results show that contrary to what significant amount of scientific literature suggests, traditional masculinity can be well perceived by consumers, especially if the advertisement is presenting traditional masculinity with humor. The results also indicate correlation between likeability and consumer engagement and the importance of the main character and characteristics displayed in the advertisement for receiving positive consumer feedback.

Keywords: *Advertising, Communication, Marketing, Traditional masculinity.*

JEL Classification: M37, M31

ACHIEVING SELF-SUSTAINABILITY OF THE VENTURE CAPITAL MARKET IN LATVIA

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Abstract. The first part of the study defines features of the self-sustainable VC market (a status which a government should help the market to reach). The features are defined based on triangulation of the scientific literature qualitative content analysis' outcomes with the Baltic VC market expert opinions. The second part of the study is devoted to assessing whether government policies can influence the various drivers of the VC market development and to what degree the Latvian government is exercising possibility to influence these factors. The results of the Importance-performance matrix analysis show that many factors, which have significant impact on the market development, don't receive sufficient influence from the government. The authors propose using the Importance-performance matrix analysis results as a guideline on how and with which means the government should support VC market development in Latvia.

Keywords: *Importance-performance matrix analysis, Public interventions, Self-sustainability of the market, Venture capital.*

JEL Classification: G18, G24

VISUAL PROFILING OF SME GOVERNANCE APPROACHES MVU PĀRVALDĪBAS PIEEJU VIZUĀLĀ PROFILĒŠANA

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Anotācija. Lielu daļu mazo un vidējo uzņēmumu (MVU) vada paši to īpašnieki vai dibinātāji. Pārvaldības pieejas un darbības rezultāti šādos uzņēmumos var būt ar nozīmīgām atšķirībām. Vadības procesi nelielos uzņēmumos nevar tikt īstenoti tāpat kā lielos uzņēmumos ierobežoto resursu un kompetenču dēļ. Lai aprakstītu daudzveidību, kāda pastāv MVU lokā, tika veikts empīrisks pētījums par uzņēmumu pārvaldības pieejām un rezultātiem 205 Latvijas īpašnieku vadītos MVU. Pētījuma ietvaros tika izstrādāta uzņēmumu pašvērtējuma rezultātu vizualizācijā balstīta uzņēmumu tipoloģija. Tipoloģiju veido 8 MVU raksturīgi uzņēmumu profili, ar katram profilam raksturīgām pārvaldības īpašībām, potenciāliem tālākās attīstības izaicinājumiem un riskiem. Šāda rezultātu vizualizācijā balstīta tipoloģija ir labāk uztverama arī pašiem MVU vadītājiem, kuriem bieži nav formālas izglītības un pieredzes vadības zinībās. Šādu tipoloģiju var izmantot MVU uzņēmumu darbības analīzē, attīstības plānošanā, kā arī apmācību procesā augstākajās mācību iestādēs un vadītāju profesionālās pilnveides programmās.

Keywords: *Īpašnieku vadīti uzņēmumi, Mazie un vidējie uzņēmumi, Pārvaldība, Uzņēmumu īpašnieki-vadītāji, Vadība, Vadības procesi.*

JEL Classification: M10, M12, G30, L10

THE RESPONSE OF GENERATIONS X AND Y CONSUMERS TO THE COVID-19 PANDEMIC

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Abstract. This study analyses the changes which have taken place in consumer behavior and purchasing priorities caused by the COVID-19 pandemic. The emphasis is laid on the comparative analysis of respondents of highly active purchasing ages who represent Generation X (39-58) and Generation Y (18-38). The set of research methods used in this study consists of comparative descriptive analysis, qualitative content analysis, reliability analysis and Chi-square test of the corresponding quantitative and qualitative data collected in an electronic survey. It was revealed that the main changes in consumer behavior are conditioned by personal finances and safety & health related measures intensified during the pandemic. Statistically significant differences between changes in purchasing priorities of the two generations are found for: meat products, dairy products, fruit & vegetables, non-alcoholic drinks, alcoholic drinks, clothes & shoes, body care & cosmetics, entertainment (pay TV services, computer games, etc.) and transport out of 17 essential product groups and services.

Keywords: *Consumer behavior; COVID-19; Generations X and Y; Open innovation; Purchasing priorities.*

JEL Classification: D91, E21, M31

**DIVERSITY MANAGEMENT AS A KEY ELEMENT OF BUSINESS
PROCESS MANAGEMENT FOR ENSURING ORGANIZATIONAL
SUSTAINABILITY**
**DAŽĀDĪBAS VADĪBA KĀ BIZNEŠA PROCESU VADĪBAS
PAMATELEMENTS ORGANIZĀCIJU ILGTSPĒJAS
NODROŠINĀŠANAI**

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Anotācija. Dažādības vadības koncepcija ir apzināti centieni, ko organizācijas vadītāji īsteno savā darbā, lai pieņemtu darbā dažādus talantus un atbalstītu iekļaujošu darba vidi, kas vienlīdz vērtē un aizsargā katru savu darbinieku, nodrošinot resursus, no kuriem iegūt zināšanas, radīt risinājumus, cienot personības identitātes atšķirības. Tiek izšķirtas sešas pamat šķirības identitātes kontekstā – vecums, dzimums, seksuālā orientācija, etniskā izcelsme, fiziskās spējas, rase. Tas ir īpaši būtiski biznesa institūciju, tajā skaitā mākslas institūciju ilgtspējas nodrošināšanai. Viens no dažādības vadības pamatelementiem, ir universālais dizains. Ir iespēja radīt organizācijas attīstības modeļi, kura ietvaros organizācija īsteno tādus organizācijas pārvaldības procesus, kas nodrošina atvērtību un attīstību attiecībā uz cilvēkiem, kas ir resurss ikvienā organizācijā, attiecībā uz vidi, kādos tiek īstenoti biznesa procesi, attiecībā uz komunikāciju (gan iekšējo, gan ārējo– darbinieku savstarpējās komunikācijas modeļi, komunikācija ar klientiem, nodrošinot organizācijas ilgtspējīgu attīstību. Darbā kā pētniecības subjekts izvēlēti muzeji, tomēr pētniecības rezultāti būs izmantojami ikvienas organizācijas ilgtspējīgā attīstībā. Darbā piedāvāts izstrādāt instrumentus, kas būtu pielietojami organizāciju ilgtspējīgā attīstībā, izmantojot dažādības vadības metodes. Darba mērķis ir pētījuma ietvaros radīt četrus zinātniskus jaunumus. Hipotēze - muzeju organizācijas vadības modeļu dizainā ieviešot dažādības vadības metodes, muzeju ekonomiskā un sociālā kapitāla pieaugums būtu lielāks nekā tad, ja muzeju attīstība notiktu saskaņā ar esošajiem muzeju pārvaldības modeļiem. Izmantojot nākotnes pētījumu metodes – sistemātiska iespējamo, ticamāko un vēlamu nākotnes izpēte. Tā var iekļaut pasaules uzskatus, mītus, ticību un pārliecību, kas ir katras iespējamās nākotnes pamatā. Metožu mērķis ir sistemātiska iespējamo, ticamāko un vēlamu nākotnes izpēte nosakot muzeju attīstības scenārijus. Nākotnes pētījumu uzdevums nav tikai tendenču apkopošana, bet nākotnes ietekmēšana, radot argumentāciju tagadnē pieņemamiem lēmumiem. Organizāciju socioloģijas pētījumu metodes, kas to dabiskajā pieejā pēta organizācijas. Pieejā tiks pētītas mākslas aģentu un mākslinieku neformālās attiecības un noteikts to iespējamais attīstības potenciāls, līderības procesi, organizāciju kultūra un tās ietekme uz veiksmīgu sadarbību un abpusējo labumu. Par galveno uzdevumu organizāciju socioloģijas kontekstā tiek uzskatīta organizācijas izdzīvošana.

