TAKE 2018

THEORY AND APPLICATIONS IN THE KNOWLEDGE ECONOMY 2018

Conference Book of Abstracts
This volume includes the abstracts of the papers presented at the Conference Theory and Applications in the Knowledge Economy – TAKE 2018, which occurred in the Poznan University of Economics and Business, from 11th to 13th July 2018.

Thank you very much for your participation.

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Absorptive capacity to perform the relation between the knowledge management and innovation: application to the case of the productive apple chain

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Antonio Fernandes
Maria Emilia Camargo

a) purpose
The constant changes that come by setting the business environment have mobilized researchers to investigate the factors that lead to innovate and achieve higher levels of performance. In this context, knowledge management has been considered as a promoter for the development and crucial for organizations to survive. However, the theory has pointed to the knowledge management processes as direct innovation and performance background, but not always considering the role of the absorptive capacity, which enables the Organization, assess, absorb and use the knowledge of best way. In order to fill this gap, the general objective of this paper is to analyze the relationship between knowledge management processes, absorptive capacity, innovation and performance in the productive chain of the Apple from the links of production and packing-house.

b) design/methodology/approach
To validate the proposed measurement model and test the hypotheses proposed, adopted the methodological strategy of type quantitative-descriptive, investigated empirically through a survey, with 166 actors of the productive chain of the Apple, the segments of production and packing-houses in the States of Santa Catarina and Rio Grande do Sul. The collected data were analyzed by means of structural equation modeling.

c) theoretical base
The present paper is based on a theoretical framework on the presupposes of knowledge management as a process related to direct innovation and performance background. In this relationships the role of the absorptive capacity is relevant, which enable organizations to be considered as a promoter for the development and crucial for organizations to survive.

d) results or expected results
The results obtained have provided strong support for hipotetizadas relations, which have shown that the processes of knowledge management influence significantly the absorptive capacity and the product and process innovation. Also indicate that the absorptive capacity influence directly the innovation, as well as, mediates the relationship between partially knowledge management and innovation. In addition, you can see that the innovation influenced positively the performance of participating organizations. As for the knowledge management processes, validated the modeling from the analysis by means of a second-order construct.

e) originality/value
The research can target efforts to the construction of scales for the processes of knowledge management and absorptive capacity that take into consideration the peculiarities of the agribusiness sector. From a practical perspective, the relationships tested provide indications about the essential factors to ensure innovation and sustain superior performance. The findings of this study provide a theoretical and empirical that contributes to a better understanding of the importance of absorptive capacity as a mediator variable between the relationship of knowledge management and innovation to improve the performance of organizations.

f) practical implications
From a practical perspective, the relationships tested provide indications about the essential factors to ensure innovation and sustain superior performance. The findings of this study provide a theoretical and empirical that contributes to a better understanding of the importance
of absorptive capacity as a mediator variable between the relationship of knowledge management and innovation to improve the performance of organizations.
A Mexican in Europe: An Autoethnographic Exploration of Personal and Professional Self-Expatriation
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Keywords:
Self-expatriation, learning, experiences, culture.

Purpose:
Identify key elements of personal and professional experiences of a Mexican living in France, that might have contributed to personal and professional growth.

Methodology:
We used autoethnography as our methodology. While this is not a new research methodology (Sambrook, 2016), it has a relatively recent application in HRD. Two recent examples of its use in HRD include Grenier (2015) and Alagaraga and Wilson (2016) both supported the use of autoethnography in HRD research and then provided examples of such research by providing their own authoethnographic stories, the later with critical reflection included. Such an approach provides an in-depth case that invites readers to reflect on the experience and determine the meaning of the story in their own practice. Based on the strengths of such an approach, we used ethnography in our study.

Theoretical base:
Autoethnography often uses critical reflection and dialogue as a form of analysis. McLean read Gonzalez Hernandez’s extensive responses (a 32-page transcript) many times. Based on that reading, he asked additional questions to encourage greater reflection on the experiences by Gonzalez Hernandez. Based on this dialogue, the two participants both shared their learnings about the personal and professional experiences of Gonzalez Hernandez’s experience as a Mexican working in France.

Results:
In the final paper, all findings will be supported by quotes from the transcript of the dialogue. Because of the limitations of an abstract, only a sampling of a few broad areas of personal and professional learnings are provided. These are classified into cognitive, emotional, and experiential learnings.

Personal Learnings
The personal learning themes that will be explicated in the final paper, supported by quotes, include, as brief examples:
- Cognitive
  - Broad learning as a child
  - Private education spoiled public education
  - Language study (English, French) opened doors
- Emotional
  - Importance of justice as a value
  - Challenge of perfectionism
  - Impact of role models, family, and friends
- Experiential
  - Role of reading in shaping career vision
  - Travel and internships opened doors
  - Desire for practical, concrete outcomes
Professional Learnings
The professional learning themes that will be explicated in the final paper, supported by quotes, include, as brief examples:
- Cognitive
  o Exposure to students from many countries and cultures as preparation for global job
  o Universality of English as language of business
  o Need for continuous improvement, especially when many errors
- Emotional
  o Need to adjust to French bureaucracy of forms!!
  o Sometimes, opportunities come unexpectedly
  o Manager autonomy re: strategy, travel, and budget enhance work life
- Experiential
  o Mergers and acquisitions are numerous and potentially chaotic
  o Cultural ignorance in global organizations
  o Face-to-face time is important in global organizations

Originality:
Case of self-expatriation within countries, Mexico and France, not part of the literature review.

Practical Implications:
Autoethnography is not designed for generalization. What has been reported is the experience of one Mexican woman in her limited experiences working in Europe. What has been evident in the study is the value of reflection on one’s experiences and the insights that can be gained. So, from a practical perspective, the basic recommendation is that other self-initiated expatriates engage in critical reflection and dialogue through autoethnography. Not only will this have value personally, but it will also have benefit to the HRD community as it is shared through publication.
Analysis of national human resource development (NHRD) policies of 2016 in South Korea

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Keywords:
NHRD(National Human Resource Development), centralized NHRD policy, developmental task, South Korea.

Purpose:
To realize equal educational opportunities and productive welfare, the need for national policies and investment in education (national human resource development: NHRD) has increased. Due to their inherent complexity, NHRD polices are implemented by multiple governmental agencies. This causes redundancy and inefficiency in policy execution. Thus, we systemically and holistically examined NHRD policies implemented by several national governmental departments and identified NHRD policy benefits and obstacles for policy efficiency.

Methodology:
We employed content analysis as the methodology. We collected data from the NHRD policy budget plans for 2016 from the official websites of 16 Korean national governmental departments.
The contents of NHRD policies were coded using a coding guideline developed by three HRD professionals. All coded policy contents were analyzed horizontally in terms of the centralized NHRD model, as well as vertically through the perspective of career development theory. More specifically, in the analysis table, the rows were filled with NHRD policy items and the columns with life phases. The policy items included the names, objectives, and summaries of each policy, responsible government agencies, and budget. Based on Lee and Yoon (2009), the life phases were classified into early youth (middle high school students), later youth (aged 19-23), early adulthood (24-29), later adulthood (30s-50s), and seniors (60 or older). Additionally, considering Article 7 of the Korean law on human resource development that regulates policy beneficiaries, also included were marginalized groups, such as women, immigrants, and the disabled.

Theoretical base:
NHRD models
Cho and McLean (2004) distinguished five NHRD models: centralized, transitional, government-initiated towards standardization, decentralized, and small nation. The centralized model is characterized by the essential role of the national government in planning, implementing, and evaluating HRD policies, whereas, in the decentralized model, the market plays a pivotal role, and individuals or the private sector is responsible for training and learning. While the transitional model is based on a multi-departmental approach, the government-initiated model takes a stakeholder approach, and the central government’s role is largely consultative. Lastly, the small nation model is seen mostly in small countries where intergovernmental organizations play an important role and people participate at every level of decision-making of NHRD policies.

Developmental task theory
A developmental task is a task that an individual has to and wants to solve in a particular life period, and there are clear age-appropriate developmental tasks to be accomplished (Havighurst, 1950). Since Havighurst’s conceptual viewpoint, defining the life stage and its
developmental tasks has been discussed (Arnet, 2000; Lachman, 2004; Ranta, 2015). Contextualism has been emphasized in developmental task perspectives. A developmental task is defined as a link between social or cultural structure (Heymans, 1994); human development is approached within the context of historical time characterized by specific sociocultural resources, constraints, and opportunities (Buchmann & Kriesi, 2011). With this perspective, Lee and Yoon (2009) defined life stages and developmental tasks in the Korean society context.

Results:
We found that early youth was not the main target of NHRD policies. For later youth and early adulthood, the policies focused on transit and adaptation to the labor market; the policies for later adulthood tended to aim at sustaining employability. Seniors occupied the smallest portion, both in the number of policies and in the amount of budget. The NHRD policies targeting the marginalized groups were run by relevant governmental departments, such as policies regarding women by the Ministry of Gender Equality and Family. Overall, each governmental agency established and implemented NHRD polices based on their expertise, but the policies were partly redundant across the agencies.

Originality:
Differentiated research methods: Distinctive from the literature that has largely focused on the validity of the Korean NHRD laws and the broad policies, we looked into the detailed policies through a content analysis. We extracted the policy contents qualitatively and quantified them for further analysis.
The central Korean NHRD model: This study shed light on how the centralized NHRD model is realized under unique Korean contexts, such as the launch of the new government and the anxiety toward the fourth industrial revolution.

Practical Implications:
Whereas integration and linkage of certain policies appear to be necessary to avoid redundant execution and to bring a synergetic effect, the current agency-based, independent operation of NHRD policies inevitably limits collaboration and information sharing across agencies. It is recommended that an overarching responsible ministry should be appointed to establish NHRD policies and to coordinate the interests among the agencies. Besides, the decision-making process of such policies should be systemically structured and the planning should be established periodically from a long-term point of view. Lastly, the roles and responsibilities within the agencies should be specified and policy evaluation should be in earnest.

References:

An Analysis of Public Sector Spending on Higher Education in Pakistan and its Impact on the Productivity and Employability of Pakistan’s Human Resource

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Keywords:
Education; Productivity, Budgetary Allocations, illiteracy, MDG’s

Abstract
Over the years, there has been a structural change in Pakistan’s GDP. While the share of services sector to GDP of Pakistan has been steadily increasing the Industrial as well as the Agricultural sectors of the country has been steadily declining and both these manufacturing sectors collectively contribute almost 41% of the GDP while services sector contributes near 59% in 2015-2016. The share of Services Sector to Pakistan’s GDP has grown from 58.3% in 2012-2013 to 59.2 % in 2015-2016, while the share of Industry in the GDP has declined from 20.3% in 2012-2013 to 19.9% in 2015-2016 and the share of Agriculture has declined from 21.4% in 2012-2013 to 20.9% in 2015-2016. (Government of Pakistan, 2016)
The literacy rate in the country according to official statistics is 60% of the population leaving 40% of the population illiterate in 2015-2016. (Government of Pakistan, 2016) While at the same time in 2015-2016, the Punjab Government’s (the largest by population province of Pakistan) allocation for School Education were Rs. 21.0 billion (US $ 0.21 billion) and for University education were Rs. 31.1 billion (US $0.31 billion) (Punjab Ministry of Finance, 2016)
Almost 60 percent of Pakistan’s is youth under 25 years of age ready to join the job market. (Government of Pakistan, 2016) At the same time most of this youth as human resource is not employable due to lack of jobs or due to lack of proper skills for the jobs that are fast changing in their character due to structural changes in the economy and the world.

a) Purpose Of The Study
The purpose of the study is to analysis the Budgetary allocations and policy directions of Federal and Provincial Governments of Pakistan where illiteracy and lack of scientific thinking is still prevalent in a large part of the population

b) Design/Methodology/Approach
It is a secondary study using quantitative data from the official budgetary documents of respective Governments of Pakistan to analysis the gap between theory and practice in the education sector and the employment opportunities of the country

Problem Statement:
Pakistan is sixth largest by population in the world with almost 50 percent of the population categorized as youth. At the same time, more than 45 percent of the population is illiterate. Half of these school going children are out of school and another 50 % drop out before reaching class five and a majority of these are girls. On the upper spectrum, there are 160 universities and professional institutes in the country producing highly qualified professionals.
In this global age of information technology and connectivity, Pakistan as a developing economy has tried to increase its public sector investments on higher education and its universities, thus spearheading in some way the realization that knowledge economy and its impact on human resource development are important for any nation to be part of the fast changing global economic paradigm.
However, at the same time the country’s lack of investments and public sector spending on quality school education has created a knowledge gap between not only the urban and the rural
economies of the country, but also between the rich and the poor strata of the economy. Which means that while the upper strata of the country is fast entering the modern age of information and knowledge, a large part of the country’s population, especially its children remain illiterate and deprived of schooling, leave aside quality education that can enable them to be part of the service providers and the knowledge economy.

The present paper will look into the relationship between budgetary spending and impact of education on the economy of Pakistan from 2001 until 2017.

Objective of the study is
1. To analysis the impact of Public Sector investments on Higher University Education in Pakistan
2. To analysis the impact of Public Sector investments on School Basic Education in Pakistan
3. To analysis the impact of education on Marginal productivity of labor in Pakistan
4. To analysis the impact of education on creation of new knowledge economy related jobs in the country

c) Theoretical Base
Public Choice theory of Budgets and its implications for Education in Less Developed Countries(Gallagher, 1993).

d) Expected Results
H1 = Public Sector Budgetary spending and policy measures have significant impact on school education in Pakistan
H2 = Public Sector Budgetary spending and policy measures have significant impact on University and Professional education in Pakistan
H3 = Public Sector Budgetary spending and policy measures have significant impact on Marginal productivity of labor
H4 = Public Sector Budgetary spending and policy measures have significant impact on creation of new knowledge economy related jobs in the country
Note: to all above there are null hypothesis also

e) Originality/Value
The paper will have an original value that it would contribute to the general body of knowledge in assessing the trends of investments on human resource in a developing country like Pakistan. It should pin point the issues where the budgetary allocations have misfired and give a theoretical direction to policy makers as well as donors around the world of solving such issues in the near future

f) Practical Implications
The practical importance would be for the policy makers in Pakistan at both Federal as well as provincial levels, and the educationists in less developed world, the private sector employers and foreign investors as well as for the future researchers.

References


Are the most innovative SMEs the most competitive ones?

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Keywords: SMEs, Innovation, Knowledge based economy, Competitiveness, European Union.

Purpose: The purpose of the present paper is to study European innovative SMEs and investigate if the most innovative SMEs are the most competitive, based on productivity, internationalization and creation of employment.

Methodology: The present paper will be based on a literature review about the topics under study, seminar articles and state of art articles, followed by an application through a regression analysis the relation between innovative SMEs and competitiveness variables. The analysis of the obtained results allow to conclude and answer to our initial questions.

Theoretical base: The paper will be based on the theoretical framework of Economics of SMEs, which will be presented and described. According to this approach the SMEs are the locomotive of the economic growth and progress of European Union and supported by the Europe strategy 2020. The theoretical framework will be properly described to support the relations between the SMEs, innovation (determinants of SMEs’ innovation) and competitiveness.

Results: According to existing literature, is expected to obtain a significant relation between innovative SMEs and their competitiveness.

Originality: The present paper is original and allows to contribute to the scientific knowledge of the concepts under study and to the contribution of knowledge about the relevance and significant relation between innovation’s SME and competitiveness.

Practical implications: The results from this paper allow a better understanding of the concepts under study, as well to suggest some realignments in public policies to improve European competitiveness and financing policies appropriate programs to support the development, sustainability, internationalization and innovation of European SMEs.
Barriers to university - industry knowledge transfer: A case of tourism academia in Poland

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Keywords:
University - industry knowledge transfer, barriers, tourism industry, Poland.

Abstract:
The growing interest in university–industry collaborations stems from the belief that knowledge transfer from academia to industry can be a powerful source of innovation (Arvanitis, Kubli and Woerter 2008; Ankrah, et. al., 2013). However, due to the existing barriers, knowledge transfer from universities to tourist companies is limited. Xiao and Smith (2007) found that practitioners espouse an appreciation for tourism research but fail to use it. This is consistent with the conclusions made by Frechtling (2004) and Cooper et al. (2006) that tourism academia is poorly involved in cooperation with industry. There is a growing body of research aimed at investigating the causes of university-industry gap but very few of them have explored this issue in a tourism setting. This study aims at investigating the barriers to academic knowledge transfer perceived by scientists involved in tourism research.

The empirical analysis is based on a questionnaire survey carried out in 2018. The sample frame included all Polish scientists who declared the tourism and hospitality specialization. Finally, we received questionnaires from 76 participants, representing a response rate of 25% which is an acceptable result compared to other web-based studies (Goethner et.al., 2012). The identification of barriers to the knowledge transfer from universities to enterprises is based on resource-based approach and the relationship-based approach. We assumed that the university - industry barriers can be classified into three groups: universities related factors, companies related factors and relational factors (Olszewski and Bednarska, 2016). The paucity of entrepreneurial academics, ie. those who are in contact with the industry, stems from the lack of necessary resources and capabilities. This insufficiency of resources and competences can be described as a low universities’ emission capacity. Moreover, the knowledge-based view suggests that the extent of knowledge spillovers from university to industry may depend on the companies’ absorptive capacity (Keller, 1996). Another group of barriers is related to mutual ties between universities and enterprises, and can be described as relational factors.

Based on data obtained from scientists involved in tourism research we found that paucity of resources e.g. time and motivation are the main barriers of engagement in knowledge transfer into industry. Moreover, we identified the factors differentiating the importance of this barriers. Currently, there is a gap in knowledge, as few empirical studies analysed the barriers of tourism academia involvement in relations with industry. This study is one of the first to explore the knowledge transfer barriers in a tourism context and contributes empirical evidence to the body of knowledge on this issue.

The results of the analysis have important implications. Identification of cooperation’s barriers is the first step to intensify knowledge transfer from academia to companies. Success in overcoming these barriers will undoubtedly bring beneficial effects on innovativeness of tourism companies.

It is important to note that this study has some limitations. Firstly, the data was collected at a single point in time for restricted time frame i. e. last 3 years. Secondly, the data were collected only for scientists engaged in tourism research. Therefore, generalizations beyond the specific context of this research must be guarded.

Moreover, future research should include representatives of tourism companies in order to obtain their perspective on university - industry knowledge transfer.

Literature:
Building the ENRICH Community – Common European Network as advantage for ENRICH in Brazil, China and in the USA?

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Keywords:
ENRICH, Network, Global Innovation Ecosystem, Community Concept, Organisational Structure.

Purpose:
This paper investigates the benefits and risks of cooperation on the case of the European Network of Research and Innovation Centres and Hubs (ENRICH), which is currently being established in Brazil, China and the United States. It is an initiative of the European Union and is funded by Horizon 2020 research and innovation programme. ENRICH has the mission to encourage and facilitate a bilateral cooperation in research, technology, and entrepreneurship between Europe and China, Brazil and USA by supporting and empowering all innovation actors along the innovation value-chain. ENRICH on these three continents consists of the ENRICH Community – involving different levels of stakeholders with different foreseen roles and involvement possibilities.

Methodology:
The ENRICH Community concept is currently being designed and implemented at ENRICH in Brazil – considering a common European basis of all three Centres. Nevertheless, the idea of a joint approach to building up the European Community hasn’t been taken into considerations so far by all three Centres.
The ENRICH Community in Brazil comprises different levels of involvement including various stakeholder of the European and foreign market. In the outer circle of the community the individuals, entrepreneurs and the researchers are foreseen, who are the users of the services provided by ENRICH. Besides that, service providers are part of the ENRICH Community. Service Providers are organisations which are willing and able to provide services under the umbrella of ENRICH in Brazil. As a so-called second level of the service provider, Soft Landing Hubs are foreseen as ‘specialised service providers’. Furthermore the ENRICH Community foresees the involvement of ENRICH Ambassadors and Sponsors. A common ENRICH community could become a fruitful cooperation between the three centres which will have the advantage of accessing ideas and economic opportunities as a one membership for all three centres. However, there could be some disadvantage, for instance a problem called ‘free riders’ incentives, benefitting from what the other did, where contributing to the community with a little amount and benefit more than what each centre contributed.

Theoretical base:
A common ENRICH community considers the interactions between the different actors in the innovation ecosystem, based on the triple helix model of innovation, which was introduced by Etzkowitz and Leydesdorff (1995), it would be expected from the community to play an essential role by contributing to these interactions between the different actors (universities, industry and government) (Goto, 2000, p.104).
The community would also create stronger ties and more integrated model that could shift towards a knowledge-based society in europa as well as the three countries (Brazil, China and the US).

Results:
A common European community for the three centres could increase competitiveness through knowledge gain and accelerated innovation processes by providing innovation actors, access to three different markets by being member in one initiative. Besides that, it will provide for researchers a better access to the different existing research programs in Europe as well as the three countries (Brazil, China and the US).

Another advantage for the community is reducing the risks of research and construction of flexible and long-term strategic networks. However, there are some possible challenges posed by different cultures, legal frameworks and resource endowments.

