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Content

EMERGING TRENDS IN
FINANCE, ECONOMICS AND POLITICS

Viktorija Skvarciany, Silvija Vidžiūnaitė. APPROACH TO THE PRIORITISATION OF DECENT WORK AND ECONOMIC GROWTH IN BRICS COUNTRIES

Abstract

Research purpose. Sustainable development is one of the issues of all the countries. Sustainable development has been reached through sustainable development goals announced by the United Nations in 2015. All the goals are expected to be achieved by 2030. Even though all the UN member states seek to reach the set goals, it is not apparent when it could be stated that the goals have been achieved. In other words, there is no benchmark, the achievement of which could be an inference that the country does not seek sustainability, but is sustainable. The first step that should be done in order to define a benchmark is the evaluation of the present situation. In other words, it should be understood where countries are at present.

Design / Methodology / Approach. The article covers the prioritisation of BRICS countries in order to find out which of them is the most successful in terms of SDG8. For that purpose, AHP and TOPSIS methods were used. The AHP method was employed in order to assign the SDG8 factors with the weights, and TOPSIS method was used for prioritisation procedure of BRICS countries.

Findings. According to the AHP method, the most influential SDG8 factors are as follows: agriculture, forestry, and fishing; employment in agriculture; and youth unemployment. Based on the TOPSIS method results, China is the most developed economy from 1991 to 2019 regarding economic growth and a decent work environment. South Africa showed the lowest progress.

Originality / Value / Practical implications. The current study revealed the weights of SDG8 factors which could be valuable to the policymakers as could help to put the accents on the factors that should receive the greatest attention.

Keywords: Sustainability; sustainable development; economic growth; decent work; BRICS.

JEL codes: O47, Q01.

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Milena Medineckiene, Viktorija Kirdaite. EVALUATION OF INFLUENCING FACTORS ON GREAT BRITAIN'S EXPORT VALUES

Abstract

Research purpose. The aim of the research was to identify the main factors influencing export volumes in the region of Great Britain from the period of 2000-2020.

Design / Methodology / Approach. In order to implement the investigation, the following tasks were intended: (1) To analyze scientific literature and mark out at least 5 non - dependent variables that have an impact on export volumes of Great Britain; (2) Basing on finding, lineated in scientific review, suggest or choose methodology that is the most appropriate for this kind of tasks' determination; (3) Collect the date for dependent and non-dependent variables (at least 30 samples); (4) Based on the presented methodology, determine the impact of the selected factors, make the statistical and economical analysis. The research was mainly done by the methods of quantitative analysis (descriptive, correlation, regressive analysis).

Findings. Five non-dependent variables were marked out as factors, influencing the export volumes in selected region: gross domestic product (GDP); the number of employees in the region; amounts of cargo transportation; average salary in the region and labor costs. Calculation of the correlation coefficients showed that all independent variables were statistically significant. There is a very strong relationship between export volumes and GDP, employment and labor costs.

Originality / Value / Practical implications. It is important emphasize that the deeper analysis of the influencing factors on volume of export in Great Britain showed also and interrelation of these factors in between. So further investigation of this factor impact is essential. For broaden analysis some more additional factors can be added for investigation.

Keywords: Impact analysis; GB export values; quantitative analysis; influencing factors.

JEL codes: E01, D20.

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Lina Baranauskaite, Daiva Jureviciene. RISK ASSESSMENT OF LITHUANIAN INTERNATIONAL TRADE IN BEVERAGES

Abstract

Research purpose. The purpose of the article is to identify the risk of foreign trade in four beverage groups (waters, including mineral waters and aerated waters, with additives; beer; wine and other alcoholic beverages) at a national level.

Design / Methodology / Approach. Agricultural beverages do not belong to the first necessity food category. Four main groups of drinks examined: waters, including mineral waters and aerated waters, with additives; beer; wine and other alcoholic beverages. The case of Lithuania is presented, using the data for 2015-2019. Analysis of scientific literature, statistical analysis and mixed risk assessment methods (qualitative and quantitative) are used.

Findings. The research categorises the product groups according to the level of riskiness. Critical risk factors affecting the smooth external trade of these products are also identified.

Originality / Value / Practical implications. The risks of foreign trade in beverage products assessed in this article can help shape a country's trade policy, mitigate trade risks, and effectively manage the agricultural trade beverage subsector.

Keywords: International trade; food trade; beverages; risk management; risk assessment.

JEL codes: F1, F13, F17, F18, G32, L66, N5.

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Kamile Daunaraviciute, Greta Keliuotyte-Staniuleniene. ASSESSMENT OF THE FACTORS OF GREEN BOND MARKET DEVELOPMENT

Abstract

Research purpose. The development of the green bond market provides various benefits to both issuers and investors and makes a significant contribution to sustainable economic growth. Therefore, it is crucial to determine the main drivers affecting the growth of the green bond market. The aim of this research is to identify the main factors of green bond market development and quantitatively assess their impact.

Design / Methodology / Approach. After the analysis of previous scientific researches, the authors used the methods of correlation-regression analysis and expert evaluation method to identify and evaluate the main factors of the green bond market development.

Findings. The results of the research revealed that general development of financial markets, as well as high standards of living, market openness, implementation of sustainability-oriented policy and the number of environmental-friendly initiatives in the country have a significant impact on green bond market development. The results confirmed the general macroeconomic situation in the country determines the expansion of the green bond market.

Originality / Value / Practical implications. Despite the recent increase of practical and scientific researches of green bond market, so far relatively little research on the main drivers of green bond market development has been done. This research contributes to the field and reveals the relation between green bond market expansion and macroeconomic and other indicators.

Keywords: Green bond market; sustainable economic growth; market development drivers.

JEL codes: G10, Q56, H74.

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María José Miranda Martel, Sara Ojeda González, Ammar Z. Alwrekiat, Antonio Mihi-Ramírez. **DETERMINANTS OF INTERNATIONAL MIGRATION, A THEORETICAL REVIEW**

Abstract

Research purpose. Migration is one of the most controversial political issues in industrialised countries, especially in a time of population ageing and the prospect of a shrinking labour force. Unfortunately, there is no general agreement on which are the determinants of migration, because each paper analyses different issues and perspectives. So, this study look for reviewing the determinants of international migration with the goal of highlight the large number of studies that address this important research topic of migration literature.

Design / Methodology / Approach. We perform a comprehensive review of determinants migration literature, as well as the relationship between these determinants and their connections with the different migration approaches. The most relevant papers selected belong to Web of Science (WOS) collection from the last 20 years.

Findings. There are many different theoretical approaches that are found when analyzing international migratory movements and although an attempt is made to explain the same, no consensus is reached on the determinants that cause migration. After an exhaustive analysis and reviewing the literature on migration, this work determines that there are 10 key determinants of international migration: grouping the determinants of international migration: Fiscal policy, income, networks, unemployment, economic openness, social inequality, demographic need, foreign direct investment, highly skilled human capital and climate.

Originality / Value / Practical implications. In the literature on the determinants of international migration, there is no consensus as to which aspects are key to the international movement of people. This study, after a thorough review of the migration literature, proposes a list of determinants of international migration. In terms of practical implications, policy makers have at their disposal a set of variables that they need to be aware of in different circumstances. On the one hand, they will be useful for those countries that have demographic needs, that require qualified personnel for the development of their productive fabric or to understand their environment and anticipate waves of migrants motivated, for example, by social inequality. On the other hand, this study is a starting point to analyse each of the determinants and their relationships with economic variables, in order to verify whether they can be complementary or substitutes. Furthermore, it would be of interest to analyse these determinants under current global pandemic conditions and to test which are stable despite global circumstances.

Keywords: determinants; emigration; immigration; migration

JEL codes: F2; O1; R23

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Elena Stavrova. **ON THE HAUSMANN' THEORY FOR ECONOMIC COMPLECSITY AND PRODUCT SPACE**

Abstract

Research purpose. The main goal of the study is to show the one of most popular economics theory"Economic Complexity and Product Space" how is meaning for the process of digitalization in financial industry. The validity of this theory has already been studied in a dissertation in the context of industries such as automotive, but digitalization as a process encompasses ecosystems of different nature and therefore our goal is to explore how digitalization while underlying the ecosystem may develop its next levels in the process of financial intermediation.

Design / Methodology / Approach. The article included three parts: introduction, analysis of the theories of economics development, content analysis of the Housman's theory for economics complexity and product space, analysis of the most important indexes of development to the developed countries from the Hausmann Theory point of view.

Findings. There are two major solutions to the studied dynamics:

Hypothesis 1: There is new philosophy of collaboration between institutions and publics.

Hypothesis 2: Digitalization as a process will radically change the results and efficiency of financial operations.

Hypothesis 3: The more developed countries has owned the highest levels of the ICI and this is a prerequisite for the development of related, ie. Cluster structures with high added value.

Originality / Value / Practical implications. Index of economic complexity (ICI) as an internationally recognized methodology, is a new basis for comparison in the development trends of countries with similar characteristics - population, gross domestic product per capita, index of inequality and to draw conclusions and form policies on this basis. The article looks for an answer of the question - why developed economic countries are becoming more developed, while others are catching up at a significantly slower pace. This became even more evident during the Kovid-19 crisis, when countries with a high degree of digitalization received overdevelopment of industries based on computer and innovative technologies.

Keywords: GDP; ICI.

JEL codes: O20, O12, F61, O11.

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Vita Zarina, Anna Abeltina, Kristaps Grinbergs. DEVELOPMENT OF CIRCULAR ECONOMY IN LATVIAN CATERING SECTOR

Abstract

Research purpose. The aim of this paper is to find out the possibility of introduction of the principles of circular economy and interest in the public catering sector in Latvia. To achieve the aim, the following tasks were selected: to study the theoretical substantiation of circular economy, to study the development of circular economy in the public catering sector, to identify the basic problems in business related to the circular economy. Research question: is there any difficulties to implement circular economy in Latvian catering sector.

Design / Methodology / Approach. The research consists of three interrelated parts. In the first part of the article the theoretical aspect of circular economy, is analysed and assessed, and also opportunities of circular economy in comparison to linear economy are analysed. The second part describes methodology of the research, information on design of the questionnaire and profile of participants and also information about participants in the expert discussions. In the last part empirical findings are presented and the outcomes of questionnaire and experts' opinion are clarified.

Findings. The important factors of companies' management understanding of circular economy and related factors were identified and the most important factors were highlighted.

Originality / Value / Practical implications. Circular economy plays an important role in the global economy and sustainable development in every company, particularly in the public catering sector. Research helps to maintain the trajectory of economic development, shows the necessity to implement circular economy in the public catering sector and the necessity for more information.

Keywords: Circular economy; linear economy; catering sector

JEL codes: C83, L 26, M 14.

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Primoz Pevcin. **SOCIAL INNOVATIONS AND THE CONTEXT OF ADMINISTRATIVE CULTURE AND TRADITION**

Abstract

Research purpose. Traditional public administration approaches have widely neglected the role of local traditions in developing norms in public administration and shaping administrative practice. This has resulted in the emergence of new approaches that have started to stress the role of administrative culture and tradition in shaping variations in governance and public policy outcomes. In this context, administrative culture and tradition, which are related terms, can be also described as a particular "type" of governmental organizational characteristics, with features that distinguish it from the private or third sectors. Moreover, administrative culture and tradition differentiate across countries. Thus, administrative culture and tradition are taken as independent variables, the purpose being to portray, how they contribute to divergence and variety in policy outcomes. We specifically focus on social innovations, as we assume that similarly to shaping policy outcomes and administrative practice, administrative culture and tradition represent an important element in either promoting or inhibiting social innovations.

Design / Methodology / Approach. The approach portrays the role of administrative culture and tradition as the environmental factors shaping and contributing to social innovations. We focus on mimesis and benchmarking how different administrative cultures and traditions enable social innovation processes and affect outcomes, which corresponds to the utilization of co-variational comparative approach. Specifically, the analytical approach utilized derives from operationalization of administrative cultures and tradition within the European context. The assumption is that we seek for effect of the distinctiveness in these cultures and traditions on social innovations. That is, culture and tradition operationalization is linked to the receptivity of and alignment to social innovations.

Findings. Administrative culture and tradition affect the reception of new ideas and influence the level of social innovations, in particular through the channel of how collaboration of various stakeholders is embedded in the governance and decision-making of government. Moreover, the effect of administrative culture and tradition, is also specifically subjected to the influence of political and managerial motives.

Originality / Value / Practical implications. This study would like to add to the literature by specifically relating the role of political-administrative and cultural contexts and legacies for social innovations potentials and outcomes. Although administrative culture and tradition are established themes in public administration and organizational research, there is a lack of literature that would address specifically relate these themes to social innovations.

Keywords: Administrative culture; administrative tradition; social innovations; comparative public administration.

JEL codes: D73, O35.

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Linas Jurksas, Rokas Kaminskas, Modestas Stukas. **EVALUATING ECB COMMUNICATION: WHAT GUIDANCE DOES IT PROVIDE?**

Abstract

Research purpose. This study aims to evaluate how ECB communication has been changing over two decades period and how it has affected euro area financial markets.

Design / Methodology / Approach. We apply the combination of the topic modelling technique (mainly – Latent Dirichlet Allocation) and sentiment analyses (field-specific and general-purpose lexicon) for over 2000 public ECB Executive Board member speeches as well as over 200 ECB press conferences. We then estimate the impact of the distribution of topics and sentiments on financial market variables separately by employing regression analysis.

Findings. Topic analysis showed that the main focus of ECB has shifted from strategy and objectives at the onset of euro area to various policy actions during global financial crisis and, more recently, to instruments and economic developments. Sentiment analysis revealed the expected decline in communication tone during turmoil periods and gradual shift to more accommodative monetary policy tone over time. The regression analysis showed that sentiment indices entail the expected impact on financial market indicators, while the effects of press conferences were substantially higher than the effects of speeches.

Originality / Value / Practical implications. Unlike the previous studies, we propose a broad-based and in-depth analysis of the ECB communication events using the combination of the topic modelling and sentiment analysis as well as its effects on various financial markets. First, we analyse two different types of ECB communication: regular ECB press conferences and, in particular, irregular Executive Board speeches. Second, using topic modelling algorithms we present not only the importance of different topics for the ECB as a whole, but also for each Executive Board member separately during last two decades. Third, the sentiment analysis includes two different lexicons as well as separate economic and monetary policy sentiments. Finally, by employing a variety of regression specifications we estimate the impact on a wide range of financial market indicators including stock indices, market volatility, proxies of fragmentation and risk-free interest rates. This whole set of characteristics embedded in our analysis allows us to capture more comprehensive picture of ECB communication developments as well as corresponding reaction of broader set of financial market indicators than in similar studies.

Keywords: ECB; speeches; press conferences; text analysis; financial markets.

JEL codes: C80, E43, E44, E58, G12.