Keywords: *Diversity management, Organizational development, Sustainable business*

JEL Classification: Y4

ECOLOGIES OF BIOPHARMA BUSINESS MODELS AND ASPECTS OF SUSTAINABILITY

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Abstract. Biopharmaceutical (pharma and biotech) companies are entering in its next S-curve of growth as companies work to transform an array of innovations into powerful new therapeutic tools. They use a combination of different business models. From a theoretical point of view, business models can be based on various approaches and contexts. The main trigger is engaging in collaborative networks. Therefore, the main grouping discipline throughout the classification of business models is the openness towards sharing innovation. Big pharmaceuticals face a broken BM. They need to replenish their pipelines with new and innovative drug candidates. This is driving them towards new and dedicated – smaller – biotechnology firms as a window on leading-edge technological developments, giving them room to better focus on their core profile. This phenomenon opens room for sharing innovation and developing open business models. Next to the traditional closed business models, an ecology of new business models is emerging. Business model development continues in the direction of digital, Covid-19 induced, idea management, sustainable and other business models. There is no “One-Size-Fits-All Model”, but a continuous development of new and disruptive business models that can accommodate the transition from a product-driven approach towards a connected patient-centered healthcare ecosystem with personalization of medicine in key therapeutic and disease areas. The present paper attempts to enrich the body of knowledge and abundant literature on business models in biopharma and to complement this with emerging strategies towards sustainability in the biopharmaceutical industry.

Keywords: *Biopharmaceuticals, Business models, Sustainability.*

JEL Classification: L26, L65, O32, Q01

EVALUATION METHODOLOGIES APPLIED IN EX-ANTE AND EX-POST REPORTS OF LATVIA PUBLIC INVESTMENT POLICY

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Abstract. Public funding policy demands efficient tools for distribution of investments delivered from society taxes with the highest benefits for society. The challenge of evaluation is to predict forecast society gains in perspective of 5 – 7 years and model the future needs of society. European Structural funds distribution is related to ex-ante and ex-post evaluation reports. Ex-ante and ex-post reports transform common Europe strategical aims into national actions and defines measurement systems and indicators to evaluate if aims have been reached after investments. The research aims to identify commonly used methods of quantitative and qualitative evaluation, measurements systems used in Latvia public funding policy and identify core indicators in these systems. The analysis provides also comparative evaluation of ex-ante and ex-post reports interaction. Research results provide Latvia public funding distribution measurement system framework and identify through ex-post reports the main risk areas in initial planning of society benefits. Research results can be in public funded investment impact evaluation through social targets and setting the cost – benefit analysis in level of multiple project program.

Keywords: *Ex-ante reports, Ex-post reports, Multi-criteria evaluation.*

JEL Classification: C52, I38, D61

THE ASSESSMENT OF THE ESG MATURITY IN THE BALTIC COMPANIES

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Abstract. Sustainability has taken over the corporate world as wider disclosure and higher performance is expected around the environmental, social and governance (ESG) matters from companies globally. The firms across the Baltic states are no exception and several studies recently has pointed towards higher ESG consciousness in the region – both by the stock listed companies as well as the financiers. Recent data on the privately held companies, however, is missing, therefore this study aims to capture the ESG adoption and implementation practices of the privately held companies operating in the Baltic countries - Lithuania, Latvia and Estonia. By analysing survey data, the results shall shed light on the current stance of the ESG maturity, main drivers, and potential challenges that the companies face in their ESG adoption practices. By addressing the shortcomings highlighted by this research, the policy makers and business practitioners can explore the ways how to foster a wider adoption of ESG policies across the Baltic companies.

Keywords: *ESG, Sustainability reporting, Non-financial disclosure.*

JEL Classification: G30, G32, Q56

SUBSECTION

“INNOVATION AND QUALITY TECHNOLOGIES”

INCREASING THE QUALITY OF THE PROFESSIONAL COMPETENCE ASSESSMENT PROCESS: AN INNOVATIVE APPROACH

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Abstract. The aim of the study is to promote in-depth research of aspects related to certification of persons in order to identify whether the certification process as a conformity assessment procedure contains formal attestation of conformity or it ensures the quality and reliability of the process in accordance with the requirements set out in the professional sphere. Research is focused on the professional competence assessment process performed by Latvian Certification bodies of Constructors. The analysis was carried out by collecting qualitative and quantitative data while studying and evaluating the concept of certification and the main elements of concept of professional competence. Identification of competence assessment in the performance of the certification process of construction specialists was made using survey analysis and correspondence analysis. The research results indicate a new innovative approach to the certification process, where quality and reliability refer to the certification of a person's ability to apply the acquired knowledge and skills not only in accordance with the certification scheme and key industry requirements, but also with the needs of stakeholders. On the basis of the conclusions made from the literature review, survey and correspondence analysis results, it could be observed that an innovative approach to the personal certification process provides the clearly defined professional competences by certification bodies supervisory authorities, industry and certified persons, as well as it includes the periodical monitoring of the competencies required in the industry according to the needs of stakeholders.

Keywords: *Competence assessment, Professional competence, Certification of persons.*

JEL Classification: L84

ESTABLISHING A DATA DRIVEN APPROACH FOR CONSUMER JOURNEY MAPPING AND MEASUREMENT

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Abstract. The aim of this research is to develop practical methods on how Consumer Journeys should be mapped and measured, using a variety of data sources available in organizations. While current research in the field of Customer Experience has established various methods on how to map and measure the various touchpoints of Customer Journeys in the context of a single organization, the same doesn't apply to Consumer Journeys – the collection of various Customer Journeys in pursuit of a higher order goal. These journeys are rather novel in the academic literature, and lack practical framework on how to visually represent and measure them. Additionally, existing Customer Journey mapping framework has been widely criticized about not adopting a data driven approach – frequently focusing on assumptions and even anecdotal evidence to create these maps, rather than empirical data from multiple sources. Therefore, this research focuses on creating a practical and customer centric method on how to map Consumer Journeys by conducting a comprehensive literature review, and discusses how to integrate this new framework in existing methods of Customer Journey mapping. To eliminate as many potential biases as possible, this research establishes the various qualitative and quantitative methods of data collection: customer and employee interviews, emotional engagement surveys, focus groups, purchase data and CRM extracts.

Keywords: *Customer experience, Consumer journeys, Journey mapping*

JEL Classification: M31

THE STRATEGY DEVELOPMENT PROCESS: INTEGRATION OF AN ADAPTED DECISION-MAKING MODEL

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Abstract. Development of effective universities strategy balances on current strategic performance and fulfilled desirable results in the future. Many organizations are defining strategic aims without taking into consideration their resources, capabilities, stakeholders, and other influencing factors. As a result, the desired results are not achieved or have been exceeded in the period of strategy implementation, because there are no strategy evaluation indicators in place. The evaluation of strategy direction potential should be considered and measured before approving it. The aim of this research was to develop an approach by which universities can assess the implementation of the current strategy, while at the same time assessing the key priorities and proposals for the future strategy development by involving the key stakeholders. Literature review has been used to define the factors that influence the strategy development process. The authors have created an approach that uses the basis of Importance – performance matrix – IPA and Resource-Based View (RBW) to evaluate the strategic proposals and prioritize them. The use of the adapted approach in this research for strategy development planning is limited to involving only three strategic directions.