Originality:
The paper presents a conceptual approach on the design of the programme framework to build the ENRICH community, since ENRICH is a unique initiative funded by the European Commission, the developed member- and partnership scheme is also adapted to the needs of the centres as well as to the European market conditions. The value of the paper is that it gives a clearer view on whether having one membership for all three centres is better than if each one of the three centres has its own network by focusing on the cooperation benefit.

Practical implications:
The findings of the paper will show how ENRICH is to design the community in this international innovation ecosystem to attract, retain and engage with European science, technology and innovation actors. It can be relevant for policy makers that are looking to establish international innovation ecosystems, as well as for scholars who are interested in the international dimension of innovation ecosystems and the design of roles and strategic partnerships across continents.

Until now, the approach of having one ENRICH Community in Europe for all three Centres hasn’t been investigated so far. But, having one community for the all centres will benefit the related stakeholders as it will allow them to easily access three different markets and therefore enable them to expand their own network in a greater extent.

References:
CHALLENGES OF DIGITAL TRANSFORMATION AND INFORMATION OVERLOAD IN RETAIL INDUSTRY

KEYNOTE SPEECH

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Abstract: Digital transformation and information overload are two interconnected concepts in a modern economy. As it is an intermediary between producers and customers, retail industry is the most affected by changes in consumer behavior. This means that it has to adapt quickly to changed consumer in a digital world in situation where consumer is confused by quantity of information offered. In this paper, we will give definitions of information overload and digital transformation and we will briefly describe each of them influences the retail industry. The aim of the paper is to outline some ideas that could be further explored and researched in the field of retail management and marketing.

Keywords: digital transformation, retail, consumers, information overload

Retail industry role and importance
In national economies, retail industry is an important economic sector. In the EU it is an important source of employment. Furthermore, it significantly contributes to the creation of gross value added and gross domestic product (GDP). Moreover, around fifth of all enterprises are registered for retail (see more in Knezevic et al., 2011; Šegetič, Mesarić, Dujak, 2015). In retail industry in EU, there are about 3.6 million active companies representing 4.5% of gross value added and accounting for almost 9% of EU jobs (European Commission, 2018). Therefore, it is necessary to scientifically study its development and position and the changes brought by various development trends in this economic sector.

Retail is an intermediate economic activity positioned between producers and end-users (consumers), creating value through effective distribution of produced goods and services. As an intermediary economic activity, retail enhances the value of products and services by increasing establish a pleasant shopping environment and raising the shopping atmosphere, reducing risks and making purchasing processes appropriate to consumers’ needs while also increasing transaction efficiency in communication and distribution channels (Kent, Omar 2003: 14-17). Indeed, the retail industry is the last chain in supply channels exposed directly to the final consumers. As such, it is heavily exposed to changes in consumer behavior.

Nowadays, retailers observe a rapid change of consumer behavior, which is the outcome of the intensive usage of digital technologies. The ongoing changes are obvious in all phases of purchasing process starting with new ways of collecting information on product and services which is not only driven by retail companies anymore, but by information sharing among consumers via social media as well. In addition, new ways of in-store shopping supported by digital technology emerge. Moreover, usage of electronic commerce and mobile commerce as substitutes or complements to traditional stores is also brought to the focus of modern retail management.

Information overload phenomenon
Due to the intensive use of digital technologies, retailers and marketers nowadays are dealing with consumers who live in an era of information overload. Actually, modern consumer lives in an environment in which too much information is coming from too many sources in too many different forms and, therefore, usefulness of received information is decreasing because an individual cannot efficiently process such a huge amount of information in a timely manner. There are some synonyms used to describe this phenomenon. Wurman (2001) and Oppenheim (1997) uses the term: information fatigue syndrome, Shenk (1997) describes it as data smog.

As a phenomenon, information overload is driven by digitalization of everything and it refers to the situation when an individual is literally bombarded with commercial and other information throughout various information channels (such as: traditional media, electronic media, social media, billboards, posters within the stores, traditional and digital advertisements in public transport means, mobile applications etc.). Digitalization is increasing diversity of information and lowers cost of information transfer and the consequence is the rapid growth of information availability (no matter is information unsolicited or requested by an individual).

Zhuang et al. (2011) claim that information overload occurs when information processing requirement exceed information processing capacity. Information overload as an economic problem occurs both on employees’ and on consumers’ side. Klausegger et al. (2007) proposed sources of the information overload at employee side: (1) increase in internal communication (with colleagues), (3) increased access and utilization of databases, (4) increased utilization of published information (such as journals and newspapers), (5) increase in external communication (e.g. with customers/suppliers) and (6) increased need for documentation and records that have to be maintained.

Zhuang et al. (2011) and Klausegger et al. (2007) outline several outcomes or symptoms of information overload at employees side of the story. Those can be summarized as: inability to use information effectively, implementation of various adaptation methods to the existing situation, increased errors and tolerance to errors, lowered decision efficiency, blurred boundary between work and private life, cognitive strain and stress or even depression and physical illness.

When it comes to a consumer side of the story, a couple of studies confirmed that there is a link between information overload influences the decision making efficiency. Soto-Acosta et al. (2014) and Furner et al. (2016) emphasize that there is inverted U shape curve relationship between information load and information processing both in traditional shopping environment and in online shopping environment as well. Meaning that low information load and excessive information load (i.e. information overload) in shopping prolong decision process and decrease the purchasing intention of a consumer. So if consumer is not informed at all, it will be harder for him or her to make the purchasing decision. On the other hand, if consumer has too much information during purchasing process, he or she will need more time to decide what to purchase. In addition, if information is too extensive, some consumers will decide not to make purchase at all (see results of the cluster analysis in Stanton and Paolo, 2012).

Furthermore, information overload creates consumer who is (1) less responsive to advertising, (2) easily influenced by social media, (3) exceptionally well informed before entering the retail store, (4) distrustful and less loyal to sales channel, company, store or a product brand, (5) frustrated with numerous marketing messages, especially those transmitted directly on a personal level. On the other hand, numerous examples are showing that, in the situation of information overload, some consumers are becoming more responsive to an instant fascination with the offered products or services. Therefore, lifecycles of products shorten rapidly and there are numerous examples showing this trend. Therefore, we can say that digital technology creates a number of challenges that a fashionable retailer must analyze and adapt to in order to create and preserve its competitive advantage.

Digital transformation as a necessity in retail industry

In order to adapt to such consumer, retail industry is undergoing through digital transformation. The concept of digital transformation refers to the transformation of organization and business processes based on the intensive application of information and communication technology. Spremić (2017, 53) elaborates the concept of digital transformation of business and debates that it relates to the continuous application of digital technologies. And those digital technologies are aimed at designing innovative business strategies and disruptive business models, applying progressive business concepts, new ways of management and leadership with
the goal of creating better products and services, and improving consumer experience, i.e. in order to create a new value for the customer.

In addition, Knežević and Knego (2012) point out that over the past 30 years there has been an accelerated development of information and communication technologies (ICT) and that ICT brings major changes in the daily operation of retail companies. Moreover, ICT changes the way that end consumers (who are directly in touch with retailers) behave. Also, they emphasize that in the retail industry, in recent times, ICT is viewed as a strategic component of the business system, which can significantly improve the differentiation compared to competitors, and generate revenue growth and increase added value for consumers.

There are several areas of digital technology that already have or that soon will have an important impact on further development of retail industry. Namely: (1) electronic commerce, (2) mobile commerce, (3) social networks and social media, (4) location-based commerce and geoinformation systems, (5) radio frequency identification, (6) intelligent and integrated consumer profiling systems and retail mix planning systems, (7) additive technologies.

It is necessary to emphasize that contemporary literature highlights two directions of digital transformation in retail industry. One refers to the complete abolishment of traditional channels of communication, sales and distribution, with the establishment of new ones which are digitally-based. This direction of the digital transformation can be described as a digital revolution. It is characterized by the abolition of some parts of trade channels (so-called disintermediation process), but also it is characterized with the emergence of new intermediaries in trade channels (so-called reintermediation process) (Turban et al., 2015, 145).

The second direction of the digital transformation is, in fact, the implementation of ICT into existing business processes in order to increase efficiency, reduce costs, improve competitiveness and increase consumer satisfaction. This direction is called digital evolution. It implies the application of digital tools in the operation of existing trading channel participants, and here is often discussed about the digitization of business processes within existing retail companies and the implementation of the omnichannel approach to consumers (see Brynjolfsson, Hu, Rahman, 2013; Piotrowicz, Cuthbertson, 2014; Juaneda-Ayens, Mosquera, Sierra Murillo, 2016).

The emergence of new research topics in retail marketing and management

Both digital revolution and digital evolution have different impacts on:

(a) consumers who become well informed, more demanding, more critical, more open to different communication channels and begin to demand a fully personalized approach,
(b) supply chains that need to become more integrated in order to quickly create value for a changed consumer market and to become as flexible as possible, but also more reliable in creating value on the way from raw material to end consumer in an environment of shortened product lifecycles,
(c) producers by fostering them to produce high quality products with a high degree of personalization and to organize faster delivery to such demanding consumers,
(d) the retail industry in general, which is restructured on the basis of the emergence of new intermediaries or on the basis of the implementation of multi-channel (omnichannel) approaches to consumers.

Therefore, new research questions emerge which should be addressed in future research studies in retail management and marketing field. Some of them are:

- whether the digital revolution or digital evolution dominates in retail industry
- which digital technologies is digital (r)evolution in retail is based on
- how digital technologies affect consumers, supply chains and retail industry in general;
- can connection between digital (r)evolution and the other development trends within retail industry (internationalization, concentration, and networking of companies) be seen
• are there differences in digital transformation processes between companies (micro-level) and between countries or regions (macro-level)
• and, finally, does digital (r)evolution changes consumer behavior or vice versa.

References

The nature of clusters has been investigated by a great number of researchers. The literature provides a huge number of definitions of clusters. The roots of this phenomenon go back to the works of Alfred Marshall (1920) and his theory of industrial districts. In his theory, Marshall highlighted the significance of agglomerations and resulting externalities from localized cooperation among entities within industrial districts. Nowadays, the most popular approach to business clusters is associated with Michael Porter who defined clusters as geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries and associated institutions (e.g., universities, standard agencies, trade associations) in a particular field that compete but also cooperate (Porter 2000, p. 15-34). Enright (1996, p.191) explained that “A regional cluster is an individual cluster in which member firms are in close proximity to each other”. Van den Berg, Braun and van Winden associated clusters with “local or regional dimension of networks” (2001, p. 187).

In general, what determines a cluster is the focus on a core industry with high level of specialization, existence of a large pool of firms that constitutes the critical mass; operation of R&D and business-support institutions in spatial proximity engaged in vivid interactions based simultaneously on competition and cooperation among the three types of entities (Markusen 1996; He & Fallah 2011, Ketels & Memedovic 2008).

Cluster-specific advantages can contribute to the competitive advantage of cluster entities, in particular, the cluster firms. Bearing in mind that competitive advantage enables a particular firm to perform better in comparison to rivals, generally we can argue, that the advantage may be efficiency- or innovation-driven. Both types of advantages may emerge thanks to the knowledge sharing processes. The efficiency-driven advantage may be translated into the decrease of the costs of operation and the innovation-driven advantage is related to differentiation from competitors. This approach is consistent with the simple and traditional perception of the competitive strategy characteristic for Porter. We can assume that knowledge-sharing processes that exists within clusters lead often to advantages of cluster entities in comparison to non-cluster entities. Efficiency-driven advantages are related to opportunities to reduce costs of operations. The chance to decrease the cost of operations results from a set of factors, i.e. better access to specific information; easier and broader supply of labour force and access to capital resources; complementing one another activities by cluster entities and great opportunities for economies of scale. This kind of advantages contribute to the productivity, which can be leveraged outside the formal boundaries of individual firms. Nevertheless, efficiency may be improved also thanks to the knowledge-sharing among cluster members. Innovation-driven benefits arise since cluster entities exploit opportunities to share knowledge and knowledge spill-overs (Lundvall and Johnson 1994, p. 26). Innovations, which arise from operations within clusters represent often the result of interactive model of innovation processes (Johannessen 2009), which means that innovation is the outcome of interactions between people, organisations and the environment. Innovation emerges from the relationships between entities with different knowledge resources rather than from knowledge resources alone.

In this context, the author states that clustering and thus studies focused on this phenomenon are not losing its relevance, since clusters are attractive locations providing conducive knowledge environment. The peculiarity of clusters related to the co-operation of business and R&D institutions supported by their spatial proximity giving rise to the above mentioned advantages is the motivation to develop policies which intentionally support clusters, in particular influence research, technology transfer and relationships among cluster firms. Thus, the goal of this paper is to explain how clusters may facilitate the knowledge transmission and how cluster initiatives may influence the management of the knowledge-sharing process.
The conceptual discussion is accompanied by the presentation of the concept of Key National Clusters in Poland based on the idea of smart specializations in the Europe 2020 strategy. The author uses the case study method, supported by bibliographic and documentary research to exemplify how cluster become a knowledge-sharing devices.

Key word: cluster, knowledge-sharing, cluster organization, smart specialization
Comparative Study between Polish and Croatian Accounting Systems

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Keywords: Accounting systems, Croatia, international accounting, Poland.

Purpose:
Globalisation processes nowadays play a key role in every sphere and especially in a business field. These trends haven’t avoid an accounting field. However, there are numerous features and determinants that differ accounting systems among the countries. Furthermore, the differences in accounting field are generated by the fact that managers select accounting policies and make accounting estimates in accordance with proper financial reporting standards applicable in a country. Despite these legal differences, financial statements and information from the accounting system constitute the most reliable source of data as objective, true, timely and reliable information inevitable for making decisions by different stakeholders.

Methodology:
Our research is to compare the accounting field in the Republic of Croatia and Poland, especially in the accounting standards. Authors describe and compare the basic features of accounting frameworks in Croatia and Poland. After that, we thoroughly analyse the adoption and main content of national accounting standards. Due to the fact that according to the EU Regulation 1606/2002 the International Accounting Standards should be applied at least for the consolidated financial statements of the companies that quote on the EU regulated financial markets author explore the differences and/or similarities in extending the Regulation requests on annual financial statements and on non-publicly traded companies. The research methodology is based on a critical analysis of scholarly literature, Polish and Croatian accounting standards and legal acts that prescribe accounting in the observed countries. Key determinants for the comparative analysis will be selected, explored and based on that, the research results will be formed.

Theoretical base:
The references on the topic of international accounting for the purpose of identification similarities and differences in accounting systems (S. J. Gray, 1998; O.K. Hope 2003, H. I. Radebaugh, J.S. Gray and L.E. Black, 2006, K. Kosmala, S. Bychkova and I. Jindrichovska 2007, F.D.S. Choi, G. K. Meek, 2008; C. Nobes and R. Parker, 2008; D.R. Borker 2012; C. H. Gibson, 2013) will be used as the theoretical base for the study. Furthermore, national financial reporting standards and national accounting legal regulations will be used as a base for the conducting research.

Results:
The authors indicate a number of determinants of accounting system and accounting standards in the transitional economies of Central and Eastern Europe on the example of Croatia and Poland, like economic growth, education level, the degree of external economic openness, cultural factors, the existence of a capital market, and also accounting standard-setting body and its aspiration to the harmonisation of accounting standards, main legal acts in accounting and acts in auditing, certification in accounting profession, regulated financial market, average number of listed companies on regulated financial market. They influence indeed the
similarities and differences between Croatian and Polish Accounting Standards. The authors analyze their comparability, and as the main findings present the areas of standards and principal accounting regulations’ compatibility and the areas of non-comparabilities.

Originality:
Research results of the paper will contribute the international accounting literature but also have an impact on European Union accounting harmonisation references.

Practical implications:
All entities interested in business relations between the observed countries could have systematic information on differences between the two accounting systems. That information can be very important, not only for equity owners, but also for creditors, investors, vendors, customers, analytics, scientist whose interests are related to the evaluation of a certain business entity from Poland or Croatia.
Comparison of import and export dependence of Croatia and Poland in period from 1994 to 2016
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Abstract: In this paper export and import dependence for Croatia and Poland are calculated and compared for the years from 1994 to 2016. Trade dependence refers to dependency on imports from and exports to abroad. It is preferable for country to have lower values of trade dependence, otherwise it can experience economic vulnerability on external shocks. Concentration levels are measured by using concentration ratio and Herfindahl-Hirschman’s concentration index. Results of the analysis has shown that Croatia and Poland are highly dependent on its most important export and import trading partners with concentration ratio higher than 0.5 in the observed period. If total concentration levels are observed including all trading partners, export and import concentration levels in Croatia and Poland can be treated as low. Methodology and framework constructed in this paper can be applied in estimating trade dependence for other individual countries or group of countries.
Crowdsourcing for employee engagement – applications and benefits

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Keywords:
Crowdsourcing, knowledge management, employee engagement.

Purpose:
The aim of the article is to identify the possibilities of using crowdsourcing to raise employee engagement. The article discusses the concept and implementation of crowdsourcing and the application and consequences of crowdsourcing have been presented with a discussion of a chosen example from a local government unit in Poland selected in purposeful way.

Methodology:
In the article the results of a systematic literature review and the initial results of research conducted in one of the municipal offices in Poland, which uses crowdsourcing, have been presented.

Theoretical base:
In the recent years employee engagement has been attracting more and more interest. Despite numerous publications in this regard, still little is known how this involvement may be raised. The term “employee engagement” refers to the emotional relationship between the employee and the organisation and it is expressed in the employee’s identification with company goals and values on its different levels. Engagement is also a feeling of responsibility for one’s work and attachment to it. The results of the research entitled “State of the Global Workplace” conducted by the Gallup Institute show that only 13% engage in their work. Similar data on employee engagement is contained in the report entitled “The Quantum Workplace 2015”. It appears from it that 31.4% of employees are not engaged – 24.3% are “only doing” their work and 7.1% are disengaged. It is pointed out in the literature that employee engagement not only impacts the organisation’s financial results. It is the dominating source of competitive advantage. Employees should be the best and most trusted proponents of the organisation who contribute to knowledge development. In the literature on organisation and management the importance of knowledge has long been emphasised. It is pointed out that it is an important organisational resource, which leads to lasting competitive advantage. It is also a driving force and an element of the organisation’s survival in a dynamic and competitive era. It enables the organisation to adapt the key resources to market requirements. Knowledge is also perceived as a source of above average economic benefits, innovations, economic rent, and capability of solving organisational problems.

It is also the organisation’s strategic resource and a success factor, which enables it to survive in a situation of discontinuity. Possession of knowledge by the company alone is insufficient and it will not be the key to competitive advantage. What is more, creating knowledge independently concentrates risk and prolongs the time for creating a knowledge base. At the same time, one may observe the need to use the resources already possessed by the organisation. It is pointed out in the literature that the nature of knowledge is social and engaged employees may contribute to creating it. Reference is made to the fact that the employees’ internal motivation may stimulate creation of new knowledge, learning, and using knowledge coming from the organisation’s environment. By the same token, raising employee engagement seems to be of great importance.

It is indicated in the literature that crowdsourcing may constitute a new method or tool for raising employee engagement. Crowdsourcing refers to the organisation’s activity, which consists in including the virtual community, in the form of an open online call, in problem solving, creating, implementing innovations, or creating ideas, thus those tasks which so far have been implemented by the employees. The results of the literature review have indicated that to a large extent the significance of crowdsourcing for raising employee engagement,
postulated in the literature, remains in the sphere of purely theoretical considerations. This approach is new for Polish science, and at the same time an area of research that is investigated to a little extent in the global management sciences.

Results:
The results of the systematic literature review, presented in this elaboration, indicate that the knowledge about the possibilities of using crowdsourcing to raise employee engagement is fragmentary and dispersed. Despite the postulates, this area is still scientifically undeveloped. One should, however, bear in mind that crowdsourcing may not only contribute to employees’ innovativeness and creativity, but also to their engagement. This is proven by the results of the initial research carried out in the municipal office. It has been observed that raising engagement is accompanied by a feeling of impacting the work of the organisation where a given employee works. Making use of crowdsourcing may be of great importance in raising employee engagement.

Originality:
In this article a systematic literature review on the importance of crowdsourcing for raising employee engagement has been performed. It has been demonstrated that crowdsourcing may be applied in this regard and influence the behaviours of the employees. However, the literature does not provide any conclusive results related to the impact of many elements of a crowdsourcing project on employee engagement. The carried out initial research within the framework of this elaboration leads to the conclusion that further scientific research is needed in order to answer the question about what type of crowdsourcing is most suitable for raising employee engagement and what impact the different stages of crowdsourcing have on employee engagement. Generally speaking, to maximise employee engagement more research is required to better understand how to match crowdsourcing better to the employees. An original contribution of this article is a set of recommendations the aim of which is to raise employee engagement through crowdsourcing.

