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**Abstract Booklet** 





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#### **Guilt and consumption**

#### Mgherony Abdul Whab

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This paper argues how guilt affects consumption intention . It is a try to explore the hidden motivation about our modern tendency to consume. I explain the Lacan's concept "jouissance" or enjoyment depending on Zizek understanding and how we've ended up buying into lifestyles rather than living our lives, and end this discussion by talking about the change in our understanding of the charity

### Human safety requirements based on a steering by wire system

#### Safa Jameel Dawood Al-Kamil, Tamas Szakacs

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Steering systems are one of the most significant components in vehicles since they directly related with drivers, and their performance considerably affects the steering feel. However, it failures can cause hazardous driving situations. Therefore, the contribution of this paper is two-fold. First, it describes the research effort to assess the functional safety requirements related to a steer-by-wire (SBW) system by applying a number of hazard analysis techniques. Second, it presents a fault-tolerant architecture that can be used for SBW systems to improve vehicle safety through better steering capability.

The results of this study provided support for drivers with their driving tasks, and an alternative controllability SBW system was used.

# Effect of the basic corporate identity factors (organizational culture and strategy) on the competitiveness of SMEs

#### Aniko Almasi

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The Corporate Identity (CI) has influence on operation and success of enterprises, but the literature and case-studies, however, are mostly about large companies. More CI based researches are performed by the author especially for SMEs in Hungary, and secondary data of several competitiveness surveys are analysed. The balance of the factors are essential and the organization based competence is undervalued. As new result the main factor is revealed: the GAP and its extend between the leader and the organization has the most significant effect on the competitiveness of SMEs.

### Industrial revolution 4.0, renewable energy: A content analysis

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Objective: The main objective is to do a content analysis of the publications in the Industrial Revolution (IR) 4.0: renewable energy in ScienceDirect, year 2018.

Methods: The research was a qualitative one, content analysis and coding was used. To gather data, the researchers analyzed the recent researches during the first half of the year 2018. from ScienceDirect. "Industrial revolution 4.0" in the "Title" field and "renewable energy" in the field of "Title, abstract, keywords" are searched. Thirteen papers are retrieved. So ten papers were related to our topic and analyzed. All of the titles and abstracts of the available full-text papers imported to ATLAS 7.5.7. In the first step, the primary findings in the abstract were presented. In full-text format, final data analysis will be provided.

Primary findings and conclusions: It was found that there are two hundreds and twenty two conceptual codes are available in those researches. The massive technology growth nowadays is leading to the new technological era; IR 4.0 is the new era. Energy is one of the most important resources for all societies, thus new energy technologies became one of the essential research areas. As a consequence energy manufacturing is indeed shifting toward IR4.0.

It was concluded that during 2018 researchers studied different types of energy generation methods such as solar and Photovoltaic (PV), gas and hydrogen generation. As well as some storage methods, battery banks and water storage are some examples. Also, they researched different aspects and methods leading IR4.0 like financing

and modeling strategies, optimization simulation, manufacturing, and Innovational analysis. The researchers focused on three main ideas, first, applying new green technologies or combine the current technologies with newer ones (using IoT for enhancing current monitoring systems for example). Second, improving the current energy technologies side by side with energy storage systems. The third focus was financing and funding green projects. Further researches are needed in order to find other aspects of IR4.0, also there is a need for studying different types of renewable energy resources since they are many factors affecting the power generation reliability.

Keywords: Industry Revelation 4.0, Energy, Renewable Energy, Energy Generation, Energy Technologies

#### The risk of using biometrics

#### Haya Altaleb, Sinan Kocak

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Biometric is an advanced technique that provides excellent benefits in access privilege and authentication. This security technology has become an integral part of a variety of sectors, regardless of its type, governmental or private. The growth of proprietary data is becoming increasingly important for excellent authentication solutions that enhance mobile security. The security of information is necessary to protect the property of institutions that may fall into the hands of competitors or hackers and cyber-terrorists. This paper shows the hidden risks of biometric techniques and how to avoid them.

# Implications of the enforcement of the international accounting standards over the financial and economic information of the Spanish companies

#### Begona Alvarez-Garcia, Joaquin Enriquez-Diaz, Maria Teresa Fernandez Rodriguez, Felix Puime-Guillen

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Accounting information has to be useful to enable different end-users (mainly investors and shareholders) to make informed decisions. It is for this reason that the analysis through ratios linking the balance sheet and the profit and loss accounts is a key tool for studying the economic and financial situation of companies. As a result, a clear objective of the International Financial Reporting Standards (henceforth IFRS) is to establish parameters of recognition, measurement, and representation of the financial information that improve the usefulness of these indicators.

This paper demonstrates how the process of harmonization of the accounting rules has affected the results of Spanish companies and whether the regulatory changes have influenced the companies' performance. We revisit IFRS accounting principles related to assets and liabilities of the balance sheets (in particular, related to tangible and intangible fixed assets, leases, and financial instruments) in order to ascertain if the changes have an impact on key management accounting ratios, such as capital adequacy ratio, liquidity ratio, debt ratio, return on assets (ROA), or return on equity (ROE). We assess the major implications of the enforcement of international standards

on the Spanish accounting system in general, and on management ratios in particular.

The main conclusion is that the requirement to use of fair value in financial instruments with mandatory accounting revaluations, caused solvency to move in the same direction as the change in valuation. In addition, the application of the amortized cost for debts improves the company's autonomy by reducing its indebtedness because deferred interest are not considered as debt. Concerning the other assets, the international regulation moves the 'non-current assets held for sale' from non-current assets to current assets, thereby improving the companies' solvency and liquidity. Although there are no significant changes in valuations applied to 'financial lease', because of the principle of 'substance over form', certain contracts that should have been considered as operational (and recorded in the profit and loss account) must now be treated as a 'financial lease', while the non-current asset and short and long term debt are recorded in the accounting. This change in turn worsens the solvency situation.