Keywords: *University, Quality, Strategy, Development, Decision-making model.*

JEL Classification: I20, I28, I23

DESIGN THINKING TO REINVENT VALUES IN A BUSINESS MODEL: A 4-STEP APPROACH

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Abstract. The purpose of this paper is to create and test design thinking approach sequence, in order to redefine values' propositions. This paper suggests a 4-step systematic design thinking approach sequence to reinvent values in a business model, which was researched by a case study method. Based on the idea management approach the authors describe idea generation and evaluation processes by applying the design thinking approach and their possible moderation elements. Originality/value: a created approach could be applied by the organisations that would like to create new values or reinvent the existing ones in their business models value propositions.

Acknowledgement: European Regional Development Fund within the Activity 1.1.1.2 "Postdoctoral Research Aid" of the Specific Aid Objective 1.1.1 "To increase the research and innovative capacity of scientific institutions of Latvia and the ability to attract an external financing, investing in human resources and infrastructure" of the Operational Programme "Growth and Employment" (N-1.1.1.2/VIAA/4/20/670).

Keywords: Value propositions, Design thinking, Idea management, Business model.

JEL Classification: L86, D89, D79, M15

HIGHER EDUCATION AND INDIVIDUAL ENTREPRENEURIAL ORIENTATION: EMPIRICAL EVIDENCE FROM BUSINESS STUDENTS IN LATVIA AND POLAND

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Abstract. In the scope of the SEAS funded study the authors analysed whether there are differences in Individual Entrepreneurial Orientation (IEO) before and after university. The current research investigates which factors and components contribute to EO orientation development for students who are doing their major in business studies and whether there are differences in IEO by the moment when higher education studies are completed. The researchers conducted two steps survey in Latvia and Poland – the first phase was aimed to gather 1st year students' opinions while the second phase addressed the same students when their studies were completed. Authors applied non-parametric inferential statistical methods as well as linear regression analysis to verify the research hypotheses. The authors identified that there are differences between students' perception about entrepreneurship and it was detected that the chosen field of study affects students' perception of educational support, thus influencing their innovativeness, proactiveness, and risk propensity. The current research investigates which factors and components contribute to IEO development among different groups of students in Latvia and Poland which experienced systemic transformation and where the topic is considered as under researched. Output of the study might contribute to the entrepreneurship training methodology for transdisciplinary students to enhance entrepreneurial competence dissemination and development across education programs and beyond.

Keywords: *Business education, Higher educational institution (HEI), Individual entrepreneurial orientation (IEO), Perception of educational support*

JEL Classification: I21, I23, I25, I29, L26, M19

EXPLORATION OF THE NATIONAL OPINION ON THE USE OF STANDARDS AND PARTICIPATION IN STANDARDS DEVELOPMENT

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Abstract. Standardization plays an important role in meeting the changing needs of the market and society worldwide. The global multi-level system of standardization provides a platform for any interested party to participate in standards development processes, thus introducing the opportunity for national stakeholders to ensure their presence in the development of regional and international standards. The paper focuses on exploring the national opinion of stakeholders – standards users and technical committee (TC) experts of Latvia – on the motivation for using standards, national participation in standards development and the impact of the Covid-19 pandemic on the work of TCs. The methodology was based on a literature review of research articles that address the issues of the use of standards, motives to standardize and the technical work of standards development. Following, surveys for standards users and TC experts were conducted in order to answer questions related to the research focus. A comparison of the results for the years from 2018 to 2021 was performed. In addition, experts from LVS/TC 10 "Quality management" were interviewed to obtain more detailed information. Main conclusions and results: The main motivators for the use of standards continue to remain stable over the years. The Covid-19 pandemic has introduced new models for the work of TCs. There is no consensus on whether national interests are sufficiently represented in European and international standardization, however, increasing this presence can be fostered both by improving communication between the national standards body and TCs and by setting clear priorities at the national level.

Keywords: *European standardization, International standardization, National stakeholders, Standardization, Standards development.*

JEL Classification: F53, L15

DIGITAL TRANSFORMATION AND THE CHANGING SHAPE OF QUALITY MANAGEMENT PRACTICES

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Abstract. The main purpose of this paper is to explore how digital transformation influences and changes quality management practices adopted by the organisation. The methodology employed in this study is qualitative content analysis with open coding of selected literature followed by an empirical study in three logistic companies. Quality management practices related to leadership and culture, strategy, customer focus, improvement, relationship management, organisation and people, decision-making and processes are likely to transform with the integration of digital technologies. Innovation and digitalisation itself have all prospects to become a new addition to the core quality management concept. This study reviewed the general influence of digital transformation on quality management practices. The impacts of particular digital technology integration, e.g. blockchain, Internet of Things, robotics, etc. on quality management practices were not considered. The future research can be conducted on aspects of digitalisation of quality management systems and on the role of quality management practitioners in digital transformation. This study could be beneficial for the managers of organisations and quality professionals considering different aspects of digitalisation and adoption of digital technologies in their companies. This paper adds to the general knowledge about the relations between quality management and digital transformation which are not studied widely enough in the existing literature. The findings of the study provide a new insight on quality management in the light of digital transformation.

Keywords: *Digitalisation, Digital transformation, Industry 4.0, Quality 4.0, Quality management, Quality management practices.*

JEL Classification: O33, M10

SUBSECTION

“INTERNAL SECURITY AND CIVIL PROTECTION”

RISK SOURCES (EVENTS) FOR FIRE RISK ASSESSMENT IN ORDER TO PLAN NECESSARY MEASURES IN URBAN AREAS

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Abstract. The risk of fire is present in every urban area; however, the capacities and capabilities available in a particular state, region, municipality, or community in order to prevent it, prepare the society for it, and respond if the mentioned risk occurs could be limited. The article's aim is to identify the common fire risk sources (events), which could be summed up to form the total value of fire risk level in a particular area. The results of fire risk assessment (risk level), interlocutors can use in order to plan preventive (e.g. fire supervision test), preparedness (e.g., fire exercises, fire awareness-raising campaigns), and response measures (e.g., location of the fire station, response time, number of crew) for a particular area, e.g., the higher the level of fire risk, the more comprehensive measures are needed to reduce it and vice versa, thus ensuring data-based decision-making. Article researcher method will be a literature review.