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Mangirdas Morkunas. **THE CONCEPTUALIZATION AND MEASURMENT OF CLIMATE-SMART AGRICULTURE**

Abstract

Research purpose. The purpose of this study is to clearly conceptualize the notion of climate-smart agriculture, to provide clear delimitations between agricultural sustainability, economic resilience of agriculture and climate-smart agriculture.

Design / Methodology / Approach. Literature review, expert survey, Analytic hierarchy process method.

Findings. The clear theoretical borders between climate-smart agriculture, agricultural sustainability and economic resilience in agriculture were drawn. The set of indicators for measuring climate-smart agriculture have been proposed.

Originality / Value / Practical implications. The integrated indicators system for measuring climate-smart agriculture have been proposed.

Keywords: climate-smart agriculture; economic resilience, agriculture, sustainability.

JEL codes: Q18; Q19.

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Bohumil Stadnik. **CRYPTOCURRENCY FUNDAMENTAL VALUATION**

Abstract.

Research purpose. Nowadays popular cryptocurrency investments provoke a discussion about a “fair” exchange rate of cryptocurrencies against traditional currencies like EUR or USD. In the case of a traditional currency pair, we use for fundamental valuation mainly theories of absolute or relative purchasing power parity or interest rate parity. Although market price usually differs from a fair price, all these approaches are supported by existed real economy which works by utilizing the appropriate currency and helps to keep conversion rate in “reasonable” levels. The question which is solved in this research is if we may use such approach in the case of cryptocurrencies, and if not, what does it mean for the behavior of price of cryptocurrency and for its prediction?

Research methodology. Methodology focuses into comparison of the rules of pricing of goods or services in an economy with traditional currency and in the world of cryptocurrency. Based on these findings the conclusions are made.

Findings. As there is no economy which works autonomously in cryptocurrency and all the prices of goods and services are basically only conversion of market rate of cryptocurrency, we cannot use classical parity theories and we must also conclude that extremal volatility may appear.

Research limitations. There is no significant limitation as it is fundamental research in in the field of cryptocurrencies valuation.

Practical implications. The research helps practitioners considering investment to cryptocurrencies.

Originality/Value. As there is no economy working in cryptocurrency, we cannot use classical parity theories.

Keywords: Cryptocurrency; valuation; purchasing power parity; interest rate parity.

JEL classification code(s): G1, G12.

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Mintaute Mikelionyte, Aleksandra Lezgovko. HOW GENDER IMPACT PERSONAL INVESTMENT STRATEGIES

Abstract

Research purpose. The main goal of the current study was to determine whether the gender difference exists in personal finance and especially investment area, to refine the reasons behind this phenomenon, to analyse what could be done to improve the situation and to introduce the suggestions for further research. The primary objectives were to find out what are the main peculiarities between males and females when it comes to personal investment strategy choices and to analyse financial literacy and investment fields through female perspective.

Design/ Methodology/ Approach. The major task was to conduct the research on the male and female personal investment decision peculiarities presented in literature sources and to prepare the survey to conduct practical research while applying theoretical knowledge and to present the findings along with the suggestions on how to improve female situation in investing field. The research was done based on literature, reports, surveys, statistical data used for literature analysis and Lithuania's case study for the practical part of the research.

Findings. The most obvious finding to emerge from this study is that females lack knowledge and understanding in finance and especially investing areas, therefore this leads to inadequacy in self confidence in finance and investment matters and as a result neglect of successful personal finance management and more significantly poor investment strategy decisions.

Originality/ Value/ Practical implications. The importance and originality of this study are that it assesses the collective evidence in the personal investing field and explores its processes through the prism of gender impact. The understanding of the gender bias impact in personal investment strategy development process can play an important role in addressing the issue of gender inequality in finance and investment areas. The main points revealed during this study were that men tend to invest more often than women, as females, in general, prefer to save rather than invest; women tend to choose less risky investment strategies compared to men or save rather than invest. The main factors of this phenomena are the influence of cultural, social, or psychological factors, low financial literacy level, differences in economic status, the longer life expectancy, the lack of confidence when it comes to knowledge applied to the financial decisions; males are more likely to choose a higher-risk investment strategy and to be more confident in their investment ability even if they have less knowledge on the matter. The analysis of Lithuania's case has also confirmed the main literature review findings and reported females to lack financial and investment knowledge, spare funds and select to save rather than invest or invest into the low-risk tools.

Keywords: Investment strategy; personal investment strategy; investment decision; investment risk; gender difference; female investing.

JEL codes: G23, G53.

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EMERGING TRENDS IN
BUSINESS ADMINISTRATION, MARKETING AND ENTREPRENEURSHIP

Iveta Cirule. **LATVIAN NATIONAL INNOVATION POLICY – STATE OF ART AND OPEN INNOVATION PARADIGM**

Abstract

Research purpose. Open Innovation is the concept of co-creation and collaboration. National innovation policy in Latvia is mostly focusing on technological innovation. The non-tangible aspects of innovation culture are missing in 2014-2020 planning documents and are rarely mentioned in planning documents for 2021-2027. The purpose of this article is to draw policy makers' and researchers' attention to Open Innovation approach in national innovation policy in order to promote the values of co-creation and collaboration.

Design / Methodology / Approach. The national innovation policy planning documents of period 2014-2020 and 2021-2027 qualitative analyses was performed in order to detect Open Innovation approach.

Findings. The analysis of national innovation policy planning documents proved the assumption that Open Innovation approach is missing not only in previous planning period 2014-2020 but also in the main state strategic documents for period 2021-2027.

Originality / Value / Practical implications. The inclusion of Open Innovation paradigm as co-creation and collaboration approach in national innovation policy planning documents for 2021-2027 is the practical implication suggested by this research.

This research was conducted within the project "Open Innovation, No1.1.1.2/VIAA/3/19/426" funded by Postdoctoral Research Support Aid programme of Latvia.

Keywords: open innovation; national innovation policy

JEL codes: 036; 038

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Tatjana Tambovceva, Tetyana Pimonenko, Yana Us, Regina Veckalne. **BIBLIOMETRIC ANALYSIS ON THE ROLE OF MARKETING IN SUSTAINABLE DEVELOPMENT**

Abstract

Research purpose. This paper provides a bibliometric analysis of publication activity on the marketing role in the transition towards sustainability. The concept of sustainable development is becoming increasingly popular across the globe. This concept is promoted by various international organizations, such as the International Union for Conservation of Nature and Natural Resources, the United Nations Environment Program, the World Wildlife Fund, and others. Nowadays, the economy of commodities and manufacture transforms towards an innovative economy. Herewith, marketing is a vital part of the contemporary, so-called 'information society', where information technologies, intellectual resources, and digital economy tools are employed. Despite much discussion on the main factors that affect sustainability, it is widely accepted that the concept of sustainable development stands on the three pillars: the economy, society, and environment. In this regard, green marketing has gained a competitive advantage over other marketing strategies in promoting all three sustainable development pillars. This research aims to analyze

the world scientific background and visualize the clusters' relationship between marketing and sustainable development.

Design / Methodology / Approach. The survey sample consists of 2278 articles published in the scientific journals indexed by the Web of Science database. The period of publication is 2000-2020. The authors formulated the sample out of the articles indexed by the keywords "marketing", "sustainable", "green", "environmental" and "sustainability" in the article titles. To gain the research purpose, the method of visualization of similarities was conducted. Using Web of Science database tools and VOSviewer allowed visualizing the articles in terms of the quantity, research areas, number of citations, authors, etc.

Findings. The paper presents seven main clusters of keyword co-occurrence that determine the relationship between marketing and sustainable development. The obtained results indicated a growing tendency of publication activity on a marketing role in sustainable development from the research. In turn, scientists consider marketing a vital tool for sustainable development promotion and achievement as it helps raise environmental awareness. However, since the idea of green marketing is relatively new, it is only becoming mainstream in the past several years. Therefore it is hard to examine the real impact it made in the sustainable development progress.

Originality / Value / Practical implications. The paper provides the background for future investigations on the role of marketing in sustainable development.

Keywords: sustainable development, green marketing, tools of sustainable development, sustainability.

JEL codes: O13; M31

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Inese Abolina. REVIEW ARTICLE: STUDY OF TOUCHLESS AIRPORT FOCUSING ON AIRPORT PASSENGERS SATISFACTION

Abstract

Research purpose. The global aviation sector has never had a greater crisis than what it is experiencing during the COVID-19 global pandemic. While passenger numbers are floating, COVID-19 remains a threat. This innovative interdisciplinary study maps airport passenger services digitalization literature review with regard to passenger satisfaction. The study tracks the influence of touchless airport services, focusing on the safety and encouragement of airport passengers.

Design / Methodology / Approach. Literature searches in Google Scholar. The review includes a general screening of more than 100 publications covering the period of 2016-2021, and a close reading of more than 20 selected publications, including literature cited and citations of each.

Findings. Study consolidates key constructs of passenger satisfaction, digital self-service processes in airports, passenger attraction policy and touchless airport.

Originality / Value / Practical implications. Literature review provides a framework for establishing the foundation for the post-doctoral research study on passenger services digitalization at Riga International Airport (PASSDIGI). It provides results of other studies that are closely related to PASSDIGI, opens a larger ongoing discussion in literature on touchless airport, fills in gaps and extends the prior studies on passenger satisfaction with touchless airports.

Keywords: Passenger satisfaction; digital self-service processes; passenger attraction policy; touchless airport.

JEL codes: L90, J28, F68.

Acknowledgement: This research is a part of the Postdoctoral research project Passenger services digitalization at Riga International Airport (PASSDIGI) 1.1.1.2/VIAA/4/20/608, financed by ERAF (85%), LV (10%) and UL(5%).

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Helmuts Lejnieks, Ilona Lejniece. DIGITAL REALITY IN COMPANIES AS A PART OF CORPORATE SOCIAL RESPONSIBILITY DURING PANDEMIC: CASE OF LATVIA

Abstract

Research purpose. The aim of the article is to outline the relationship of the concept of corporate social responsibility with the issue of digital reality.

Design / Methodology / Approach. The research is based on a scientific research analysis method (deduction, synthesis, induction, deduction, critically creative) analysing principles of corporate social responsibility during pandemic, including digital social responsibility in companies. Within the framework of the research, methods of analysis and deduction are used to reveal the degree of concentration of digital principles in the socially responsible business environment. The method of synthesis and induction, as well as the logical approach is applied in assessing the effects of the application of the principles of digital reality of corporate social responsibility. A critically creative method is applied to the presentation of the results of the research, revealing the elements of digital reality included in the corporate social responsibility.

Findings. Corporate social responsibility and digital reality are one of the most important factors of global competitiveness in the modern business environment. The new everyday life during pandemic – remote work, remote provision of goods and services not only poses new challenges for companies, showing both pros and cons in the work processes and organization, but also requires the need to improve the social and

digital dialogue model as well as to encourage entrepreneurs for not only socially, but also digitally responsible business environment. Socially and digitally responsible entrepreneurship goes hand in hand, and such interactions must ensure participation in the provision of working and living conditions for both the company's employees and society as a whole.

Originality / Value / Practical implications. Prepare a crisis management plan to improve social and digital dialogue between business and society. In order to avoid mistakes, the plan is recorded both as process improvement as well as changes in regulations.

Keywords: Digital reality; corporate social responsibility (CSR); business; pandemic; Latvia.

JEL codes: M14, M15.

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Lenka Smolikova, David Schuller. INVOLVEMENT OF STAKEHOLDERS IN CSR DURING PANDEMIC COVID-19 IN THE CZECH REPUBLIC

Abstract

Research purpose. The purpose of the paper is to identify and find out the importance of individual stakeholders in Covid-19 situation. The results are used for the creation of corporate social responsibility (CSR) stakeholders Covid-19 framework. The implementation of the framework will be presented in real cases.

Design / Methodology / Approach. The focus group method was used to identify all interest groups. For individual focus groups, respondents rated their importance for universities on a scale from 1 - 10. Subsequently, the different interest groups were divided into relevant groups by factor analysis. The obtained outputs are used for the creation of CSR stakeholders Covid-19 framework.

Findings. The university's most important stakeholders in education were found to include applicants for study and their parents, student, and academic staff, and last but not least, foreign students. In the field of science and research, the university's main stakeholders are academics, enterprises, and the professional public. Emphasis is placed on how these stakeholders contribute to the university's CSR objectives.

Originality / Value / Practical implications. The value of the proposed corporate social responsibility stakeholders Covid-19 framework can be seen in the fact that it is tailored to the situation of Covid-19. A case study related to the subject is also included in the study.

Keywords: Stakeholders; corporate social responsibility; Covid-19; best practices; framework.

JEL codes: M14 .

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Marcin Komadna. POLISH FITNESS INDUSTRY FACING LOCKDOWN 2

Abstract

Research purpose. Restrictions on economic activity during the Covid-19 pandemic have a very negative impact on the condition of the Polish fitness industry. It is currently struggling with a protracted second lockdown. The aim of this work is to trace and systematize the activities undertaken by the representation of this industry in Poland in order to improve its situation.

Design / Methodology / Approach. The research intention was based on the analysis of information collected thanks to media publications. These activities also included profiles of industry groups in social media.

Findings. The first lockdown due to the Covid-19 pandemic was used by the fitness industry in Poland to search for new ways of running business, as well as to initiate cooperation within industry associations aimed at stronger influence on decisions made by the Polish government. The second lockdown forces to tightening of cooperation between entities within associations, active and frequent submission of demands towards the government, as well as the organization of legal support for industry members, and legal action against the Polish government.

Originality / Value / Practical implications. The findings made as a result of the analyzed information make it possible to systematize the dynamic image of the Polish fitness industry in a crisis situation caused by the pandemic. This gives the opportunity to trace the unique processes of industry environment integration and coordination of activities.

Keywords: Fitness industry; lockdown; Covid-19.

JEL codes: M10, M19

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Ilze Blauberga. DESIGN THINKING AS COMPETITIVE BUSINESS TOOL

Abstract

Research purpose. Purpose of the paper is to research literature and scientific reviews in order to define design thinking as competitive business tool to be implemented in business strategy not only in finance and health sector, but in any service business. Design thinking has reached managers' attention as an important topic. Some of the world's most influential technology companies – Apple, Alphabet, IBM, SAP – have moved design to the very heart of their operations. (Change by Design, Revised and updates, 2019). M. Stickdorn and J. Schneider have said: "Service design thinking is an interdisciplinary approach that offers great value for entrepreneurs and innovators in the field of services." (This is service design thinking, 2010) According T. Brown "innovation shows how design thinking could be a major lever for change by using design as a systematic tool for managing the innovation portfolio." (Change by Design, Revised and updates, 2019)

Design / Methodology / Approach. The paper is mostly focusing on analysing literature and information sources about service design thinking as well as scientific articles on this topic. The idea is to define what could businesses benefit from implementing design thinking in their daily operations. This theoretical research will be used as a basis for the next research phase – an empirical study.