Practical implications:
Based on the obtained results of the empirical research and the systematic literature review the municipal city managerial staff will receive guidelines on raising employee engagement through crowdsourcing.
Abstract: This research aimed to investigate the perception of quality of work life by employees of three local government offices in malopolskie region in Poland. The results are based on quantitative data that was collected via questionnaire. The descriptive analysis were used to analyze the data. Based on these results, an in-depth expert interview survey was prepared to conduct interviews with managerial staff in the researched offices. The results, based on a regional probability sample of office workers revealed that employees' perceptions of quality of work life are similar in two offices but are different in the third one. The qualitative study of an elaborative nature, helped to get an insight into these differences. The author discusses the results and provides own answers to the questions regarding the substantial discrepancies between the three offices. No such integrated research on QWL has been conducted in Poland so far. The aim of the study was purely practical and had an intention of providing a valuable source of knowledge about the functioning of local government in Poland.

**Keywords:** quality of work life (QWL), perception of QWL, public sector, local government.
Different Leadership Styles in Organizations that adopt and do not adopt the BSC

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Abstract: The current macroeconomic context, recognized by its global, turbulent and competitive environment, pushes organizations, especially those that are most exposed to international markets, to have the capacity to achieve sustained performance. Given this requirement, managers are aware of its relevance and seek to implement effective tools to be able to evaluate organizational performance. Managers are aware of the need for sustained performance, as it characterizes a special effort for organizations because it compromises their continuity in the market; so it is considered a main focus in the organizational management area. Linked to this relevance, it is customary for managers to go beyond measuring tangible assets, as intangible assets play a key role for organizations and their competitive performance. Bearing this in mind, namely the importance of intangible assets, leadership style is crucial since it has the ability to promote and encourage the way collaborators behave, decide and guide organizational success. Indeed, leadership can drive and enforce the most powerful assets, which can be monitored by very specific management tools. The literature considers the Balanced Scorecard (BSC) as one of the most acknowledged well known management tools, as being able to define organizational strategy, such as supporting the communication strategy throughout all the organizational processes. In addition, based on its four perspectives the BSC goes beyond the traditional management systems, being able to monitor performance, promote strategic alignment and foster organizational communication. These features characterize the BSC as one of the most relevant strategic management tools to improve organizational performance. Regarding performance, the literature has found that the way leaders behave, manage tasks and also coordinate their collaborators has high impact. In this sense, the OCAI model is a powerful culture assessment instrument to investigate the leadership style among organizations with and without the BSC.

To the best of my knowledge, there have been no studies aimed at understanding if the management style differs between these organizations. Considering that the BSC still has the potential to continue to raise its implementation rates, we consider it relevant to highlight the leadership differences, so that organizations which intend to implement the BSC may be aware of these existing differences. Based on this gap in the literature, the main objective of this research is to identify the leadership profile of the largest Portuguese exporters without the BSC and with the BSC. Furthermore, this quantitative study, based on questionnaires, seeks to identify differences between the leadership style of these organizations that adopt and those that do not adopt the BSC. With this knowledge in hand, the successful implementation rate of the BSC could be improved as the leadership has a crucial role. The empirical evidence from 107 out of 250 questionnaires reveals that there are differences in the leadership style of the managers. Considering these outstanding empirical differences which are of high theoretical and practical interest, due to the implications of leadership towards performance, this investigation brings new light into this management field. As the adoption of the management tool BSC is still in the process of growth, we consider that further studies need to be conducted to research and understand the leadership differences in other types of organizations, such as those in other national cultural contexts.

Keywords: Balanced Scorecard, Organizational Culture, Leadership Style
Digital Readiness Analysis (DiREA) of Logistics Service Providers

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Keywords:
Logistics 4.0, digitalisation, Logistics business models, competence building.

Abstract:
Logistics is a field which can benefit to a great extent from all the different aspects of digitalisation. Contradictory to that, a lot of logistics service providers remain in a waiting position pretending to wait for the new needs of their customers. The purpose of the paper is to identify realistic pathways for logistics service providers (LSP’s) to handle the challenges of digitalisation and develop strategies to become equal digitalization partners of their customers.

A survey amongst LSP’s was conducted to analyse the readiness of LSP’s for jumping into the digital world. Technological, organisational, financial as well as competence oriented readiness are part of this survey. The focus are digital processes on the one hand and digital business models in logistics on the other hand. Basis is a profound analysis of similar studies in other branches.

The theory for this paper is based on disruption of business models, innovation concepts and strategies in logistics as well as flexibility and adaptability of logistics systems and processes in a world of increasing dynamic and complexity. That’s why the question, how digitalisation can support in dealing with complexity, will be raised, too.

Looking to the results of the study there is a twofold acquisition of knowledge. On the one hand it becomes much clearer where are the challenges and obstacles LSP’s have to cope with, when preparing for the digital world. The study delivers benchmark results for the participants, too. On the other hand realistic strategies will be provided which can help LSP’s to become a leader in the fast changing digital world.

Up to now there is no digital readiness analysis regarding the logistics sector available. For the first time now there is a kind of orientation available for LSP’s and their customers regarding the digital readiness. It has to be investigated if this can become a general standard for digital readiness investigations and the future developments in this field.

LSP’s and their customers will get a very good orientation for their individual development status as well as the requirements for their future practice, based on digital processes.
Does Industry 4.0 require Business Model Innovation?

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This paper aims to provide an evaluation of how the extensive development and adoption of new digital technologies such as the Internet of things, big data and analytics, robotic systems and additive manufacturing may influence firm’s innovation activities.

The approach of this paper is to review various sources about the potential adoption and influence of the new digital technologies (Industry 4.0) to lead to new interaction between companies, customers and suppliers.

Our paper is based on researches and works published in scientific journals, and reports of government and non-government organizations to understand not only scholars’ point of view but also practitionners.

Despite the fact that Industry 4.0 is still in its infancy, it already affects the nature of competition, organizational structure, business performance and corporate strategies in many industries.

Understanding the specific features and mechanism of Industry 4.0 will help to customise the business model innovation to provide economic welfare and success. It’s important because the real value is originality and soleness.

We are going to study not only economic and management aspect of Industry 4.0 but also a social impact (i.e. the potential cyber-risks, individual privacy, job design and so on).
Enriching Bateson’s theory of learning: a personality psychology perspective.

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Keywords: Levels of learning; Bateson’s theory of learning; personality change; personality; profound Learning.

Purpose:
In this paper, we review Bateson’s theory of learning, i.e. “logical categories of learning and communication” (Bateson, 1972, p. 293). In particular, we focus on learning III, which Bateson describes as “profound reorganization of character”, “profound redefinition of the self” i.e. profound learning processes. Although his theory gained seminal status and provides an important framework for organizational learning, it does not offer specific mechanisms how to facilitate such learning processes (Bredo, 1989, pp. 37–38). In that regard, we draw on contemporary approaches from the personality psychology literature. This will allow us to build a bridge between the theoretical learning framework and empirical findings from personality psychology.

These findings challenge traditional assumptions that personality develops through adolescence and remains stable for the rest of the lifespan. Meta-analytical evidence suggests that personality is subject to profound change (Roberts, Walton, & Viechtbauer, 2006) and that personality can be intentionally changed (Allemand & Flückiger, 2017; Wrzus & Roberts, 2017). This new evidence and theories that are developed accordingly may enrich our understanding of and fill the framework with specific processes and mechanisms that enable learning III. Based on these considerations, the following research question arises: How can recent evidence and approaches from personality psychology facilitate profound learning processes?

Methodology:
To answer the research question, we use a comprehensive literature review based on Bateson’s levels of learning and recent literature from personality psychology dealing with the phenomenon of (intentional) personality change. In doing so, we build ground for an explorative analysis and subsequent theory building (Corley and Gioia, 2011).

Theoretical base:
The argument rests on two pillars. First, an overview of Bateson’s levels of learning and its further interpretation is given. The second pillar consists of personality psychology. While personality was assumed to be stable and enduring, a recent paradigm shift in personality psychology now assumes the changeability of personality within the course of a lifespan. We argue that an intentional change in personality is well comparable to the aforementioned definitions of profound learning. Furthermore, we show that mechanisms and methods to intentionally change personality are the key to facilitate such profound learning processes.

Results:
Bateson’s theory of learning can be best understood as a framework rather than a concise and explanatory theory, and as such it is rather general (Bredo, 1989). We expect that this paper can contribute the level of detail within this framework.

Originality:
This paper contributes to the ongoing interdisciplinary discussion and the reception of Bateson’s levels of learning, also within the management discourse (Tosey, Visser, & Saunders, 2012). Differently here, levels of learning are not brought into another discipline, we rather enrich Bateson’s levels of learning by contemporary findings from personality psychology.

Practical implications:
Practical implications are drawn from the field of personality psychology which uncovered ways to facilitate intentional personality change. Normative theories such as “personality change coaching” have been introduced and could shed light on how to facilitate profound learning. This may have implications for the discourse on organizational learning and especially triple-loop learning which builds on Bateson’s theory of learning (Tosey, Visser, & Saunders, 2012).

References:
Everyone’s heard about fake news. What about fake research?

KEYNOTE SPEECH

Gary Mc Lean

This presentation deals with the problematic of science nowadays. It addresses the ambiguity of science and also the aims of “evidence based research”, “quantitative research” and the ranking system of publications and scholars.
EXPECTATION LEVELS OF GENERATION Y AND GENERATION Z OF THEIR EMPLOYERS AND SUPERIORS

Katarzyna Półtoraczyk

Abstract:
The paper presents preliminary results of research on the expectations of employees from generation Y and generation Z. The author of the article presents a brief description of these generations, their motivations and expectations related to work. The aim of the paper is to present expectations towards potential and current employers and superiors.
Key words: employee's expectations, generation Z, generation Y
Expectations towards education at the HRM postgraduate studies in Poland- research
Findings

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Keywords:
HRM, postgraduate studies, education.

Purpose:
The purpose of the article is to identify the expectations of students pursuing postgraduate studies in the field of human resources management related to their curricula, that is the usefulness of individual modules, preferred methods of teaching and competence they would like to acquire in the course of studies.

Methodology:
The study involved 100 students pursuing postgraduate studies in the field of human resources management at the Wroclaw University of Economics. The group of respondents included students pursuing the postgraduate studies in the field of human resources management with both Polish and English as the language of instruction. The principle used within the research was methodological triangulation (Denzin, 1978). The data was obtained as a result of applying the following research methods and techniques:
- electronic questionnaire sent to graduates and current students of postgraduate studies in the field of HRM;
- interviews made with current postgraduate students;
- observation through participation which involves authors’ active participation in managing postgraduate studies in the field of IHRM with English as the language of instruction administered by the Wroclaw University of Economics since 2014.

The basic research tool was the electronic questionnaire of the interview with predominance of closed-ended questions. The questionnaire included also semi-open-ended questions providing the possibility of giving in-depth answers to the issues dealt with in a closed-ended question.

In the study, a qualitative approach was applied (Bogdan and Bicklen, 2002), thus making the evaluation analysis largely narrative.

Theoretical base:
In the subject literature the issue of national HRD models has gained increasing attention (Garavan, McCarthy and Morley, eds., 2016). However, the research on HRD in Central Eastern Europe is limited (Morley, Slavic, Poór i Berber, 2016, s. 406-432; Różański, 2008; Szalkowski, Jankowicz, 2004). Broad framework of the CRANET 1 project dealing with human resources management, of which employees’ qualification improvement, did not take into account the exploration in Poland (Cranet, 2011). In spite of receiving the highest allocation among new member states of the European Union for investments in human capital after completed financial perspective 2007-2013, Poland’s rate for life-long learning education is at the level of 3.5%. It is nearly twice lower than the EU average and 4-5 times lower than in Scandinavia. Low share of adults in the general number of population results from the fact that many people do not consider qualification improvement as investment but as a cost. There is a widespread conviction that knowledge once acquired is sufficient and there is no need of its supplementing and improving (Sprawozdanie z POKL…, 2015, p. 13-14). It is confirmed by the studies which show that about 60% respondents do not undertake continuing education as they do not feel any need for that (Turek, Worek, 2015, p. 9). In this context, it seems justified to draw attention to the expectations and results arising from the investment in qualification
improvement during postgraduate studies as an example of good practices in the area of promotion and development of human capital.

Results:
Such study will enable the definition of usefulness of individual subjects included in the curriculum of postgraduate studies in the field of human resource management; types of competence which are particularly significant for the people interested in studies, and learning of students’ preferences in the area of proportion of theoretical and practical aspects of the studies, as well as the assessment of diverse nature of knowledge offered by many - and not only some - lecturers.

Originality:
The literature on the subject includes a number of empirical studies on training and development (Garavan, Carbery 2012; Garavan, McCarthy, Morely 2016, Garavan, Morley 2006; Mclean 2004). Yet, it is worth paying attention to several limitations which may contribute to the explorations carried out by the authors. First of all, the studies in the area of HRD in Poland were of macroeconomic nature. They took into account the perspective of Poland in relation to basic ratios such as gross enrolment ratio or life-long learning index; yet, without any insight into a specific types of T&D (Sheehan, Buchelt, 2016, p. 269-288; Susabowska, 2013, 89-108). Secondly, the existing empirical studies on employees’ development, of which participation in postgraduate studies, referred mainly to large enterprises (cf: (as an example): Listwan, Stor, 2008; Pocztański, 2002; Suchodolski, 2008; Suchodolski, 2010, p. 727-736; Miś, 2002), without examining the perspective of an employee who wishes to improve their qualification on their own initiative. Thirdly, postgraduate studies are gradually gaining importance as one of the most often selected forms of investment in one’s own development (Konrad, Turc, 2015 p. 8-9 ), and the interest in the studies in the field of HRM is still continued with such studies being offered by all Polish public - and many non-public - institutions providing higher education in the area of economy.

Practical implications:
We believe the research will provide:
- guidelines to improve the contents of postgraduate programs;
- knowledge about preferred methods of running particular courses;
- practical and organizational hints related to running the postgraduate studies as “the whole”.

References:
Bogdan R. C., Bicklen S.K., Qualitative Research for Education: An Introduction to Theory and Methods, Allyn & Bacon, Boston 2002.
Susabowska, K., Na tropie polskiego HRD, Zarządzanie zasobami ludzkimi, nr 6, 2013.
Exploring Business Model Components in the Age of Industry 4.0

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Keywords:
Business model; Industry 4.0; Innovation; Value creation; Strategy.

Purpose:
The global industrial landscape has changed deeply in the last few years due to increasing technological developments and innovations in manufacturing processes. The Industry 4.0 concept has emerged and the academic literature has paid an increased attention to this topic, which remains non-consensual. Nevertheless, there is a common understanding that the emergence of a new industrial paradigm will lead to novel business models. This paper presents an overview of the background, concept, basic methods, major technologies and strategic scenarios for industry 4.0. The purpose of this work is to explore the components of business models in the context of Industry 4.0. With this seminal work we attempt to explore the Business Model compositional facets integrating the Industry 4.0 challenges and strategic management literatures.

Methodology:
The paper combines the literature revision on business models and analysis of websites of enterprises that start implementing initiatives for adapting business models to the new environment. The existing literature on Industry 4.0 is mainly technology-oriented, while there is a lack of insight into strategic effects of Industry 4.0 components within organisations. Because of the novelty of paradigm organisations are not able to determine to what extent their business strategy and operations align with the Industry 4.0 paradigm. The tool to evaluate the impact Industry 4.0 has on business models is not available at this moment. This is the knowledge gap that is addressed in this research. For that the paper explores the initiatives some organizations are following to drive the implementation of Industry 4.0.

Theoretical base:
“Business model”, as a manifestation of strategy, is a term often used to describe the key components of a business, providing a tool to analyze and communicate strategic choices, and articulate how a firm creates and captures value. Based on the literature revision, this paper focuses on Industry 4.0 concepts and drivers, and contributes for further understanding about its implications in the emergence of new business models.

Results:
This paper introduces relevant aspects of Industry 4.0 in relation to strategy, key technologies, such as the internet of things, the industrial internet of things, and artificial intelligence, and their implications in business models. The results not only summarise the current research activities but also indicate potential research directions.

Originality:
By integrating Industry 4.0 concepts and a comprehensive review of the academic literature on business models, the paper opens avenues that deserve future research consideration. Based on the revision of business model components, the paper aims to identify the main features of business models for Industry 4.0 that drive the new industrial paradigm shift.

Practical implications:
This work offers a number of key strategic issues that critically influence our reflexion on the business models components in the context of Industry 4.0. Taking into account both business model and Industry 4.0 principles, academics may be enabled to further study on the topic, while practitioners may find assistance in implementing appropriate scenarios.
Factors affecting the efficiency of crowdfunding projects: Comparative Analysis

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Keywords:
Crowdfunding, Kickstarter, Boomstarter, Predictive models, Success factors

Purpose:
The aim of this paper is to identify and characterize influence of crowdfunding project’s characteristics (factors) on the outcome of crowdfunding campaign on Russian crowdfunding platform in comparison with projects from Kickstarter, one of the leading crowdfunding platforms in the world.

Methodology:
The methodology for the research was developed due to the tasks this paper is also supposed to cover:
- extraction of primary data from crowdfunding platforms via special data gathering tools such as WebScraper or RStudio techniques;
- identify factors affecting success of crowdfunding projects in Russia and construct a predictive model using machine learning algorithms: GLM – a logistic regression, Random Forest, SVM – support vector machine, etc.;
- define and update information on actual factors influencing success of crowdfunding projects in Kickstarter by firstly reviewing available academic background and then also building a predictive model using the same ML methodology;
- compare those sets of factors and extent to which they influence on project’s outcome, models in general, to determine the differences via comparative analysis;
- discuss probable reasons of the difference or the similarity and provide limitations and requirement based on descriptive and statistical analysis.

Overall, the whole research though having an individual level has also cross-sectional and across cases orientation and due to shares both platforms (Kickstarter and Boomstarter) occupy within their local markets the results can be then generalised to the national crowdfunding markets with relevant limitations.

Theoretical base:
Previous research in this field could be divided into 2 types. A wide number of papers have analysed connection between project’s characteristics and its success probability on a particular platform (Kaartemo, 2017; Cordova, Dolci & Gianfrate, 2015; etc), while fewer researches were dedicated to comparing such relationship on platforms from different countries (Cho & Kim, 2016; Torkanovskiy, 216; etc.).

While there are many studies dedicated to the factors of success using Kickstarter data and a few comparative ones, there does not seem to be any research based on data from Russian crowdfunding platforms, and that is the gap in scientific knowledge this research is aimed to occupy by analysing data from one of two leading Russian platforms - Boomstarter.

Results:
The research is supposed to identify factors and their affect on a crowdfunding campaign of projects within different platforms as well as provide a reader with predictive models for Boomstarter and Kickstarter based on the information above. As for the sets of factors and the extent to which they determine project’s success, that can be further used as recommendations and guidelines for projects’ authors while launching the crowdfunding campaign on different
platforms. Regarding predictive models, they are expected to forecast the success probability of the projects on both platforms and be accompanied by limitations.

Originality:
While there are many studies dedicated to factors of success using Kickstarter data and a few comparative ones, there does not seem to be any research based on data from Russian crowdfunding platforms, and that is the gap in scientific knowledge this research is aimed to occupy by analysing data from one of two leading Russian platforms - Boomstarter.

Practical implications:
The overall outcome of the research though is supposed to be:
- predictive models able to forecast the success probability of the projects on both platforms and their limitations;
- recommendations on aspects to which authors should pay attention while launching the crowdfunding projects on different platforms.
FDI Determinants of Firms Transferring Technology with Know-how as a Transfer Channel – Homogeneity of Areas and Barriers of Technology Transfers.
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Abstract: Technology is increasing in importance as a factor of economic development. Given that Foreign Direct Investment is seen by researchers as a significant technology growth stimulating factor, the topic of FDI determinants is an important subject for study. Especially in case of economies classified as modest innovators that are at the best position to benefit from technology transferred with FDI. This study aims to establish the hierarchy of FDI determinants of firms that use know-how as a channel for technology transfer and to identify the barriers and areas of technology transfer, which are hypothesized to be homogeneous across the examined firms given the importance that they assign to the determinants of FDI. Primary data was collected among technology transferring FDI firms in Poland and a set of statistical tools ranging from standard descriptive statistics to factor and cluster analyses were used. European Union membership, the internet/telecommunication infrastructure and a vast set of determinants describing the intellectual labour force are the most important FDI determinants from the perspective of the foreign firms that transfer technology with the means of know-how. Administrative and legal are the key barriers of the studied transfers, which tend to concentrate in the manufacturing area.
Gamification in higher education – the example of a Microeconomics course in bachelors Studies

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The purpose of the paper is to examine the influence of implementing the gamification elements on the outcomes of economic education at higher education level. An obligatory Microeconomics course at the bachelor level was the basis for the research.

The teaching experiment was the methodology used for the purpose of the paper to collect data, and econometrical analyses were conducted to answer research questions. The game-based elements were implemented in the Microeconomics course, perceived as one of the most difficult for students, being in the curricula at the first semester of bachelor study. Every week during the whole semester, students could collect scores for answering quiz questions; answer possibilities were time-limited, and students got immediate feedback on the correctness of their answers. The names of the students who answered the fastest were presented as winners. Students used an online platform to answer quiz questions. The number of collected scores was the basis for raising the final grade of the Microeconomics exam. Students’ participation in this activity was voluntary. Then, the number of collected scores in quizzes and frequency in quiz participation were accepted as measures of gamification and were treated as independent variables. The accuracy of answers was treated as a control variable, showing students’ possibilities to adopt new knowledge. Scores obtained by students during the written final exam were treated as a measure of learning outcomes and dependent variable. Then, the relationship between the results of the exam and students’ involvement in the game-based elements of the course was analysed to answer the research question.