Keywords: *Fire, Risk assessment, Risks source, Urban area.*

JEL Classification: O18, K32, D81

THE CONCEPT OF SUSTAINABLE ECONOMIC DEVELOPMENT AND SOCIAL RESPONSIBILITY IN THE EUROPEAN UNION

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Abstract. Sustainable economic growth means continuous development following and considering interaction and collaboration in terms of micro, macro and mezo economic factors in context of social environment and ecology. The European Union has formed a strong stance on sustainable development by setting it as the priority and developing the strategy and setting objectives to achieve it. Good governance at both national and organizational levels establishes the grounds to achieve the set goals successfully, thus providing the basis for sustainable economic growth. Companies and their activities influence the economic processes significantly not only by the offered products and services but also, and more importantly, by setting safe working conditions, caring about human rights, ensuring health benefits, appropriate environment, emboldening innovations, education and training. A possible solution to ensure sustainability in economics and environmentally friendly economic processes is to know and follow the basic principles of social responsibility. Companies tend to be reluctant to implement the basic principles of social responsibility in their organizations voluntarily claiming it would require additional resources and investment. However, there is a completely opposite view – being socially and environmentally responsible is a way a company can ensure its own growth and economic sustainability. The aim of the research is to identify possible problems of sustainable economic growth and develop a concept which could lead to successful tools and methodology to ensure the EU strategy and goals are implemented in companies and their daily activities and processes. The findings and analysis of the research data clearly show the disparity of the implementation of sustainable development goals in different regions of the EU, thus challenging to take more purposeful actions to achieve the European Union goals by 2030. Moreover, social entrepreneurship must be considered as an important tool to identify and solve issues of sustainable economy as well as to help achieving the goals of sustainable economic development. However, the level of acceptance of the type of entrepreneurship, the developed strategies and the degree of implementation differ significantly across the European Union countries.

Keywords: *Environment, Social responsibility, Sustainable economic development, Sustainable economy.*

JEL codes: J24, J28, J50, M14, Q01

IMPROVEMENT OF LABOR PROTECTION SYSTEM AT THE CARGO HANDLING COMPANY IN THE PORT

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Abstract. Workers are exposed to various factors that negatively affect their health at the workplace. It is necessary to determine what harmful factors of the working environment affect workers, and to what extent. The effects can be both long term and short term. This creates a necessity for an additional assessment that would point out what must be improved in the occupational safety system, so that workers are not exposed to harmful factors. Workers are exposed to multiple risk factors that depend on organizational and production processes, as well as the indoor climate. Humanity has always worked on achieving welfare, protecting health, creating a beneficial living environment. As human welfare improves, other key matters pertaining to the existence of humanity, such as health and physical and mental wellness, improve in turn. The times and opportunities change, and one must keep track of the new possibilities provided by science, research and discoveries. Setting stricter requirements for ourselves, we indirectly make the world around us change as well, to improve, take care of the environment and other people. By caring for the environment, we learn and discover how to achieve this more efficiently, with less resources used. If we improve the environment we share, our health will improve, too. As its objectives were accomplished, this research study will show that workers are exposed to harmful risks, and that there is room for improvement in the occupational safety system.

Keywords: *Occupational safety, Lighting, Grain dust*

JEL Classification: J28, K32

NEW WORKING ENVIRONMENT RISK ANALYSIS MODEL WHEN PERFORMING REMOTE WORK

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Abstract. Although modern technologies have allowed us to organize our work remotely, before the COVID-19 pandemic, remote work was not famous; more precisely, it was pretty rare. The first wave of the pandemic introduced a fundamental change in the organization of work since the work had to be organized remotely, i.e., from employees' homes, to ensure the company's operation. This was necessary to ensure the health and safety of workers and reduce the prevalence of COVID-19 in workplaces and throughout the country as a whole. Adjustments were also made to the assessment of the risks of the working environment as the pandemic sustained. In addition to the risks of the working environment, such as job placement, lighting, and microclimate, workers faced unprecedented risks to the working environment. Risks to the working environment such as stress, burn-out syndrome, loneliness, and lack of support have played an important role. A little modified, compared to the 1990 s, is a digital risk factor for the working environment, a return to technostress, or a fear of using various digital devices. Cyber attacks and data protection have also been raised. The authors of the article believe that taking into account all these facts. It is necessary to update and update the assessment of risk factors for the work environment, take into account new risks, and develop an appropriate model for the analysis of the risks of the working environment.

Keywords: *Remote work, Risk analysis, Risk assessment*

JEL Classification: J28, K32

**TRUE KPI IN EVALUATING CURRENT CUSTOMS
PERFORMANCE AND THE ENVIRONMENT
PATIESI KPI MŪSDIENU MUITAS DARBĪBAS UN VIDES
NOVĒRTĒŠANĀ**

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Abstract. Lai nodrošinātu efektīvu muitas un robežkontroles pārvaldību, svarīgi ir pētīt muitas stratēģiskās vadības, darba organizācijas, darbības novērtēšanas un nepieciešamās modernizācijas jautājumus, kā rezultātā muitas dienests spētu operatīvi reaģēt uz izmaiņām iekšējā un ārējā vidē, kvalitatīvi veiktu attiecīgās valsts valdības dotos uzdevumus un izpildītu starptautiskās saistības. Līdz šim tradicionāli izmantoto kvantitatīvo rādītāju novērtēšana nevar sniegt pilnīgu atbildi uz jautājumiem – vai dienests kopumā strādā efektīvi, vai atsevišķas darbības muitas lietu ietvaros tiek veiktas lietderīgi, vai visi procesi tiek realizēti kvalitatīvi? Tradicionāli muitas dienestu darbības novērtēšanai izmantotos rādītājus ir nepieciešams papildināt ar tādiem, kas atbilst mūsdienīgas pārvaldības principiem, izmaiņām muitas darbības vidē, muitas funkcijās un darbības metodēs. Novērtējot dažādu organizāciju darba rezultātus pasaulē tiek izmantoti tā saucamie būtiskie darbības rādītāji (*KPI – key performance indicators*). Tie ir rādītāji, kas saistīti ar tiem organizācijas darbības aspektiem, kas ir visnozīmīgākie organizācijas pašreizējos un turpmākajos panākumos. Starptautiskās tirdzniecības, loģistikas, robežu pārvaldības, ostu efektivitātes un muitas darbības novērtēšanā atbilstoši noteiktām metodikām arī tiek piedāvāts piemērot būtiskos darbības rādītājus. Šie rādītāji, novērtējot, piemēram, ostu efektivitāti vai legālās tirdzniecības veicināšanas panākumus, skar muitas lietas, bet pilnība neatspoguļo visus to aspektus. Dažās metodikās muitas darbības rezultāti veido daļu no kopējā rādītāja, bet citās rādītāji tiek meklēti kādā noteiktā muitas darbības segmentā. Lai KPI muitas jomā patiešām varētu uzskatīt par loģiskiem, lietderīgiem, objektīviem un patiesiem, nepieciešams, lai tie aptver visas muitas funkcijas, visas ģeopolitiskās izmaiņas, importa un eksporta plūsmu kontroles prioritātes. Īpaši svarīgi novērtēšanā izmantot KPI, kas raksturīgi robežu drošības jautājumiem un saistīti ar valsts, sabiedrības un vides aizsardzību.

Keywords: *Muitas funkcijas, Būtiskie darbības rādītāji, Robežu drošība, Darbības un rezultātu novērtēšana.*

JEL Classification: H11

FIRE-FIGHTING TECHNOLOGY INNOVATIONS USING WATER

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Abstract. One of the priority substances for fire-fighting still is water, as the most traditional, available, efficient and relatively inexpensive means of extinguishing. In the last 60 years, intensive studies have been carried out on the types of water supply and effectiveness in the combustion area. In addition, researchers are interested in reducing water supply intensity and increasing the quality of its use. A new term has emerged in scientific publications and fire-fighting practices (“Water environment in a metastable phase state”, hereinafter referred to as “WEMFS”), the previous name (“Temperature activated water”, hereinafter “TAW”) is proposed to use water in a special device, after which water acquires unique properties similar to those producing capillary porous rocks in nature at high temperature and pressure.