Originality / Value / Practical implications. Many businesses where affected and even temporary closed due to the pandemic. Companies have to develop new ideas and show the additional value for clients. By discovering the possible new and innovative ways to restart business or find other aspects in continuing businesses in current competitive environment. Design thinking is about understanding customer needs and transforming them into solutions adapted for the new normal.

Keywords: Design thinking; innovation; management.

JEL codes: O20, D83, L26.

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Asie Tsintsadze, Natia Diasamidze. IMPACT OF THE COVID 19 - CAUSED DELAYS ON THE MULTIPLICATION EFFECT IN THE TOURISM INDUSTRY

Research purpose. The aim of the study is to determine the of multiplication effect of investments and revenues gained in the field of tourism before and during the pandemic period in order to identify the shortcomings of the tourism sector in Georgia and to develop ways to avoid shock events.

Research Methodology. Quantitative and qualitative analysis methods were used for the research, the efficiency factor for damage of business entities constituting the tourism cluster in the pandemic conditions is determined.

Findings. Tourism is on the list of industries that are mostly affected by the pandemic. Traditionally, the tourism sector has always been influenced by various internal and external factors like military conflicts, natural-climatic conditions, currency fluctuation, economic crises and others. But the shock from COVID 19 has turned out to be fatal for the tourism industry.

Originality / Value / Practical implications. This problem has emerged to a high degree mainly in developing countries where tourism has contributed greatly playing the most important role in maintaining and improving the socio-economic situation of the population. The conducted research provides business entities operating in the field of tourism with particular approaches that can be used to define the expected shock events.

Keywords: Tourism; investment; multiplication; cluster; shocks.

JEL codes: Z3

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Laima Jeseviciute-Ufartiene. MEASUREMENT OF CONSUMER INTENTIONS: FAST FOOD MARKET ANALYSES APPLYING LITHUANIAN COMPANY EXAMPLE

Abstract

Research purpose. The goal of the research is to measure consumers' intentions for fast food usage while analysing the case of Lithuanian company.

Design / Methodology / Approach. The analyses are performed using a quantitative questionnaire applying it to consumers of fast noodles products. 918 respondents were questionnaire. The reliability analyses of Cronbach alpha showed great consistency (0,994 with 107 items).

Findings. Research results revealed that 71.7% of respondents from the research are consuming fast food noodles and 5.1% from them are consuming it every day, 8.3 % every week and 23.6% every month. Furthermore, their choice to consume fast food noodles are influenced by such aspects as a deal of price, easiness of preparation and taste than by such aspects as price, brand or environmental friendliness. The research results deeply indicate the specificity of fast food consumption and could be useful for fast food producers thus it creates value for practitioners.

Originality / Value / Practical implications. Scientific value is reached in the creation of deep and specifically applicable questionnaire for collecting data and making their analyses. Research could be repeated with different products in the fast food market.

Keywords: Consumer intentions; fast food; consumer’s needs; quick prepared food, consuming pasta.

JEL codes: M31, D12.

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Philip L. Fioravante, Ph.D., FCIM, FISROSET. **A NEW SUSTAINABILITY MODEL – THE FOUR ESSENTIAL QUADRANTS OF SUCCESSFUL OUTCOMES**

Abstract

Research purpose. There have long been suppositions and actual working level models featuring three primary rudiments. Much of the prior research and modeling has centered on Economic, Social and Environmental as the basis for sustainability within business models. This distinct perspective develops and puts forth four quadrants that are corollary to these three core elements; however, purports a more comprehensive business case with focus on: Financial Acumen, Critical Thinking, Creativity & Innovation and Corporate Social Responsibility (CSR). Each of these "new model" fundamentals provide a broader application for sustainability within a business strategy as companies look to distinguish themselves in the markets served. There is no doubt that executives are faced with a myriad of complex and in some sense, extraordinary demands on the business. This sustainability model captures four imperatives for sustaining and improving business performance and in the end, a sophisticated and authentic approach will provide engagement by and with all stakeholders. Financial acumen must be comprehensive and create value; Critical Thinking must be pervasive throughout the organization; Creativity & Innovation must drive systematic improvements throughout and Corporate Social Responsibility should be a core business strategy for both engagement and creating social influences. Though this last supposition can be argued such as Friedman put forth, there remains the awareness and recognition of the importance of CSR in a business model. This paper will present contemporary ideas on how, when and where the four quadrants are vital to the sustainability of an organization and central to the future of the entity.

Design / Methodology / Approach. So, let us start the dialogue regarding how and why organizations prosper in their respective sectors. Over time there have been several high-profile business failures and perhaps many more in the lower and middle markets, not to mentioned all of the small businesses that have unfortunately disappeared due to a myriad of reasons – both self-inflicted and market forces. As with any of the pre-work on this topic, there exists tension and differences of how business achieve sustainability. As McIntosh, Sheppy and Zuliani (2017) put forth, Sustainability, the capacity to endure, is not merely an add-on or an afterthought, but a central aspect of the future of business" (p. 309). Bringing sustainability into all strategic discussions is sin qua non in today's business settings. Integrating the four quadrants may very well provide a systematic methodology to encompass each in the daily operations and thereby establishing an institutionalization of sustainability within the business.

The primary capture in this article is based on one-on-one interviews with CEO's who have been in their role for over 10 years. In addition, there was an extensive review of similar, topic-based literature is complementing the qualitative, explanatory research approach. As a basis of the interviews, today's top executives are faced with complex, dynamic and fast-paced trends. In support, Whelan and Fink (2016), suggested "social, environmental, market, and technological trends. These require sophisticated, sustainability-based management" (p.1). The notion of critical thinking within the four-quadrant model mentioned earlier seemingly is intrinsic to this supposition. In addition to critical thinking, business sustainability if embedded or institutionalized will lead to improved business performance. A key point is the assurance that all stakeholders see the value of sustainability beyond "going green" and by their engagement in the business will realize continued strategic outcomes. Whelan and Fink (2016) discuss "adaptive strategies" – think using all of the four quadrants in harmony with the resultant intersections providing high-level, performance in all aspects of the proposed model.

As companies build their marketplace presence, they must look to the sustainability model as a road map of success.

The emerging need to conform to internationally recognized and accepted corporate governance is vital within a sustainability model. Transparency must exist among all stakeholders including government, employees, and society in a holistic sense. Those firms that manage governance effectively and efficiently have been found to have increased enterprise value. Several of the interviewees reflected on how important it is to be transparent, authentic and have a clarity of purpose. Companies that are sought after by investors, those who are feared by competitors, or those in adjacent industries who wish to emulate a particular company – these have a strategy that enhances a culture driven to be the best. Companies and leaders must

embrace and assimilate sustainability into the everyday business model especially in this fast-changing global economy. It needs not be an objective, goal or target. Rather, the focus needs to be seamless and simply a thread within the culture of excellence. As was discovered in the literature review and also found during the interviews, those companies that can move to sustainability at its core or as McIntosh, Sheppy and Zuliani (2017) purported, "…central aspect of the future of business" (p.309). This article will demonstrate the importance of each quadrant on its own merit and in synchronization within a business sustainability model.

This article has an ontological philosophical stance as it looks to reality and researcher assumptions of how the [business] world consisting of people, organizations and real situational contexts work together. The axiological philosophical assumption is evidenced throughout the explanatory narrative and the open-ended interviews focused on values, while discussing the nuances of shepherd leadership. The methodology applied is a review of relevant literature on sustainability, critical thinking, CSR and financial acumen. Moreover, a new Sustainability model will be put forth and primary data captured through the lens of interviews that occurred during the qualitative research process. Key words were selected based on the four quadrants and also included business ethics, corporate philanthropy, design thinking, shepherd leadership and stakeholder theory. As has been previously utilized, the methodology examination follows the systematic approach put forth in 2006 by Lockett, Moon and Visser.

By utilizing the literature review as secondary data, the interviewees were provided background in advance of the sessions. This step was constructed as an approach focused on: educating the participants in various theories, key words and broad concepts to support the explanatory approach of this article - which attempts to connect ideas to understand cause and effect. The ability to ascertain the "rich descriptions" of the participants was accretive to the existing literature. In addition, admittance of some bias was discovered, and the interpretations were a center of the participant interviews. Furthermore, a systematic computer-based and a manual search was also conducted based on the various leadership approaches as outlined in this research. The research brings currency and relevancy to some of the legacy descriptions and suppositions of sustainability within business models. Based on the research carried out, the four-quadrant model is yet to be fully introduced in business as put forth.

Findings. There should not be an existence of a question if a sustainability model is warranted. As Hoffman (2018) put forth, "companies have sought to improve competitive positioning by sustainability and corporate strategy" (p. 36). One of the first steps in this marriage is clearly stating the company's vison and establishing core values that will act as a social and business centric true north. Engaging all stakeholders is also essential as the baselines are established and that will create the common-speak, the operational excellence objectives, marketplace presence sustainment such as new, innovative product [or services]. Critical thinking provides for thoughtful, data-centered analyses. In the interviews, there was sufficient evidence of an established model that drove decision-taking and supported the presence of acute financial acumen. One key finding is the lack of understanding of the interrelationships among the four quadrants. Leadership must work tirelessly to draw all stakeholders into the learning process – inputs and outputs of sustainability. One such approach is drawing clear lines between the creation and applicability usefulness of the initiatives. All stakeholders need to share the purpose of the business to comprehend the nature of an integrated sustainability purpose. Organizations that engage and have a culture of innovation tend to transform more quickly and thus get to a higher performing level of success. In addition, businesses that look at each quadrant as an opportunity seemingly move along the continuum at a brisker pace than those that "pick and choose" their way to sustainability.

Originality / Value / Practical implications. An essential recognition for companies is to choose to thoughtful approaches to overarching strategies that drive high-performance. Embedded in this recognition is the intonation where sustainability transcends "simply being an objective" and instead is institutionalized as a core purpose of the business. In support, Chouinard (2011) offers that the next stage of sustainability is for it to evolve to the nature of the business. When this materializes, the four quadrants of the new sustainability model are more apt to provide opportunities for success. The base principles of sustainability as provided herein are ever-present as companies strive to ensure all stakeholders are in the conversation and the desired expectations of the business are realized – strong financials, creative and innovative practices, the use of critical thinking to drive sound decision taking and a corporate social responsibility that resonates with all with in the business' ecosystem.

Developing a system that includes the four quadrants is seemingly a result of a comprehensive strategic plan that is aimed at one thing – business sustainability. Not solely sustainment, but growth and learning across the organization. Many researchers have chosen to study and suppose the importance of value creation. Business sustainability moves to a focus on value-driven mindset – a subtle blend of altruism and capitalism. Paying attention to the chosen marketplace(s) provides firm with a base to which to build a sustainability model. Being proficient at adapting, transformation and measuring enables companies to achieve a balance of the "triple bottom line: people, plant and profit" (McIntosh, et. al, 2017). The research has shown in abundance that sustainable business must include strategic communication, ethical business practices, paying attention to the environment and enforcement of innovation and coherent thinking.

Keywords: Sustainability; corporate social responsibility; critical thinking; financial acumen; innovation.

JEL codes : M14, O35.

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Philip L. Fioravante, Ph.D. is a well-rounded business executive and Professor of Marketing and Management. Dr. Fioravante sits on several corporate boards for both private and public companies. He also is a frequent guest speaker and participant on industry and academic panels. In addition, he has published several peer reviewed articles in the areas of corporate philanthropy, the value proposition of strategic philanthropy, shepherd leadership and dark side leadership and published a book on Philanthropy and its Role in an Organization's Performance. Dr. Fioravante has a B.S. in Applied Engineering Sciences – Manufacturing Engineering from Michigan State University, MBA – International Business from Wayne State University (Detroit), an Advanced Executive Program Certificate – Strategy & Technology from MIT and his Ph.D. in Organizational Management & Strategy from the Business and Technology College - Capella University (Minneapolis). He also earned an Executive Scholar Certification – Growth & Innovation at Northwestern University – Kellogg School of Management.

Inga Shina, Velga Vevere. IMPACT OF LAWS AND REGULATIONS ON CORPORATE SOCIAL RESPONSIBILITY AND PUBLIC BENEFIT ORGANIZATIONS IN LATVIA

Abstract

Research purpose. On January 1, 2018, the Corporate Income Tax Law entered into force, which introduces significant changes in the activities of companies, which also affect the activities of organizations that have been granted the status of public benefit. As part of the tax reform, a new conceptual procedure for paying corporate income tax was introduced. The goal of the current research is to analyse the impact of changing the laws and regulations on Corporate Social Responsibility on the volume of donations to public benefit organizations

Design / Methodology / Approach. The research methods employed in the current research are the following: (1) qualitative content analysis of the State Revenue Service reports, companies annual Reports (from Lursoft) and webpages of public benefit organizations; (2) interviews with experts connected to the public benefit organizations. Research questions are the following: 1. How do changes in regulatory enactments affect the volume of donations to public benefit organizations? 2. Which donations model (out of the three) is preferred by legal persons when donating to public benefit organizations?

Findings. The results of the research allow authors to conclude that there is direct decline of the volume of donations to public benefit organizations from legal persons. The number of times that donations were given decreased by 33 %. Most often used donations model by legal persons in 2018 was "5 % from revenue".

Originality / Value / Practical implications. There is not studies in Latvia about the impact of laws and regulations on CSR. The research analyzes the reasons for this decline and works out a set of practical suggestions for the situation improvement.

Keywords: Corporate tax legislation; corporate social responsibility; public benefit organizations.

JEL codes: K34, M14.

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Sofia Carujo Pereira, Joao Rocha Santos, Pedro Fernandes da Anunciacao. DIGITAL TRANSFORMATION AS A COMPETITIVE FACTOR IN SUPPLY CHAIN MANAGEMENT: THE CONCEPT APPLIED IN ONE OF THE LARGEST EDITORIAL GROUPS IN PORTUGAL

Abstract

Research purpose. Through the adoption of the concept of the Proof of Concept, the main objective of this work is to highlight an approach that allows the framework and study of the viability of investments in the digital transformation of companies. The research focuses on the book sector and, mainly, on one of the largest publishing groups in Portugal and focuses on the strategic decision to adopt a Warehouse Management System to increase the productivity and competitiveness of the Company under review.

Design / Methodology / Approach. As a methodology adopted in the first phase, the authors developed a framework of current challenges through the Focus group technique. In a second phase, the authors conducted semi-structured interviews with the different managers of the various companies of the group and their departments. These methodological options aim to obtain more specific information on facts, the degree of relevance, validity, and reliability in which is analyzed from the perspective of the objectives of collecting information. Both methods provide elasticity in the approach and depth of the intended analysis, favoring spontaneous responses and the creation of openness to the approach of more complex and delicate topics.