In sum, regulatory change that affects the concept of result and the valuation assumptions based on fair value, will have a significant and positive impact on the image of the company, thus improving the ROA and ROE indicators.

### The relevance of the human capital theory in macroeconomics

#### Ilona Ida Balog

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The theory of human capital prompts the positive effect education can have on future productivity. Despite several publications on the topic the relationship between education and economic development is not clear. According to the research agenda set by the UN Statistical Commission accounting of human capital remains an important issue. In connection with this I present data from the national accounts of Hungary to detect the relationship between educational spending and economic performance.

### Talent management at Obuda University focusing on teachers' and students' roles

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We examine how to motivate young people with promising intellectual abilities as an increasingly important topic of excellence in education. Regarding to Obuda University's mission, talent management should focus on three basic cores: teaching, research as well as servicing and supporting. Conceptually the paper focuses on

opportunities which include different ways to obtain the possibilities for talented students. On the other hand, we should take teachers and professors into account, who must step into a new role where it is, no longer enough to be a source of knowledge, but have to challenge students' interests, fostering their capabilities and increase options for them to work in diverse projects – real or virtual -, fields and teams. We provide a systematic overview of how to support talent management in higher education, in case of the Obuda University's Safety and Security Studies of Bachelor and Master level. First we provide a short state of art after we show best of practices from the field of honours' programmes.

Keywords: talent management, higher education, honour students' programs, teachers' roles

JEL classification: I2, I23, M53

### 10 minutes neurofeedback for better concentration

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Children with learning disabilities have an increasing hard time in school. Due to various reasons they have a problem to keep up their concentration to a certain required level. Be it during a school or life activity. In order to help I am currently developing a neurofeedback system, which sharpens these students' attentiveness. Hopefully using their increased abilities the students can achieve their respectfully goals in a less stressful and more easily attainable way.

### National and regional economic strategies in Hungary

#### **Arpad Duczon**

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Automobiles are gaining an increasingly larger share in Hungary's positive balance of trade and strategy. By mapping the largest factories and their suppliers, we show that only cities along the Gyor-Debrecen axis can participate in this strategy. What does this mean for Hungary's southwestern region? Is every town or settlement forced to give up on agriculture and pursue tourism or industry? The aim of this study is to show that the land can still be in an engine of growth in Baranya and Tolna counties.

### The financing options for the Romanian SMEs in the current economic condition

#### Florin Duma

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The financing decisions, together with the investment decisions, are probably the most important financial decisions that any entrepreneur or small and medium enterprise has to adopt from the very beginning of their activity. Therefore, particular attention should be paid to different factors that are influencing the financing decision such as costs, duration, flexibility, risk involved, control, timing and so on. In this paper we intend to analyze the way the Romanian SMEs are financing their activities in the current economic conditions, what are their options and preferences and what is the effectiveness of these financing solutions.

### **Surveying IT Threats for Server of Small Business in Real-Environment with Honeypot**

#### David Janos Feher, David Baranyai

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The cybercrimes are more and more popular nowadays and not just against the corporations, and the small businesses are vulnerable against the attack too. Most of the small businesses use IT tools, as they have websites, servers, and other information communication-related devices, limited by the smaller budget, they cannot buy the newest, most secure devices since they cannot spend a high amount of money as a typical corporation can. The small companies have less vulnerable data and less prestige to lose, but they are still the target of the attackers. Our article is surveying the external IT security attacks against a small business in the countryside with a honeypot solution.

Keywords: webserver, SSH, Telnet, honeypot, threat, small business

### The impact of cloud computing on business - IT strategic alignment

#### Peter Fuzes

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Research has shown that Information Technologies (IT) can be a source of competitive advantage for companies. However, researchers have also found that not all IT investment leads to the desired results. One of the main reasons why IT often does always improve company performance is the missing strategic alignment between the business units and the IT organization of the firm.

A relatively new technological innovation, cloud computing is potentially disrupting the way companies are using IT. Instead of building their own IT systems, they can use IT as a service.

In our research, we analyze what is the potential impact of cloud computing on the strategic alignment between functions and the IT organization of the firm. We conclude that cloud computing changes the role of the IT organization and use of cloud services can improve the strategic alignment.

### Differentiated marketing communication solutions in the light of generation challenges

#### Monika Garai-Fodor

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This present study follows the concept of generation marketing, and presents the peculiar traits of generation Z when it comes to selecting workplaces and career paths from the aspect of different communication solutions. Differences between age groups - values, thinking, and lifestyles - have always existed. Conception of generation marketing became important in the near pat, because the gap has never been so great between the active generations as it is today. That is why there are more and more marketing and marketing communication studies which are focus on the differences of generation and try to find the solution based on the generation differentiation. In my opinion when we are thinking in generations, we need to start the analysing with values of generations, because generations are bound together by their joint experiences, life sensations, and finally, mutual values. The greatest cohesive force between the diverse generations is their value system. Therefore when we examine the differences between generations, one should start with analysing the deviations regarding their value perceptions This present study shows the sub results of the last year's primary research project related to the selecting workplaces and career paths of Z generation from the aspect of a special communication issue: employer branding. Quantitative and qualitative research results will be presented. Within the frame of the qualitative research, thirty minifocus group interviews were conducted based on a semi-structured guide, in case of quantitative research process more than 1000 questionnaires have been analysed. The research results generated

conclusions could support the communication, mainly the HR-communication how to achieve Z generation with success, what kind of marketing communication tools processes and style could be adequate in case of this generation. Based on the research experiences I could say that the differences between generations represent a segmentation criteria in case of employer branding, as a special marketing communication issue. The employer brand, such as a product brand differentiates, identifies and positions. The generation Z is growing and becoming more and more important as a target group on the labour market, quite different media using and purchasing habits and social relation building practices, compared to members of the previous generations. Therefore research studies exploring the incentives and the way of thinking of this generation could become important and useful, serving as a guide for employers who attempt to reach out, convince and retain them.