Keywords: *Ecological safety, Fire-fighting efficiency, Protection of firefighters' work, Temperature-activated water, Water environment, Metastable phase state.*

JEL Classification: O310

DEVELOPMENT OF LABOUR PROTECTION REQUIREMENTS FOR OFFICIALS OF THE STATE FIRE AND RESCUE SERVICE BY PERFORMING PREVENTIVE, PREPAREDNESS, RESPONSE AND MITIGATION MEASURES IN CASE OF LEAKAGE OF DANGEROUS CHEMICALS AT INCREASED HAZARD OBJECTS

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Abstract. The study is related to the development of labour protection requirements by performing preventive, preparedness, response and mitigation measures for officials of the State Fire and Rescue Service in the event of leakage of dangerous chemicals in objects of increased hazard and the response to binding action thereof, as well as the development and improvement of a regulatory base for officials of the State Fire and Rescue Service who perform the work at event sites with the presence of hazardous chemical, biological, radioactive and explosive substances. Potential disasters and large-scale industrial accidents, that can potentially be caused by leakage of hazardous chemicals, occur rarely, but can have a serious impact on public order and on the health of the environment. In the event of an accident at an object of increased hazard, in which activities with dangerous substances are performed, or in the event of a road traffic accident as a result of the transport of these substances, the function of the State Fire-fighting and Rescue Service while performing the tasks specified in the Regulations of the State Fire-fighting and Rescue Service shall be: to carry out fire-fighting and rescue operations, to organise and take preventive measures in the field of State fire safety and civil protection, to participate in the assessment of measures taken for the assessment and reduction of industrial accidents risks, to manage and carry out rescue work, in cooperation with other authorities, to take and manage emergency accident prevention measures, thereby protecting the public and the environment from damage from hazardous chemical substances. In accordance with Annex 11 of the State Civil Protection Plan, when the leakage of dangerous chemicals at an object occurs, the State Fire and Rescue Service shall not only take response and mitigation measures, but shall also take preventive and preparedness measures during the period from 2020 to 2027 specified in the order. In performing and managing response and emergency accident relief measures in the event of leakage of dangerous chemicals at an object, officials of the State Fire and Rescue Service with special service degree may be subject to risk factors present in the event, which differ significantly from risk factors when performing fire-fighting and rescue works in other types of events. Description of the results of the study: on the basis of the results of the study, proposals were developed for the development of existing labour protection requirements and measures at the State Fire and Rescue Service, which were implemented to ensure the safety of officials with special service degrees in the performance of tasks related to the performance of emergency response and elimination measures, in the event of the leakage of dangerous chemicals at increased hazard objects, as well as study the risks of leakage of hazardous chemicals, which may affect and evaluate officials involved in rescue works and disaster relief works, as well as develop proposals for the development of the existing labour protection system

Keywords: Hazard, Labour protection requirements, Hazardous chemicals, Increased hazard objects.

JEL Classification: Y800

CITES AND SUPPLY CHAIN SECURITY

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Abstract. The last decade is marked by a particularly topical view of the human footprint in the environment. It has set the EU a long-term goal of reaching 0% of environmental emissions by 2050. In reducing waste and emissions, it is not least important to maintain environmental diversity. Illegal trade in protected wild flora and fauna has a direct impact on the conservation of biodiversity. The Convention on International Trade in Endangered Species (CITES) is an international agreement between governments to protect endangered plants and animals ensuring the trade of them does not threaten their survival. According to the WCO, illegal trade in CITES-listed plants and animals amounts to more than \$ 20 billion per year. In order to reduce the growing volume of illegal international trade, the main emphasis is placed on the development of solutions to increase the level of security of supply chains. The study examined in this publication focuses on solutions for identifying and assessing the risk of illegal movements of protected specimens of fauna and flora, to be used both in the activities of supply chain operators and in the activities of customs authorities to identify and prevent irregularities. In order to achieve the results of the study, the analysis of statistical information and empirically obtained data within the framework of the research, as well as data of other scientific studies have been used. As a result of the study, the authors concluded that extensive analysis of information on the demand and supply of endangered species in different countries, as well as protocols of identified violations, can develop basic risk profiles that can be used by both supply chain operators and customs authorities to reduce risk of CITES violations. In order to implement this solution, the information exchange system needs to be further developed not only within customs and other CITES enforcement services, but also to provide information to supply chain operators, thus strengthening their capacity and role in mitigating CITES violations.

Keywords: *CITES (The Convention on International Trade in Endangered Species), Risk assessment, Supply chain security, Violations.*

JEL Classification: Q37

HEALTH SYSTEM PERFORMANCE ASSESSMENT FOR IMPROVEMENT OF THE PUBLIC FINANCIAL MANAGEMENT SYSTEM

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Abstract. Healthcare systems are characterized by complexity derived from uncertainty, pluralism and a multidisciplinary environment, embracing resources, organizations, financing mechanisms and governance models which ensure delivery of health services to the population. Public finance management (PFM) plays an essential role in improving the well-being of the population, managing public resources, including systems for budget preparation, approval, execution, and evaluation. For the purpose of quality of public finance (the credibility, reliability, efficiency and efficiency of the budget process), the link between PFM and effective health service delivery should be ensured. In the public sector, performance measurements mainly are aimed at financial measures and volumes of services provided, but for health system financing, the adoption of a systemic approach that takes into consideration the link between outcomes and resources from a population-based perspective is more appropriate. The aim of the research is to evaluate the conditions, determining factors and possible solutions for improvement of public finance management in health care, taking into consideration multidimensional aspects, the necessity of linkage between health system performance assessment and public resources granted by general government budgets for Latvia, as small EU country with the tax-financed healthcare system. In Latvia, without general Health status statistics, since 2019, information on health system performance assessment (HSPA) data has been collected. To date, there have been no studies on the use of HSPA for PFM. The main features for such PFM improvement should be multidimensionality of health outcomes based on public value, assurance of universal health coverage as a basis for sustainable development and systematic benchmarking of the results with a clear relationship with resources granted.