Findings. Information technology investments do not automatically bring competitive advantages. It is essential to carry out careful management of the project and carefully analyze the economic and financial viability of the investment. The disruptive changes do not allow errors in investment. So, adopting a methodology that integrates the strategic analysis of the challenges and technical analysis of the assets and respective viability seems critical for the digital transformation projects' success, namely in the publishing sector.

Originality / Value / Practical implications. The digital transformation of companies is a current reality. The pandemic has highlighted digital as a factor of sustainability. However, this finding requires the preparation of management and the adoption of appropriate models and instruments. The present work presents a model that organizations can adapt to in a changing context.

Keywords: Digital Transformation; Warehouse Management System; Information Systems; Warehouse Management; Logistics.

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Denise Lopes Pereira, Pedro Fernandes da Anunciacao, Joao Rocha Santos. **CHANGE MANAGEMENT THROUGH ORGANIZACIONAL URBANISM: THE CASE OF LEAN ADOPTION IN AN INDUSTRIAL MULTINATIONAL COMPANY**

Abstract

Research purpose. The main objective of this research work is, through the adoption of Proof-of-concept methodology, to verify, on the one hand, the relevance of the adoption of a guiding model for change management, and, on the other hand, the adequacy of the organizational urbanism model associated with the Lean adoption in a multinational company of industrial instrumentation. Bearing in mind that the adoption of new concepts and practices is linked to change and considering that multinational companies are complex in their organisation and management, it has been sought to highlight the usefulness of this concept in managing the associated change process. In its phases, it is proposed a set of steps for the functional, informational, and technological adequacy to the specificity of enterprise with multi-business and multi-relational perspectives.

Design / Methodology / Approach. The study of the relevance and potential adoption of organizational urbanism model was carried out using the observant participation technique (Focus Group) with the aim of involving all stakeholders concerned, sharing knowledge and experience and generate a consensus about the solutions to be adopted. Two Focus Groups were created. One with the objective of analysing the dimensions with a strategic nature, as the vision, and critical success factors. And the other with a more operational nature whose constitution aimed an implementation perspective. The case study focused on a Switzerland multinational with an industrial equipment core business, which has a subsidiary in Portugal.

Findings. The results of this work, applied to the industrial business context, led to a greater awareness of internal stakeholders, who participated in the focus group. Regarding the importance of Lean in competitiveness, the proposed model (Metavision) provided a commitment to change. The approach facilitated an analysis of the relevance and feasibility of the set of steps presented, as well as the expected benefits, allowing the identification of the best strategies for the development of the Lean project. Although the work was focused on the Portuguese branch, it should be noted that the adoption of the Metavision model allowed a greater understanding of the organizational and procedural relations of the remaining subsidiaries of the group.

Originality / Value / Practical implications. Although Lean and Change Management are not recent management topics, they continue to reveal research opportunities, because the economic environment of companies is in permanent change, associated with technological innovation. Therefore, it is considered that, in the domain of change management, the existing models should be tested to analyse their suitability relatively to the specificity of surrounding context. For the company studied, it was possible to evaluate the

applicability of the proposed model, its usefulness and value in the adequacy to the Lean culture and adoption, as well as to analyse the feasibility of adoption this approach to other subsidiary companies of the group.

Keywords: Lean approach; Organizational change; Change management; Organizational urbanism; Process reengineering.

JEL codes: L2, L20.

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Oksana Lentjushenkova, Nataļja Verina. CRITICAL ANALYSIS OF THE CONCEPT OF THE DIGITAL TRANSFORMATION

Abstract

Research purpose. The aim of study is to analyze the concept of the digital transformation in order to clarify definition and understanding of the concept for business society at organisation level.

Design / Methodology / Approach. The authors used content analysis for research purpose achieving. Content analysis was made by using NVivo12. The sources for content analysis were selected from scientific data bases Scopus and Web of Science, using keywords “Digital transformation”, “Digitalization”. After critical review of selected sources 100 articles are included for content analysis. Frequency analysis was used for possible similar concepts identification. Using codification system ten nodes are created for relationship identification with similar concepts.

Findings. The concept of digital transformation is related to different concepts such as digitalization, digital innovation, digitization, IT innovation. Researchers mentioned these concepts in the context of digital economy, business digital strategy and digital skills development, but these concepts are not synonyms. Digital transformation of the organisation provides benefits for different stakeholders’ and increases competitiveness of the organisation in the future.

Originality / Value / Practical implications. The understanding of the concept of the digital transformation and benefits could enable organisations to implement digital tools and solutions for further performance.

Keywords: Digital transformation; digitalization; digitization; organisation.

JEL codes: M1, 03.

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Jana Tambovceva. SUSTAINABILITY IN THE FASHION INDUSTRY- A BUSINESS CASE OF VEJA

Abstract

Research purpose. The main goal of the research was to investigate whether the company does actually create sustainable products and how it is reflected in its business model, reporting, image and value chain in general. Additionally, several points of interests such as ownership, climate risks, shareholders and innovations in the organization were researched and identified. Moreover, certain potential threats of losing market share and momentum were looked at for Veja, as an organization that is completely advertising free.

Design / Methodology / Approach. The research was based on the already available secondary sources, however, some of the models used were the Ansoff matrix for potential growth strategies in the market, Mitchell's Stakeholder typology for determining several Veja's stakeholders, as well as differentiated business model definitions for establishing the one pursued by Veja.

Findings. It was concluded that the company faces several climate risks associated with the raw material supplier countries, as well as having to create original and sustainable product designs, that would keep up with the fast-paced fashion industry and trends. Moreover, it was established that Veja uses a Social Enterprise business model, which is defined to be a hybrid for companies that pursue both profit and purpose, emphasizing the prospect of causing no harm to the environment, the society, etc.

Originality / Value / Practical implications. The originality of the research stems from Veja being a brand that does not allocate any resources towards advertising, relying solely on word-of-mouth. Additionally, the company having its two founders as the sole owners for a very long time shows how the company's business model is influenced in terms of the values, mission and transparency to stakeholders. This research indicates how sustainability can profitably work in the fashion industry, establishing a stringent anti-fast-fashion position, demonstrating that ethical sourcing of products, complete transparency and strong core values can lead to a very successful brand.

Keywords: Sustainability; fashion; Veja; clothing; sustainable.

JEL codes: Q5, L67.

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Nataļja Verina. **PREREQUISITES FOR SUCCESSFUL BUSINESS DIGITAL TRANSFORMATION: VIEWPOINT OF LATVIAN EXPERTS**

Abstract

Research purpose. Every company that engages in a digital transformation journey does so to gain a competitive advantage as a main result. But not everyone gets to a successful finish in this journey. McKinsey research shows that 70% of complex, large-scale change programs don't reach their stated goals. (Bucy, et.al., 2016) According to IDG's 2018 Digital Business Survey, only 7% of companies have fully implemented their digital transformations. (IDG.com, 2018) The research results of McKinsey's 2020 shows that just 16% of executives say their company's digital transformations are succeeding. (Khanna et.al., 2020). There are plenty of different reasons, which negatively affect the business digital transformation process. Starting from a lack of financial resources, a lack of leadership skills among managers and a lack of digital skills among staff, problems in the corporate culture and others.

The purpose of the current research is with Latvian digital transformation experts to determine factors that contribute business successful digital transformation and the partners (organizations), which should help guide and complete the digital transformation process. The general aspect of the research is to identify weaknesses in the structure of the enterprise, to specify structural units or business functions insufficient attention to which may prevent a successful digital transformation in the enterprise.

Design / Methodology / Approach. To achieve the goal and to answer the research questions, the Latvian experts on digital transformation were surveyed, using the author' developed questionnaire. It included 5 blocks: 1) respondent profile questions; 2) factors influencing the successful business digital transformation; 3) partners (organizations) company should collaborate with for business successful digital transformation; 4) structural units/business function that ask for special attention and financial investments to provide digital transformation; 5) the successful digital transformation' outcomes. The respondents were offered to evaluate the pre-determined statements, by expressing their agreement/disagreement within a 5-point scale. The data analysis was performed in SPSS environment, applying frequency analysis and ranking techniques, two independent samples Mann-Whitney U-test, Principle Component Analysis (PCA) for grouping of the outcomes.

Findings. The results of the research will be used for further investigation of DT issues, specifically for study on staff perception and resistance to DT implementation.

Originality / Value / Practical implications. The research instrument for a survey among digital transformation experts can be developed using the findings of the given study, in particular, for structuring the questionnaire's blocks.

Keywords: digital transformation; staff; employee; technology; staff resistance.

JEL codes: L26; O33

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EMERGING TRENDS IN PEDAGOGY AND EDUCATION

***Olha Mikhieieva.* DIGITAL TOOLS AND AGILE APPROACHES FOR PROJECT-ORIENTED STUDENTS' TEAM ASSIGNMENTS**

Abstract

Research purpose. Digital tools in education has become inevitable, especially, due to the challenges and measures of the COVID-19 pandemic. Project-oriented team assignments is one of the didactic forms in higher education aimed to develop such competences as team building, collaboration, communication, etc. However, due to the online/distant education semesters, students had to work in virtual teams that led to more miscommunications and misunderstandings on the assignment's requirements. Agile approaches belong to agile project management, offering digital tools for working in virtual teams, such as Trello or MS Teams. The purpose of the research was to develop an approach for students' team assignments that not only ensures transparency of assignments' requirements but also allows for virtual collaboration between students. Furthermore, the approach is aimed to prepare students for future work in virtual dispersed teams.

Design / Methodology / Approach. For this purpose, agile approaches and tools were analysed, including a literature review and statistics analysis. Among available tools, an agile tool Kanban board was chosen for its simplicity as well as popularity in managing virtual teams. Based on literature review recommendations for a Kanban board set up were developed. MS Teams and Trello were chosen as digital tools for pilot projects with students. The developed approach was tested during the team assignments with two different master courses, where in total 10 student teams were performing different group assignments.

Findings. Pilot projects revealed that using a Kanban board provided more sufficient communication and collaboration between students themselves and with a teacher. Application of such agile terms as 'acceptance criteria' and 'Definition of Done' were helpful to specify assignment's requirements. The Kanban board application provided for clear visualisation of the tasks and possibility of real-time adjustments of the progress and completeness of the assignment.

Originality / Value / Practical implications. In this research, the author suggested to implement agile project management methods that originally belonged to IT software development projects to educational project-oriented assignments. Application of the developed method proved to be beneficial for virtual collaboration and communication between students themselves and with the teacher.

Keywords: Digital tools; virtual teams; project-oriented; agile; distant education

JEL codes: M15.

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***Oskars Rasnacs, Maris Vitins.* USE OF SCIENTIFIC PUBLICATIONS IN ACQUISITION OF UNIVERSITY INFORMATICS AND STATISTICS COURSES**

Abstract

Research purpose. To find out whether the introduction of data sets generated from the statistical indicators of scientific publications in the study process improves the level of knowledge and skills in higher education informatics and statistics courses.

Design / Methodology / Approach. 2428 students from Latvian universities over 13 years were surveyed. The average assessment for these students in university informatics and statistics courses is high - 7.4 in the 10-point system. However, improvements are also possible in this case. 1040 (42.8%) students in the study process were given different sets of generated data from 1 to 5, 1388 (57.2%) students were not given them. 671 (27.6%) in the learning process were asked to create their own internet surveys and fill them with the generated data. Final grades were recorded for these students at the end of the course. Descriptive statistics and Spearman correlation analysis were used for data analysis. *MS Excel* tools *Random Number Generation*, *Goal Seek* and *Solver* were used for data generation - so that the statistical indicators of the generated data differed as little as possible from those given in the publication.

Findings. The following results were obtained. The more generated data sets are given to students in the learning process, the higher the knowledge value ($r_s = 0.277$, $p < 0.001$). If students in the study process were asked to create their own internet surveys and fill them with generated data, then higher knowledge scores were obtained ($r_s = 0.113$, $p < 0.001$).

Originality / Value / Practical implications. Lecturers of university informatics and statistics courses should preferably generate data sets according to the statistical indicators of scientific publications and use them in the study process. Then it is possible to achieve a greater increase in students' interest and knowledge ratings.

Keywords: Scientific Publications; University Informatics and Statistics Courses; Statistical Indicators.

JEL codes: C10, C12.

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Heiner Schulze, Hiram Bollaert, J. Ides, Piotr Milczarski, J.C. Monteiro, Derek O'Reilly.

SERIOUS GAMES IN ACTION: FROM BLENDED MOBILITY TO ONLINE MOBILITY WITH JEU

Abstract

Research purpose. "JEU: let's play together for the European Union" is an Erasmus+ project using "serious games" as a tool of engagement for active learning and fostering awareness of European citizenship, gender equality and environmental protection among students using modern technology. The project's purpose is the production of serious games to be used in the classroom settings of middle and high school students. These games are to be developed in blended, interdisciplinary mobilities by teams of international higher education students, properly supervised by mentors from the partner organizations involved in the project. At the same time is the mobility also designed using modern technology. Initially planned as an in-person mobility, it was reconceptualized by the project partners as a virtual experience to accommodate the current context of the SARS-COVID-2 virus. We show how modern technology helps us to provide innovation in education and pedagogy by showing and analyzing our schedule, pre-mobility part, and the (digital) mobility itself, as well as their pros and cons.

Design / Methodology / Approach. Initially planned as in-person mobility taking place in March 2020 in Antwerp, Belgium, the project partners had created an online student pre-mobility platform (in Moodle) which students started accessing prior to the planned 11-day in-person mobility. The worsening Covid-19 crisis led to the cancellation of the mobility and intense deliberations on how to proceed. When it became

clear in September 2020 that an in-person mobility was not viable for the foreseeable future, the project team started working on the creation of a fully online version of the mobility which takes place in March 2021 and will be presented in this paper.

Findings. The reconceptualized design still resembles the original two-part set-up by keeping and expanding the online pre-mobility student part preparing students and mentors for the mobility while shortening the "main" mobility to an intensive 6-day variety of online student group activities and project development to result in high-value students' projects. The project will also produce a short description of the JEU's project's main objectives, the methodology used to implement and monitor it, the tools that will be used to assess it as well as the experience made in the mobility itself in March 2021.

Originality / Value / Practical implications. The paper provides an insight into the possible usage of modern technology for digital student learning and projects. It also discusses our experiences with the adaption of in-person mobilities into a digital context and the challenges coming with that.

Keywords: Serious Game; Citizenship; Active Learning; COVID-19; Digital Tools in Education

JEL codes: Z0

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Jelena Jermolajeva, Svetlana Silchenkova, Larissa Turusheva. ANALYSIS OF THE FIRST-YEAR UNIVERSITY STUDENTS' LEARNING MOTIVATION (RIGA AND SMOLENSK SAMPLES)

Abstract

Research purpose. For a successful pedagogical process, university teachers need to study the motivation of students of the first study year, monitor it, and take into account its peculiarities while developing learning materials and choosing educational strategies. Especially great attention should be paid to the motivation of first year students. In the first months of studies freshmen face increasing difficulties, which sometimes negatively affects their learning motivation.