Game-based learning is based on the assumption that implementing game elements into the education process raises the motivation and engagement of learners, which are crucial factors in the effectiveness of the learning process.

Research results based on the regression functions show that to some extent, gamification has a positive impact on educational outcomes. The regression function parameters of gamification elements were positive and statistically significant, but the game-based elements do not explain the whole changeability of the educational outcomes.

Gamification as game-based learning is widely commented on as a tool raising the effectiveness of educational process by increasing the engagement and motivation of learners, but the effectiveness of this attitude still requires testing. The most frequent studies in this field are based on surveys asking responders’ opinions. The paper’s originality is connected to the experiment on gamification done with students and the created measures of game-based elements in education. Students faced the game-based elements as part of a regular Microeconomics course, and their engagements and results were accepted as measures of gamification. Thanks to this attitude, the influence of game-based elements on learning outcomes could be estimated with the use of parameters of regression function.

According to the research results, game-based elements have a positive impact on the learning outcomes, but they are not the only factor influencing the outcomes of the learning process. Implementing game-based elements into education can raise the effectiveness of the learning process, but it should be strictly combined with the content of the course and the skills and competences required in a given course. Gamification should be treated as a valuable part of the education process, which should be carefully designed and comprehensive with other elements of education.
How knowledge based economy influences competitiveness? The case of European member states.
Elisabete Pereira
Antonio Fernandes

a) purpose
The purpose of the present paper is to study how the European knowledge based economy influences the competitiveness of the European member states and also compare the European competitiveness with the ones from USA, China and Japan. The comparison will be based on variables that characterize the knowledge based economy and competitiveness.

b) design/methodology/approach
The present paper will be based on a literature review about the topics under study, seminar articles and state of art articles, followed by an application through a regression analysis and a cluster analysis to determine which are the available knowledge-related indicators (Shares of high-technology industries in total manufacturing, R&D expenditures and research personnel, knowledge stocks and flows, particularly the diffusion of information technologies – in manufacturing and service sectors-, social and private rates of return to knowledge investments to better gauge the impact of technology on productivity and growth; the functioning of knowledge networks and national innovation systems; and the development and skilling of human capital) that influences competitiveness of European Union member states. The variables used to explain the countries’ competitiveness will be based on OECD studies: productivity, employment and economic growth. The obtained findings will allow to take conclusions about the European countries with better results and which variable are more relevant to competitiveness, as well as to compare the significant differences of the European results with the cases of USA, Japan and China.

c) theoretical base
The European economy is defined as a knowledge-based economy, which characterizes by an increasing knowledge and information. Knowledge is currently recognized as the driver of productivity and economic growth, leading to a new focus on the role of information, technology and learning in economic performance.

d) results or expected results
It is expected to obtain a significant relation between the variables of knowledge based economy with competitiveness, and obtain which of these variables most influence, in a significant way, the competitiveness. In the comparison with USA, Japan and China, it is supposed to obtain the ones where there are significant differences, the findings and obtained results will allow to conclude for the relevance of current knowledge based economy to competitiveness and economic growth and development of European societies compared with other world economic potencies.

e) originality/value
The present paper is original and allows to contribute to the scientific knowledge of the concept and the contribution of knowledge based economy to European competitiveness, as well as the explained variables and the significant differences between the countries’ variables. In this way, contribution to understand which variables reinforce and improve the competitiveness of Europe in relation with the other world countries.

f) practical implications
The results from this paper allow a better understanding of the variables and concepts under study, as well to suggest some realignments in public policies to improve European competitiveness.
How Leadership can be impacted by different Organizational Cultures and have influence on followers.

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Keywords:
Organizations, Culture, Leadership, Behaviour

Purpose:
This study explores the concepts of Cultural Dimensions within an organization that are understand as two different ones: National and Organizational Culture. The purpose of the paper, based on Organizational Culture practices is to discuss How Leadership can be impacted by different Organizational cultures and have influence on followers. Which is the research question. It will lead us to test and validate the impact of Organizational Culture on leadership behavior and his influence on follower’s commitment, engagement and inherent results.

Methodology:
This conceptual paper, explores the concepts of Organizations Culture framed by six autonomous dimensions or variables and two semi-autonomous dimensions (Means-oriented vs. goal-oriented, internally driven vs. externally driven, easygoing work discipline vs. strict work discipline, local vs. professional, open system vs. closed system, employee-oriented vs. work-oriented, degree of acceptance of leadership style, degree of identification with your organization). The methodology used was documentary analysis, including papers from the main scientific databases: Scopus and WOS, using the keywords Organizations, Culture, Leadership, Behavior. The field methodology will be a ´Action Research´ that study organizational cultures, methods, leadership styles and behavior from Leader but also the effect on the followers. For that propose an existing model will be used to understand the organizational cultures by the six factors, related to concepts within the field of organizational sociology and the six dimensions that were developed based on the literature. The study is to be performed from March 2018 to September 2018 in a specific sector and environment, using several techniques to collect data. Data collecting will be through, In-depth interviews with Top and Middle management, Business leaders. Workouts will be done with expertise people to define meaningful questions that can identify as many differences among work practices as possible. As a pre-test some Ad hoc questions will be analyzed, assessed to validate whether they are well understood and whether the answers can differentiate. A support survey using around 100 questions administered among company employees (Managers, non-managers, operational professionals per department and ad-randomly chosen).

Theoretical base:
Previous studies identified six dimensions that will be analyzed under Organizational Culture scope which however should not be confused with the six national culture dimensions and are not necessarily considered as relevant in all regions, countries and all companies or organizations. They are not based on values but on strategic practices, which unlike national values can to some extent be monitored by the organization’s management, leaders, with the support of skillful specialist, expertise people or even consultants or coaches. Reinforcing the main purpose of this research mentioning that effective leadership is still largely a matter of behavior and that could be dependent of each Organizational Culture and according to Geert Hofstede, “culture” can be defined “as the collective programming of the mind that distinguishes the members of one group or category of people from others”. Is necessary to gather the right people with certain behaviors to the
right position and when adapted to the organizational culture in place will lead to better decision making (on leadership level) and consequently better and faster business results can be achieved.

Results:
The main expected result is the development of Leaders behaviors, adapted to Organizational Culture in place, and competencies with the goal to impact follower’s results in terms of engagement and commitment.

Originality:
With the specially concern to fit between strategy and culture this research will also bring perceptions on organizational culture in combination with context and in using combinations of dimensions and their reflection in real work life, such as engagement and commitment, efficiency, productivity, innovation among others.

Practical implications:
To get a scientific approach/ validation for an application on the field that can bring together the development of Leaders behaviors, adapted to Organizational Culture in place, and competencies with the goal to impact follower’s results in terms of engagement and commitment.
Informal communication structure as a determinant of employees’ satisfaction in educational institution

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Keywords:
Internal marketing, informal communication, organisational network analysis (ONA), secondary education, employee satisfaction.

Purpose:
To identify the nature and magnitude of the relationship between employees’ satisfaction and the informal communication structure in an educational institution (based on the research project in the college of Water Resources (Saint-Petersburg, Russia).

Methodology:
We are going to proceed in several stages:
– First, we investigate the existing part of internal marketing research field devoted to employees’ satisfaction assessment models. Then we distinguish a set of provisional items to measure satisfaction level;
– Next, we describe the idea of organisational network analysis, especially the part connected with informal communication structure analysis and visualisation (sociometry). We also discuss previous studies explaining the nature of the relationship between communication structure and employees’ satisfaction;
– At the third stage we elaborate the relevant items to detect informal communication structure, and after that, we construct and pilot the questionnaire for employees;
– The features of our case delimit us to use within-case pretest-posttest quasi experimental design. We collect data twice – before and after a certain controlled set of changes in the case institution (College of Water Resources in St Peterburg, Russia)
– Finally, we conduct reliability analysis for the created scales of employees’ satisfaction; we construct the graph and compute informal communication structure measurements (betweenness, in and out degree centrality). We analyse the collected data to reveal the relationship between informal communication structure and employees’ corporate loyalty in the college of Water Resources.

Theoretical base:
Employee’s satisfaction has been previously studied in the framework of such disciplines as marketing, sociology and psychology. It reveals the complexity and breadth of the chosen subject. Chaudhry, Olcum, Harter and Schmidt devoted their works to the topic of corporate loyalty and employee satisfaction in different contexts: respond to changes, different managerial styles or its effect on business outcomes. Moreover, in the educational sphere, Harsha N. Pereraa, Helena Granzierab and Peter McIlveenc attempted to create the classification of educational staff according to their personality, work satisfaction and engagement. However, the topic of measurement employee’s satisfaction and job satisfaction in the educational sphere has not been thoroughly studied. The aspect of informal communication structure analysis was first presented by J. Moreno in 1960s. The organisational network analysis is a specific area of sociometry practical implication exploring the potential threats, required changes and growth areas in the structure of organisation. The research papers in this research field are mostly covering the cases of commercial companies.
The amount of research on implementation of ONA in educational institutions is scarce. That is why our research will contribute to exploring this topic.

Results:
1) We collect data from employees of the college of Water Resources (Saint-Petersburg, Russia) using the questionnaire twice (in January and May). It helps us to get the information before and after implementation of the new changes provided by a new director of this institution. We already have the first data set, and we have identified potential threats in communication structure by satisfaction level of employees from different departments.
2) After the second data collection phase, we will run the reliability analysis for our employees’ satisfaction measurement instrument. So the reliability check results will contribute to the existing experience of satisfaction measurement methodologies. We will also provide the information about analysis and interpretation of the received results to manage employees and provide information about the nature and magnitude of the relationship between employees’ satisfaction and the informal communication structure in the educational institution.

Originality:
The scarcity of research activity in the area of ONA in the educational institution as mentioned earlier supports the potential research niche that we are planning to investigate in our case. The target audience of the research results is those who run their studies in ONA application, internal marketing technologies in education, human resources management in secondary education. The research has inductive nature because a model of evaluation would be specially created and applied to the case. However, the model and results will be useful not only for the manager of the College of Water Resources but also for other organisations of educational direction or managers interested in the evaluation of corporate loyalty and satisfaction.
In search of an Integrated Reporting at the macro level (Regions and Nations). Theoretical foundations and framework proposal.

KEYNOTE SPEECH

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The advent of the Knowledge economy has dramatically changed the foundations of wealth creation for individuals, companies and nations. Assuming wealth is equivalent to abundance of valuable assets, we realize that in the new context of the knowledge economy wealth is moving from tangible to intangible assets. At company level, traditional accounting books (Balance Sheets and Profit and Lost Accounts) do not provide relevant information on intangible assets, and the way to inform on future wealth creation potential is given to new information system initiatives, such as Integrated Reporting. At the macro level (Regions and Nations) there is a similar problem, but not a similar tentative solution and this research pretends to search the theoretical foundations of an Integrated Reporting at the macro level and to design an Integrated Reporting specific framework as well. After an introduction, the presentation has two main purposes. First, discovering from the existing relevant literature on sustainable political, economic and social development and on competitiveness, innovation and intellectual capital at the macro level, which are the principles and theories that guide nations’ wealth creation in the knowledge economy context. Second, finding out the suitable methodology or framework to enable an in-depth diagnosis of a nation’s wealth creation potential foundations. At the same time, this methodology or framework would be the cornerstone of a kind of Integrated Reporting at the macro level (Regions and Nations).

In summary, the research tries to be a first step on the design of an Integrated Reporting framework at the macro level that considers knowledge and other intangibles as the main foundations of competitiveness, innovation and sustainable economic growth, or in other words the main foundations of wealth creation potential.
Intellectual capital reporting in universities as a tool of accountability

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Keywords: Intellectual capital, reporting, accountability, universities.

Purpose:
During the last decades, the growing interest regarding intangibles and intellectual capital (IC) has extended from firms to public institutions, such as universities. Universities play an important role in society: they are essential partners of the knowledge creation and knowledge exchange networks, catalyst of innovation, suppliers of tangible outputs of research results, institutions providing consulting and advisory services. Knowledge in universities represents both the input and the output of their activities. Intellectual capital serves as a key resource for those institutions. Moreover, nowadays universities are facing an increasingly competitive environment. There are also growing expectations placed on universities by their stakeholders that request accountability for funds spending and university outcomes. Intellectual capital reporting could be an important tool of the improved internal management of universities and in the same time a tool of communication, transparency and accountability for external purposes. The objective of this paper is twofold; on one hand, to present the accountability request geared towards universities, and, on the other hand to review and discuss one of the crucial tools of universities’ accountability, namely the IC reporting.

Methodology:
In this paper the issues concerning the need of transparency and accountability of universities are presented. As the answer, the IC reporting approach is indicated. The intellectual capital disclosure practices of Australian, Spanish and Italian universities are presented and discussed. The challenges, benefits as well as problems and difficulties within the process of IC reporting are examined.

Theoretical base:
The resources theory, stakeholders theory, legitimacy theory, and signalling theory as well as the new public management concept gave the foundation of this research.

Results:
An approach and examples of IC reporting in universities are presented. The benefits, however also difficulties and barriers as well as challenges of IC reporting are discussed. The latter points may define the research agenda in the field.

Originality:
This paper contributes to IC literature by providing an assessment of accountability requests toward universities and the description, together with comparison of IC voluntary disclosure practices. It provides an insight into benefits that can be achieved when adapting IC reporting into the practice of universities, mainly concerning the reduction of the information asymmetry; the discharge of universities’ accountability to various stakeholders; and signalizing the
organizational legitimacy and excellence /quality to society, that are seen as motivations for universities to disclose their IC on a voluntary basis.

Practical Implications:
The proposed IC reporting has two main practical implications: it may be used as an internal management tool, aiming at improving the performance of universities’ management processes and may play a role of the external accountability tool, legitimizing the universities’ activities and outcomes.
The aim of the paper is to provide an insight into the intellectual capital reporting standards presented in various international studies. Article main assumption is thus to identify and compare how enterprise from different nations disclosure their intellectual capital. Conducted in the following paper systematic review is a meta-analysis of the existing literature based on multiple studies concentrated on the phenomenon of intellectual capital disclosure practices both in developed and developing nations.

Many empirical studies concentrate on the intellectual capital reporting practice around the world (e.g. Goh&Lim, 2004, Schneider & Samkin, 2008, Yi & Davey, 2010; Whiting & Woodcock, 2011, Liao et al., 2013; Vishnu & Gupta, 2014; Low et al., 2015). Research on intellectual capital reporting may be divided into three groups of studies concentrating on:

1. Identification and valuation.
2. Determinants of disclosure.
3. International reporting comparisons.

Many authors (Brennan (2001), Bontis (2003), Xiao (2008), Yi and Davey (2010), Singh and Kansal (2011)) claim that although intellectual capital is a key firm asset disclosure practices rare. One of the reasons behind that is, according to Bismuth and Tojo (2008) and Ariff et al. (2014) are conservative accounting rules. Nevertheless, there may be identified relevant determinants of intellectual capital reporting. Study by Guthrie at al. (2006) on 50 listed entities in Australia and 100 entities in Hong Kong suggests that there is a positive correlation between voluntary intellectual capital and the company size. Similarly Study by Bruggen et al. (2009) indicates that firm size and also industry are key factors in intellectual capital disclosure (a sample of Australian companies). As the level of knowledge on intellectual capital is different among nations, study on the sample of Indian and Australian IT companies by Joshi et al. (2012) suggests that there is a gap in intellectual capital disclosure between enterprises from developed and developing nations. Wang, Sharma and Davey (2016) found out that publicly listed IT entities from India perform better in intellectual capital reporting than Chinese ones.

Proposed in the paper review aims at identifying most prevalent intellectual capital reporting standards in terms of: items (with the division on human capital, structural and relational), scope (quantitative and/or qualitative score), frequency, determinants and adopted research method. Another expected result is to determine the differences in intellectual capital disclosure between developed and developing nations.

To the best author’s knowledge proposed review is one of the few encompassing the broad international meta-analysis of the intellectual capital disclosure standards. Study should reveal observable differences in the practices of intellectual capital reporting thus such analysis may contribute to better understanding the phenomenon of intellectual capital and its reporting. In addition, by presenting different approaches in disclosure, there may be created global guidelines in the form of Best Practices that may be followed by the enterprises.
ISO 9001 as a driver to push IC and KM

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Intangible Assets Consulting GmbH

Keywords:
Industry practice of KM; organizational development; management method implementation; entrepreneurship

Purpose:
The purpose of this paper is to report on the status quo of implementation of KM- and IC related measures to improve quality management (as a function of organizational development) according to the requirements of ISO 9001:2015 in Germany.

Methodology:
This paper builds on a web based national industry survey that was repeated as a longitudinal study over a period of 3 years between 2015 and 2018. It is supported with a Delphi approach to inquire on both, challenges as well as remedies to support enterprises on the management of IC as well as to investigate on reasonable interpretations regarding the new requirements of ISO 9001:2015. Auditors as well as industry experts are currently working on the establishment of a shared understanding in order to support competitiveness of the enterprises and the economy.

Theoretical base:
This paper builds on the standard literature in knowledge management (e.g. Spender, J.C.; Bratianu, C.; Kianto, A.), knowledge strategy (Grant, R.), innovation (Viedma, J.M.;) as well as established ideas on quality management in the context of business excellence (EFQM, ISO).

Results:
The survey reports stable positions of enterprises to not yet fully comply to the requirements of ISO 9001:2015 regarding the management of knowledge, competencies, process stability or documentation.

Originality:
This paper connects new requirements of ISO 9001:2015 with established instruments for knowledge management and Intellectual Capital Management and the perception within the relevant industry players over a timeframe of three years in Germany. In this paper, these requirements are connected with Business Processes and tangible strategic results in order to support sustainable business competitiveness. Ideas such as risk to lose critical knowledge as well as approaches to systematically identify and further develop innovative ways to organize knowledge are explored.

Practical Implications:
Because of the high relevance that ISO 9001 presents for certified enterprises, changes in requirements have an impact on several levels of the economy: the standards per se constitute a regulatory framework and serve as guidelines on a macro level; implementing those requirements is supported by various (national) associations (e.g. in Germany; DGQ, TQS, TÜV), who support their members – industry as well as consultants – to implement measures to manage the knowledge base and, eventually, audit the progress. The survey results highlight a modest readiness of the industry to comply with the new requirements. Building awareness to shift priorities is thus a highly relevant priority.
Knowledge Economy and the Immigration Policy
Marian Ouzek
Jerzy Kur

Abstract
The main task undertaken by the authors is an attempt at explaining why the most difficult problems in the sphere of immigration can be observed in the countries leading in implementation of the knowledge economy principles. As the most unacceptable immigration phenomena are the ‘No-Go’ zones having strong features of national or subnational enclaves. Their advanced development is identified as an empirical consequence of the state excessive tolerance considered as a result of the state helplessness rather than its generosity.
In order to explain the causes of the state policy weakness the presented analysis embraces the doctrinal bases of knowledge economy as corresponding to the evolution of economics. The principle of minimal state as a result of a theoretical transformation of Keynesian demand economics into supply economics is evaluated with special reference to Professor Rothbard’s proposals for reforming capitalism. His concept of total privatisation is presented as a solution of the excessive immigration problem. The paper includes critical remarks concerning these proposals as well as the neoliberal bases of state policies.
At the beginning of the paper there is an explanation what had happened with the economic knowledge called the liberal economic theory created by Adam Smith and improved by John Keynes and Paul Samuelson. That theory had been rejected before the last decade of the previous age due to the peculiar transformation of economics into a doctrine of neoliberalism. According to the common conviction the leading authors of that doctrine were Friedrich Hayek and Milton Friedman.
The knowledge economy concepts introduced into economic policy since the last decade of 20th century have turned out to be easily implemented as a foundation of economic policy leading to a bad economy which can suffer a deep economic crisis. A diagnosis of that type and a sharp criticism of the neoliberal transformation of economics was published in 2010 by the British economist Anatole Kaletsky who expressed a view that ‘Economics must reform itself quickly or the funeral will be for the discipline as a whole’ (“The Economist”, 22.11.2010).
Neoliberal ideology had been prevalent in the countries with the democratic system just under the banner of free market and the rule of minimal state according to the first stage of the libertarian philosophy called minarchism. Its worthwhile to notice that the target libertarian model created by Professor Murray Rothbard contains three basic principles: first – the rule of sovereignty of the individual, second – the principle of the decomposition of the state and third – the idea of decomposition of the nation into the local libertarian societies with ‘spontaneous order’ (these two words are a libertarian definition of anarchy). However, the aim connected with the immigration policy, postulated by Rothbard, is the total privatisation of all territories of the states.
The most important observation that may not be disregarded while evaluating Rothbard’s model in terms of the issue of international migration, may be formulated as the following hypothesis: Rothbard implicitly assumed that for the important libertarian rule, i.e. total privatisation of all land areas to be strategically implemented, the Western societies should for some time live under conditions of fairly free establishment of ethnical enclaves within the territories of national states. The following views of Rothbard may suggest the need to gradually shift towards the target model:
‘The pure anarcho-capitalist model, simply, is that no land areas, no square footage in the world, shall remain “public”; every square foot of land area, be they streets, squares, or neighborhoods, is privatized. Total privatization would help solve nationality problems, often in surprising ways, and I suggest that existing states, or classical liberal states, try to approach such a system even while some land areas remain in the governmental sphere.’ (M. Rothbard, ‘Nations by Consent: Decomposing the Nation-State’, „Journal of Libertarian Studies”, No. 1, 1994).
According to Rothbard as long as nation states exist, they should be subjected to changes occurring under the influence of the libertarian rules. In this way conditions will emerge for national states to transform themselves into libertarian communities of a mass range. Only under such conditions, each local community will be able to place boards around its territory, not allowing to cross by persons of undesired religious or ethnic denomination. As long as any state ownership of territories exists, it will be impossible to put such announcements on state borders, and the total bans on immigration may be only temporary. Such a ban introduced in the US to fight the effects of the Great Depression of the 1930s was analysed by Rothbard in the early years of his academic activity.