Keywords: *Evidence-based budget governance, Benchmarking, Health system performance assessment, Public value of healthcare, Patient-centred care.*

JEL Classification: H41, H51, I15

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TRENDS IN THE DEVELOPMENT OF FIRE FIGHTING AND RESCUE EQUIPMENT AND SPECIAL EQUIPMENT. ANALYSIS AND IMPROVEMENT OF THE NORMS SET BY THE REGULATORY FRAMEWORK

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Abstract. With the improvement of the methods of fire-fighting and rescue work of the State Fire and Rescue Service, the requirements for the necessary provision of machinery and equipment have also changed. In order to ensure continuous and full-fledged operation of the State Fire and Rescue Service structural units, increase their efficiency, ensure implementation of functions and tasks specified in regulatory enactments and improve the quality of services provided, it is necessary to implement a set of measures aimed at improving the institution's material and technical base to ensure the most efficient and effective use of resources in the future, as well as the provision of safe working conditions for staff. The analysis and improvement of the norms set by the regulatory framework is relevant today, as the regulatory enactments regulating this field have not been updated since 2011, but the material and technical base of the State Fire and Rescue Service is constantly updated and has changed significantly over many years. Depending on the decision made by the State Fire and Rescue Service management, the draft of a material regulatory enactment that determines the equipment necessary for fire extinguishing and rescue works of the State Fire and Rescue Service, as well as special and technical equipment and their norms, may be used for any draft regulatory document. The article researched the current regulatory framework, which determines the equipment required for fire extinguishing and rescue works of the State Fire and Rescue Service, as well as special and technical equipment and their norms. Identified experience of neighboring countries. A statistical analysis of the operational activities of the State Fire and Rescue Service and a comparative analysis of the statistical data of the Baltic States have been performed. As well as the provision at the disposal of the State Fire and Rescue Service with the equipment necessary for fire-fighting and rescue works, norms of special and technical equipment and provision has been studied and analyzed. Within the framework of the article, a questionnaire was developed to determine the actual amount of special and technical equipment and facilities in the structural units, as well as to find out the optimal amount of required special and technical equipment and facilities. Questionnaire analysis was performed. Calculations have also been made to explain the situation. Practically applicable material is proposed for the draft regulatory enactment, which determines the equipment necessary for fire extinguishing and rescue works of the State Fire and Rescue Service, as well as technical equipment and their norms.

Keywords: *Civil protection, Rescue equipment, Regulatory framework update, Statistical data, State Fire and Rescue Service (SFRS).*

JEL Classification: Y800

DIFFERENCES IN THE APPLICATION OF METHODS FOR ASSESSING THE EFFECTS OF ACCIDENTS AND THE IMPACT ON THE RISK LEVEL AT THE INCREASED HAZARD OBJECT

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Abstract. The aim of the paper is to assess the possibility of using emergency assessment software and the differences between world-developed computer programs and methodologies in assessing the impact and risk levels of an area of increased hazards associated with the storage of liquefied petroleum gas (LPG). The study group includes 16 different effect assessment methods, with the help of which the comparison of the effects of an accident in the event of a liquefied petroleum gas leak and an explosion of heated liquid (fireball) has been performed. The study did not result in a single coherence between the results of the calculation of the effects proposed by the methods, which resulted in a chart showing the main results of the calculations, as well as explanation on the importance of differences. Within the working framework it was explained how variations with the level of consequences affect the level of risk to be calculated at the object of the increased hazard and what problems it may cause. The use and comparison of the pooling of methods provide an opportunity to explain the consequences for a person in an accident with LPG, and it is therefore of extreme importance to carry out an examination of the methods applied and to compare the effects between them. When exposed to the human body, the fireball may result in burns of varying degrees associated with the heat of the fireball and the duration of exposure to the fireball, so the pooling of methods should provide an answer on the average effect level and information on the event that can be useful in assessing the risk level at the increased hazard object.

Keywords: *Assessment methods, Explosion, Average effect level.*

JEL Classification: C00, C02, C29

SUBSECTION

**“DECISION MAKING IN LOGISTICS AND
BUSINESS MANAGEMENT “**

EU-WIDE POLICY MEASURES AND LOGISTICS IN THE COVID-19 ERA: EXPECTATIONS, STATISTICS AND MODELING RESULTS

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Abstract. EU-wide policy and unprecedented safety measures related COVID-19 have caused extreme challenges for the transportation and logistics. The aim of the research is to model the short-term impact on the economy and regional development of the COVID-19 related shocks that transportation encountered. A comparative-static approach that involves an input-output model with additional two-perspective regional modelling block and scenarios are applied. Two scenarios are estimated for Latvia's economy: firstly, extremely dramatic decline in demand on air transport services by 90%; secondly, unexpected increase in demand for postal and courier services that tripled output. The results of the first scenario argue that the service sector is influenced more than manufacturing due to air transport collapse –rental and leasing services (-11.6%), employment services (-9.7%), other transport services (-7.0%), impact on manufacturing is relatively minor and only on certain branches. The results of the second scenario argue that there is a positive impact, but the scale is relatively low, the most affected industries are manufacturing (of paper products (increase by 3.5%), rubber and plastic goods (3.2%)). The findings confirm that the urban areas due to higher economic activity and larger service sector are more affected to the modelled shocks both negative and positive. The results argue that the rural areas are relatively less negatively affected during the crisis, but, at the same time, during the recovery (for example, in the post-COVID era) it may lead to weaker economic activity and the rural areas will continue to lag behind, maintaining the income inequality.

Keywords: *EU policy, Transport, Logistics, COVID-19, Input-output analysis, Regional development*

JEL Classification: C67, R41, O18, F13, C32

THE CHALLENGES OF PUBLIC ADMINISTRATION DURING COVID-19 PANDEMIC: THE ROMANIAN CASE

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Abstract. The COVID-19 pandemic affected the entire society and required the adaptability and resilience of the systems to being capable to take the best decisions for the wellbeing of the citizens. Our paper examines how the Romanian public administration responded to the actual necessities of the citizens and how effective are. From methodological point of view, we used primary and secondary data and content analysis. The results show that the socio-economic problems and political distortions are factors that affect the decision capacity of the public administration and creates uncertainty. In this regard, are discussed the impact factors, the lessons from other states and the possible solutions.

Keywords: *Public administration, Resilience, COVID-19 pandemic, Administrative capacity, Wellbeing*

JEL Classification: H83, H75

TRANSPORT INVESTMENT ASSESSMENT USING ANALYTIC NETWORK PROCESS

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Abstract. A unified transport investment assessment methodology is required in all the EU countries. The corresponding scientific project was tendered by the Latvian Ministry of Transport and launched by a team of RTU scientists. The goal of this study was to develop the methodology which is a complementary support tool for the transport policy and investment strategy planning, and allows to evaluate and plan the impact of investments on transport flows, connected mobility solutions, climate plans and road safety nationwide. The research was made in several steps and using combination of methods, where the central role was Analytic Network Process. The research was co-financed by the European Social Fund technical assistance project No.10.1.3.0/19/TP/003.

Keywords: *Transport system development, Analytic Network Process, Investment assessment.*

JEL Classification: E170, L98, O18, R28

HOW DIGITAL ARE ALBANIAN ENTERPRISES: A MICROECONOMIC ANALYSIS

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Abstract. This paper focuses on the analyses of digitalization of enterprises and its performance impact in Albania. Using data from 2019 Enterprise Surveys (ES) we try to give answers to questions related to digitalization that characterise Albanian enterprises. The survey was a shared project of the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB) and the World Bank Group (WBG), the data are collected in Albania between January and May 2019. The objective of the survey is to better understand firms experience in the private sector. Collected data are based on firms' experiences and perception of the environment in which they operate. The paper uses these specific questions to study Internet adoption. ES exactly address the following questions: (1) Does the firm have a high-speed Internet connection on its premises? (2) Does the establishment have its own website? (3) Do you currently communicate with clients and suppliers by emails? The dependent variable is performance of the firms measured in terms of sales growth and labor productivity. While the vector of independent variables is composed by enterprise characteristics such as firm size, ownership structure, legal status, region, etc. Moreover, dummy variables are used to capture firm's digital and technological capability, and gender ownership.