Design / Methodology / Approach. The article presents the results of international study of freshmen's motivation. The aim of the research is to investigate and compare the separate groups of learning motives of the first-year students at the EKA University of Applied Sciences (EKA, Latvia) and Smolensk State University (SSU, Russia). In the survey carried out in December 2019, 129 students from EKA and SSU participated. The technique of diagnostics of learning motivation by 7 content scales was used for the data collection. For the data processing, descriptive statistics, analysis of statistical indicators, and Spearman correlation analysis was used.

Findings. In both samples, the Professional motives are put on the 1st place; the Prestige motives and Avoidance motives are on the penultimate and last place, relatively. However, there is difference in the students' assessment-of other groups of motives. In the EKA sample, the 2nd most important place is occupied by Educational/cognitive motivation and Creative self-realisation motives, whereas the SSU respondents put the Social and Communication motives on the 2nd place. Data analysis shows that a few months after the start of studying, the general academic motivation of first-year students is at an average level. However, for more successful training, it could and should be improved.

Originality / Value / Practical implications. The learning motivation of freshmen at the EKA University of Applied Sciences and Smolensk State University has never been investigated before. The results of the study will help university academic staff to develop teaching materials and strategies. The analytical comparison of the data of the two national samples gives additional insight into the problem of academic motivation. Some ways to increase freshmen's motivation for learning are proposed in the article.

Keywords: First year students; learning motivation; educational/cognitive motivation; professional motivation.

JEL codes: I21, J24, M53.

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Teemu Haukioja, Ari Karppinen, Jari Kaivo-oja. HIGHER EDUCATION TUITION FEE SYSTEMS IN THE OECD FRAMEWORK AND THE COMPARATIVE ANALYSIS OF KEY ECONOMIC TRENDS

Abstract

Research purpose. This study identifies analyses four key higher education policy models on the basis of OECD and EU data base with background discussion. The study provides information and knowledge how higher education policies and some key economic indicators can be combined? Study provides comparative ~~trend~~ analyses, which are policy-relevant and give insights to decision-makers.

Design / Methodology / Approach. Since the well-known Mincer-Earnings-Equation in the early 1970s, there has emerged an extensive literature concerning the monetary returns on higher education. Tuition fees in higher education can be considered as private investment in higher personal incomes. Free education has been opposed on the basis of its unfairness: At the same time as the proportion of public expenditure on tertiary educational institutions is an average of near 70 percent of total expenditure in all OECD countries, less educated tax-payers support higher futures incomes of privileged students. In this paper we focus on key trends of economies with their higher education systems.

Findings. At present, only few countries, in addition to the Nordic Countries, have adopted tuition-free higher education system. There are growing financial and political pressures to adopt tuition also in these countries. Thus, it is of the greatest importance to acquire research knowledge in this matter. First, we briefly review the relevant theoretical and empirical economic literature. Next, we discuss the potential

economic benefits of tuition-free higher education system in terms of dynamic macro efficiency. We suggest an eclectic approach, where aspects of endogenous growth theory and dynamic public economics are emphasized. Criterion for national success is the balanced growth path with social welfare maximization. We argue that there are plausible links between national success indicators, like competitiveness and welfare, and free higher education. In this paper, we present some empirical comparative analyses which are relevant for the assessment of higher education systems in the global OECD study context. The study contributes to (1) the global analysis of higher education systems, (2) to the policy of higher education finance, ;(3) the education and inequality discussion, (4) to the discussion about returns of higher education and (5) to the discussion about education and development.

Originality / Value / Practical implications. This study helps decision-makers in the field of higher education policy to create a big picture of on-going trends of higher education systems. The applies OECD´s analyses as a analytical framework. OECD classifies in its "Education at a Glance" report (2014, 2020) four alternative models of tuition fees and student support systems. Model 1: Countries with no or low tuition fees and generous student support system (Denmark, Finland, Iceland, Norway and Sweden). Model 2: Countries with high tuition fees and well-developed student support systems (Australia, Canada, New Zealand, the United Kingdom and US). Model 3: Countries with high tuition fees and less-developed student support systems (Chile, Japan and South-Korea); and Model 4: Countries with low tuition fees and less-developed student support systems (Austria, Belgium, the Czech Republic, France, Ireland, Italy, Poland, Portugal, Switzerland and Spain).

The study executes an empirical analysis of the higher education systems in these countries. A data pool covers higher education data, economic growth data and key welfare indicators. The study executes an empirical analysis of the higher education systems in these countries. A data pool covers higher education data, economic growth data and key welfare indicators.

Keywords: Comparative analysis; higher education systems, ;ECD framework of higher education systems; education policy; welfare and economic growth returns of higher education systems.

JEL codes: I20-I29

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Ann Saurbier, D.M. **INTERMEDIATING STAKEHOLDERS: MODELLING THE INFLUENCE FLOWS OF ACCREDITORS IN THE AMERICAN HIGHER EDUCATION STAKEHOLDER SYSTEM**

Abstract

Research purpose. Synthesizing several previous studies, this research expands Saurbier's (2021) model of the American Higher Education Stakeholder System. Fulfilling a unique role, the American regional accrediting bodies act as both peers and as agents for the government (Orlan, 1974). By more deeply understanding the influence flows among all system stakeholders, a more collaborative approach to the creation of quality and value across the American higher education system may be possible.

Design / Methodology / Approach. Grounded theory is utilized to expand the initial conceptual framework (Saurbier, 2021). Adopting the same constructivist, exploratory stance, this research is designed to abductively integrate several additional studies in a meta-analysis. This methodology also limits this study to the expansion and animation of the original conceptual framework and intends to neither fully operationalize nor empirically test the revised theoretical model.

Findings. Occupying a position between the traditional stakeholder layers (Saurbier, 2021), and generating influence flows to both the direct/task and indirect/general stakeholders, the American regional accrediting bodies act as intermediating agents. Uniquely, as intermediating stakeholders, accreditors possess the ability to span boundaries and facilitate the activities of all system members in better defining, planning for, and executing programs and processes to create quality and value for all stakeholders.

Originality / Value / Practical implications. By animating the influence flows within the American Higher Education Stakeholder System, a deeper appreciation for impact each stakeholder possesses becomes evident. The ability to use this understanding for all system members to collaborate more effectively system holds great promise as the post-pandemic world looks to redefine and provide high quality and high value higher education programs into the future.

Keywords: Higher Education; Stakeholder Theory; Power and Influence; Systems Thinking; Boundary Spanning.

JEL codes: I23.

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Sandra Valantiejiene. **TRANSFORMATIONS OF PROBLEM-SOLVING SKILLS OF 9-12th GRADE PUPILS DURING IMPLEMENTATION OF PSYCHOACTIVE SUBSTANCE ABUSE PREVENTION PROGRAM: LITHUANIAN CASE**

Abstract

Research purpose. The use of psychoactive substances among adolescents is one of the most painful problems not only in Lithuania, but also around the world. One of the most effective ways to prevent abuse of psychoactive substances is to strengthen protective factors and to develop social skills among children and adolescents (Botvin, 2000; Botvin, Botvin, Ruchlin et al., 1998; Buhler et al., 2007; Faggiano et al., 2005; Vorobjov); Saat, & Kull, 2014). Various scientific studies have shown that the development of problem-solving skills is associated with positive results of psychoactive substance prevention in the late adolescence age group (10-12th school grades) (Onrust, Otten, Lammers, & Smit, 2016). Besides, higher problem-solving skills in the period of adolescence is often associated with higher psychological feeling of well-being (Cenkseven-Önder, 2013). For this reason, to find out how these aspects changes during the implementation of psychoactive substance abuse prevention, the author carried out an investigation (in the Republic of Lithuania) the results of which are presented in this article.

Design / Methodology / Approach. To achieve the aim of the study, it was decided to perform a quasi-experiment with initial (pre-test) and final (post-test) measurement (based on the methodology suggested by Price, Jhangiani and Chiang, 2015). The essential features of this type of quasi-experiment are as follows: manipulation of the independent variable takes place in a non-randomly formed single group (experimental group); the measurement is performed before and after manipulation with the independent variable. The post-experimental measurement tool was developed on the basis of theoretical analysis (Valantiejiene et al., 2015) and taking into account essential consequences of the use of psychoactive substances on the behaviour of pupils, studying in 7-8th grades described in this analysis and additionally based on the "Model of Drug Prevention in European Secondary Schools" developed by Dobson and Wright (1995).

Findings. The study, which was carried out in the schools operating in the Republic of Lithuania, found that the problem-solving skills of pupils, studying in 9-12 school grades were strengthened during the quasi-experiment. A detailed analysis of the self-assessment changes in each component of the problem-solving skills of pupils revealed that all eight components of the problem-solving skills changed (statistically). The significantly important changes first of all relates to the ability of girls to ask for help, to show someone that he or she likes you, first think, then do and solve problems first for someone that he or she likes, way of thinking that ads on TV, radio, or the Internet may not always show or tell the truth, and, finally, while solving a problem, firstly to identify opportunities, evaluate them, and only then to decide.

Originality / Value / Practical implications. Based on the results of the empirical research and their analysis, conducted in the Republic of Lithuania, it can be stated that the implementation of the psychoactive substance abuse prevention program has an impact on the problem-solving skills of pupils, studying in grades 9-12, especially between girls.

Keywords: Prevention; psychoactive substances; abuse; problem solving skills; pupils.

JEL codes: 121, 128, 129.

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Marina Solesvik. ENTREPRENEURIAL INTENTIONS: IMPACT OF UNIVERSITY ENTREPRENEURSHIP EDUCATION

Abstract

Research purpose. This study explores the linkage between university entrepreneurship-specific education (ESE) investment, alertness and risk-taking asset accumulation, and the outcome relating to the intention 'to become an entrepreneur. Building upon insights from a dynamic view of human capital theory, the purpose of this study is to explore the following three research questions with regard to the transition Ukrainian context: Do students who participated in ESE report a higher intensity of entrepreneurial intentions than students who did not? Do students who participated in ESE cite alertness specific human capital assets and report higher intensity of entrepreneurial intentions? Do students who participated in ESE cite risk-taking specific human capital assets and report higher intensity of entrepreneurial intentions?

Design / Methodology / Approach. To test our hypotheses, we gathered information from bachelor and masters students in Nikolaev in the Ukraine. Students were either enrolled in business studies or engineering courses at one of three universities. ESE is compulsory for business students in each university. A structured questionnaire was administered to business students. Also, a structured questionnaire was administered to a control group of engineering students who are not allowed to take ESE courses in ESE. However, their technical training provides them with the potential to establish knowledge and technology-based firms.

Findings. Students from self-employment and/or business ownership backgrounds reported a higher intensity of entrepreneurial intentions. ESE is positively associated with higher intensity of intentions. This means that ESE students are more oriented to higher entrepreneurial intentions when they have accumulated more connection entrepreneurial alertness asset.

Originality / Value / Practical implications. Assets relating to entrepreneurial alertness and risk-taking perception need to be honed in transition economy contexts associated with political structures that did not promote individual risk-taking. With reference to a transition economy context, the provision of ESE in universities can increase the pool of students reporting higher intensity of entrepreneurial intentions. This study makes a novel contribution by considering whether ESE promotes different elements of entrepreneurial alertness and risk-taking assets.

Keywords: Entrepreneurial intentions; entrepreneurship education; risk-taking; alertness.

JEL codes: M13, P2.

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Agata Basińska-Zych, Agnieszka Springer, Karolina Oleksy-Marewska, Iwona Werner, Sylwester Białowąs . SELECTED HEALTH BEHAVIORS AS A MODERATOR OF THE RELATIONSHIP BETWEEN STRESS AND BURNOUT AND CHRONIC FATIGUE AMONG THE PROFESSIONAL GROUP OF ACADEMIC TEACHERS

Abstract

Research purpose. Increasing and changing demands for academic teachers worldwide are leading to different consequences, some of which are negative, such as physical and mental health impairment. With the job demands-resources model as a theoretical framework, a study was conducted in order to diagnose the relationship between the negative consequences of excessive work demands (occupational burnout and chronic fatigue) and health behaviors such as stress-coping strategies and rest..

Design / Methodology / Approach. The sample (N=340) was comprised of academic teachers employed at Polish higher education institutions who have experienced changes in the work environment in recent years. We conducted a multiple regression analysis to determine the relationships among stress, burnout, and chronic fatigue, looking at coping strategies and rest as a moderator.

Findings. The results of the study indicate that there is a strong relationship between stress resulting from an excessively demanding work environment on the one side and occupational burnout and chronic fatigue on the other. At the same time, selected health behaviors of academic teachers only slightly moderate the analyzed relationship. Avoidance strategies strengthen the relationship between stress and its negative consequences, while rest and, to a limited extent, the amount of sleep only slightly contribute to reducing weakening the analyzed relationship..

Originality / Value / Practical implications. The research analyzed multiple variables that helped to integrate a knowledge from higher education management, organizational psychology and occupational health, which led to filling a cognitive gap in the field of academic teachers' well-being. The results obtained indicate that there is a need to introduce prevention and remediation strategies in terms of shaping the work environment of academic teachers, as well as to make it possible for them to engage in healthier behaviors which can contribute to improving their personal resources.

Keywords: Chronic fatigue; health behaviors; occupational burnout; stress; stress-coping strategies; academic teachers.

JEL codes: I310, M540

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EMERGING TRENDS IN
LAW AND INTERNATIONAL RELATIONS

Karina Zalcmane. INTERNATIONAL INTERINSTITUTIONAL COOPERATION IN TACKLING CRIME AND CORRUPTION IN SPORTS

Abstract

Research purpose. The Aim of the research is a critical analyse of the existing legal regulation and programs in the field of international interinstitutional cooperation in tackling crime and corruption in sports, in order to identify how affective this approach could be.

Design / Methodology / Approach. The methodological basis of the study consists of general scientific methods (monographic method, analytical method, historical method, comparative method, induction deduction) and methods of interpreting legal norms (grammatical, historical, teleological and systemic methods).

Findings. International interinstitutional cooperation is the only way, how to support governments and sports organisations to pursue effective anti-corruption and other crimes in sport action, building on the strong foundation provided by the UN convention against corruption and the multiple resolutions adopted by the state's parties on safeguarding sports against corruption and crime.

Originality / Value / Practical implications. The world of sport was among those sectors most visibly affected by COVID-19 pandemic, therefore any research that gives critical overview of possible solutions to the existing problems is valuable.