#### Health and youth

#### Gabor Gyarmati, Janos Tibor Karlovitz

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Health and health education are an important part of youth education. However, how do young people think about health, how it important is for them? The article examines the place and role of health in society, education and the food industry, focusing on the consumer's opinion. Following the evaluation of the questionnaire, we can see that the level of health awareness is not too high among young people, which is reinforced by the fact that there is no health education in schools either. This will have more serious consequences for the longer term, whose economic impact is expected in the future.

### The past and future of CAP - Hungarian and Polish similarities and differences

#### Gabor Gyarmati, Tamas Mizik

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The Common Agricultural Policy needs to be constantly reformed and this is because it is not possible to create a perfect solution for all 28 Member States, which means that continuous experimentation is taking place, improving the CAP by reforming the issues and trying to answer the questions which emerge. The most recent reform measures are the common organization of agricultural product markets, direct payments to farmers and rural development policy. The article looks at how this is happening in our country and Poland, what are the successes and what are the measures for which we can not talk about success.

### The impact of price promotions in the sale of complementary products.

#### Sandra Lizzeth Hernandez Zelaya

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The management of the product categories at the point of sale requires a good understanding of the relationship between the categories because the decisions that affect a category can have consequences in complementary ones. To evaluate the complementarities between categories, this research focuses on price promotions that can have a positive effect on the sale of complementary categories. Within these complementary categories, a primary and secondary category is identified, the primary category encourages the purchase of secondary category with more intensity and, on the other hand, the secondary category encourages the purchase of primary category with lower strength or intensity, which is associated with asymmetric promotional effects between complementary categories. In these complementary relationships it is important to consider the influence of the brand as it could help strengthen complementary relationships.

The research focuses on an experiment where two complementary categories (shampoo and conditioner) are analyzed. In it, German consumers participated and were randomly assigned to respond to the different scenarios proposed. The results show the importance of considering the complementarities between categories and the promotional effects between categories. Finally, the results provide evidence on the complementary asymmetries of the product that may exist in the complementary products to optimize the management of the category. The research provides relevant information for distributors in the management of their categories and for manufacturers in the promotion of the complementary products of their brands.

Keywords: Price promotions; complementary products; asymmetries; brand.

#### **Blockchain in taxation**

#### **Zoltan Hima**

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Robotic Process Automation is the technology that allows anyone today to configure computer software, or a "robot" to emulate and integrate the actions of a human interacting within digital systems to execute a business process. RPA robots utilize the user interface to capture data and manipulate applications just like humans do. They interpret, trigger responses and communicate with other systems in order to perform on a vast variety of repetitive tasks. My presentation gather and analyze the future of RPA and summarize expectation behind this technology.

## Regional competitiveness in the European Union: The role of the individual and the institutional factors

#### Krisztina Horvath, Zsofia Krabatne Feher, Laszlo Szerb

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Our study presents a new index, called Combined Regional Competitiveness Index (CRCI), measuring the competitiveness of 151 European Union regions. The aim of the new index is to explain differences in economic growth. While it is generally believed that the basic unit of territorial competitiveness is the firm, existing country level and regional competitiveness measures focus on the widely interpreted institutional aspects of competitiveness and neglect individual (firm) level characteristics (Annoni 2016, Huggins 2003, 2011). We have created a competitiveness index that combines together the firms' individual competencies and the regional institutional factors in a systemic way. These CRCI pillars and subindices reflect not only to theoretical constructs but also to the availability of data.

The new index comprises four sub-indices, ten pillars and 20 variables each representing a different aspect of the regional competitiveness. Intensity of competition sub-index reflects to two types of competitive pressure one that is coming from existing businesses and the other is deriving from new entry. Growth and internationalization strategy includes the firms' generally interpreted growth and international aspirations. In the Human capital sub-index, we incorporate the businesses' level of education and training and the entrepreneurial abilities of the leader of the business. The Innovation sub-index reflects to the firms' renewal capabilities. It measures the

ability of create new technology, new product, and how firms can absorb existing technology.

Our firm level individual variables are from the Global Entrepreneurship Monitoring (GEM) adult population survey including young/baby businesses and established firms. Data are available for 24 European Union countries, 151 region, a mix of NUTS1 and NUTS2 regions from 2010-2014. Institutional variables are mainly from Annoni's Regional Competitiveness Index (RCI) dataset (Annoni 2016). In the index building methodology we follow Acs, Autio and Szerb (2014).

The cluster analysis shows that the three groups of the 151 EU regions prevail a wide varieties of competitiveness profile based on the nine pillars of competitiveness. The regression analysis shows that the regional employment rate of CRCI has a positive effect on the gross added value per employee in the given region. We can find that CRCI scores explain regional growth both in terms of value added and employment.

#### Literature:

Annoni, P., Dijkstra, L., & Gargano, N. The EU Regional Competitiveness Index 2016.

Acs, Z. J., Autio, E., & Szerb, L. (2014). National systems of entrepreneurship: Measurement issues and policy implications. Research Policy, 43(3), 476-494.

Huggins, R., & Williams, N. (2011). Entrepreneurship and regional competitiveness: The role and progression of policy. Entrepreneurship & Regional Development, 23(9-10), 907-932.

Huggins, R. (2003). Creating a UK competitiveness index: regional and local benchmarking. Regional Studies, 37(1), 89-96.