Keywords: *Information, Firm performance, Entrepreneurship, Digitalization.*

JEL Classification: L15, L25, L26, L86

DECISION-MAKING IN THIRD PARTY LOGISTICS: DEVELOPMENT OF THEORETICAL FRAMEWORK

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Abstract. In this study focus is put on development of theoretical framework for development of decision-making model for third party logistics service provider selection, which is based on hybrid approach with application of neural network principles. The goal of the study is to develop decision-making theoretical framework that could be used for practical application in logistics field. Model is based on main principles of neural networks, including data analysis methods and preparation, designing multiple-level network, definition of connection algorithms and application of linear-DEA and TOPSIS methods for weight estimations. As the result of the study, a framework of hybrid model is created that provides alternative solution for multiple-criteria decision-making in logistics. It also provides an opportunity to evaluate links between key elements of third-party logistics service provider selection process and prioritize selection of alternatives. Further study will demonstrate practical application of developed theoretical framework.

Keywords: *Decision-making, Hybrid model, Neural networks, Third-party logistics.*

JEL Classification: L90, M16, R40, R41.

USING THE BALANCE SCORECARD FOR OUTGOING ACCOUNTS AS A METHOD FOR STRATEGIC DECISION SUPPORT

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Abstract. In today's intensely competitive environment, financial indicators are not in themselves capable of providing guidance for the future, they typically provide information on some events of the past, i.e. they are only retrospective, ex-post indicators. Because financial accounting cannot provide adequate information for management, nor support strategic decision-making, managers need complex systems that can help them plan for the future using data built on the past. Our research question was focused on how outgoing accounts (invoices) comply with the Balanced Scorecard and how they can be used to support long-term decisions. We describe the mandatory content of outgoing accounts (invoices) and their compliance with it as a case study. In our study, we point out the interface between financial accounting data assets and strategic decision support and use the case study methodology to show the links between outgoing accounts and the Balanced Scorecard.

Keywords: *Balanced scorecard, Decision making, Outgoing accounts.*

JEL Classification: D81, M41

A CHOICE OF LOGISTICS RESEARCH METHODOLOGY

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Abstract. Along with the rapid development of logistics systems (transportation, terminals and warehouses, infrastructure, modes of freight deliveries, communication technologies etc.), a choice of an adequate research methodology in logistics studies is particularly important. An analysis of many studies (research projects, doctoral and master theses) carried out in logistics, shows that a more comprehensive and constructive substantiation of methodology and methods for the study used today is needed. Studies increase demand for additional empirical data, the methods for collection and processing of information are changing. At the same time new research and innovative operational methods are being developed (specialised statistical and mathematical programming techniques, multisectoral research techniques, artificial intelligence algorithms etc.), system dynamics, systems engineering and simulation approaches are used more frequently, models of faziological, neural networks, hybrids etc. are being constructed. The problems being solved are becoming more complicated. The organisational forms of studies are changing in the context of the remote work. The article reveals the conditions for choice and substantiation of methodology in different phases of the research for logistics and other issues. It is concluded that the correct choice of the research methodology at all stages of investigation can significantly increase the quality and effectiveness of research ensuring their comprehensiveness, can also help to economize the time and resources affecting the duration of the study.

Keywords: *Logistic, Methodology, Research methods, Models.*

JEL Classification: O31

MODELLING THE SPREAD OF THE COVID-19 IN LATVIA

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Abstract. Modeling a spread of diseases and epidemics has always been an interesting scientific topic. Many scientific papers have been written on this topic, and the topic has been widely used to train modelling professionals. The topic received a new impetus in the context of global spreading of the coronavirus SARS-CoV-2. In a several months, all available scientific experience in the field has been overestimated. The topic of the epidemic and its modeling has become the most discussed topic in the scientific community. Various methods are used to simulate the spread of the virus, such as statistical modelling, econometrics and regression analysis, agent based and discrete event simulation, system dynamics. Under these conditions, the highest marks were given to models that allow simulating multi waves of the virus spreading. The study shows the practical application of modelling a spread of the covid-19 in Latvia for decision-making at the government level.

Keywords: *Modelling, Simulation, System dynamics, Coronavirus, COVID-19, Decision making, State policy.*

JEL Classification: C61, C63, I18, J11

ECONOMIC GROWTH AND ENERGY CONSUMPTION: AN EMPIRICAL STUDY OF SELECTED DEVELOPED COUNTRIES

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Abstract. This study examined the relationship between economic growth and energy consumption in the period 1986-2015 for 15 selected developed countries. In this study, in which the dynamic panel analysis method was used, cross-section dependence and homogeneity tests were taken into account. Accordingly, unit root and cointegration tests were decided. According to the cointegration test results, it has been determined that there is a long-term relationship between economic growth and energy consumption. The results obtained from the Dumitrescu-Hurlin causality test analysis show that there is a bidirectional causality relationship. As a result of the analysis, it has been concluded that economic growth and energy consumption are the cause of each other for the period of 1986-2015 in 15 selected developed countries.

Keywords: *Economic growth, Energy consumption, Panel data analysis.*

JEL Classification: O40, O13, C23

SUBSECTION

**“Territorial and Regional Development, Construction
Management“**

THE ROLE OF CREATIVE INDUSTRIES IN SUSTAINABLE DEVELOPMENT OF SMALL CITIES IN LATVIA

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Abstract. The research focused on evaluation of the role of creative industries (CIs) in sustainable development of small cities. The literature review was done to develop a typology of sustainability-oriented actions that CIs enterprises might take in practice. The hypothesis of the research: Entrepreneurs of creative industries in small cities are interested in sustainable development of the city and they follow the principles that promote sustainable development of the city in their businesses. To prove the hypothesis the following empirical research methods were applied: survey of the CIs entrepreneurs from Cesis municipality; expert interview; a focus group interview involving six CIs entrepreneurs from Cesis municipality. The main conclusions are the following: 1) creative industries are not by default benign with regard to sustainability, due to material practices of creating, distributing and consuming cultural and digital products; 2) literature review finds particular ambivalence with regard to environmental and social aspects of sustainability; 3) entrepreneurs of Cesis municipality are interested in the sustainable development of the Cesis city and municipality.

Keywords: *Creative industries, Economic development, Small cities, Sustainability.*

JEL Classification: R11, Q01

ENTREPRENEURSHIP IN THE SYSTEM OF RESOURCES FOR THE URBAN AGGLOMERATIONS DEVELOPMENT: CASE OF KRASNODAR CITY AGGLOMERATION

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Abstract. Entrepreneurs, as a rule, are one of the significant subjects in the urban agglomerations development. Agglomeration effects create new business opportunities. However, analysis of specific situations does not always confirm these theoretical provisions. The results of the study conducted by the authors in the form of an expert survey to identify the problems and resources of the development of the Krasnodar city agglomeration show that the development business is the most active participant and stakeholder in this project. At the same time, companies operating in this area prefer not to take their interests into the public space, but to implement them as part of lobbying activities at the level of regional authorities and municipalities. The interests of entrepreneurs representing other sectors of the economy are latent, and entrepreneurs, being potential beneficiaries of the systemic development agglomeration project, at this stage do not act as an independent entity. Opportunities and risks for most entrepreneurial structures (primarily small and medium-sized businesses) are not aggregated and articulated, which does not allow it to become a driver of agglomeration processes.