Keywords: K19; K14

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Gediminas Valantiejus. STATUS OF THE WTO LAW IN THE NATIONAL LEGAL SYSTEMS: RECENT DEVELOPMENTS IN THE EU AND THE REPUBLIC OF LITHUANIA

Abstract

Research purpose. This year marks the twentieth anniversary of the Republic of Lithuania's membership of the World Trade Organization: it joined this international organization regulating international trade back in 2001, even before becoming a member of the European Union (EU), which itself (as a customs union) is also a separate member of this international organization. It should be noted that due to their importance the international treaties which regulates the activity of the WTO and the implementation of its functions (WTO Agreement (1994), General Agreement on Tariffs and Trade (GATT) and the annexes to the WTO Agreement (e.g., Agreements on the origin of goods, customs valuation, trade defence measures, etc.) are even separately called WTO law. Their provisions are very important source of international economic and trade law because they set out the fundamental principles and procedures for the taxation of international trade which should be followed by all the WTO members.

However, from a practical point of view, the legal nature and the role of these Agreements (in national legal systems as well as in the legal system of the EU) are often discussed. The most frequently asked question in theory and in practice is whether they can be applied directly (while protecting the rights of individual persons) or whether they should be considered and treated international sources of law that establishes rights and obligations only for the states themselves and the international organizations representing them.

Design / Methodology / Approach. To answer the above-mentioned problematic question, the research presented in this article is based on a method of thematic analysis (an object of the analysis is the above-mentioned case-law). It examines and compares the changes in the case-law of the EU courts and the national courts of the Republic of Lithuania which have taken place in the last few years (since 2019) and which change and modify the concept of application of WTO law by expanding the traditional limits and possibilities of its application.

Findings. The emerging legal practice in the Republic of Lithuania (during the last few years) regarding the application of the WTO law is becoming more and more liberal (compared to the practice of the EU courts) and even recognizes the possibility of relying directly on the WTO law to challenge sanctions (fines) imposed by a national tax administrator.

Originality / Value / Practical implications. This article which complements the research conducted in the EU and the Republic of Lithuania in previous years (up to 2019) and presents the latest practice of the Republic of Lithuania as the Member of the WTO in the above-mentioned area. Research carried out for this purpose can be useful for practitioners (taxpayers, business entities) and is important at the EU level while developing uniform practices in the application of WTO law in EU Member States.

Keywords: World Trade Organization (WTO); international trade; WTO law; EU courts; national courts.

JEL codes: F13, K19.

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Elina Avota. CHANGES IN THE BASIC PRINCIPLES OF BAILIFFS'ACTIVITIES DUE TO THE INTEGRATION OF LATVIA INTO THE EUROPEAN UNION

Abstract

Research purpose. The aim of the article is to depict the changes in the fundamental principles of bailiff's work in regards to integration of Latvia in the European Union.

Design / Methodology / Approach. The methodological basis of the study consists of general scientific methods (monographic method, analytical method, historical method, comparative method, induction deduction) and methods of interpreting legal norms (grammatical, historical, teleological and systemic methods).

Findings. The institute of bailiffs has undergone drastic changes in the Republic of Latvia for nearly 30 years. A bailiff has become a state official from an employee of the Ministry of Justice. Sworn bailiffs are independent in their official activity and are governed by law only. At the same time, the guarantees of independence of bailiffs are counterbalanced by the mechanism of controlling lawfulness of bailiffs' activities. Financial freedom and independence are gained. Services of bailiffs are equally available throughout the territory of Latvia. Bailiff reforms have ensured for the state governed by the rule of law an adequate execution of court adjudications and qualitative work of bailiffs.

Originality / Value / Practical implications. Until this moment, little research has been made about the institute of bailiff in Latvia as well as about its historic development and future prospects in the territory of Latvia.

Keywords: Bailiff; independence of bailiffs; the institute of bailiffs.

JEL codes: K49.

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Anna Di Giandomenico. BEYOND GROWTH: IS SUSTAINABLE DEVELOPMENT ALWAYS SAD? ON SUSTAINABILITY FROM A PHILOSOPHY OF LAW PERSPECTIVE

Abstract

Research purpose. This paper aims at criticizing the use of sustainability criterion for the evaluation of development policies, although pollution, climate change, and the near scarcity of resources (especially energy) seem to add further strength to this criterion, making it a true paradigm of environmental bioethics.

Design / Methodology / Approach. An approach of legal philosophy characterizes the analysis of theories on sustainability and sustainable development. Firstly, there will be an analysis of the locution 'sustainable development'. Then, a brief reconstruction of theories on sustainability and sustainable development, highlighting their pivotal points. Finally, the proposal for a solution of issues, highlighted by such an analysis.

Findings. The consideration of the locution 'sustainable development' reveals some critical issues (i.e. the substantial difference between sustainability applied at ecosystems and sustainability applied in economics). The analysis of theories on sustainable development and sustainability reveals further issues. Among several, just cite the reduction of well-being of humans to a condition without needs. An unsatisfactory definition highlighted by some economists and bioethics scholars too. These issues may be solved by replacing the criterion of sustainability with the paradigm of durability. A paradigm that does not exclude a priori the possibility of growth, but anchoring it to "durability", or connoting it, better constraining it to persistence. However, it does not suffice. In fact, sustainable development seems to depict as desirable a human condition without needs. The question is if such a condition is fully respectful of humanity, of its essentially exceeding nature. In this way, it may be assumed a capability approach, emphasizing the dimension of responsibility, understood in the strictly etymological sense, rooted on *responsāre*, with its double significance of *res-ponderare* (carefully considering) and *respondere* (accountable for made choices).

Originality / Value / Practical implications. The paper highlights a perspective aligned with the prevalent pro-sustainability thinking, nor, at the same time, adhering to the opposite orientation. It wants to show some critical knots not until now sufficiently highlighted, offering a key of interpretation according a perspective of legal philosophy.

Keywords: Philosophy of Law; Sustainability; Durable Development.

JEL codes: B29; Q01; Q55.

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Atis Bickovskis. **ASSESSMENT OF EVIDENCE IN VALUE ADDED TAX DISPUTE CASES**

Abstract

Research purpose. The purpose of the paper is to study and analyse the case law of Latvia regarding the involvement of a taxpayer in fraudulent transactions with value added tax (hereinafter - VAT). Whether the court and tax administration, when establishing a fraud for the deduction of input tax law, has correctly identified the preconditions determined in Section 92, Paragraph one, Clause 1 of the Value Added Tax Law and, upon establishing the actual circumstances of the case and evaluating evidence, has complied with the requirements of the Administrative Procedure Law.

Design / Methodology / Approach. It has been recognised in the case law of the Court of Justice of the European Union and the Supreme Court: when there are indications, causing objective doubts about the selected counterparty and having suspicions about misuse of the tax system, requirements may be determined for a taxpayer to establish additional information on its counterparty. In accordance with the European Union law, the requirements may be determined for a taxpayer to perform all measures that may be reasonably requested from it, in order to make sure that the activities performed by a taxpayer are not related to participation in the field of tax fraud.

Findings. When analysing the Latvian case law, the author established that, first, it is necessary to establish whether the user of deduction of input tax rights has received the goods specified in the invoice at all. If it is established that the good is not received, then the right of a taxpayer to the deduction of input tax shall be denied without a detailed assessment of the formal requirements of deduction of other input tax due to the fact that the use of these rights is based on the transaction actually having taken place. When it is established that a user of the right of deduction of input tax has received the good specified in the invoice, it is necessary to establish further, whether the good was received directly from a VAT taxable person specified in the transaction documents. If it is established that the person specified in the invoice has not delivered the goods under dispute, it is necessary to establish whether the user of the right of input tax knew or had to know that the transaction is related to misuse of the VAT system.

Originality / Value / Practical implications. As it was already specified before, in order to recognise the right of a taxpayer to deductions of input tax, it is necessary to establish a number of preconditions, including the fact that the goods, for which the input tax was deducted, are received directly from the VAT taxable person specified in the tax invoice. This determines a duty for a receiver of the tax invoice to make sure of registration of the issuer of the tax invoice in the register of VAT taxable persons. However, the compliance of the issuer of the invoice with the status of a registered tax payer itself does not mean that right the issuer of the invoice performs the transaction under dispute and that this person is actually able to perform taxable transactions. Therefore, the reference of the receiver of the invoice to the fact that the issuer of the invoice is registered in the register of VAT taxable persons, is not sufficient for the deduction of input tax. It may be required in certain circumstances for the taxpayer to make use of the ability of the selected counterparty to perform particular transactions. If there are indications that allow one to suspect the existence of irregularity or fraud, an informed market player may be obliged to find out information about another market player, from which it intends to purchase goods or services, in order to verify its reliability.

The fact that a taxpayer has verified whether the counterparty is registered in the register of VAT taxable persons, does not itself mean that proper verification of the counterparty has been performed. A taxpayer also needs to establish the fact of whether any indications are to be established, due to which it has to have objective doubts on the ability of its counterparty to perform the transactions under dispute and act reasonably, in order to eliminate doubts and secure itself against the risks of being involved in the misuse of the VAT system.

The fact of what scope of measures would be reasonably expected from a taxpayer, when making sure about the fact that goods and services are received right from the person specified in source documents, should be assessed in each particular case, taking the circumstances of the case into account.

Keywords: Value Added Tax (VAT); Tax Fraud; Evidence; National Courts; Tax Disputes.

JEL codes: H25, K23, K34.

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Ivars Civciss. APPROACHES TO THE CONCEPT OF POLITICAL CRIME IN CRIMINOLOGY

Abstract

Research purpose. Provide an overview of the concept of political crime in criminology, analyse the advantages and disadvantages to identify the most appropriate approach to criminological studies of political crime.

Design / Methodology / Approach. The research is based on the analysis of literature and case studies, by applying the following research methods: creation of taxonomy, classification, analysis, synthesis, inductive reasoning, and the logical construction method.

Findings. The research includes an overview of various concepts related to political crime, and these concepts are defined according to the purpose of the research. The research addresses the concept of political crime as it is perceived in diverse criminological approaches, mainly in the criminal legal approach, the objective approach, the subject approach, the consequence approach, the assessment approach, the motivation approach. The research shows that although each of the approaches have some strengths and some weaknesses, most of them are appropriate for specific criminological studies, whereby for general criminological studies the most appropriate is the motivation approach. The latter can be effectively used in political crime studies, whereby the political crime is defined as a set of criminal offences committed due to political motives.

Originality / Value / Practical implications. Concept of political crime has not been thoroughly studied in the legal literature. A comparative study of different criminological approaches is a novelty and can be applicable to other criminological concepts as well. Taxonomy of political crime and the research of the concept of the political crime, as well as identification of the most suitable theoretical approach are key theoretical results of the study, having broad practical applicability.

Keywords: Criminology; Crime; Political Crime.

JEL codes: K40.

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Marina Kamenecka-Usova. GOOD GOVERNANCE IN SPORT ORGANIZATIONS

Abstract

Research purpose. Sport organizations in Latvia are lacking good governance. Good governance covers, but is not limited to, transparency and clear internal dispute resolution procedures established. As far as

Sports law institute in Latvia is at the beginning of its formation, Latvian sport organizations neglect to implement good governance in its internal regulatory enactments, hence, the purpose of the research is to define good governance in sport organizations referring to the EU soft law for sports.

Design / Methodology / Approach. The research is based on empirical-analytical group of the research methodology.

Findings. One of the latest documents on the EU sports policy based on the values proclaimed in the European Sports Charter, EU White Paper on Sports and all three EU Working Plans on Sports is the Conclusions of the Council and of the Representatives of the Governments of the Member States meeting within the Council on promoting the common values of the EU through sport (2018/C 196/06) that, among other policies asks the Member States to encourage and, where possible, support sport organizations in strengthening good governance, within their organizations and, where appropriate, address these values in their ethical guidelines or equivalent documents. According to the Author, this document indicates that in the European Union, sport is, first of all, considered to be an instrument to promote shared values throughout the union and, secondly, it indicates that the common sports values are to be established in the EU.

Originality / Value / Practical implications. Good governance in sport organizations is a topical question that should be touched upon in order to contribute to the development of Latvian sport system, by making it clear and transparent, as well as it will undoubtedly promote the protection of athlete' rights and interests.

Keywords: Good Governance; Sports Law; Sport Organizations.

JEL codes: K39.

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Simone Gabriele. RIGTHS OF THE EMBRYO AND FOETUS A COMPARATIVE PERSPECTIVE BETWEEN HUNGARY AND SPAIN

Abstract

Research purpose. The right to reproduction arises from the right to life, the right to self-determination, the respect for human dignity and the right to health care, and is now an independent human right, aided by states in various ways. Mostly, the life is institutionally protected by the international actors and considered as a universal value, founder of the most important and individual human rights. Among all the international actors involved in the promotion and legal regulation of Assisted Reproductive Technology, two countries share a similar historic and cultural background in a certain moment of their past. Both Hungary and Spain saw the impact of a dictatorship and all its consequences, although the actors involved, the timelines and several others features differ from each other. Therefore, aim of this research is to understand how a shared repressive experience of their history could lead to profoundly different answers, sometimes embodied in opposite concepts of ART and, more broadly, of reproductive rights and protection of all the actors involved.

Design / Methodology / Approach. Considering the extent of the present subject, the research will examine certain components of the reproductive rights in both Hungary and Spain, focusing on the dedicated laws and the activity of the state in helping to enforce them.

Findings. At the present time, Hungary and Spain have widely differing legal frameworks regarding the Assisted Reproductive Technology.

Originality / Value / Practical implications. The research outlines the legal status of the different subject involved in the application of the reproductive rights, giving primary importance to the figures of Embryo and Foetus.

Keywords: Embryo; Foetus; Hungary; Spain; Reproduction.

JEL codes: K36, K38, K39.

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EMERGING TRENDS IN
ICT SOLUTIONS FOR ECONOMY, BUSINESS AND SOCIETY

Uwe Busbach. **THE DIFFERENCE BETWEEN LEGAL CONTROL AND MATERIAL CONTROL – COORDINATION OF ACCESS RIGHTS IN SHARED WORKSPACES**

Abstract

Research purpose. Modern work is increasingly taking place in temporary work groups embedded in decentralized work environments that transcend organizational boundaries. In this context, cooperation is supported by shared workspaces which, in addition to functions for exchanging documents between the participants, also provide specific information about the status of the cooperation. The first implementations of the shared workspace idea emerged in the 1990s in the CSCW research area and are now firmly integrated into the working world with systems such as GoogleDrive, OneDrive or Dropbox. However, when it comes to accessing documents, problems arise in terms of coordinating access to documents. Who can access the documents, modify them and upload them back to the work environments? It should be noted that concurrent changes can lead to inconsistencies. Furthermore, incorrect changes to the content of documents can have economic and legal consequences. Who is responsible for this? Strict access control can avoid this problem if necessary. However, it contradicts the approach of agile cooperation, which benefits, among other things, from access to documents that is not restricted in terms of time and place.