In the quoted Rothbard’s work, which he was writing in 1993, he could already analyse several years of implementing in the policies of the US and the EU the initial stage of reducing the functions of the state under the intense deregulation in the banking sector and of applying the night-watchman state. He must have deemed those results quite a progress in carrying out his ideology, as he wrote: ‘while some land areas remain in the governmental sphere.’ Thus, he must have found important to continue the implementation of the destatisation of capitalism and expanding privatisation. In his work he wrote, pointing to the future, about who would purchase the parts of territories of the particular countries to take over the owner functions from the national states, also underlining the benefits that would be available to local communities following the decomposition of nations.

Rothbard says: ‘Under total privatization, many local conflicts and “externality” problems – not merely the immigration problem – would be neatly settled. With every locale and neighborhood owned by private firms, corporations, or contractual communities, true diversity would reign, in accordance with the preferences of each community.’ (Ibidem)

The way Rothbard treats privatisation of public areas ignores the significance of infrastructure as a special sector of the national economy and at the same time as a system of international ties. Marek Ratajczak, Professor at the Poznan University of Economics and Business, a specialist in research of infrastructure problems, writes: ‘The field of the economy for which the symptoms of market unreliability are particularly clear is infrastructure. Such phenomena as externalities, natural monopoly, or public property, characteristic of infrastructure and its services, make it difficult, not totally excluded though, to base the operation of infrastructure on typical market rules. (…)The mere privatisation solves nearly none of the problems, and additionally, in the area of infrastructural elements of the economy, it is not necessarily a solution absolutely better than retaining public ownership’. (M. Ratajczak, Infrastruktura w gospodarce rynkowej [Infrastructure in Market Economy]. Poznań, 1999, p. 7).

In Professor Ratajczak’s book we can find the convincing arguments corroborated with the analyses of empirical processes, that it is indispensable that the state exercises both the oversight of the infrastructure, particularly that in the fields of energy and transport, and the owner functions. The results of research by Professor Ratajczak published at the end of the previous century deny the claims of Rothbard concerning the rationality and social acceptability of the idea of total privatisation and total elimination of state oversight of infrastructure. In his radicalism towards the systemic transformation of capitalism, Professor Rothbard made serious mistakes in assessing the reality in economic and socio-political terms.
Knowledge Management 4.0 – Implications of the fourth industrial revolution on knowledge management in supply chains

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Keywords:
Knowledge management, KM 4.0, Industry 4.0, supply chain management.

Purpose:
Internet of Things, Internet of Services, Internet of People, digitization, integration, comprehensive networking, interconnectivity through communication – these are all terms used in the context of what is called the fourth industrial revolution or Industry 4.0: advancing from embedded systems, e.g. programmable machines, to cyber-physical systems (CPS), i.e. communicating and thinking machines.

Implementation of Industry 4.0 aims to achieve a higher level of operational efficiency and productivity, as well as a higher level of automatization. The potential impact of Industry 4.0 on producers and their labour force as well as on companies that supply manufacturing systems is widely expected to be enormous.

Continuous resource productivity and efficiency will solve today’s challenges related with resources and energy efficiency, urban production and demographic change.

Industry 4.0 is a favorite topic of discussion from many perspectives. However, its implications on knowledge management are not in focus yet. From the perspective of Information Technology (IT) digitization in production, logistics and supply chains is expected to strongly support knowledge management because of the somehow natural link to accessing and (re-)using knowledge. On the other hand, Industry 4.0 and digitization goes inline with dramatic changes in the labour world, in the future role of human workers, in requirements for qualification and training, in the design and organization of collaboration. Here, knowledge management might become a key driver for assuring a company’s sustainability. To what extent knowledge management needs to be adapted to digitization or can directly benefit from it, this needs to be subject to further investigation and discussion.

Methodology:
Based on a review on Industry 4.0 triggers and the current state of implementation on knowledge management in logistics and supply chain management, the paper draws the link between main concepts of Industry 4.0 and knowledge management, analyses challenges knowledge management faces in the age of digitization and discusses how a “knowledge management 4.0” should look like. Logistics and Supply Chain Management are used as application area as they form the backbone of the interconnected physical world.

Theoretical base:
The paper is based on a sound literature review on changes and challenges the fourth industrial revolution and especially smart factories or smart logistics provide to the way companies and supply chains need to operate in future. Furthermore, the paper refers to literature on the role of knowledge and knowledge management in companies of the future, but also to discussions on changes in society and labour world in general, particulary related to demographic change and human-machine collaboration.

Results:
The paper intents to discover implications of Industry 4.0 on knowledge management and particularly to elaborate whether KM implementation in companies and supply chains gets a push or requires a different approach in future. With this the paper will identify fields of future research.
for unlocking the developmental potential of knowledge in companies and supply chains and for appropriately designing respective knowledge management.

Originality:
The paper wants to contribute to research and development for assuring and increasing the practical relevance of knowledge management, strengthening its impact on organizational sustainability and supporting knowledge-based company development. It therefore aims to provide answers to the conference’s core question on how organizations can tailor, use, and extend techniques and tools from knowledge management for improving their business practices and processes.

Practical implications:
Even though the paper is meant to start into discussion in the field, first practical implications are derived for logistics companies and supply chains. However, major elements can additionally be related to other fields of business, too.
KNOWLEDGE MANAGEMENT IN THE COMPANIES WHICH DELIVER NEW INDUSTRIAL SOLUTIONS

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Wyższa Szkoła Logistyki

Keywords:
Knowledge management, intellectual capital.

Purpose:
The main purpose of this paper is to analyze process of knowledge management in organizations offering new technology, know-how and other innovative solutions for industry. The other target is to identify the most often met barriers and obstacles. Analyzing the knowledge management process the author take an operational management approach, considering methods used in analyzed companies.

Methodology:
The paper explores the literature on the topic of knowledge management. It offers conceptual insights and provides possible solutions for knowledge management problems (solutions for knowledge generation, application, combination and transfer). After reviewing the relevant literature, the paper empirically analyzes the processes of knowledge acquisition, generation, storing and distribution within a sample of firms.
The investigation was carried out to identify the most common solutions in the area of knowledge management. The sample was a group of 54 companies which deliver technology and innovative solutions to manufacturers. This paper discusses also components of the knowledge management outlines.

Theoretical base:
Knowledge management systems contain ways and methods used to gain or create, store and distribute knowledge within an organization. Corporate attention to knowledge management projects and solutions has increased substantially over the years. There are many opinions that well organized area of knowledge management can foster innovation, increase efficiency and productivity, may lead to the higher skill level of the staff. It may be also applied to solve future organizational problems. Organizational knowledge is often perceived as a strategic asset that needs to be generated, stored, transformed and transferred to chosen members of the organization. Knowledge management is also treated as an essential tool for preserving, maintaining and empowering the intellectual capital of the organization. Because of that organizations are implementing various methods to generate, share and exploit knowledge. Corporations are focusing on building intellectual capital, recruiting specialists and experts, staff training, skills improvement, development of knowledge management procedures.
The question is which methods are most efficient, which of them arouse the biggest interest among managers of companies which run their activity in a very competitive and innovative environment.

Results:
The paper discusses possible solutions for managing knowledge process.

Originality:
The biggest value and originality of this paper is the fact that it focuses on the organizations which create the innovative solutions using the knowledge.

Practical implications:
After recognizing the choice of solutions, it may be possible for managers to establish routines and to build procedures useful in this area. Such established routines provide strong incentives to manage knowledge in companies. Findings can guide managers to enhance the development of procedures in the field of knowledge management. They show that knowledge management practices most often are adopted in a well prepared way, as a system of coherent knowledge-oriented practices. The paper also suggests some useful practices that corporate system should include.
Learning Culture in the making - history, ideas and implementation of gamification in the context of corporate learning

Justyn Czekanski,

I will start with a short overview of how games have impacted the course of the history and that elements of games have been used for millenia also in other contexts than games (ancient pagan cultures, Jewish religion, the pre-columbian times in Mesoamerica etc.). Building on that I will prove that gamification today is just another level of an idea that has been with us for awhile and has shifted into the direction of a much better defined process that allows organisations to stir engagement, influence corporate culture and improve on KPIs. I will also briefly provide examples of companies that have successfully implemented gamification to create a learning-friendly environments and move on to a case study of my own.
Economic policy and Knowledge Management are two areas that have been distant in science. The question has some relevance because economic policy results in forecasts and those forecasts are based in linear evolutions. And those predictions may be politically and ideologically motivated. The interesting finding however is that according to some well established KM models Human Behaviour is not entirely rational and not entirely linear. Therefore we believe that if KM science would be used in relation to Economic forecasts, there would be benefits for the individuals, the organization and society as a whole. Life would probably seem more complex and bumpy but we would gain in realism, accuracy and truth,
Looking on the bright side of the middle-income trap? The competitiveness of global mid-tech leaders in the Polish exports

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Keywords:
Competitiveness, technological intensity, Polish exports, comparative advantage, intra-industry trade.

Purpose:
The primary purpose of the paper is to diagnose the competitive position of selected mid-tech product clusters in the Polish exports which used to be ranked from 1st to 5th in 2016 in the global trade. Another aim is to evaluate whether this case study can deliver some evidence-based arguments to counterbalance pessimistic outlooks related to dilemmas typical of the middle-income trap.

Methodology:
The research concentrates on the sample of mid-tech product clusters at the 4-digit disaggregation level of the Harmonised System. They were identified and selected from the database of the International Trade Centre (Trademap.org) covering the period 2010–2016 (or 2017 if available). The study is rooted in the classification of product clusters according to their technological intensity (primary products, resource- and labour intensive, low-tech, mid-tech and high-tech goods) provided by the United Nations Conference on Trade and Development (UNCTAD). The essential evaluation of competitiveness is based on the evolution of:
- The index of revealed comparative advantages (RCA) of every mid-tech product cluster our research sample consists of,
- The intensity of intra-industry trade between Poland and the rest of the world, measured by the Grubel-Lloyd (GL) index, within every mid-tech product cluster covered by this study; the reason behind its application is to identify the significance of its different subcategories: horizontal (HIIT), vertical low-quality (VIIT-LQ) and vertical high-quality (VIIT-HQ) trade.

Theoretical base:
The main idea behind the research relates to the paradigm of the middle-income trap and its characteristics discussed recently within the political and economic debate on the prospects and challenges to the growth and development of the Polish economy. Another theoretical background refers to the classical analytical concepts widely applied for empirical research within the field of international economics: revealed comparative advantage and intra-industry trade (as indicated above).

Results:
Expected results of our case study will answer whether the competitive position of global mid-tech leaders in the Polish exports has been robust/sustained (in terms of the value of RCA index) and hardly imitable (classified as VIIT-HQ; see above) in recent years (2010–2016). Another promising insight is whether they may be seen or treated as powerful engines of the expansion of Polish exports.

Originality
The novelty of this paper lies in the fact that it sheds light on the issue of the middle-income trap, which has rarely been applied to studies covering the Polish case.

Practical implications:
The results may be of a particular importance for political decision makers by providing evidence-based arguments to pick up potential winners in the global competition for foreign markets.
MANAGEMENT ACCOUNTING INNOVATIONS AND THE IMPACT OF ORGANIZATIONAL CULTURE, POWER, AND THE ROLE OF ACTORS: A CASE STUDY ENLIGHTENED BY INSTITUTIONAL LOGICS PERSPECTIVE

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Abstract
The scope of this paper is the organizational context of a Portuguese government agency, where a profound process of institutional change occurred between 2004 and 2013. Consequently, innovative management accounting and management control frameworks and practices (basically a quality programme and a balanced scorecard, duly integrated into a strategic plan) were implemented. Institutional theory and particularly the institutional logics perspective (Friedland and Alford, 1991; Lounsbury, 2007; Thornton and Ocasio, 2008) were used to inform the investigation. The empirical study showed evidence of a strong interaction between the macro (societal) level, the meso (organizational/institutional field) level and the micro (organizational) level. Therefore, main insights came from the 'Integrative model of the microfoundations of institutional logics' (Thornton et al., 2012). This model combines the interinstitutional system and the cross-level effects, identifying the mechanisms or elements that can influence change processes resulting in social practices and structures, and emphasizing the action of actors.

To support the investigation, a longitudinal, retrospective and in-depth longitudinal case study was conducted at the field site, where two research questions were posed: i) how did the organization embark on an organizational change process, and which were the main elements and mechanisms found in the process?; ii) can the 'Integrative model of the microfoundations of institutional logics' (Thornton et al., 2012 – Thornton et al.’s model) explain the process of institutional/organizational change and the implementation of innovative management accounting frameworks and practices in the government agency? Thus, interviews were conducted inside and outside the field site, and specific data and written material were collected, so that findings and evidence could imply the full answer to those research questions. The case study is mainly explanatory as existing theory is used to understand and explain the specific (Ryan et al., 2002).

Sets of multiple logics were found in the field site. Concretely, public administration mode logics, compliance logics and management logics emerged as a response on the organizational (micro) level to pressures and trends from the upper field levels – societal (macro) and organization field (meso) levels.

Findings indicate that the main elements or mechanisms, which supported the change process and the implementation of innovative management accounting frameworks, were culture, communication/negotiation, mobilization, power, and the role of actors, directed to decision making. One of these elements is identified in the Thornton et al.’s model at the societal and the organization field levels - culture. Power is linked to negotiation/communication and mobilization, and is seen in the model as a link between the micro and macro levels. However, in the field site, all these elements were found at the micro (organizational) level. Other elements were found in the organization (micro) level, particularly the role of actors which is not seen in the Thornton et al.’s model. This is a contribution of the study. Moreover, the combination and linkage of the several elements of the Thornton et al.’s model were mostly identified in the empirical study. Thus, the Thornton et al.’s model explains basically the events that occurred in the field site where the research was conducted as well as the reasons why the change process took place. This is another contribution of the paper.
Meeting the 2030 Sustainable Development Goals in Higher Education Tourism Programs

Daniela Dimitrov
Sue Slocum
Kelly Webb,

Abstract

Background Information

A review of the extant literature revealed that tourism academia has a considerable impact over the future ability of tourism to accomplish the 2030 Sustainable Development Goals (SDGs). Even though imparting critical thinking, decision-making skills, and ethical stewardship remain the primary mission of higher education, universities are becoming more market-oriented due to insufficient public funding. Neoliberal influences, aimed at customer satisfaction, change the role of higher education toward training, which reduces their ability to instill the critical thinking skills needed to sustain the SDGs by future generations.

Research Purpose and Questions

Research on sustainable development has not adequately addressed the influence of neoliberalism on tourism higher education (HE). Therefore, the purpose of this research was to investigate how tourism curricula are impacted by neoliberalism; how the role of educators is changing; and how institutions are communicating the sustainable development goals through tourism education. The specific research questions employed are:

1) How do neoliberal changes in higher education institutions (HEIs) impact research, teaching, and service?

2) How do neoliberal changes in academia impact the ability of future student generations to meet the sustainable development goals?

Main Definitions and Literature Review

The literature review conducted for this study includes extant literature in the following areas: 1) Core rational for neoliberalism (Dinica, 2016; Fletcher, 2009; Kline & Slocum, 2015; Ojeda, 2012; Morrell, 2009, etc.); 2) Neoliberalism in academia (Allen, 2011; Brackmann, 2015; Harris, 2005; Jankowski & Provezis, 2014; Mitchell, Leachman, & Masterson, 2017); and 3) Critical Thinking (CT) - (Brookfield, 1997; Halpern, 1998; Jamal, 2004; Tribe, 2002, etc.).

The sustainable development definition adopted was the one by The Brundtland report: “behaviour that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 8). In September 2015, the Sustainable Development Goals (SDGs) were adopted by all member states of the United Nations. The agenda for these goals focuses on ending poverty, protecting the planet, and ensuring prosperity for all (United Nations, 2015). The 17 SDGs were developed from, and replace, the former Millennium Development Goals of 2000. Updates to the new SDGs include a target for quality education (Goal 4), decent work and economic growth (Goal 8), as well as industry, innovation, and infrastructure (Goal 9).

Methodology

This research is qualitative in nature, involving interviews with 14 academics in nine different countries. It utilizes an instrumental case study approach as presented by Stake (1995) where the researchers use multiple cases to explain relationships within a specific phenomenon. The goal is to review multiple situations simultaneously in an attempt to generate a broader appreciation of a particular issue (Crowe, Robertson, Huby, Avery, & Sheikh, 2011). The case study technique was applied on an individual participant level, not to whole organizations.
Participants were selected based on a convenience sampling approach. An invitation was sent to potential participants using an international listserv (Trinet) that links academics, graduate students, industry professionals, and institutions within tourism, hospitality, and event management. Potential candidates self-selected their participation by contacting the researchers directly; however, certain qualifying criteria were applied. Participants had to be employed full-time at an institution of HE; specifically, within a tourism or related program, and possess a terminal degree (e.g. PhD, EdD). Moreover, all interviews were conducted over Skype in either English or Spanish, which determined participants’ command of one of those two languages. Qualifying candidates were sent the interview questions in advance in order to gain an idea of the subject material.

All interviews were recorded and lasted between 50 and 90 minutes. Transcriptions were done by a different individual than the interviewer, who also spoke fluent English and Spanish. All transcriptions were returned to the interviewees for final approval and any adjustments to their comments were noted and changed. All participants chose pseudonyms to ensure anonymity. They also represented diverse geographic regions: 4 representatives were from the US, 3 from Canada, 1 from Mexico, 1 from Ecuador, 1 from Turkey, 1 from Brazil, 1 from the Netherlands, 1 from Scotland, and 1 from New Zealand.

Results

Results indicated that consumer-centric policies and increased industry involvement in curricula are taking priority over the nature of education. Moreover, participants expressed a concern for their ability to enhance critical thinking skills in the next generation of tourism professions. Four themes were found: 1) the relevance of modern education, 2) reallocation of resources, 3) changing channels of communication, and 4) the role of ethics in academia.

The Relevance of Modern Education

Most respondents agreed that HEIs are placing greater emphasis on meeting students’ needs as a means to generate revenue and build a solid reputation. In turn, students maintain the purchasing power, which influences the subject material and the course selection (Naidoo & Williams, 2015). In addition, there seemed to be a consensus among participants that not only institutions feel that student expectations must be met, but that there is a new generation of students who are empowered to demand the job skills and the curriculum they seek.

Reallocation of Resources

In the neoliberal sense, bureaucracy is the sheer number of tasks that academics are required to complete in order to fulfill their job requirements (Johnson & Libecap, 1994). It appears from respondents’ opinions that these bureaucracies impact student success, specifically related to fiscal responsibility. Participants in this study emphasized the negative repercussions of neoliberal changes on the equitable distribution of university resources. In short, tourism programs appear to be hard hit by policy changes that privilege STEM (science, technology, engineering, and mathematics) disciplines, the lack of commitment to teaching staff, and the hidden costs passed to students and academics.

Changing Channels of Communication

One topic of discussion that emerged was the changing nature of networks and new avenues of communications. A frequent issue discussed by the participants was the need to network with other academics on a global scale. Many also found that networking with industry has become more important within the new neoliberal paradigm. In addition, respondents have noticed an increased communication with industry and requests from communities and businesses for research-based activities.

The Role of Ethics in Academia

Participants were asked directly about the topic of sustainability and ethics within the culture of their program. This question was interpreted in many different ways. Some
participants looked at sustainability as a classroom concept for student learning, such as helping
students to think critically and make informed decisions. Others brought concepts of inclusion,
diversity, work-life balance, and respect for the environment into the interview. Overall,
sustainability invoked strong emotions and participants demonstrated committed values in
relation to the subject. Balancing real-world relevancy with the changing nature of student
demands and industry influences was at the forefront of participants’ concerns.

Conclusion and Implications

The conclusion of this study is that the changing role of educators has directly impacted
the quality of education that HEIs are capable of providing. Therefore, academia must uphold
the fundamental values of HE in order to ensure the SDGs remain a viable future for society.
The primary challenges lie in finding the main purpose - to educate, not train, and to instill
responsibility in students, preparing them as critical thinkers. In so doing, academia must
address more supportive roles for junior faculty, increase solidarity among academics, and
uphold the fundamental values of higher education, in order for the future generation to uphold
the SDGs.