### Supporting to choose a CNC machine by building a Knowledge Base

#### Hazem Issa

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Decision making nowadays is hard due to the complexity of tasks and the overlapping of the solutions with problems in other areas that may affect passively over the main process in the long-term and for this and other reasons, the need emerges to rely on an accurate system that considers the relations to other fields and easy to use like the expert system. The knowledge-based expert system is one area of artificial intelligence which applied in various fields such as advertising decision making and manufacturing decisions. This study shows an example of knowledge-based decision making to support how to choose a 5-axis CNC machine. This system like fuzzy logic system containing 5 inputs connecting with each other via if-then rules to decide the final decision of using or not of 5-axis CNC machine. The knowledge base consists of 5 input and 2 dependent attributes. This knowledge base is done by Doctus Expert System. Choosing 5-axis CNC machine is based on many factors and the paper choose the following factors (which are related to scientific paper): Setup time, level of staff training, the geometry of the parts, required accuracy of the parts and the costs of CAM software and these factors will be the input of the system. The output of the system will be the choice between three decisions of (useful, useless and indifferent) of utility the 5-axis CNC machine. The results show that there are single strong clear decisions in many cases, but in other cases, there are composite decisions which contain a percentage of the three decisions but they still enough to decide.

Keywords: CNC machine, fuzzy logic, knowledge-based expert system

### Project ownership and stakeholders – From a project manager's angle

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Building and leading a company as well as managing projects has always been about managing for stakeholders. The economic world today consists of interconnected networks of customers, suppliers, communities, employees, financiers.

Ownership plays a special part in the life of companies and projects. Beyond physical possession of business property it includes responsibility (even in hard times), ability to make decisions, taking control and pride in tangible results and creating value during the process. Addressing project ownership issues should fit within the general framework of the organization. By the temporary and unique nature of projects they are still performed to achieve specific goals. Projects are usually performed by

temporary teams, have a non-repetitive feature and provide non-standard deliverables. The purpose of the presentation and the related small study is to show and highlight the connection between project ownership and stakeholders.

#### Development and implementation of the numerical model for predicting the values of ecological footprint, based on the Monte Carlo methodology

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The impact of human activities on the environment can be observed through the ecological footprint - the measure of human activities, in biologically productive area of land and water, which is needed to satisfy human demands. In order to achieve and maintain sustainability, Earth's natural capital needs to be preserved. Thus, it is of high importance for scientific and general community to analyze and predict the ecological footprint in order to successfully manage natural resources and protect the environment. The aim of this paper is to develop and implement a numerical model based on Monte Carlo methodology, for predicting the values of ecological footprint. The model is based on six input variables: (1) Rural population, (2) Urban population, (3) GDP per capita, (4) Energy use, (5) Electric power consumption, (6) Electricity production, and one output variable which is the total ecological footprint of consumption, for the region. The dataset included data from European, North American, South American, Asian and African countries, as well from Australia. Predicted values from the model were then compared in order to verify the accuracy of the model.

Keywords: ecological footprint, Monte Carlo, numerical model

## Modelling interconnection between provision under IFRS9 and countercyclical capital buffer

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The impairment recognition in International Financial and Reporting Standard changed significantly in 2018 with the introduction of IFRS 9. In this paper I am modelling the interconnection between provision under the new IFRS 9 standard and countercyclical capital buffer of prudential regulation. The recently introduced IFRS 9 impairment model is closely related to the economic cycle. I am modelling the effect of macro environment to the allowance and compare it with regulatory mechanism of countercyclical capital buffer.

# Comparison of reserving principals between prudential regulation and international accounting standards

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In this paper I am comparing the prudential regulation and the international accounting framework from reserving point of view. Prudential regulation deals with standards and guidelines, which are required for financial institutions to control their risks and hold adequate capital in case of recession and bankruptcy. Accounting regulations are necessary to support decision making of financial investors. I am highlighting the differences and similarities between prudential and accounting reserving methodologies.

# What have the app generation done with our work environment?

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They migrate between companies every couple of years or months. They don't mind travelling and constantly crave change. They know their own worth and willing to ask for it and stand their ground when they feel they aren't getting it. The world is now a place where remote working is considered normal and being a digital nomad is not only a well-known phrase but a desirable career. The biggest question here is whether these changes are beneficial economically or whether previous generations had the right idea and work morals? That is the question I intend to answer.

# Women Motivations Applying for Science, Technology, Engineering and Mathematics Education and Workplaces in Hungary

#### Aniko Kelemen-Erdos, Valeria Szekeres

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Women are significantly underrepresented in the STEM (science, technology, engineering and mathematics) fields in Hungary in higher education and, as follows, in the related workplaces. The aim of the research described herein was to explore the sources of motivation of the women who choose to pursue STEM-related higher education. A further aim was to investigate their employment history and examine their opportunities on the labor market. This analysis of the conditions of women's career choices helps understand the reasons for the low share of women in the related subjects and highlights the critical factors behind their commitment to STEM. Indepth interviews were conducted with women who have studied and may work in the related fields. Narrative analysis was used to interpret the results and provide insight into the factors underlying and working situations of the STEM-related decisions of women. Determinant factors included positive impressions of the field in women's lives, such as childhood experiences and emotionally engaging work experience. This finding suggests that STEM-related issues should be embedded favorably into child education. State support for STEM-related higher education also has an impact on commitment in this field. Employment-related difficulties which are liable to occur are very similar to those with other fresh graduate students, and include a lack of vision, long-term work experience, appropriate English-language skills, and understanding the content of job advertisements and their requirements.