Design / Methodology / Approach. The paper proposes a framework for access coordination to shared workspaces. Its basis is the legal distinction between the levels of legal control (owner) and material control (possessor). The owner of an object has the right and the duty to allow the other participants of the shared workspace to access it, i.e., to have material control. This takes place within the framework of a contract between the owner and the possessor, in which the conditions of the material control are specified. In addition to coordinating access, the owner also has the responsibility to arbitrate in the event of a conflict and to determine which changes are valid or not. Privileges that have arisen because of the transfer of ownership may have to be considered.

Findings. The distinction between owner and possessor leads to six possible classes of conflict. Ownership vs. possession, ownership vs. privilege, ownership vs. ownership, possession vs. possession, possession vs. privilege, and privilege vs. privilege. Conflict resolution strategies corresponding to the access options are defined for each of these conflict classes. On the one hand, it is possible to apply strict, conflict-avoiding settings, but this tends to restrict cooperation. On the other hand, more agile, cooperation-permitting settings can also be selected since a reaction tactic in the event of a conflict occurring is defined in advance based on the conflict resolution strategies.

Originality / Value / Practical implications. The concept of the legal distinction between owner and possessor has not yet been applied to the area of access coordination in shared workspaces. The approach allows common locking procedures to be embedded in a higher-level framework so that new access scenarios are supported using conflict class-specific conflict resolution strategies. Furthermore, the conflict classes allow an analysis of the current access settings of a shared workspace.

Keywords: Shared Workspaces; Access Coordination; Conflict Resolution.

JEL codes: M15.

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Girts Rimicans, Natallia Karatun. PRODUCTIVE WEB DEVELOPMENT

Abstract

Research purpose. The purpose is to increase the speed of WEB application development with WEB front-end and back-end frameworks, and compare the development time required with more tradition technologies.

Design / Methodology / Approach. Application comparison in development speed, prototyping speed, adding addition functionality to the application, the time needed to create an application with and without a WEB framework.

Findings. Faster and a more flexible development cycle for businesses, with a more rapid pace of innovation for WEB applications.

Practical implications. Quicker development speeds for businesses and WEB applications, as well as an increase in productivity for the developers.

Keywords: WEB frameworks; WEB development; WEB productivity

JEL codes: I20; D80

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Theresa Lauraeus, Jari Kaivo-oja, Mikkel S. Knudsen, Kimmo Kuokkanen. MARKET STRUCTURE IN THE FIELD OF GLOBAL COBOTICS MARKETS AND BUSINESS: HERFINDAHL-HIRCHMAN INDEX AND LAURAEUS-KAIVO-OJA INDEX FOR NOVEL INDUSTRIAL MARKET ANALYSIS

Abstract

Research purpose. The study is focused on expected market dynamics of global cobotics markets. This study investigates the current market structure of global cobotics market. The scientific aim of the research is to report first data-based market structure analysis of global cobotics market with the HHI index and with the LKI index analysis. With analysis we are able to show the diversification rate of global cobotics market.

Design / Methodology / Approach. Methodology is based on conventional statistical index theory and statistics. Methodology is the calculation of Herfindahl-Hirchman Index and Lauraeus-Kaivo-oja Index. Authors compare the results of these two methodologies.

Findings. The Herfindahl-Hirschman Index (HHI) and the Lauraeus-Kaivo-oja Index are statistical measures of market concentration and they can be used to determine market competitiveness. This paper

demonstrates novel data analytics possibilities of new market data collected by the Statzon Ltd with various comparative analytical results and findings. By our analyses we can help various industrial stakeholders make faster decisions and better strategic plans with the easiest and fastest access to accurate, reliable and up-to-date cobotics industry statistics, forecasts and insights. The finding is that this study reveals current market structure of global cobotics. It is a novel finding and result.

Originality / Value / Practical implications. This paper demonstrates novel and exciting possibilities of transparent index calculation tools. Novel original results are provided by the authors. Authors underline that extra value added to stakeholders and customers will be provided by joint data pooling strategy of various data sources, which is a key approach of this paper. Real-time market structure analyses create a reliable and knowledge-based information for decision-makers and stakeholders of global cobotics industry.

Keywords: Trends, market structure of global cobotics market; HHI; LKI; market data analytics.

JEL codes: A20, B16, B41, C13, C53, C63, D52, E37, F61, G28, G34, K21-K24

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Theresa Lauraeus, Jari Kaivo-oja, Mikkel S. Knudsen, Kimmo Kuokkanen. **TRENDS FORECAST OF MARKET STRUCTURES IN THE FIELD OF GLOBAL COBOTICS MARKETS AND BUSINESS: NOVEL FORECAST TREND DATA ANALYTICS WITH VARIOUS DATA SOURCES**

Abstract

Research purpose. This paper presents a trend data analytics of market structures and changes by various data sources. The study is focused on expected market dynamics of global cobotics markets. The study is comparative trend evaluation study of 16 research companies. This study investigates trends with index set and analyses expected changes in trends. Market saturation of future global cobotics markets in the years of 2019-2025 is discussed and conclusions are drawn.

Design / Methodology / Approach. Methodology is based on conventional index theory and statistics. The study is based on data visualisation and data analytics aiming to serve global Industry 4.0 community. The study aims to provide unique information about the emerging trends of global cobotics markets.

Findings. The paper demonstrates novel data analytics possibilities of new market data collected by the Statzon Ltd. with various comparative analytical results and findings. By our analyses we can help various industrial stakeholders make faster decisions and better strategic plans with the easiest and fastest access to accurate, reliable and up-to-date cobotics industry statistics, forecasts and insights.

Originality / Value / Practical implications. This paper demonstrates novel and exciting possibilities of simple trend analysis tools. Novel original results are provided. Authors underline that extra value added to stakeholders and customers will be provided by joint data pooling strategy of various data sources, which is a key approach of this paper.

Keywords: Trends; Cobotics Markets; Market Saturation; Comparative Trend Analysis; Market Data Analytics.

JEL codes: A20; B16; B41; C13; C53; C63; D52; E37; F61; G28; G34; K21-K24.

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Jari Kaivo-oja, Samuli Aho, Theresa Lauraeus. COVID -19 PANDEMIC DATA AND SOCIAL INCLUSION POLICY IN THE EUROPEAN UNION: CRITICAL TRADE-OFFS AND TRENDS

Abstract

Research purpose. The study is focused on Covid-19 pandemic on the European Union. This study investigates the current trends and trade-offs of Covid-19 pandemic and social inclusion trends in European countries.

Design / Methodology / Approach. Methodology is based on conventional statistical index theory and statistics. The study investigates cases, deaths and key Covid-19 statistics. The research design combines key social inclusion statistics of the Eurostat to official Covid-19 statistics of the European Centre for Disease Prevention and Control.

Findings. The study reports basic trends of Covid-19 cases, deaths, deaths/cases and calculates these Covid-19 trends in relation to population in 28/30 European countries. This study reports trade-off -analyses of key social inclusion trends of European Union countries. Key indicators are linked to economic income, income distribution, poverty, gender issues and housing statistics. The 10 key indicators of social inclusion are analysed and reported with Covid-19 data. Statistical correlation analysis table is calculated with key European country indicators. The study reveals some relevant aspects of social inclusion policy of the European Union in relation to on-going Covid-19 crisis.

Originality / Value / Practical implications. This paper demonstrates novel and exciting possibilities of transparent index calculation tools. Novel original results are provided by the authors. Value added and interesting results are delivered for European governments and business community. Results and findings of the study can be used in the planning of economic recovery policies in the European Union.

Keywords: Covid-19; pandemical data analytics; social inclusion; European Union; trend analysis; trade-offs analysis.

JEL codes: H10-H19, I32, I38, J10-J19, N14.

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Atis Verdenhofs, Tatjana Tambovceva. AUTOMATED KEYWORD NETWORK MAPPING OF SCIENTIFIC PUBLICATIONS

Abstract

Research purpose. Purpose of the research is to create automated system that would be re-usable by different academics to create scientific publication keyword network mapping and visualizations. This research approach can be used in addition to other research methods like systematic literature review or content analysis.

Design / Methodology / Approach. Automated system is created in R - free software environment for statistical computing and graphics. This system was chosen due to open-source nature and different theme package availability covering specific steps of automation tasks. System is created based on four packages – readxl, dplyr, tidyverse and network. All of whom can be installed by any user of the R software.

Findings. Authors have created a replicable set of code that consists of less than 50 lines and is using four different theme packages to cover full cycle of network mapping – starting with data read from Web of Science database export files to data cleaning, transformation and network mapping and visualization.

Originality / Value / Practical implications. Value of the research is in ability to reproduce the keyword network mapping without knowledge of programming language. Set of code is adjusted to fit respectable Web of Science database exports and researchers need to only point to exported files. This can be used in addition to other research methods to emphasize some findings or identify new patterns in literature review step of research.

Keywords: Keyword mapping; network maps; scientific publications; automated systems, R.

JEL codes: C880, O36.

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Matīss Mazurenko, Tatjana Tambovceva. **CONSUMER DEMAND FOR LATVIAN INFORMATION TECHNOLOGIES**

Abstract

Research purpose. The main goal of the research was to find out consumer demand for IT equipment rental and technical support services in Latvia. The main goal of the research was to find out consumer demand for IT equipment rental and technical support services in Latvia. Additionally, several points of remote communication tools, effectiveness of technical support, effectiveness of the organization's remote training, frequency of software / hardware changes in the organization, efficiency of outsourcing software / hardware maintenance were researched and identified. Moreover, different factors influencing the environment in the market hinder the company's / institution's actions to change software / hardware and use the services of an IT outsourcing company were looked.

Design / Methodology / Approach. The research was based on survey using a questionnaire. Data on the survey: number of respondents - 256 companies / institutions in Latvia; the survey was conducted in the period from 01.02.2021. until 28.02.2021; generalization and compilation of data was performed in the period from 01.03.2021. until 13.03.2021.

Findings. It was concluded that more than currently only about 36% outsource services and a half of the companies plan to outsource software / hardware maintenance. Moreover, it was identified different environmental factors in the market that prevent the company from changing software / hardware and using the services of an IT outsourcing company.

Originality / Value / Practical implications. The paper provides the background for the outsource companies in Latvian IT market for decision making process how to develop this market in future and which products and services to provide for customers.

Keywords: ICT; IT equipment; IT outsourcing; factors.

JEL codes: O32, L86, L96.

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Patriks Morevs, Marina V. Khudzhina, Elman Dzhambetov, Sergei D. Karakozov. **ON THE FUNCTIONAL NODAL METHOD FOR 2D ELLIPTIC EQUATIONS**

Abstract

Research purpose. In this work a new nodal-type method (a functional nodal method) is proposed for numerical solution of 2D Helmholtz equations basing on decomposition is space. Here it is assumed that Helmholtz equations are elliptic equations, namely Helmholtz and absorption equations, which differ from each other with a sign of the coefficient before the unknown function. Nowadays it is very common to use computers, which are small enough to put into pockets. We are also used to the whole range of wonderful devices, for example, in the field of medicine, which help us quickly diagnose health problems and cure

them. Our world is full of fascinating devices. And what makes the basis for construction thereof. If we consider more deeply any of the modern technologies, we will conclude that the basis is formed by mathematical equations, which describe physical processes and therefore allow us making research and construct new devices on the basis thereof. Modern technologies are based on semiconductors and the processes occurring therein. The theory of semiconductors is a very rapidly developing subject and among one of the subjects of study there is absorption equation, which describes the behaviour of electrons in crystals. Lots of different equations, which are essential for the modern science can be reduced either to Helmholtz or absorption equation. For instance, the physical processes describing acoustic phenomena can be described by Helmholtz type equations. Maxwell equations can be also reduced to Helmholtz equation in some cases. As to absorption equations, it is used in tomography research, as well as in semiconductor physics. According to the number of articles devoted to numerical solution of Helmholtz type equations it is possible to conclude that numerical solution of these equations is a question of interest. There are certain difficulties in numerical solution of Helmholtz type equations due to its oscillatory nature. This article gives an overview of a so-called flux method, which allows constructing a difference scheme for Helmholtz type equations and which is competitive in respect to other existing methods.

Methodology / Results. In the paper it is proved that the method described shows the second order of precision and numerical results are obtained. The numerical results also prove the theoretical results about the second order of precision. For numerical results acquisition Matlab and Wolfram Mathematica software were used.

Keywords: Helmholtz equations; Elliptic Differential Equations; Numerical Methods.

JEL codes: C02.

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Yulia Efimova, Artem Gavrilov. INTELLECTUAL MONITORING AND DATA ANALYSIS SYSTEM DEVELOPMENT

Abstract

Research purpose. The purpose of this research is to develop and assess implementation of data collection, processing and analysis for the differentiated data, based on the input signals from intellectual sensors in the distributed system, in order to assess the location of objects which demonstrate strange behaviours.

Design / Methodology / Approach. The paper presents a literature review of the papers on data collection, processing and analysis. Based on this review the authors have created system of data monitoring and interpretation which aims to reveal suspicious or strange behaviours of economic agents – in order to later provide recommendations for analysis-based decisions for enterprises.

Findings. The proposed system is based on the controller model which integrates functions of monitoring, analysis and interpreting of data in distributed non-centralized systems. The system has the central processing unit and a number of peripheral units which are responsible for data collection and processing on the lower levels. The central processing unit is responsible for data processing on the higher level (for instance, in case of information security – to reveal undesirable activities). In this developed systems the programme part of the application consists of the following elements: connection of the peripheral processing units, data collection unit (responsible for pre-processing of the data in accordance with the submodel), controller that is responsible for processing of data collection and analysis processing as well as their visualization, and algorithm for mathematical data processing followed by its analysis and visualization for the final user.

Originality / Value / Practical implications. At the point the paper is dedicated to development of a metamodel which is oriented on managing of structural levels hierarchy. This research can be used as a methodological tool for developers and organizations who are creating multisensory security systems.

Keywords: Programming languages; multisensor systems; smart sensors; monitoring; data interpretation.

JEL codes: O31.

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Yulia Efimova, Evgeniy Valiev. INDUSTRIAL IT PROJECT MANAGEMENT MODEL: SPECIFIC FEATURES AND PROGRAMMING

Abstract

Research purpose. The purpose of this study is to increase project management efficiency by means of IT project management model. This model was tested by means of structural-functional model and programme complex that is used to increase IT projects efficiency.

Design / Methodology / Approach. The key method used for this study was experiential testing of IT projects control methods, as well as data collection and data analysis methods. The experiential data was collected in the IT department of an industrial enterprise.

Findings. The structural functional model of corporate network cooperation in accordance with the hierarchical role distribution. The system boasts 3 roles: administrator (this role allows to create projects and tasks within projects, manage the flow of the project, define the responsible people); executor (this role appears when the administrator appoints the responsible person). Executor has the possibility to require the needed amount of time to implement his part of the project. In case the executor has the function to request prolongation in case the task can not be fulfilled within the settled deadlines. The guest (the third role) has only a possibility to see the flow of the project. Administrator can create the calendar plan of the project where he and the executors can add tasks and subtasks. These tasks and subtasks are defined in

terms of deadlines, or an administrator can set a sequence of tasks, when the next task can be started only when the previous one is finished. System automatically creates the timeline of the project.