Limitations of the study were seen in the selection criteria for respondents that were
only full-time faculty members. Seeking answers to the same interview questions among part-
time and contractual academics worldwide, would provide further ideas in how to reshape
tourism HEI’s profile towards serving the SDGs. In addition, the study failed to investigate
whether sustainability was specifically taught in the curricula of represented tourism
departments. Shedding more light into the actual content of tourism curricula could confirm
or dispel participant’s fears regarding the reduced role of critical thinking skills, as well as
contribute to the arguments that tourism HEIs can, indeed, influence tourism to become more
sustainable and thus, accomplish the SDGs. Further analysis of the geographical and cultural
variances among participants’ views was also encouraged. Finally, the features of an education
humane organization (HO), as suggested by Dimitrov and Slocum (2017) could also be
explored in reaching the social sustainability improvements needed to accomplish SDG #8 for
decent work environments.

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Mobile applications of retail banks - the dynamics of development and its determinants

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Abstract:
The article contains identification of the dynamics of development of mobile applications of retail banks in Poland and its determinants. Characterizing examples of retail banks' use of mobile applications in shaping service offerings. Popularity of this offer of retail banks among customers. An indication of the determinant of the use of mobile apps especially related with customers and their preferences, expectations and the negative attitude and anxiety about security and privacy. The article uses methods of reviewing and analyzing critical, descriptive and comparative content in available domestic and foreign sources of the literature and reports on the issues of the mobile banking market.

Keywords: Innovations, mobile banking applications, retail banks
Negotiations in strategic economic games – challenges for developing an artificial intelligence engine

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Keywords:
Realistic gameplay, negotiations, economic strategy games, AI engine.

Purpose:
The aim of the paper is twofold: 1) to assess the quality of negotiations in strategic economic games within Player-NPC interactions by determining the gap in delivering realistic gameplay, and 2) to propose a design of an multi-agent system based on artificial intelligence providing a new quality of negotiations in strategy games – more realistic, ie. replicating behaviour of “live” players, enhancing the useability of the game (satisfaction of the human player in the single player game).

Methodology:
On the one hand, there will be an overview of the solutions on the market of computer games regarding the functioning of the negotiation mechanism in strategic economic games, which will be confronted with the assessment and perception of their functionality and usefulness by players.
On this basis, a game engine mechanism will be proposed that eliminates the main weakness of economic strategic games on the market in the area of negotiation mechanisms in game play. For this purpose, an in-depth analysis of the literature on the subject and evaluation of the applicability of multi-agent systems and AI techniques, such as artificial neural networks, monte carlo tree search (MCTS), reinforcement learning (Q-learning) or fuzzy logic will be carried out in order to develop a framework that suport machine learning model.

Theoretical base:
The study is focused on artificial intelligence methods and optimisation of utility function within decision process of player in gameplay as interactive computer games are an opportunity area for exploring techniques and theories leading to human-level AI.
While there has been quite a lot of research into various artificial intelligence methods, the primary focus of much of this research is concentrated on single-agent systems, or in larger systems with multiple independent agents [Franklin, Markley, 2013]. Our focus is on multi-agent systems where the team is coordinating its actions guided by some larger strategy.
On the other hand, most research on algorithms for games has focused on zero-sum games, such as Chess, Checkers and Go. This is not perfectly suitable for strategy games, especially economic ones as the whole idea of a market economy is essentially a non-zero-sum game; each participant in the economy has its own personal goals and by exchanging goods and services with one another each individual participant may benefit. The field of Automated Negotiations is an important field of research within Artificial Intelligence. The domains investigated in Automated Negotiations, however, are often of a much simpler nature than traditional games. One usually assumes that the negotiators make proposals for which the exact utility values can be determined quickly [Baarslag et al., 2010].
Little attention has been given to negotiation settings in which determining the utility value of a deal is itself a hard problem. The preferences of the agent’s opponents on the other hand, are often assumed to be completely unknown. This is in sharp contrast to Game Theory, in which reasoning about one’s own utility and the opponent’s utility is paramount. Furthermore, one usually assumes the negotiation algorithms do not require any domain knowledge or reasoning at all, or that all such knowledge is hardcoded in the algorithm [de Jonge, Zhang, 2017].
Results:
As a result we obtain a model of interactions between agents (modules) in strategic economic games, being intelligent multi-agent system, that are more realistic by replicating behaviour of human players within Player-NPC interactions and reproducing the complexity of the relationships that occur in socioeconomic systems – according to the paradigms of modern economic systems that increases the complexity of economic processes.

Originality:
The design of artificial intelligence mechanism providing more realistic (ie. replicating behaviour of “live” players) NPC behavior while interacting with the player in strategy economic games is innovative at international level.

Practical implications:
The design of artificial intelligence engine based on multi-agent system approach enables to deliver in practice more realistic AI behavior in strategy economic games. It responds to the main problem of AI engines of existing strategy games that is a must-be feature.
New engagement hidden in cryptocurrency world
Bartosz Bilicki

The purpose of this presentation is to show one of the newest trends in modern loyalty programs. By connecting gamification mechanics with cryptocurrencies we can achieve completely new level of user engagement. Ordinary, "flat" points are not enough to keep motivate new generations of users. In nearest future users will expect that game or application will extend inside concept of point by new dimensions like for instance: fluent value related to external factors. These concepts are closely related directly to cryptocurrencies, blockchain technology and tokenisation trend.
Perspectives of developing students’ skills for the knowledge economy.  
Case study Romanian Universities

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“Stefan cel Mare” University of Suceava

Keywords:  
Conceptual generic skills, core competences, knowledge management, learning and teaching.

Purpose:  
The main purpose of this research is to identify the level of students’ competencies according to the requirements of the knowledge-based economy. The necessity of this study stems from the fact that traditional teaching and learning has become insufficient for today’s dynamic environment. In this sense, we will pinpoint the opportunities in order to develop those competencies of knowledge-based economy students. In this approach, we will highlight the influence of generic concepts that stimulate the student to think strategically and learn through their experiences.

Methodology:  
We developed the research throughout administrating a questionnaire of 30 items. The questionnaire was addressed to 300 students, both undergraduates and graduates, enrolled in management and business study programs from USV. 240 questionnaires were filled in and processed using SPSS, version 19. Additionally, a factorial analysis was performed, with a view to extract the most important factors which are involved in developing students’ skills in university programs. Identifying and understanding the compositions and sources of these factors enables us to propose some options of improving the existing level of knowledge competencies and thus improve the curricula and further more the potential of the students as human capital within the knowledge economy.

Theoretical base:  
More than ever universities are facing a great challenge regarding the requirements of their students who must adapt to the fast going environment. The big issue is that universities must be able to prepare students for very different jobs than the traditional ones and also for jobs that are yet unknown but shall pop-up into the labour market at any moment. Thus the teaching process should change in order to meet these phenomena.  
At this point we believe that the classic ways of teaching and learning which consist in the basic knowledge transfer are obsolete and insufficient or incomplete. The improvement we suggest is to change the focus from simple learning of knowledge to developing thinking skills which will enable graduates to think and act in a strategic manner.  
Thinking and action should embrace new dynamics based on the whole spectrum of knowledge comprising rational, emotional, and spiritual knowledge fields. Generic skills, also known as core skills, key skills, essential skills, basic skills, soft skills, key competences, or employability skills are those capabilities which are liable to power personal and professional development based on learning.  
The difficulty of implementing a new vision concerning generic skills in universities comes mostly not from professors, but from students who should work harder in developing their conceptual skills and the capability of learning to learn in a changeable business environment. Learning to learn becomes the new mantra of university education, so that students develop their capacity of searching for new knowledge instead of acquiring it already processed through explicit lectures.  
This means that students assume responsibility for their learning and developing generic skills as mechanisms able to handle novel issues in a changeable world.
Results:
The obtained results show that most of the students from the undergraduate programs prefer the classical approach - less implication and responsibility in doing a harder conceptual work, while most students from the master programs are open to the new perspective of learning to learn, namely to developing generic skills.

Originality:
The current study provides a preliminary insight into the perception of Romanian students about developing generic skills and into their readiness to assume the role of main actors in the learning process. We consider this information valuable as it represents a starting point for the elaboration of any curricula improvement or education strategy.

Practical implications:
In the new turbulent business landscape, universities face a significant change in teaching their students. Although the research adds to the value of the extant literature on generic skills (also known as core skills), it is mainly focused on a Romanian sample, thus reflecting a context-based perspective.
Abstract: Digitalization of economies is one of the most recognized directions of development of contemporary economies. Digitalization of economies in the area of industry could be represented by conceptions such as: Physical Internet, Industry 4.0, and Logistics 4.0. 'Responsible Development Plan' (RDP) is a conception of development of the Polish economy to 2020 (with perspective to 2030). Main aim of this paper is identification of features of: Physical Internet, Industry 4.0, Logistics 4.0 in RDP.

In the paper, a systematic literature review of: 'Physical Internet', 'Industry 4.0', 'Logistics 4.0' and 'Responsible Development Plan' was used. Authors have developed a thesis that better developed countries (measured by GDP) are more interested in introducing an Industry 4.0 conception. For verifying a hypothesis, a correlation index was used.

Authors show that there is a correlation between the number of scientific papers (about analyzed conceptions) and GDP of the country in which these publications are developed. It shows that Physical Internet, Industry 4.0, and Logistics 4.0 conceptions are developed in more developed countries.

There is a lot of references to Physical Internet, Industry 4.0, and Logistics 4.0 (mainly to Industry 4.0) in RDP. It shows that RDP includes a right analysis of the current state and draws from experiences of more developed countries.

Keywords: Responsible Development Plan, Physical Internet, Industry 4.0, Logistics 4.0, Digitalization of economy.
PLATFORM-BASED COOPERATION - HOW TO CREATE THE VALUE IN NETWORK BUSINESS MODELS?
Patrycja Juszczyk

a) purpose
The rapid and significant changes in the environment, affect not only the functioning of the enterprises, but rather force them the need to adapt to the new conditions. These changes also create new opportunities, which become the goal that pushes entities to create innovative business models, leading to the emergence of new players on the market. The growing importance of ICTs sheds new light on the process of value creation but also encourages business entities to use innovative business models that in recent years has been revolutionized by network approach.

Nowadays, the network business models built around digital platforms, functioning as multi-sided platforms, are gaining in importance, both in the business and economic areas. The network business models, for which the core are digital platforms, are based on the interrelationships of companies, which are involved in common activities, what causes that value is created jointly by several participants of a model, connected by various inter-organizational relations. The researchers suggest that the network business models, including those built around the digital platforms, are one of the most promising solutions for many of today's enterprises. The number of science publications dealing with the issue of network business models and digital platform in that context can be undoubtedly considered as very limited. In particular, there are no studies regarding the ways of creating value in such models. Therefore, the paper aims to present the conception of value creation in network business models based on digital platforms with a particular emphasis on the specificity of the participants' relations and the impact of ICTs.

b) design/methodology/approach
The systematic, critical analysis of literature method will be used.

c) theoretical base
In the traditional approach to business models, the value creation process is linear and unidirectional. It includes suppliers, intermediaries and final purchasers of products and services, and thus combines individual elements of the value chain, i.e. production, distribution, marketing and consumer. The value is therefore created by all included participants - generated by all elements of the chain, considered as a coherent whole. On the other hand, the area of relational research - considered between entities - directs attention towards a multilateral, simultaneous and iterative process of value creation, which is appropriate for the specificity of network business models, built around digital platforms. In the value creation process there is a shift from the value chain logic to the value network logic. What’s more, it seems that the consideration on how to create value in the network business models should direct attention towards a deeper analysis of their specificity, properties and architecture. It should be noted that the researchers point out that a properly designed, network business model has the potential to both - create and maintain a competitive advantage but also to co-create value. What's more, it can be assumed that network models built around digital platforms are an example of complex models, with deliberately designed structure, determining their functioning and evolution in time.

It is indicated that within the digital platforms, there are actors who function in it and create the value separately or as part of the cooperation – consequently, the collective value creation is a key element of network business model. As the literature indicates, participants of the network model can occupy various positions in it, including a key or niche participant in the network or alternatively - the position of the so-called peripheral or central actor. It can therefore be assumed, that value creation and competitive advantage are influenced by the
number and quality of relational relations - characteristic for a given participant of the model - determining both their strength and type.

The digital platforms reveal architectural features in the form of a set of components with varying degrees of diversity or similarity between different platforms. Technology platforms reveal architectural features in the form of a set of components with varying degrees of diversity or similarity between different platforms. The structure of the discussed models consists of the core of the platform - with a high degree of connection between components (modules) - and peripheries, characterized by looser and less frequent connections. The literature indicates that the structure of the network affects the ability of the platform (and therefore the entire model) to develop and evolve over time. In addition, the general mechanisms of creating value within the model are also influenced by the specificity of the industry and the degree of vertical integration between the network participants.

d) results or expected results
The analyzed structure, properties and architecture of digital platforms, determining the specificity of individual participants, including amount and quality of their relations, as well as their role and position in the model. At the same time, the aforementioned position is closely related to the architecture of the model, which is being, in turn, determined by interaction between different actors. It seems that it is thanks to a suitable, purposefully designed architecture, network business models create value.

e) originality/value
The existing research concentrates more on individual inter-organizational networks, leaving multi-sided relationships analyzed at network level less recognized. A critical preliminary Polish and foreign literature review shows that the research on value in network business models has so far concentrated mostly on common value creation and without analyzing the impact of ICTs. Creating and appropriating value in network business models built around digital platforms, seems particularly important due to their specific approach to competition and cooperation (cooperating rivals create value, and through simultaneous competition they intercept it), collectivist attitude, mutualist reasons for acting and ethics of cooperation. The subject literature underlines also that in order to achieve success and survive, it is necessary to create value within a multi-sided platform, balancing generosity with the need to maintain value for oneself.

f) practical implications
The article points out effective structure and explains the components of network business models’ architecture, allowing for value creation by enterprises within a given platform, but also for potential clients.
Relational competence of a company – determinant of firm’s success in inter-organizational relationships

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Keywords: Relational competence, partnering competence, relational advantage, managing inter-organizational relationships.

Purpose: The purpose of the study is to present the multi-dimentional construct of relational competence (RC) and to analyze its role in determining firm’s outcomes in inter-organizational relationships. Relational competence consists of organizational abilities and routines of different type necessary at subsequent stages of partnership. Although factors building the complex nature of relational competence are broadly analyzed in relations management literature, most attention is put on them individually, while there is a need to conduct analyses of relational competence as a systemic, meta competence in search for interactions among its components and their diverse influence on firm’s outcomes in cooperation. The research is based on an assumption that relational competence is one of core competences, source of company’s relational rent. RC enhances firm’s outcomes in inter-organizational cooperation, but its particular components play different role in that relationship, so if organizations want to manage the sources of their relational advantage and develop effectiveness of their relationships and networks, they should properly understand the character of their relational competence components and their impact on overall success in cooperation.

Methodology: The research is quantitative, performed on a sample of 253 medium and large manufacturing companies of different industries. Sample firms differ according to the number of foreign partners in the whole IORs portfolio and experience coming from different types of relations (value chain cooperation, coproduction, supplementary services outsourcing, horizontal marketing and sales cooperation, strategic alliances and clusters); roles played in relation (of equal power, dominant and/or subordinate partner), number of partners; length of partnerships. We searched for relationships between relational competence as composite construct, organizational meta competence consisting of 7 second-order competences and firm’s outcomes in inter-firm relationships measured with effectiveness and efficiency scales. Statistica and SPSS.22 software was used. Nonparametric methods were applied: Spearman correlation, hierarchical multiple regression and dominance analyses with bootstrapping.


Results:
The findings confirm the role of relational competence as a source of relational advantage and bring information about its structure confirming its systemic character. In-depth analysis shows the role that different relational capability components play in firm’s performance in partnerships: reaching firm’s goals - effectiveness and economic efficiency. Results reveal that the most important components of relational competence are connected with firm’s intellectual capital, knowledge management capabilities and procedures enhancing inter-organizational and inter-personal integration.

Originality:
This study contributes to the inter-organizational relationships literature by indicating critical areas of competence at organizational level necessary for successful partnership, which serves as a guide for developing well-structured relational competence and potential for relational rents and competitive advantage.

Practical implications:
We indicate the importance of providing sufficient resources and deliberate development of organizational competences necessary to derive full range of profits from inter-organizational relationships. Firms should consider interrelations between different competences that in combination serve as an important predictor of their success in IORs.
Relationships between work-related hazards and occupational burnout among academics

Iwona Werner
Agnieszka Springer

a) purpose
The main research goal was to analyze the relationship between work-related hazards and occupational burnout and to identify risk factors that are of key importance in this process.

b) design/methodology/approach
All hypothesis will be verified based on the survey conducted in 2017 among a random sample of employees of various universities in Poland (N=340). For the sake of verification, the Psychosocial Risk Scale (SRP) developed by Mościcka-Teske and Potocka (Mościcka-Teske & Potocka, 2014) and the Polish version of OLBI (Oldenburg Burnout Inventory) were used in the survey. Within the research, the correlation analysis and regression model were used with the aim to evaluate the relationships between variables.

c) theoretical base
In recent years, the Polish academic community has been affecting quantitative and qualitative changes (e.g. Kwiek, 2015) that have a direct impact on the level of perceived hazards. At the same time, the level of perceived hazards is important for the level of professional burnout, which is related to the negative consequences felt both by the employee and the organization. The analysis was based on the T. Cox concept (e.g. Cox et al., 2009), assuming the division of psychosocial risk factors into factors related to the content and context of work. In the case of occupational burnout, reference was made to the Job Demand/Resources concept of E. Demerouti (Demerouti et al., 2001), in which occupational burnout is described in two dimensions: exhaustion - understood as general fatigue and a lowered mood with anxiety in response to organizational stress and loss of engagement – i.e. unwillingness to work and withdrawal from the organizational life.

d) results or expected results
In the article five hypothesis will be tested. H1: there is a significant correlation between work-related hazards and occupational burnout. H2: the risk of occupational burnout will be stronger in the group that undergoes the strongest pressure, i.e. in the group of assistant professors. H3: job content hazards are more important to increasing exhaustion than to increasing lack of engagement. H4: job context hazards are more important to increasing lack of engagement than for increasing exhaustion. H5: the level of professional burnout is stronger connected with job context than with job content hazards.

e) originality/value
The research is aimed at empirical verification of selected negative effects of work overload, especially that in current analyzes there is a lack of publications that would clearly indicate the role of individual elements of the content and work context on the occurrence of negative effects on the part of the employee. Other value is the conduct of this type of research among university employees in Poland: such research has not been carried out so far.

f) practical implications
Due to the analysis of the relationships between factors related to the content and work context that contribute to the occurrence of occupational burnout risk and due to the identification of factors moderating these relationships as well, it will be possible to develop recommendations regarding changes in the quality of the academic work environment. Despite the concentration of research on one professional group, the identification of relationships between the studied phenomena may lead to more general conclusions regarding the possibilities for organizations to take actions aimed at improving the quality of work offered to employees.
RESEARCH ON THE IMPACT OF THE UNCONVENTIONAL MONETARY POLICY MEASURES OF THE LEADING CENTRAL BANKS ON THE LONG-TERM GOVERNMENT BOND YIELDS BY THE INTEREST RATE TRANSMISSION CHANNEL

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Abstract: The main purpose of the paper is to conduct an impact assessment of the unconventional monetary policy measures implemented by the leading central banks – the US Federal Reserve, Bank of Japan, Bank of England and the European Central Bank, on the long-term government bond yields through the interest rate channel of the monetary transmission mechanism. The research is focused on the changes of the central banks’ key interest rates and their effects on the long-term government bond yields of the Euro area countries, non-Euro area Member States of the European Union, the USA and Japan. The empirical analysis covers 30 countries explored during the period from January 2010 to December 2016, with the use of monthly data.

Keywords: Unconventional monetary policy; interest rate transmission channel; long-term government bond yields.

JEL Classification: E52, E58, F30, G15; F42
**Abstract:** Self-initiated expatriation is a new trend in the area of expatriation, which emerged in recent years. The publications of previous years were to a large extent related to the SIE studies from the western developed countries. The interest in the phenomenon of SIE in recent years has significantly increased, which has also expanded the geographical area of research. Numerous publications devoted to self-initiated expatriates (SIE) and self-initiated expatriates (SIE) to the extent to fill in the theoretical gap, and empirical. The aim of the theoretical article is to present the complexity of the problem of self-proclaimed expatriates in organizational terms. Due to several publications on the organizational aspect of the SIE, a critical assessment of the current achievements of world scientists in this field was made to underline the need to continue further research in this field.