Keywords: STEM, higher education, labor market, women studies

# Women's perspective on disaster management

#### Kata Kevehazi

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Due to the fact that women play a limited role in political and economical decision making, women's perspective, needs, needs, interests and values are neglected in policy making, development and control of public services, mechanisms, institutional systems as well as in the distribution and the allocation of available funds and resources or the operation of organizations. They have limited influence on the decisions how to tackle global problems, resolve lasting conflicts, civilizational or human disasters.

Women's perspective is hardly represented in disaster management, this article will underline the necessity to include this approach into disaster management processes and the operation of organizations responsible for disaster management.

# An examination of the efficiency of logistics processes at STI Hungary Kft

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Logistic processes are integral parts of commercial processes. Logistics, being one of today's most dynamically developing business sectors, brings new challenges and opportunities to us. To aim for efficiency in logistical processes and their management is therefore essential, and the limit is the sky. Thanks to the continuous technological innovations and the ability to change, we can realize a great deal of performance improvement which determines the proper functioning of the entire corporate system. Recognizing this possibility, the Germany-based S.T.I. Hungary Kft. asked for our assistance to look at the company's processes as an external viewer, so they can change their processes and the efficiency of their systems with the help of our knowledge and suggestions.

We detail this research and some of its results in our study, showing that with some simple organizational changes and standardized performance indicators, not only the image of the company will be more realistic and more accurate, but we can realize the profit as well.

# Transportation costs of the small-sized agricultural producers' direct sale

#### **Konrad Kiss**

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Participation in "short supply chains" (SSCs) means an alternative way in the concentrated food retail nowadays, primarily for the small-sized agricultural producers.

SSCs are examined from various points of views by the researchers. One of them is the distance of the transport, or the "way travelled by the food." This study presents the distances travelled by certain small producers, for the direct sales, and appraises their transportation costs.

# Is it really difficult to decide? Conflict management with conclusion of a case.

#### Csilla Kohlhoffer-Mizser

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Alternative dispute resolution (out-of court dispute resolution; extrajudicial dispute resolution) methods are to support natural persons and legal entities with several levels of conflict management. Reorganisation, resolution, restoration, evaluation and transformation are present to give methods to the parties. Mediation is an opportunity in the subject of alternative dispute resolution system, as one kind of procedures to solve a conflict. Mediation is based on the voluntary participation of the parties. Mediation is a procedure, in which an intermediary without adjudicatory powers -the systematically facilitates communication between the parties with the aim of enabling the parties themselves to take responsibility for resolving their dispute. Persons sometimes decide very quickly, in short term, sometimes the opposite: after months, after years there is no decison made for several reasons. The deeper the conflict is, the harder it is to get out of it, but what can be the reason to wait years for a solution even if there were other choices? Fear from the loss, fear from the responsibility or from changes? Through a case-study this paper aims to give a possible answer.

# EBRD investments in the financial sector of the Serbia

#### Aleksandar Kosutic

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In the world of financial investments, international financing is a key determinant and basis for a bigger and more successful development of small economies in Europe and the world at large.

This is a very important role, played by the International Financial Institutions, which are mostly provided by the largest financial investments without the progress of small and backward economies, but potentially prosperous would not be possible.

Consequently, we'll try to make this statement in further research in order to look at all the directions of EBRD's financial investments in the financial sector of the Republic of Serbia, and so we make a small review of this sector of the Republic of Serbia

# The labor market and labor shortages in the light of two empirical researches

### Adam Kovacs, Jozsef Poor

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The purpose of this article is to present a picture of the labor shortage in the V4 countries. Through the surveyed organizations, we will outline and analyze the data obtained in 2016 and 2017 researches. First, we present the current situation of the countries in the area of labor shortages and the correlation among countries. In addition, we outline what sectors and jobs are the highest regarding the labor shortage. We describe the elements that lead to a lack of workforce and what organizations are trying to prevent this problem. Finally, we summarize the results and draw conclusions

# The european migration crisis and the aspects of security politics

#### Tamas Kun

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According to the political events in Europe, in the recent years, Security Politics has become a crucial field in academic research. Some of these events have influence on the narrative in social policy on the continent (e.g. definitions about refugee status, the solidarity question, the cost of shelter etc.). I would like to clarify the basics in order to dissipate the misconceptions. The essential parts about these the Geneva Convention of 1951 and the Schengen Treaty.

# Opportunities and dangers of self driving cars

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Nowadays the issue of self-driving cars has become quite recent almost everywhere in the world. Despite the fact that automakers are working on their development and increasing the level of security, this level does not give complete security to its users. In this study we are dealing with the positive and negative sides of self-propelled cars, because we believe that these cars do not currently have sufficient confidence, which is an important element in many ways.

# Online content marketing roles on online business

#### **Mert Mentes**

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Online content marketing is an emerging strategy in a marketing arena to shift the paradigm from traditional marketing to digital marketing. Digital marketing is an appropriate alternative to collaborate with a traditional marketing for enhance marketing strategies to reach globally. In Turkey used the different kind of marketing strategies, however, in recent times, marketers focus on a digital marketing keeping view of its effectiveness and efficiency. Furthermore, a marketer needs to develop such strategies which should be consumer oriented. The digital marketing should be based on consumer interest and their product requirements. In this research paper, we discuss digital marketing with a perspective of consumer interest and requirements. After analysis of the digital marketing, we found that it is a robust medium to reach as globally within a fraction of the second.

Keywords: *E-content, digital marketing, traditional marketing, marketers, consumer.* 

# **Carbon free electricity**

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Environment protection, global warming and climate change are very popular topics recently. The future of the world is subject to pressures. The carbondioxide production is one of the reasons for climate change. 30% of the carbondioxide sources is from electricity. Energy is essential for economic and every day life of people. We have to find solutions for environmental protection. We need low carbon emission energy sector.