Originality / Value / Practical implications. The theoretical value of this research is development of corporate methodology which defines and systematizes the key principles, requirements and statements on IT projects. Practical implications of this research is practical oriented model and software which can be directly implemented in the industrial enterprises.

Keywords: Programming languages; IT project management; software.

JEL codes: O31; L63.

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EMERGING TRENDS IN
CULTURE, CREATIVE INDUSTRIES AND DESIGN

Kristina Jodenyte. CREATIVE COMMUNICATION TOOLS IN VILNIUS ARCHITECTURAL HERITAGE COMMUNICATION

Abstract

Research purpose. The purpose of this study is to single out the means of creative communication and to identify which of them are most used in the communication of architectural heritage in Vilnius.

Design / Methodology / Approach. Analysis of scientific literature, qualitative expert interviews.

Findings. The communication of the architectural heritage is multifaceted because the heritage is multifunctional. Heritage communication operates through various channels and is focused on different target groups; however, in order for the communication to be effective, as expected, the coherence of communication is required, as well as a comprehensive approach to all aspects of communication. Structured communication is essential for the best communication impact.

Originality / Value / Practical implications. Heritage communication is an actively developing field that is receiving increasing attention from scientists and the public. Much attention is paid to heritage during various cultural events, during which the public has the opportunity to get acquainted with the usually inaccessible heritage or its premises. In this way, the revitalisation of heritage involves urban residents, communities, interested groups who, for cultural, religious or other reasons, are concerned with heritage preservation. Although much attention is paid to heritage communication and sponsors are being attracted, there are fears that the communication of architectural heritage is not sufficient due to the lack of funding for architectural heritage. The consequence of the lack of funding is the disappearance of architectural objects. Thus, the analysis of architectural heritage communication is a relevant and researched topic.

Keywords: Culture; Heritage; Technology; Creativity.

JEL codes: L83.

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Dita Pfeifere, Jolanta Borite. A ROLE OF CULTURAL CENTRES IN THE DEVELOPMENT OF URBAN AND RURAL CULTURAL ENVIRONMENT: A CASE STUDY OF SIGULDA COUNTY

Abstract

Research purpose. The second largest network of cultural institutions in Latvia is made up of cultural centres. Throughout Latvia, there are more than 558 cultural centres operating in 119 municipalities. Cultural centres are multifunctional cultural institutions that provide access to culture in all regions of Latvia, be it in cities or villages. Cultural centres act as interdisciplinary institutions which provide a wide variety of cultural services and take part in the realization of all national cultural policy priorities. Within the framework of this research, the authors analyse a role of cultural centres in the development of cultural environment of Sigulda County.

Design / Methodology / Approach. The design of research- case study. The research methodology- qualitative research. The research methods are the content analysis, including analysis of relevant literature,

official reports and documents of the government agencies and Sigulda municipality, the secondary date analysis and the semi-structured interviews.

Findings. The results of the research will be presented at the conference.

Originality / Value / Practical implications. The results of the research will be used by Association of Latvian Culture Centres by preparing new cultural policy strategy for the development of cultural centres 2021-2027. The results of the research will be partly used for further research within the framework of Ditas Pfeiferes doctoral thesis. The practical implication of the research is related to the development of cultural centres in Sigulda county.

Keywords: Cultural centres; cultural environment; culture management; rural development; city development.

JEL codes: Z1, M3.

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Ance Gricmane. IN THE STUDIO OF DEMIURGE

Abstract

Research purpose. Design / Methodology / Approach. This article examines the idea of Latvian artist Helena Heinrihsone and Estonian artist Juri Arrak as demiurgic creators while being involved in the process of making sacred art called altar-piece in Lutheran church after the Fall of the Iron Curtain in the Baltic Sea region. Meanwhile, the Ph.D. candidate in Art History MA A.Gricmane is claiming to provoke a question of the artistic value and professionalism of the contemporary sacred works exhibited in the Latvian and Estonian Ev. Lutheran churches. /Research is based on the materials found in the archive of the Latvian Contemporary Art Centre, interviews with the two artists and theologians./ Specifically, there are chosen two altarpieces of each artist which are still exhibited in the Ev. Lutheran church in Kolka (LV) and Halliste St.Annas church (EE) made in the '90s while the political reconstruction was happening in Baltic states and Europe. These two altarpieces are compared with the so-called profane masterpieces each of the artists were making at the same time period as the altarpieces being in their studio.

Findings. This research approves the assumption that sacred art or in the religious terms called altarpiece can be seen as a part of the contemporary art field in the Baltic Sea region. And this claims to be a point of impact between the religious hierarchical structure and the secular contemporary art consumer. While both of them are interested in the particular art form and values its semiotic meaning, each of them seems to get a different impact from the altarpieces seen in the chosen churches. These two local Baltic artists are known for their secular works made in the '90s far beyond the borders of Baltic States putting the accent of the altarpiece making as their personal interest in religion and their religious praxis.

Originality / Value / Practical implications. That is crucial to rise the social dialogue about these art pieces and while accepting all the canons their necessity to be valuable from the prism of contemporary art in the field of painting. This research shows that even the art piece is not located in a museum, but being in a religious place still puts the impact of the viewer and its senses, raising the understanding of contemporary national sacred treasures located in the Baltic provinces like Kolka (LV) and Halliste (EE).

Keywords: Education; art history; art-making process; self - development; religious art;

JEL codes: H0.

Biography of the authors

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***Viktorija Priļenska, Kaspars Steinbergs, Aris Adlers*.** **GAMING AS A TOOL FOR ORGANISATIONAL CHANGE: EXPERIENCES FROM THE COASTAL VILLAGE OF CARNIKAVA**

Abstract

Research purpose. The purpose of the paper is to discuss the potential of gaming as a tool for organisational change in the coastal village of Carnikava. This year Latvia is undergoing the administrative-territorial reform. As a result of the reform smaller counties will merge into larger counties, and the number of the counties will decrease from 119 to 42. Carnikava county will merge with Ādažu county, and the territory in focus of the research - the coastal village of Carnikava, will lose its status of the county centre. The loss of centrality threatens to induce further reduction in public services and degradation of the public space. These threats call for the development of new action strategies in the context of altered status and governance model, where the duties, capacities and relationships between the actors involved are uncertain. With the increasing gamification of society, gaming is envisioned as a tool, which is capable of aiding the aforementioned challenges, associated with organisational transformations, through shaping and clarifying the duties, capacities and relationships of the actors involved through collective co-design efforts.

Design / Methodology / Approach. The research focuses on the transforming status and governance model of Carnikava village. The inquiry experiments with the potentials of gaming as a tool for reshaping duties and capacities, as well as the relationships between the actors involved.

Findings. The paper discusses the methodology for the prospective research and does not report any research findings.

Originality / Value / Practical implications. The paper contributes to the research on gaming as a tool for organisational change.

Keywords: Carnikava village; organisational change; gaming.

JEL codes: R1; P3 (system can be found in the website of American Economic Association: https://www.aeaweb.org/econlit/jelCodes.php)

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Nijole Janina Vasiliauskiene. ASPECTS OF FOOD CULTURE

Abstract

Research purpose. Representatives of the World Health Organization identify nutrition as one of the determinants of health. Healthy eating recommendations are constantly updated and research is made public. When it comes to food culture, food emissions must also be a concern. it is considered that the problem of food wastage has become even more acute in the context of the crisis caused by the coronavirus pandemic, leading to the launch of an online study in early January 2021. The survey asked questions about the changes in the crisis caused by the COVID-19 pandemic and food throwing during this period. In November 2020, a survey of food waste was conducted by the research company "Norstat" on behalf of "Maisto Bankas" and Swedbank. The article presents the results of these two studies, comparisons and tips on how not to waste food.

Design / Methodology / Approach. To achieve the research purpose author conducted a survey, using own developed instrument – questionnaire. In early January 2021, an online survey was launched involving 74.5% of women and 23.5% of men. Most of them were 43.7% aged 18-25, 18% were aged 26-34 and 51 and older. The survey asked about changes in the crisis caused by the COVID-19 pandemic and food throwing during this period.

Findings. Findings will be presented during the conference - data is currently being processed.

Originality / Value / Practical implications. The results of the research can be used to reduce food waste.

Keywords: Healthy food, food waste, pandemic, COVID-19, perishable foods.

Biography of the authors

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***Jelena Budanceva.* CONSUMPTION OF CULTURAL CONTENT IN THE DIGITAL ENVIRONMENT**

Abstract

Research purpose. In the modern world, people, especially young people, spend more and more time on the net. If the health experts recommends that youth and adults spend no more than 2 hour a day online, the statistics show a different trend. As the data from the datareportal.com show, from 2017 the amount of internet and social media user was growing for 7 and 14% in the world, in Latvia the number of social media users increased for 15%, and 84% of Latvian population are using internet each day (https://datareportal.com/reports/digital-2020-latvia). Since the spring of 2020, the number of hours spent online has increased even more - due to COVID-19, schoolchildren and students have completely or partially switched to online-studies. Most adults also started working remotely. In Latvia from March 2020 to March 2021 the domestic bandwidth production growth for 150% and Internet exchange points (https://www.pch.net/ixp/summary_growth_by_country). In Latvia, as well as in most EU countries the main Internet users are young adults (from 16 to 26 years old) and the frequency of Internet use for these young people in Latvia is even higher than the EU average (https://ec.europa.eu/eurostat/databrowser/view/ISOC_CI_IFP_FU__custom_682470/default/table?lang=en). The purpose of the study is to find out, how the time spent online and the content consumed online are changed due to pandemic as well as to determine what cultural content young people are consuming online.

Design / Methodology / Approach. To achieve the research purpose author conducted a survey, using own developed instrument – questionnaire. In total, 1029 respondents participated and 934 questionnaires were valid. The survey was conducted in December 2020 using snowball sampling. The developed questionnaire contained 10 questions were grouped into 2 sections: A) Questions about consumption on cultural content online before and during the pandemic and B) Respondent profile.

Findings. Totally the number of hours young people are spending online because of COVID pandemic increased, but most fastest growth is by those who spent more than 8 hours (from 15 to 100 persons). 53,2% from all respondents are spending about ¼ of all time online consuming cultural content, and 23,2% are not consummating cultural content online at all. 3 main significant reasons why the youth is spending time online are: it is easy and fast (77%); the digital environment is always along in the phone (77%); in the digital environment it is possible to communicate with friends (65%). Spending time online most respondents are consuming informative content, including news and blogs (64%) and the content related to hobbies or leisure (60%), but the cultural content was ranked with just 26%. The most used digital cultural content is movie watching (30,5%), seminars and courses about culture (18,6%), conferences dedicated to culture topics (17,1%), tours in world museums (16,3%) and study books (15,9%).

Originality / Value / Practical implications. The results of the research are representing changes in online consumption of culture goods and services caused by COVID-19. As the target group of this survey are youth from 18 to 25 years old, they can be used by evaluating potential and planning of culture goods and services online for this target group.

Keywords: Culture consumption; digitalization; culture services; culture products; youth.

Biography of the authors

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Jelena Budanceva, Velga Vēvere. **CHANGES OF CULTURE AND LEISURE CONSUMPTION DURING A FIRST PANDEMIC WAVE**

Abstract

Research purpose. COVID 19 changed many aspects of economic and social life around the world. Many restrictions affected the culture and leisure industries – in Latvia, by start of the state of emergency on 13th March 2020, cultural, sport and leisure events were cancelled, as well as was forbidden to assembly for more than 2 persons from different households (https://www.mk.gov.lv/en/article/regarding-declaration-emergency-situation-0). This restriction changed culture consumption habits of the inhabitants of Latvia: from 5%-8% in 2019 to 20% in 2020 increased the proportion of those who haven`t been to any cultural event during the year. If in previous years most of those who attended cultural events and activities had been to more than 5 different events, then this year 52% of cultural consumers have been in no more than 5 events (https://culturelablv.files.wordpress.com/2021/02/kulturas-paterins-un-lidzdaliba-2020.pdf). The purpose of the study is to find out, how the restriction caused be the state of emergency due to COVID19 had changed the consumption habits in culture and leisure sector as well as to determine changes in the cultural and leisure content consumed before and after the first wave of COVID 19.

Design / Methodology / Approach. To achieve the research purpose the authors chose to conduct a pilot study in April 2020 and conducted a survey, using own developed instrument – questionnaire. In total 92 respondents participated. The developed questionnaire contained 31 questions were grouped into 4 sections: A) Respondent profile, B) Changes of economic situation, C) Changes of culture consumption habits, D) Changes in leisure time and E) Changes in working conditions and working environment. The sections C and D contains 11 questions about consumption of different culture goods and services and habits of spending leisure time.

Findings. The data of the survey shows that from 92 respondents 81 are women, 87 are in age 20 to 60 years and 72 have higher education; 61 are working and 15 are studying; most of the respondents are working (26), studying (6) in culture field or related industry (28). Just 8 of the 92 respondents hadn't changed their consumptions habits at all or started to spend more money – all others had to cut their spending in different ways. In the first period of the declaration of the state of emergency, 38 respondents started to consume less culture products and services, 35 started to consume different culture products and services as before, by 18 respondents the pandemic hadn't changed culture consumption habits. 46 respondents indicated that they miss cultural events, 25 miss those although hadn't plan to visit them and just 19 persons are not interfered by cancelling of cultural events. During the first wave of pandemic the most consumed cultural content was watching movies, reading books, listening music (except opera and classics) and consuming of educational content online. Most rarely consumed were e-books and e-magazines, printed magazines; classic music, opera and ballet online; visiting museums, theatres and art galleries online. Before the declaration of the state of emergency, most respondents mentioned that they are spending their leisure time by visiting cultural, leisure or sport events (68), joining nature (67), meeting friends (65), doing hobbies (59), watching movies or series at home (57). The declaration of the state of emergency changed leisure time habits by 77 of 92 respondents; even more popular became to join the nature (70), more people started to study on- or off-line (from 53 to 55) and to read books (49 to 55). The most decreased types of spending leisure type are meeting friends (from 65 before state of emergency to just 7 during the state) and visiting events (from 68 to 5). The restrictions on leisure activities that bother the respondents most during the first state of emergency were cancellation of culture, leisure and sport events and ban of assembly for more than 2 people in free nature (both were mentioned by 60 respondents).

Originality / Value / Practical implications. The results of the research are representing changes in consumption habits during the first wave of COVID19 pandemic. Analysing the changes during the first state of emergency, can be concluded that respondents are missing the active cultural life and events, sharp reduced time spent with friends, but spent more time by reading books and self-education.

Keywords: culture consumption; consumption habits, COVID 19, social changes.

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