**Keywords:** self-initiated expatriates, self-initiated expatriate, expatriates, assigned expatriation.
SOME ADVERSELY FACTORS INFLUENCING MANAGERS’ DECISIONS

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Purpose:
In contrast to prevailing recommendations in literature and other sources, which address how to manage for success, the author identifies causes that may contribute to wrong decisions in solving managerial problems. There can be many factors which can create opportunity for decision mistakes and/or failures. A number of these has been carefully selected and presented in the paper. First, a specific features of managerial decisions are characterized. Next, the internal and external environments in which managers have to take decisions are described as well as the impact of company’s structure on managers’ behaviour is pointed out. Internal flexibility refers to the capacity of quick adaptation to the demands of the environment. This is necessary to survive. External flexibility is the capacity of an organization to actively influence the environment to reduce its ability to adversely affect on. Finally, lack of some features in personal characteristics of managers is addresses in detail from the point of view on the decision failures probability. It is of importance to understand the nature of the beliefs and assumptions of managers, and the cultural, social and political context in which they exist. It may help to distinguish between the intended strategy of managers – that which they say the organization will follow – and the realised strategy of an organization – that which it is actually following. The author believes that knowledge about possible failures will help managers avoid them. The paper can be also of value for practicing managers and students.

Methodology:
The paper presents the comprehensively study of many sources of relevant subject followed by a critical analysis and conclusions pertaining failures in management. Because of the enormous size of the problem the author has to subjectively limit the paper size, leaving a number of questions to discussion.

Theoretical base:
The paper is based on theory and methodology of management with particular emphasis on managers’ role in taking decisions that are important for reactive and proactive reactions for changing environment. It contributes to the theory and practice of management.

Results:
The paper results are two-fold: i) summary and synthesis of the problem in question, and ii) expected impact on management practice.

Originality:
To my best knowledge, I have never meet any paper of such kind, although similar subject has been incidentally mentioned.

Practical implications:
The paper can be of value for managers with reflexive approach. Also for teachers. It also lives a room for further discussions.
Team roles and styles of factual and relation communication and social interaction of the employees IT department

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The aim of the paper is to analyse the relations, influences of team roles, styles of factual and relation communication, and social interaction of the employees IT department. For the basic and applied research, a quantitative survey design was used three types of questionnaires – Belbin team role inventory and the rating list, ECR-CZ (Experiences in Close Relationships), and the questionnaire of out-group communication assessment. There were eight gender balanced teams of 53 participants in the sample. The choice of participants was targeted. The average age of the participants was 39, ranging from 22 to 50. Organizations have recently been forced to adapt quickly to the increasing demands and conditions of the global market. A possible way to succeed in a rapidly changing turbulent environment is to respond flexibly to business opportunities and opportunities for both cross-border and foreign intercultural cooperation, mutual co-ordination, partnership, teamwork, communication and sharing of information and communication using digital-technologies and social networks. An essential prerequisite for achieving the performance, success and synergy of the team is its knowledge and ability to negotiate, argue, persuade, teamwork. It is necessary to be empathic, assertive, and also to be able to deal with conflicts. The attachment theory as interpreted by John Bowlby is a possible way to analyse interpersonal relations in people-to-people contacts. Based on Bowlby’s knowledge and experience, it is possible assess and evaluate the relationship perception, and behaviour of the individual. In a deeper context, it allows understanding the relationships, influences and styles of communication between teams.

The authors of the paper found a positive relation between a team role of a Specialist and a dimension of attachment-related avoidance. On the other hand, there was a negative relation between a team-role of a Resource Investigator and attachment-related avoidance. Heterogeneous teams reported a better rating in out-group communication. The interrelations and relations between the rating achieved in the mutual communication and the team balance regarding the team roles were found in three questions on sharing of necessary information, open communication and willingness to understand others.

The aim of the paper was to understand the style of factual and relation communication, and social interaction of IT technicians in order to find appropriate, efficient and functional attachment and people-to-people contact and connection of team roles through open communication in the process of interaction.

The authors chose the topic due to their personal interest in the area of social psychology and psychology of work and organization with the emphasis on the use of theoretical and practical knowledge and experience in the fields of research and research applied in everyday professional practice. The results as found out by the authors call for possible use of attachment through communication and social interaction among the sample IT technicians.
The action knowledge management as a way to be prepared for risk

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Keywords: Risk; knowledge; exercise; preparation

Purpose:
The risk is defined by Ulrich Beck as an intermediate stadium between the safety and the destruction, defending that the perception of the risks determines the thought and the action. The simulation of the risk assumes matter relevance when preparing the population for a real situation through the experimentation of emergency plans during the accomplishment of simulated exercises. This preparation can be checked by the knowledge that people acquire in the execution and repetition of the procedures foreseen in the accomplishment of imitations, in other words, in the training to check the emergency plan. It is the goal of the present investigation to determine the explanatory factors of the effectiveness of these exercises in the preparation of the population for the risk. The conclusions can be extrapolated for the preparation for several types of risks.

Methodology:
In this study, the actions and the behaviors were analyzed developed in an imitation context, with foreseen actions, and where they settle down relationships among the several actors. ‘How do exercises prepare the population for the risk?’, it is the departure question of the study. The observation and analysis of the data collected during and after the accomplishment of exercises assume importance in the conclusion on the knowledge that the participants learn. The study is exploratory, based on primary data collected in the extent of inquiries, interviews and observation in laboratory. The chosen analysis field was Santa Casa da Misericórdia, where several analysis groups were considered, with an average of 15 elements each one. The participants` reactions / attitudes were considered in exercises with rules that have to be interpreted in practice, being the analysis of those relevant one for the research. Each one of the groups belongs to a valency different from the institution. In some of these valencies, the participants already had routines in the accomplishment of this kind of exercises; in other, the `actors` participated for the first time. Data were collected before, during and after the exercise.

Theoretical base:
Sage & White (1980) classify the risk in four categories, of which stand out the statistical risk and the predictable risk here, leaving of the existent report. This one assumed the importance of the preparation of the population and learning of selfprotection mechanisms. Kasperson et al refers that the ‘the researchers investigate the underlying patterns of individual perception of the risk and they identify heuristics and enviesamentos that determine the perception of the risk’ (1988, p.178). Began considers that the best way for the people to be prepared consists in the systematic accomplishment of evacuation exercises. Ramachandran (1990) considers, on the other hand, that the success of measures as the ones that foresees and they regulate procedures to reduce the risk depends on the occupants` of the spaces behavior when the accident happens. To analyze if the procedures developed by the participants in exercises evidence or no knowledge, we took in consideration the contributions of Lent (2001) and Kandel et al (2000). These authors approach several types of memory, where the procedure memory is
included, whose framing in our study is to owe of contemplating the habits, the rules and the norms.

Results:
The goal of this investigation consists of understanding the accomplishment of these exercises and the construction of simulated situations and check if they contribute or not for the preparation of the population for the risk, as well as understanding the form as they are interpreted and apprehended the transmitted rules. It is, analyzed the way that actions influence the knowledge.
In the end, it should be possible to conclude the accomplishment of these exercises contributes indeed for the preparation of the population for the risk, through the learning of procedures or if it will be necessary to rethink the preparation of the populations.
Boet et al (2014) remind health area as one in that the learning based on the simulation is used more and more by the professionals as a safe method to arrest competences as communication and leadership, in a crisis situation.

Originality:
It doesn’t exist any study about acquired knowledge in the accomplishment of the exercises. On the other hand, the difficulty in finding studies that relate the accomplishment of exercises with the learning processes prints need in analyzing the administration that involved do them of the acquired knowledge in these exercises. In this process, it interests to relate the communication processes, used parallel with the actions foreseen in the exercises, and the form like them influence in the knowledge acquisition.

Practical Implications:
The appealing practice of exercises and the repetition of the actions and actividades that understand take them to the learning of procedures. This study intends to analyze the knowledge of the participants of the exercises before, during and after accomplishment and to understand if participants acquired knowledge. The participants’ behavior in the exercises should be influenced by the acquired knowledge. In this sense, the behavior and the knowledge administration of who it participates in the exercises assumes relevance in the adaptation and preparation of the Plans of Emergency.
The results obtained in the sequence of the accomplishment of this study refer to the knowledge and automatisms that a sample of the population develops when participating in exercises for prevention of disasters and risks.
The approach to sustainable development learning in Knowledge economy

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Keywords:
Sustainable development learning, academic environment, students’ behavior.

Purpose:
The article aims to investigate the impact of sustainable development process and to analyze the effects of sustainability principles on students’ behavior. Hence, the article seeks to develop a strategic model to explain the challenging building blocks of implementing a sustainable development learning approach in the academic environment. The objective of the article is to underline that sustainable development courses make a significant contribution to an effective responsible behavior of students.

Methodology:
Our study developed a strategic model of sustainable development learning in the academic environment and used a survey data collected from students of the University of Craiova. We organized the knowledge of the students into two categories: the level of students’ knowledge and the impact of knowledge on students’ behaviour.

Theoretical base:
The theoretical research is based on literature review regarding the relationship between students’ competencies – knowledge transfer – development durable issues (UNESCO, 2017, 2016, 2015; Polanyi, 1967; Nonaka, Toyama and Hirata, 2008; Hossain et al., 2017; Naustdalslid, 2011; Spaiser et al., 2016). We will critically analyze the potential of students to develop sustainable competencies.

Results:
The results revealed that development durable learning and knowledge transfer mediated the relationship between the motivation and competencies of the students. Our strategic model includes competencies and responsible behavior of the students, and shows that some formal attributes increase their motivations towards developing a sustainable behavior. This suggests that ethical behavior of the students have to be sustained by tacit and implicit knowledge in sustainable development domain.

Originality:
The article contributes to the existing literature by providing a strategic model of analyzing the sustainable development learning. We analyze the impact of the sustainable development learning on responsible behavior of the students.

Practical implications:
The article provides practical implications for both scholars and for practitioners because our strategic model shows the factors that can contribute to creating and developing a sustainable behavior of the students and emphasizes what are the barriers that can limit the use of this behavior in practice.
THE CONTESTATION OF KNOWLEDGE IN PUBLIC PRIVATE PARTNERSHIPS
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The complexity of modern economies has, among others, elevated Public Private Partnerships (PPP’s) to a key element of national economic strategy. In fact, if anything characterises the BRICS grouping of economies, it is the centrality of PPP’s to the developmental model all 5 of them believe in. There, and elsewhere, the impact that a PPP might have on the economy as a whole, is often crucial. But PPP’s are not merely technical vehicles for economic projects. When PPP’s are analysed, it soon becomes clear that they constitute a new type of organizational phenomenon. PPP’s are a) multilateral, b) multi-organisational structures, c) focusing on an outcome over time horizons that far exceed those of conventional organisations, while d) each participating organization pursues strategic objectives that differs from the others. As such PPP’s fall in the category of complex distributed organisations where no central authority oversees the whole. This has a decisive impact on the knowledge interface and exchange in PPP’s. Conventional KM is as good as useless in a PPP setting.

In PPPs the default knowledge dynamic is one fraught with knowledge contestation and conflict, interspersed with periods of mutual incomprehension and confusion. This is a direct consequence of the organisational nature of a PPP which necessitates enforced compatibility of otherwise diverse, and sometimes opposing, knowledges. Where standard KM theory assumes a compatible knowledge basis, given with the singularity of the organisation, this compatibility basis does not exist in PPP’s.

Clearly, PPP’s pose a major challenge to KM (and organisational) theory. In simple terms: in the context of complex distributed organisations (in general, but particularly in PPP’s), the question is what knowledge, and whose knowledge is to be managed, how that knowledge is to be integrated, and what the authority is to sanction the propriety of such knowledge.

The first purpose of this thesis is to contribute some perspectives on the above question.

In order to do so a recent case study on this matter in the BRICS country of South Africa will be reviewed. In so doing the paper (secondly) contributes also to the call for country specific analyses.

Methodology:
The paper consists of two sections: and analytical section, and an (inductive) theory building conclusion.

The analytical section of the paper draws on the main results of a recent research project of the case, as set out below:

The case:
Due to its history as a primary supplier of raw material, SA generates the 20th most electricity in the world. It is in the process of increasing electricity capacity to the point that it will rank 8th. Over the past 20 years incisive technology changes have taken place in the field. At the same time major political and socio-economic shifts occurred, locally and globally. Of particular importance is the stand off between nuclear and solar power generation. (South Africa was a former nuclear power and runs the only nuclear generator in Africa. It also has one of the highest sunshine rates in the world). The result is a continuous shift in objectives with resultant controversies that have affected the country’s stability.

The analysis:
There is a surfeit of policy documents, civil society studies, political pronouncements, expert commentaries and journalistic contributions on the matter. The inductive analysis was done a) a in the form of a documentary analysis and interpretation of all key documents, and b) an interpretive framing with the use of basic Sensemaking Theory as espoused by Karl Weick (see KE Weick. 1995. Sensemaking in Organizations)
Theoretical base:
Despite using a defined interpretation theory (see point b) above) the research paradigm is inductive. As no previous studies of this nature have been done, the case study approached available documentation in an “open minded” greenfield way. It was postulated that situations of knowledge contestation are inherently sites of sensemaking. The case study, thus, applied sensemaking categories to interpret the findings.
The paper continues the inductive approach by offering theoretical perspectives with respect to KM theory on the basis of the case study findings.

Results:
The paper lists and briefly discusses the number of knowledge characteristics that were found to be intrinsic to the case. It is postulated that similar case studies would find most if not all of the characteristics in other similar PPP’s.
The paper offers views on the implications of the findings for KM theory and practice in the context of PPP’s.

Originality:
No such a study has been done before.
The economic importance that PPP’s have assumed in many national economies warrant closer attention to the matter.

Practical implications:
The importance of the research question can be seen in two areas.
Obviously, KM theory should benefit from a deeper understanding of knowledge dynamics in PPP’s. Perhaps the most important point that comes out of this is that a PPP is not entered on in the first place for financial reasons. PPP’s become necessary because no single partner has the knowledge and skills on its own to achieve a successful project outcome.
But secondly, and more significantly, it must be born in mind that the scope, cost and economic impact of PPP’s have become so big that the choice in respect of a directions for a PPP’s, could easily affect the direction of an entire economy. This is particularly true in emerging economies.
And such a direction, in the final analysis, depends on the knowledge base on which the “big decisions” (and investments) are founded.
The Evaluation of the Learning Process in Romanian Innovative Small and Medium Enterprises

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Keywords:  
Learning process, small and medium enterprises, profit, employee retention

Purpose:  
The article aims to evaluate the effects of the learning process in Romanian Small and Medium Enterprises (SMEs) at two levels. First, we have analyzed the SME’s learning process as an intrinsic motivational factor for the employees and then we analyzed the SME’s learning process as a profit source for the enterprise.

Methodology:  
We have employed three variables in our research, the learning process, the variance of the number of employees and the enterprise’s profit, using a quantitative approach to measure the relationship between them. The data was collected using a survey and from annual financial and statistical reports. In 2014, the number of employees from Romanian innovative enterprises was 142,840 (55,655 from small enterprises and 87,185 from medium enterprises), while the total number of employees in the SME sector was 989,009 (450,162 from small enterprises and 538,847 from medium enterprises). The data used in our study was collected from innovative SMEs from the South-West Oltenia region of Romania and we proposed the following research hypothesis: (1) There is a positive relationship between the employees’ learning process and the innovation of products and processes in SME’s and (2) The profit will mediate the direct relationship between the employees’ learning process and the innovation of products and processes in SME’s.

Theoretical base:  
We based our research on the findings of Damanpour (1995), Drucker (1982), Gray et al. (2003), Davis & Easterby-Smith (1984), Floren (2003) and others.

Results:  
The results will highlight the direct relationship between the learning process in SME’s and their employees number variance as well as the positive relationship between the profit of innovative SME’s and their employees’ learning process. The learning process is an important factor for the innovative SME’s an a source for the human resources’ development. Our results will provide insights regarding how the learning process contributes to an increase in the company’s profit, innovation and employees’ loyalty and commitment. Our findings indicate that the profit mediates the effects that the learning process has upon the innovation of products and processes in SME’s. This suggest that when the employees are engaged in learning behaviors, the innovative SME’s environment seems more attractive to them.

Originality:  
Our article aims to bring a contribution to the existing literature regarding learning process in SME’s with a practical research which aims to study the Romanian SME’s, considering that between 2012 and 2014, 1629 SME’s (1258 small enterprises and 371 medium enterprises) have employed (274 SME’s: 219 small and 44 medium) and/or process (594 SME’s: 235 small and 59 medium) innovation.

Practical implications:  
Considering the fact that our results show how the employees’ learning process in an SME can contribute to an increase in profitability as well as employee retention, we believe our article
is may be of use to practitioners, managers and innovators from the SME sector who aim to develop the learning process of their company.
The generic rift: artificial intelligence, automation, and the end of specialization

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The primary focus of my paper is the development of the knowledge economy in anticipation of the society of automation. It is clear that, when innovation is a buzz world that overshadows all other vital ideologemes of capitalism, knowledge becomes the leading commodity and the main mean of production (Castells, 2010). Meanwhile, the goal of the knowledge development underwent severe changes, and the new premise of innovations is not as humanistic as it used to be. The focus slowly shifting from the knowledge of how to improve the human practices and, therefore, bust the productivity towards the question of how to replace human practice and, therefore, burst the productivity even further. Once the knowledge economy becomes preoccupied with IT business, it stands on the way to make a human replacement out of science, the artificial intelligence, which aims to overperform the worker and finalize the automation of labor the industrial trend once failed to accomplish (Srnicek, 2016). Therefore, we witness the appearance of the third wave of services which is the human-centric machine.

Analyzing the state of the knowledge economy Walter W. Powell and Kaisa Snellman wrote that the growth means enhancement and substitution: ‘We define the knowledge economy as production and services based on knowledge-intensive activities that contribute to an accelerated pace of technological and scientific advance as well as equally rapid obsolescence.’ (Powell and Snellman, 2004, p. 201) The work “obsolescence” in our case is essential, as it now means not a systematical replacement of tools, materials, and technics, but now directly refers to a replacement of the physical labor as such.

Methodology
1. Analysis of the late stages of development of the knowledge economy.
2. Analysis of primary features of AI.
3. 1+2
4. Elaborations
5. Conclusions

Theoretical Base
Results:
In the end, I want to present the overview of main challenges which AI can present to the knowledge economy, and central problems it can cause.

Originality:
As there is a third stage of the service evolution, we simultaneously enter the new phase of the development of education, which stakeholders should now reconsider its role in the society and the meaning of the word “practical.” We once were engaged with the idea that education should be extended beyond the graduate and undergraduate periods to cover the entire lifetime, and then we wanted to squeeze the maximum out of the theory and convert every activity into the surplus. What is next for education here is yet to be determined. It is clear that the heavily promoted by western media ‘everybody can code’ motto will not go anywhere, but there is also an area in which the artificial intelligence is notably wrong — it is a generic knowledge (Norvig, P. and Russell, S., 2009). For now, it is the only thing which is a human-only prerogative, and which pushes the appearance of singularity back. The generalizations, the abstractions, the ideas of immaterial phenomena exceed the capabilities of machines, and, therefore, we maybe will see a reanissnace of multiple theoretical paradigms (new liberal arts?), which, considering the growing gap of social Inequality, can easily be a sign of new aristocracy, the future of educated few.

The particular problems I want to discuss are:
The lack of a ’big picture.’ The dilemma of the decision making which is inevitable will belong to machines. We already have problem with machines inability to absorb the complex values system of our societies, and, therefore, are witnessing a problem of ‘racist algorithms’;
The question of ownership. In most cases, algorithms are a proprietary technology, which allows the company to enclose not only the output but also the entire technic of production. The question is, what in this context happens both with Cathedral and Bazaar types of production described by Steven Raymond (Raymond, 1998) and how the wealth of networks defined by Yochai Benkler (Benkler, 2007). Moreover, do we really can end with a model of techno-feudalism (Ford, 2015) so can we keep knowledge behind the walls of a corporate sector (using the blockchain technology for instance)?
The end of specialization. The most glaring consequence of the fact that AI is going to abolish the human labor is that we are about to enter the phase of the global capitalism, where specialization is dead as when it comes to craftsmanship there is nothing better than algorithmic ´brains´ multiplied by the Big Data ´memory.’
THE IMPACT OF THE SHARING ECONOMY ON THE TOURISM SECTOR: THE PERCEPTION OF POLISH ENTREPRENEURS

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Keywords:
Digital platforms, sharing economy, tourism sector, new technologies, qualitative research

Purpose:
The aim of the paper is to explore how tourist entrepreneurs perceive the sharing economy (SE) providers, and its impact on both tourist destinations and the whole sector. The results allowed us to identify different factors determining this perception, and on this basis to develop a framework of three possible scenarios presenting the relationships between tourist entrepreneurs and SE providers, i.e. competition, coexistence, and cooperation.

Methodology:
In the paper we present the results of explorative qualitative research conducted with 16 entrepreneurs representing different types of tourism businesses. Individual Direct Interviews (12) and Telephone Direct Interviews (4) were conducted with tourism entrepreneurs conducting their activities in different regions of Poland. A semi-structured interview was used containing open and closed questions. The entrepreneurs were asked how they perceive SE activities (earlier SE phenomenon was explained to them by the interview moderator) and its impact on their businesses, given tourist destination, and the whole tourism sector. The interviewees were chosen purposefully as they had to: (1) represent important tourist attractions or services in each of the 16 Polish regions (voivodships); (2) be located both in small and big cities (to compare their perception of SE providers considering a city’s size); (3) be representatives of different types of companies (regarding type of activity: attractions, accommodation, tourist guides, gastronomy, etc.; and also: size, time of existence on the market, etc.). They were owners or managers of researched companies. After collecting the data, the interviews were transcribed. Cards were created for each of the interviewees and the text of those cards was afterwards coded. We used abduction as the coding process (Auerbach, Silverstein 2003) The last step involved interpretation of the results confronted with the literature.