# A need of gender inclusion in healhtcare: Indian perspective

### Juhi Pandya

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Gender equality has attained enormous attention from various domains. It has been one of the goals being focused to achieve sustainable development goals. There are various research focused on gender equality and healthcare. Women and girls are stated vulnerable by many research and reports from an Indian context. Lower literacy rate among women is one of the factors leading to vulnerability. Policy and programmes in healthcare are more women based and have quintal health benefits or focus on men health. The woman has the least decision power in a household and are dependent on her husband or the male dominant figure in their house.

The aim of the paper is to study the gender inclusion in healthcare policies and programmes from Indian perspective. It tries to study the inclusion of gender in healthcare from policy and service level. The paper discusses why it is necessary to include men health needs and men's role in women healthcare especially from the policy and programme level. The paper takes into account secondary data methodology. Random selection of articles, publications are taken from national and international journals. The secondary data opines that policy concerns have missed to focus on the men's role in women's healthcare promoting gender equality. There is a lack of gender inclusive in health policies and programmes. It says that focusing on just one gender will lead to a greater gender inequality. There is a need for focusing on gender inclusive programmes and gender responsive health system to reduce health inequalities by Government of India

Keywords: Women, Men, Health Needs, Gender Equality, Healthcare

# **Future of the robotic process automation**

## Mihaly Panyi

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Robotic Process Automation is the technology that allows anyone today to configure computer software, or a "robot" to emulate and integrate the actions of a human interacting within digital systems to execute a business process. RPA robots utilize the user interface to capture data and manipulate applications just like humans do. They interpret, trigger responses and communicate with other systems in order to perform on a vast variety of repetitive tasks. My presentation gather and analyze the future of RPA and summarize expectation behind this technology.

# Competencies by Learning and Development-A key to Performance Management

#### Hima Parameswaran

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Organizations are a combination of human and technology. Empowering human skills with technical systems aims to achieve real growth to the organizations. Human Resource Development is in a constant state of development, responding to organizational and environmental change. It is a powerful device to endow individuals, organizations and societies to compete effectively in a global market place. A study on Performance Management encourages employees to achieve optimum level of work performance in align with the organizational goals. This research not only helps to explore the relationship between PM in a Public organization and a Private organization, but it enables a framework to develop employee morale by learning and development. In this context, it is vital to depict the outcomes of two independent variables viz. competencies, and learning and development towards its dependent variable, PM. It highlights on the employee perception about PM practices of the two companies, which is a fundamental factor for attracting, retaining, and motivating employees. Accordingly, the study is concentrated at Kochi, Kerala, in the shape of "Competencies by Learning and Development - A key to Performance Management," with a focus on the Plant level workers and the Managerial staff with a sample size of 481 and 475 respectively. Furthermore, it has been statistically verified that two factors show a positive relationship with PM. Along with this, it identifies the extent to which the PM and its work-life factors are provided by the selected companies. The upshot of the survey generated relationship between dependent variable (PM) and independent variables (work-life factors), different opinion in their PM processes, their outlook about PM practices and work-life factors with respect to demographic factors, personal satisfaction about their PM methods, varying satisfaction level with respect to the demographic factors, and the influence of work-life variables in the selected companies.

Key words: Competencies, Learning and Development, Performance Management

# Socioeconomic picture of western hemisphere 10 years after global crisis - evidence from selected economies

#### **Iwona Pawlas**

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The world economy of the 21st century is characterized by globalization, internationalization and regional economic integration. The new era of interconnectedness results in a growing number of international contacts and business transactions with partners around the globe. Therefore, it is necessary to understand the specific features of economies also in other continents, including the Western Hemisphere. The aim of the paper is to identify and assess socioeconomic development of selected Western Hemisphere economies ten years after global crisis 2008+.

# Work, stress vs. hobby, flow

## **Orsolya Peto**

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What could an ordinary adult do if the work stress decreases the effectiveness and happiness? What can they do to survive the hardest situations during work? Is the free time enough to help? Can we say some of the free time activity is the solution for every problem? Or do we have other possibilities? The author tries to find the answer to these questions based on a survey. The interviewees were intellectuals, as the questionnaire focused most on how the ongoing psychological burden could be processed by the respondents. Finally the research also focused on how flow can help treating stress.

# Making marketing strategy and integrated marketing communication in the service market

### Anett Popovics, Reka Saary

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Targeted and continuous marketing activity is the most important factor nowdays for improving the market position of a company, conquering appropriate new target groups, keeping loyal partners, and positioning services.

Service companies have less used marketing tools in their activities, so they have lagged far behind the production companies, but this has changed completely nowadays. While organizing the market activities of service companies the new challenge is to mandate customers, to manage cooperation between partners and the service provider, and to meet the high expectations of customers.

Our manuscript presents a marketing strategy and practical implementation of a service company in a B2B sector based on the results of their own market research. We also describe and analyse the marketing tools, channels and communication power applied by the service company for developing its image and become a market leader.

# **Apps in Healthcare**

### **Eveline Prochaska**

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Studies prove the potential of apps in health care, e.g. for chronically ill people. The widespread use of smartphones supports the easy accessibility of services. However, the use of apps requires a responsible approach. According to data protection, the processing of health data requires strict conditions. And there are many applications that offer little or no benefit. The challenge is that everyone involved in the care process must be appropriately educated in order to benefit from the advantages.

# EU funding as a tool supporting sustainable local development - example of Poland

#### Joanna Rakowska

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Since 2004, EU regional policy funding in Poland has been addressed to a wide range of beneficiaries, including local self-governments which are the key actors of sustainable local development. These facts made rationale for the study aimed at answering the question: how absorption of EU funding by local self-governments influenced the development of LAU 2s? The study was based on the data from SIMIK of the Ministry of Regional Development, LDB of the Central Statistical Office, the National Court Register, DEGURBA by EUROSTAT and a survey carried out in Mazovian voivodship. Findings will be presented at the FIKUSZ conference.