Keywords: *Krasnodar city agglomeration, Entrepreneurship, Business, Development, Public policy, Lobbying.*

JEL Classification: R58

RENEWABLE ENERGY PROMOTION WITH ECONOMIC INCENTIVES: A CASE OF THE EU

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Abstract. The paper investigates the economic ways of green energy promotion in the European Union. It is stated that environmental friendliness and economic expediency are the main drivers of renewable energy development. The paper emphasizes that the EU has significant achievements in green energy promotion. The EU encourages the use of renewables in a variety of ways, including tariff and non-tariff instruments. In the research different economic incentives are classified by certain criteria. It is outlined in the research that the feed-in tariff was the first and most widely used mechanism of support for green energy producers. At the same time, it is gradually being replaced by a feed-in premium (a system of allowances for additional generation). The paper also highlights the importance of non-tariff instruments, including tax incentives, green certificate system, investment grants, and subsidies.

Keywords: *Economic incentives, Feed-in tariff, Green energy, Renewable energy promotion, Sustainable development.*

JEL Classification: Q28, Q42, Q48, Q58.

PROJECT MANAGEMENT IN RUSSIAN FEDERATION PUBLIC AUTHORITIES: DEVELOPMENT FACTORS AND TECHNOLOGIES

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Abstract. The project approach has become an instrumental "answer" to the challenges of the modern public administration system of the Russian Federation. Its introduction laid the foundations for a new managerial ideology that can change not only the principles of managerial decision-making, but also the ways in which priority goals of social development are achieved, the nature and style of management activities related to the formation of an innovative culture and qualitatively different personnel potential. The existing institutional model of project management in the Russian Federation includes two interrelated sets of institutional mechanisms (strategic design and project management) at the national and regional levels. The authors identified successful practices in implementing project management at the federal and regional levels in the Russian Federation, as well as a set of factors (institutional structure, interdepartmental interaction, the potential for socio-economic development of the region) and resources (personnel, network, information, institutional) that affect the effectiveness of project management in the constituent entities of the Russian Federation.

Keywords: *Project management, Public authorities, Entities of the Russian Federation.*

JEL Classification: D78; R58

MARITIME MULTI-USE APPROACH IN THE BALTIC SEA REGION: OFFSHORE WIND ENERGY AND TOURISM CASES

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Abstract. The research aims at analysing maritime spatial planning (MSP) development in the countries of the Baltic Sea region through the lens of the concept of a multi-use approach to maritime space, especially in offshore wind energy and coastal and offshore tourism sectors to contribute to the progress of a sustainable blue economy. The research methods used include analysis (using such techniques as monographic, dogmatically comparable, and special analytical) and synthesis through examination of marine plans, regional and national policy documents, and MSP-related legislation in the European Union Member States of the Baltic Sea region. The results of the research confirm that in a contemporary understanding a holistic multi-use approach to maritime space is an integral part of MSP for resource and space sharing between two or more activities with the aim of benefiting for all users. Conceptually, it evidences about the emergence of the multi-use principle in the MSP process. However, offshore wind development is prominently prioritised in the currently adopted marine plans while the accentuation of the use of multi-use principle is rather cautious. In this aspect, knowledge transfer from the countries with longer-established experience in offshore wind development and its combination with other activities, e.g., tourism is crucial. At the same time, it should be borne in mind that large-scale offshore renewable energy and the concept of multi-use maritime space will also mark the long-term future development of MSP in line with global and European Union targets for achieving carbon neutrality and zero pollution, promoting a circular economy, and restoring biodiversity by 2050.

Keywords: *Baltic Sea region, Coastal tourism, Maritime spatial planning (MSP), Multi-use approach, Multi-use principle, Offshore tourism, Offshore wind.*

JEL Classification: K32; O21; Q20; R58; Z32

DRIVERS OF GREEN INVESTMENT DEVELOPMENT IN UKRAINE: A RETROSPECTIVE ANALYSIS

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Abstract. This paper summarizes the arguments and counterarguments within the scientific discussion on the importance of promoting and supporting green economic transformation for attracting green and socially responsible investors. The research aims to conduct a retrospective analysis of green transformation to determine the main driving forces and preconditions for green investment development. The relevance of the decision of the investigated scientific problem is that the green investments contribute to the harmonization of three main pillars of sustainable development (society, economy, and environment) under the growing burden of climate change. The research object is the national economy of Ukraine. The analysis covered data for 2000-2020. To achieve the research goal, the study involved the scope of bibliometric and econometric tools. The obtained results empirically confirmed and theoretically proved that strengthening and developing the national economic performance significantly depends on the success of the green transformation. The findings identified the most prosperous economic spheres to involve green investments. The study gave the main recommendations for improving the national incentive mechanism towards developing a green investment market in Ukraine.

Keywords: *Green growth, Green investments, Green investors, Economic performance, National economy.*

JEL Classification: E22, O44, Q56

Funding: *This research was funded by grants from the Ministry of Education and Science of Ukraine «Green investing: cointegration model of transmission ESG effects in the chain 'green brand of Ukraine - social responsibility of business'» (0121U100468).*

STRATEGIC REGIONAL DEVELOPMENT PLANNING: METHODS AND TOOLS

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Abstract. Regions are supposed to create organizational foundation for country's economy. Economic regionalism, in general terms, is a combination of production and recreation processes based on the territorial structure of the economy, culture, labour and nature resources. Within the processes of development of complete mechanisms and prerequisites of production regions of various complexity levels are generated. The design of such regions, along with many other factors, have a strong influence on the country's advancements in different fields, including sustainable development. In our research we would like to critically analyze the existing approaches to sustainable regional development planning, methods, and tools. The findings suggest that the level of region's productivity and as a turn its contribution to country's development depends on the ability of enterprises to acquire sustainable competitive advantage in the market.

Keywords: *Regional development planning, Sustainable development, Strategic management of regions.*

JEL Classification: R58

LIFE CYCLE ASSESSMENT (LCA) ASPECT OVERVIEW FOR SUSTAINABLE URBAN PLANNING FOR DEVELOPMENT

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Abstract. Increasing awareness of sustainable urban development, methods for evaluation of plans and actual city status are becoming more critical. One of accepted and used as standardized assessment is Life Cycle Assessment, what is also defined as ISO standard. Research Focus: Perform literature overview and analysis for the LCA application specifics for urban development planning Research question: Identify relevant specific aspects of LCA, for sustainable urban planning and relevant boundaries. Background: Performing a Life Cycle Assessment is process to evaluate the environmental impact associated with a product, process or activity. LCA includes specifics for relevant Level of Details (LOD) of identifying input materials, energy used and generated waste to the environment, with the methodology for assessing the potential environmental aspects and improvements by: 1) Identifying relevant inputs and outputs *(Input/Output), 2) evaluating the environmental impacts associated with inputs and outputs identified (Impact), 3) interpreting the results and impact phases (Dynamic) reflecting to the objectives of the assessment performed. Research identified several potential challenges upon application of method: 1) Method requires detailed data, thus, for existing cities, collection of data and building model, would require extensive research of AS IS; 2) Methods requires setting a framework for city (models), what can be specific for particular city, thus comparison between different cities individual models, have include data or result transformation methodology; 3) Focused and planning of long-term model maintenance (cost allocation/efficiency). LCA is applicable method to use for sustainable urban development and planning assessment.

Keywords: *City planning, ISO 14040, Life Cycle Assessment (LCA), Lifecycle, Sustainable development.*

JEL Classification: Q56