# How could Multinationals be smarter? The relationship between Corporate social responsibility and stakeholders satisfaction

#### Mohamad Saleh

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This study aims to investigate the influence of Corporate social responsibility on stakeholder's satisfaction in Multinational companies. Based on a data set that is going to be collected from 500 stakeholders from 10 multinational companies operating in both Hungary and Lebanon. The companies are as following, DHL, Western Union, Walmart, Unilever, Nestle, Coca-Cola, Hilton, Mc Donald's, KFC. The result of the statistical analysis will reveal as hypnotized that there will be a relationship between corporate social responsibility aspects, economy, social, environmental aspects that affect the stakeholder's satisfaction.

# Financial risks of microenterprises

## Viola Suhayda

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Since the second half of the 19th century, the main drivers of the global economic development were the big enterprises and corporations due to their rapid growth and wide range of opportunities and potential. After a long time, it had been proven that micro-, small-and medium-sized enterprises or SMEs are indispensable participants of the modern market economy due to their flexibility and dynamic growth rate. My research and work is dealing with – the smallest participants of the SMEs – the microenterprises. Their importance is coming from their characteristics and from several other factors, among which perhaps the most valuable is their job creation capability.

As in case of any business organization, microenterprises always have to face the various types and forms of risk. The main reasons for this process are the rapid changes in the economic environment and the increasing market competition and globalization. In my secondary research, I examined various financial risks arising during the operation of domestic microenterprises. In addition, — in the framework of my primary research — I made individual in-depth interviews with consultants, experts and leaders of micro-business segments of several Hungarian commercial banks about the supply side of the domestic money market.

I consider as an important part of my research work, to formulate helpful suggestions and to explore and describe foreign and domestic good practices. By bringing these recommendations and advices back into practice, I try to help the microenterprises to find the potential ways for reducing financial risks and the favorable directions of development.

# 7 typical mistakes of a technical start-up

#### **Anna Svirina**

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The paper deals with the main mistakes almost every technical startup makes. These typical mistakes include misunderstanding of the customer, and the try to see owner's intentions as intentions of the customer; pursue for features without verification of their necessity with the customers; inability to set and test hypothesis; and also inadequate team with prevailing personnel with one competence. These problems become the main obstacle in the quest for investments, especially at pre-seed stage.

# Challenges of aging society - Topical issues of pension security

#### Zsolt Szabo

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One of the most significant societal changes that threaten the Member States of the European Union is the high aging of the population and its present and expected impact on economies and the pension security of citizens. Numerous studies prove that the state pension will not be enough to cover retirement spending altogether. It is anticipated that maintaining a retirement level at an appropriate level will require some pension savings in addition to the state pension. The study consists of three parts. The first section presents the present and future trends of the European Union's population on the basis of demographic and statistical data and its economic impact on the development of public pensions. The second section presents the forms and possibilities of financial savings, with particular regard to the possibilities for pension savings. The third part presents the theoretical basis of the research project "The role of self-care in our life" and the related questionnaire behavior in the field of economics research.

Keywords: aging society, pension security, financial investments, retirement savings, behavior economics

# Opportunities and Challenges for the Marketing of Organic Products in Szeklerland

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At present, the demand for organic products in the Szekler region is very low, partly because of the high price of products on the market, and the lack of knowledge about these products on the other hand.

Based on preliminary experiences, interviews with organic farmers and the analysis of the market situation of traditional products and local foods, it can be said that some of the biggest challenges facing new products entering the market are their sale and marketing. Despite the fact that product development is successful, distribution channels, and messages targeting customers are inadequate.

The aim of the study was to identify the marketing tools that could promote the sale of organic products in this region.

# A comprehensive analysis of generationspecific characteristics of investments to increase the level of employment

#### **Tibor Pal Szemere**

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The theoretical background of this study has three main bases: the service aspect approach of investments, the current challenges for generational marketing and employment. Among the investments, in the study I focus on the segment of the construction sector, because I have many years of empirical experience in this field. I analyze the investment as a service project, primarily as a risk factor from the client and the contractor side. The other theoretical pillar of this study is generational marketing, with the focus of my research being on the potential of the young generation as a future market for the customers and contractors of the investments. My goal is to determine what special risk perception and risk taking characterizes different generations. The study also deals with the current challenges of domestic employment, in the sense that construction investment provides an excellent opportunity for the varying employment options of various generations and thus contributes to increasing the economy's performance. The study presents primary and secondary research results, in the latter using qualitative and quantitative techniques. The results can be relevant to investors in construction as well as to the customers of investment by raising awareness.

# **Complex performance matrix revisited**

## **Aron Szennay**

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Aim of this study is to revisit foundaments and practical usability of the former established tool, called Complex Performance Matrix (CPM). CPM is an easy-to-use evaluation tool which offers an comprehensive overview about financial and non-financial performance of the organisation. Based on evaluation of literature the Author suggests, that CPM is a sound tool to measure corporate complex performance and can be an integrate part of managerial dashboard.

# The analysis of the health care market development in Poland – its directions and threats

#### Aleksandra Szewieczek

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The health care system is an important part of the economy of each country. The limited availability of resources (including financial) and unlimited health needs result in a permanent conflict. The aim of the paper is to present and interpret selected issues about the health care market development in Poland – its directions, risks, barriers and incentives of further expansion. The analysis will be based on selected statistical indicators, as well as regulations for the organization and financing of the health care market in Poland.

# Apple crisis versus Karinthy' six steps

#### **Diana Szucs**

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For many years it has been a problem for apple farmers in Szabolcs to sell their fruits at a reasonable market price. Will the Hungarian apple disappear from the market or is there a way back? The question may arise: how does Karinthy relate to the current apple crisis in Szabolcs? The answer could be found in the development of networks. Hungarian small and medium-sized agricultural entrepreneurs are in a vulnerable position due to their size. The size of the plots or farms isn't economical. This means that alone – without social support or network organization – they are not able to compete with larger agricultural firms [Szucs-Lazanyi (2018)]. The Hungarian people's mentality is unlike any other. While there are positive examples in the surrounding European countries, experts have met challenges to find a model that can work in the Hungarian environment. Social media is overwhelmed with voice of the outraged urban residents who blame the farmers for the situation that has arisen, and with the farmers' opinion, who are furious about the incompetent comments. The purpose of this dissertation is to find the path towards the solution: to present the characteristics of agriculture, the development of network sciences and to find the mistakes of the current situation.

#### An American dream

### Julia Telepoczki

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This study deals with the analyze of the manufacturing process of a food packaging material American multinational producer company. The case study analyzes human resources as one of the most important manufacturing management resources in our era. The goal of the study is to identify the problems and the potential solutions which lead to a 25% improvement in the company's production performance within a year. The basis of the study lays on the answers given by the company's employees from the manufacturing area provided within the framework of the primary research as well as on the results of the literature research related to this topic. The research identifies the obstacles which stand on the way of the company's performance improvement. It also identifies the essential elements necessary and required for manufacturing and for performance enhancement. The study analyzes from our era perspective the opportunities which are pointing forward, looking into the future and into new approaches. Therefore the study can be thought-provoking and have developing effect on other manufacturing companies too. The main keywords of the study are the value of human resources, the advantage of the knowledge-based economy, the new capitalist.

Keywords: human resource value of production, human capital, knowledge-based economy, social capital, organizational capital, knowledge management, knowledge-building environment

# Sustainable development in reflection of the laboratory market

### Anita Tolnay, Ildiko Bartus

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The purpose of this study is to present a brief analysis the most important aspects based on the R&D sector's activities, targets and background. Furthermore, the efficiency of the use of Hungarian and EU development resources will be examined as well as the social, economic and ecological analysis of the sustainable development with the supporting cooperation of the industrial laboratory market.

In the 20th century, as the result of accelerated growth of production and consumption, the increased utilisation of natural resources and the fast growing of population which exponentially escalated the extraction of resources posing an intensified threat to the sustaining capability of the environment. In this work only the most important aspects based on the Research and Development activities were examined by multivariable statistical methods for sustainable economic development. Naturally, the conceptual scope and extent of this study do not permit all the possible issues to be examined from every aspects, thus it will be endeavored to point out merely the most relevant considerations.

# A game and an experiment

### Gabor Toth, Anita Kolnhofer-Derecskei

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The authors created an economic experiment, which later was gamified. The aim of the experiment was to measure the causes and motives of tax evasion. The multiplayer decision game identifies factors which can influence tax morale. In order to define these factors, we created the rules of the game based on how citizens make their decisions so we are able to describe and measure the factors bearing influence on their behaviour. How do taxpayers think about paying taxes? In what ways is it significant? The observation of this sensitive topic can be rather challenging. This publication describes the conceptual model which is based on theories built into our game. We defined a new method that measures taxpayers' behaviour in real life situations. Applying tools of gamification, a new experimental game was designed. Further experiments have already been started, whose theoretical background is published in this present study.

Keywords: Taxpayers' behaviour, Gamification, Tax Evasion, Public Game, (Non-)Cooperation

JEL Classification: C72, E62, H26, H30

# An exploration of sensory marketing in fastfashion retailing

# Gabriella Ujvari, Aniko Kelemen-Erdos

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Human senses, such as sight, hearing, smell, touch and taste, consciously or unconsciously influence emotions. These effects, in conjunction with individual experiences, may have favorable or even negative impacts on customer behavior. The purpose of sensory marketing is to transmit positive and influential messages to the customer via stimulating the receptors of the brain. These effects have been studied in the field of fast fashion, which has significantly transformed the fashion market over the last twenty years and is now playing a decisive role in purchasing. The aim of the research described in this paper was to analyze the relationship of sensory retail marketing strategies to effects on customer behavior. A further target was exploring the connections between sensory marketing and sustainability. A quantitative survey method was used to research and highlight the effects of visual communication, background music, scent and touch on customer behavior. Results confirmed the hypothesis that minor forms of stimulation such as the right lighting, background music, or an appropriate scent can lead to significant growth in sales, a more positive brand image, and the acquisition of loyal customers. It is suggested that further research into the techniques that can be used in online shopping is conducted as the sense of smell and touch are not available to the related marketers.

Keywords: retail strategy, retail marketing, sensory marketing, fast fashion, apparel store

# HUNLYWOOD – comparison of EU cinematography focusing on Hungarian and Latvian film industry

### Cyntia Valocikova

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Film-making is considered as an art and a whole industry at the same time. A national movie is a cultural relic which can represent a whole nation. Filmmaking is one of the most important art forms, also a tool for entertainment and a great way to educate. Since its inception, European Union has been supporting the film sector. Film industry is a social and economic value what can make national heritage and as a dynamically growing field it is quite important for a nation. The study is screening and mapping of some EU film market and getting acquainted with some factors what can influence the industry for a sustainable growth. The study also compares the Hungarian and Latvian film industry, as well as mapping their biggest challenges. For the film industry, the audience's perception is an indispensable aspect and going in to the cinema is a particularly preferred cultural activity. Therefore, study shows an international focus group research what can be helpful in mapping the challenges, and it is also a basis for creating a questionnaire research.

Keywords: EU cinematography, challenges, film sector

JEL Classification: O49, F40, Z11