Theoretical base:
New digital industrial technology is changing the way of how we live and work. In this context, new business models that have been unimaginable some time ago, now become possible to implement. These changes will also influence the society, and the economy. Nowadays, dynamic changes are creating a completely new environment for running a business. New technologies have opened the door to new opportunities, including alternative forms of access to market goods and services. Thus, we can observe different new socio-economic phenomena, with SE among them. SE has risen to prominence in recent years (Orsi 2014) as fast-growing and heavily-debated, especially in the tourism sector. By transforming and disrupting long-established business practices (Koopman et al. 2015) SE has been called: “the future of our world” (Botsman and Rogers 2011).
Although SE has recently achieved growing popularity in tourism, thanks to such digital platforms as Airbnb and BlaBlaCar, it still remains an under explored field. It is possible to point out some specific knowledge gaps on SE in the tourism sector.
Firstly, there is still no agreement between researchers on what SE really is. Different types of activities are included within this phenomenon. Moreover, different terms – e.g. collaborative consumption or on-demand economy – are used interchangeably, and usually incorrectly, or even as synonyms for SE (Bardhi and Eckhardt 2012; Martin et. al. 2015). Secondly, in addition to accommodation, many SE activities are emerging in other fields of the tourism business such as restaurants, transport/travelling or tour guides (Sigala 2017; Majchrzak 2016), and they are also relatively under explored. Thirdly, there is some research on users’ perception of SE (demand side) (Hamari et al. 2015; Tussyadiah and Pesonen 2016; Belk 2010), but entrepreneurs’ or destination representatives’ perception (supply side) have not been presented and analyzed. At the same time, it should be stressed that because of the great importance of the SE phenomenon in tourism, it is essential to understand the impact of new players (Cheng 2016) or at least how it is perceived by tourist entrepreneurs. Fourthly, SE activities are tendentiously seen as unfair competition and believed to be evading taxes and regulations (Heo 2016; Fang et al. 2016; Edelman and Geradin 2015). Therefore, the literature underlines a threat stemming from SE activities towards tourist entrepreneurs (Lyons and Wearing 2015). At the same time, some authors stress that SE has some positive environmental and social effects (Botsman and Rogers 2011) – e.g., digital platforms providing additional capacity in cities in peak seasons. However, this positive impact is still relatively under explored. There is still no coherent stance among researchers on whether SE harms or helps tourism development (Heo 2016). Fifthly, although some research on SE has been conducted from the perspective of Western countries (including Western Europe), relatively little attention has been paid to emerging Central and Eastern European countries, including Poland (Tolkach et al. 2016). The paper tries to fill these indicated research gaps.

Results:
Our research, allowed us to explore how tourist entrepreneurs perceive SE providers, and its impact on both tourist destinations and the whole sector. We identified different factors determining this perception, and developed a framework of three possible scenarios presenting the relationships between tourist entrepreneurs and SE providers, i.e. competition, coexistence, and cooperation.

Originality:
We identified 11 different factors determining the way SE providers were perceived by tourist entrepreneurs and divided them into 2 groups: endogenous – specific for a particular entrepreneur (the type of business, business/activity range, company size, target group, the level of new technologies used, and the level of an entrepreneur’s openness to new market opportunities), and exogenous ones – specific for a country or a city where a particular entrepreneur operates (the level of general trust, the level of SE development, a city’s size, legal regulations and new market trends). The results show that SE providers are perceived by tourist entrepreneurs not only as competitors, but also as potential co-operators, as well as in a neutral way. On the basis of the research conducted, we claim that the way SE providers are perceived depends on the occurrence of the above factors, as well as their intensity.

Practical implications:
SE can stimulate cooperation in the form of joint booking platforms, covering all units from a given destination aiming at building positive relationships between tourism entrepreneurs and SE providers. Their activities may in turn complement the development of individual businesses, destinations and the entire tourism sector. Joint booking platforms and other forms of cooperation, based on innovative technologies and intellectual capital (crucial in the knowledge economy) finally lead to a higher quality of tourist offer in a destination. Thus, we believe, the topic is relevant for the TAKE Conference, especially with reference to dynamic and innovative business models based on new technologies and digital platforms.
The impact of spatial proximity on the form, scope and intensity of cooperation and networking in tourism region
Katarzyna Czernek and Justyna Majewska

Purpose
Tourism destinations are complex systems of interconnected and interdependent components which behave in a non-linear, self-organizing way (Boavida-Portugal et al., 2015). They are amalgamated of a vast range of heterogeneous actors collaborating but also competing in spatial proximity within tourism clusters (which is referred to agglomeration, i.e. spatial concentration of economic activity), and taking advantage of positive externalities specific to agglomeration (Marshall, 1920; Beaudry & Schiffauerova, 2009; Prager & Thisse, 2012). However, cooperation is one of the conditions for a tourist region to achieve competitive advantage (Crotts, Buhalis, & March, 2000; Fyall & Garrod, 2005).

There is a general claim in the literature that the more proximity between actors, the more interaction, the more interactive learning, the more knowledge creation, and the more innovation. However, Boschma (2005) argues that proximity may also have negative impacts on innovation, which is the case for different dimensions of proximity, including geographical proximity. Accordingly, not only too little, but also too much proximity may be detrimental to interactive learning and innovation. Torre and Rallet (2005) also raise the question of the negative effects of geographical proximity, which creates tensions between the actors who use limited support-goods and tends to damage the local relational network. They show, among others, that there is a disjunction between the need for geographical proximity and colocalization of actors by introducing professional mobility and temporary geographical proximity.

Thus the aim of the paper is to assess the role of spatial proximity in networking and undertaking cooperation in tourism region considering different forms, scope and intensity of cooperation. We took into account both intention to undertake cooperation of different kind (formal and informal, such as: bringing guests to the facilities/attractions, recommending objects to guests, price reductions, joint products and marketing, etc.) and ongoing cooperation in tourism region.

Design/methodology/approach
We applied exploratory analysis and three different estimation approaches in order to determine the importance of spatial proximity in undertaking and intensifying cooperation in tourism region, namely: 1) logistict regression, as well as 2) classification trees analysis (hierarchical exploratory technique), and 3) Local Moran I statistic as Local Indicator of Spatial Association (LISA) – within exploratory spatial data analysis (ESDA).

We applied binomial logistic regression model and we estimated odds ratio – the relative probability of undertaking the cooperation rather than not cooperate due to entities localisation and their other characteristics.

Moreover we applied classification trees analysis as an exploratory technique within Data Mining in order to determine a profil of cooperative entities based on different, hierarchical interrelated characteristics, including localisation and spatial proximity.

Finally we used techniques of exploratory spatial data analysis (ESDA) and Local Indicators of Spatial Association (LISA) – the spatial statistics of autocorrelation – in order to investigate the occurrence of spatial interdependence between tourist entities with regards to intensity of their cooperation. On this basis we determined the clusters of entities with the highest rate of cooperation but also those with the lowest one, agglomerated in spatial proximity.

We used data collected within surveys carried out among 225 entities selected as purposive sampling, beeing localised in the communes associated as so called “The Beskid Five”, i.e.: Wisla, Ustroń, Szczyrk, Istebna and Brenna. Additional we derived data on GPS coordinates of entites localisation based on their postal address with the use of software tool.
Theoretical base
In analyzing tourism cooperation there is a big variety of relevant theories that suggests a great diversity of tourism cooperation analyses including: transaction cost theory (Coase, 1937; Williamson, 1975), cluster theory (Porter, 1990), resource-based theory (Prahalad & Hamel, 1990), resource dependency theory (Pfeffer & Salancik, 1978), relational exchange theory (Donaldson & O’Toole, 2000), social network theory (Granovetter, 1985; Wellman, 1988), business network concept (Håkansson & Snehota, 1989) or agglomeration economies (Marshall, 1920; Jacobs, 1969). Some theories consider spatial proximity as crucial factor triggering cooperation and networking.

Some of the agglomeration specific externalities, such as knowledge externalities, complementary firms and business or social networks, manifest themselves specifically in the tourism sector (Yang, 2012). Knowledge and information flow much more easily between the firms in an agglomeration region, facilitating a stronger social and economic network and enhancing innovations in tourism (Jackson, 2006; Sørensen, 2007). At the same time, faster communication through local channels constructs time-saving tourism experiences for tourists and provides a multiple and instant product supply for tourist’s diverse demands (Yang, 2012, p. 1348).

On the other hand, there are varieties of approaches in proximity research since the proximity school started to develop 20 years ago (Balland, Boschma, & Frenken, 2015). This includes inter alia the thesis of optimal proximity or disentanglement of various dimensions of proximity, including geographical and non-geographical proximity dimensions. A recent development has been the integration of network theory into the proximity framework (Boschma & Frenken, 2010; Balland, 2012). In tourism studies the network approach in organizational proximity context has been developed eg. by Czernek (2013). A desirable direction for further research would be to include geographical dimension into this approach. This study fulfils this research gap.

Results or expected results
As a result we confirmed that spatial proximity is important factor affecting cooperation of entities and networking in tourism region while the relationship is not linear. The geographical distance between entities split statistically significant the whole set of entities into homogenous groups due to intensity and form of cooperation, providing a specific profile of entities that intensely or weak cooperate. There are also other factors that strengthen the importance of spatial location in enhancing the networking and interactive learning in tourism region.

Originality/value
The investigation of the role of spatial proximity in enhancing cooperation and networking in tourism region is a novelty step towards integration of network theory into the proximity framework. This is postulated in the current regional economics literature (e.g. Balland, 2012; Boschma & Frenken, 2010).

Practical implications
The application of the results could be beneficial in optimization of localization decisions of firms and entities that are willing to take advantage of the agglomeration economies, i.e. positive externalities such as interactive learning, knowledge creation and innovation in order to provide adequate, comprehensive, and instant product supply. The results also enable discussion on importance of different types and forms of cooperation between entities as well as on implications of relevant marketing strategies in tourism regions and more effective activities of DMOs responsible for applying adequate tourism policy. This is because the results show factors that influence cooperation in tourism regions and their importance and, at the same time, directions of enhancing competitiveness of these regions.
The role of knowledge in bioeconomy of Germany

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Keywords:
Knowledge, bioeconomy, biotechnology, research and development activities.

Purpose:
Globalization as well as the deterioration of pollution-related environmental and natural environment threats call for the development of pro-social and economic development processes. Among the challenges are: increase in the size of the world population, increase in food consumption, reduction in dependence on fossil resources, reduction of greenhouse gas and carbon dioxide emissions, security of energy supply and products, environmental issues, expected economic benefits, growing demand for products, sustainable development, food security. The answer to these challenges is development based on the concept of bioeconomy, based on renewable resources and knowledge. The aim of the research is to identify the role of knowledge and scientific research in the development of the bioeconomy in Germany. Bioeconomy uses knowledge from biological sciences, agronomy, ecology, nutrition science, social sciences, biotechnology, nanotechnology, information and communication technologies and engineering. However, in relation to the bioeconomy, knowledge in the field of natural sciences, including biotechnology, is of particular importance.

Methodology:
The goal of implementing the bioeconomy concept is to create a more innovative, resource-efficient and competitive society. It is important to disseminate the results of scientific research and innovation using the support from the political and legal environment, as well as to base the development on the use of renewable resources. The study will use methods of descriptive and comparative analysis. The analysis will include statistical data on the number of biotechnology enterprises in Germany, expenditures on research and development activities and sources of its financing. It should be noted that the development of the bioeconomy is conditioned by public investments in research and innovation, support offered in regions, as well as the creation of new financial mechanisms contributing to private sector investment in the development and commercialization of new products. Hence, the analyzes will be subject to the conditions of scientific and research activity directed at the needs of the development of the bioeconomy in Germany, in the form of identification of support instruments from the government, regions and institutions.

Theoretical base:
The theoretical basis of the study will be the concept of a knowledge-based economy (KBE). It is worth noting that the bioeconomy is described by some authors as a knowledge-based bioeconomy (Knowledge Based-BioEconomy), which also through its very nomenclature testifies to its close relationship with the concept of a knowledge-based economy.

Results:
The result of the research will be an indication of good practices in the creation and diffusion of knowledge, which is of particular importance for creating conditions for the development of the bioeconomy on the example of the German bioeconomy. An example of this type of instruments can be, among others knowledge transfer networks, consultancy services and business support services, bioclusters, science and technology bioparks, financial instruments, etc. supporting the creation and diffusion of new knowledge.
Due to the complexity of the processes of creating new knowledge, there is a need for cooperation between private entities and creators of knowledge (ie, among others universities, research and development institutes) in order to achieve synergy effects and ensure efficient knowledge transfer.

Originality:
The importance of the role of knowledge, research and innovation is emphasized in the concept of bioeconomy. Therefore, there is a need to identify good practices in the field of instruments supporting the creation and diffusion of knowledge focused on the needs of bio-economic enterprises. From this point of view, it is important to analyze the main areas of knowledge created by science, as well as to determine the ways of its commercialization by private entities. An important role in this respect may be played by various types of cooperation networks whose activities may be supported by institutions and public authorities at various taxonomic levels.

Practical implications:
The identification of instruments for creating and diffusion of knowledge for the needs of the bioeconomy can serve as a guide for local government units at various taxonomic levels, as well as governments of various countries willing to base their socio-economic development on the concept of bioeconomy. These instruments can also be used for various types of business-related institutions in creating innovative support instruments for business entities.
The Seven Images of a Knowledge-Based Economy

KEYNOTE SPEECH

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Gareth Morgan in his seminal book „Images of Organization” gave birth to a new school of management, which is now called ‘postmodernism in management’. Although it opened up a number of research opportunities, it seems that they have not been fully explored. Traditionally Economics research has been dominated with quantitative approaches, and qualitative approaches to describing the economic reality did not serve as an important source of inspiration and creative ideas. This paper aims to use some concepts developed in management science, namely ‘metaphors’ developed according to Gareth Morgan’s school of thought. The metaphors are intended to provide a better understanding of organizations but are not popular as a means to describe the economic landscape. The author has been conducting research and observing the expansion of a KBA since 1996 and, based on his reflection endeavors to present the somewhat different view of a KNBA where the dominant logic is not explained by specific macroeconomic indices such as share of high-value added exports, no. of higher education graduates or R&D government spending. The paper discusses the seven distinct (although sometimes overlapping) images, or perspectives of a KBA which include (1) de-materialization (weightless economy); (2) de-humanization (Industry 4.0, Internet of Things); (3) de-carbonization (green economy); (5) information overload (Economy of Attention), (6) the role of global rankings as drivers of a KNA (not vice versa) and last, but not least, some observations on (7) education systems and the concept of leaning society. Each of the images is provided with some measurement approaches and their implications for further research. A part of the discussions is devoted to the role of the service sector in the economy and its adequacy to describe the economic development in the 21 century. The growth of the service sector was analyzed explained by the three-sector theory formulated by A.G.B. Fisher, C. Clark, and J. Fourastie. The application of the metaphors to understanding the dynamics of national economies and setting research agendas for economic science is discussed in the context of the Forth Paradigm (as described in the book: The Forth Paradigm, Data Intensive Scientific Discovery Microsoft Research 2009).
The Seven Myths and One Golden Rule of the Intellectual Capital

KEYNOTE SPEECH

Constantin Bratianu

The research on intellectual capital is at crossroads, due to the failure of measuring and reporting it by using the accounting paradigm. Many people question at this moment if the intellectual capital represents a new economic entity or not. The keynote speech is based on a critical thinking analysis of the concept of intellectual capital, and of the models used for its explanation and measurement. The analysis demonstrates that there are some myths in explaining and using the concept of the intellectual capital, but also a golden rule. The basic idea of this keynote speech is to stimulate debates and ideas for a new paradigm of understanding and dealing with the intellectual capital.
The theoretical comprehension of intangibles and knowledge management in the 21st century economy

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Abstract

In our contemporary economic environment, intangibles are considered to be the key resource in sustaining and gaining competitive advantage. Intangibles have become increasingly decisive in organisations and the wider economy, as economic development depends less and less on tangibles. The word ‘intangibles’ is a widely-used economic term with multi-layered meanings. However, it remains unclear what intangibles actually mean and how to use them to measurable advantage.

This paper refers to knowledge as a core seed of intangibles and focuses on the management of knowledge which is defined to a large extent as a process involving the acquisition, creation and sharing of knowledge.

In more detail, this research takes a step back in order to attempt to improve understanding of the term ‘intangibles’ in relation to knowledge management, along with their role in gaining added value.

In this article, a tentative approach is proposed by analysing intangibles and knowledge management from a socio-economic perspective. In doing so, this study embraces investigation into the central insights of both terms based on prior conceptualisations. The analysis is furthermore anchored in the current economic context, and the interrelations between both concepts are analysed. As a result, this research lays terminological foundations and understandings of the terms ‘intangibles’ and ‘knowledge management’ in the 21st century economy.

Keywords: Intangibles; Knowledge Management; Knowledge; Economy; Organisation
Towards Innovation Union in Europe: Should Innovation Policy be Evidence-based?

Abstract of a keynote speech at the conference TAKE 2018, Poznań 11-13 July, 2018

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Nowadays, the European Union is challenged in the global arena by emerging economies as well as by the US in terms of developing innovation and capitalizing on knowledge and technology. The need to elaborate long-term strategic visions for the European Union research and innovation system has been recognized in the “Europe 2020” strategy, especially in its innovation union initiative. One of its objectives is to strengthen the European science base and to use scientific evidence in the process of innovation policy-making. The idea of using scientific evidence in order to shape policies aimed at solving society’s problems already existed in ancient times and can be found in the works of Plato, Aristotle, Descartes, among others. Today, an increase in the demand for scientific evidence has been noted, along with questions posed to scientists by policy-makers and by the entire society regarding a range of choices in energy, the consequences of climate change, food safety to health care or social exclusion.

The main objective of this keynote speech is to discuss the direct and indirect effects of the EU innovation policy instruments implemented as an Innovation Union initiative. An emphasis will be put on the tools that promote a stronger European dimension of R&D, including an evidence-based approach to policy making. The speech will be based on the results of the European Union Horizon 2020 project on “Investigating the Impact of the Innovation Union (I3U)”, (H2020-INSO-2014, grant Agreement: 645884).
Use of blockchain mechanisms in automated multi-criteria negotiation models for e-business

Andrej Bergar

a) purpose
We aim to consolidate the strengths of two paradigms – traditional multi-criteria negotiation processes and more recent blockchain technologies. In this way, we obtain a highly scalable, secure and theoretically sound platform for consensus seeking multilateral negotiations in large automated e-business systems with many collaborating or competing service providers and customers. The introduced negotiation strategy is applied to reach a common agreement on transactions that maximize the multi-criteria utility of all involved parties. The blockchain platform provides transaction security, integrity and persistence. We propose a protocol for the electricity energy distribution domain, in which providers are granted a limited access to metering data, and compete over consumers by dynamically forming sales and subscription models considering multiple criteria.

Additionally, we study and evaluate the efficiency of standard blockchain mechanisms if directly applied to multi-criteria negotiations. The motivation for this analysis is the fact that blockchain has been introduced as a technology for achieving an unanimous transaction based and traceable consensus among many parties, however it does not follow the key foundations of group decision-making and negotiation theories, such as multi-criteria utilities and concessions.

b) design/methodology/approach
We first make a review of multi-criteria group decision aiding methods and negotiation processes. We then study and analyse blockchain mechanisms from the perspective of consensus building and smart contracts. We identify common properties of both approaches, and determine which consensus related properties and concepts are not supported by blockchain. With regard to these findings, we propose some extensions of blockchain, and define a methodology which consolidates and integrates both approaches in order to enable innovative business models for transaction based multilateral consensus seeking negotiations in cooperative or competitive settings with large data sets and multi-criteria preferences. We finally propose a protocol for an applicative business domain from the area of electricity distribution.

c) theoretical base
The research is based on two relevant theoretical areas: (1.) group decision aiding and negotiation systems, and (2.) blockchain technologies.

Information technology supported nonroutine business tasks, such as provision of services/products which are available on the electronic market in the form that is highly customized to the needs of clients, require automated negotiations that credibly capture preference structures of all potential partners. For this purpose, different negotiation strategies and multi-criteria decision-making methods can be applied by agents of service providers and customers in order to reach the agreement on transactions that maximize the utility of all involved parties.

Blockchain is a recent and widespread technology that aims to guarantee a traceable and trusted consensus on large sets of transactions. Transactions are stored in finite non-modifiable blocks which are persisted in a network of concurrent nodes. Each block is secured with an encryption hash function to protect the access to data on completed transactions. Blocks are replicated for different owners so that transactions are persisted in a distributed manner. Contracts are also made to establish the trust among participating partners.

However, blockchain does not address conflicting transactions of competing parties, preference structures with multiple criteria, concessions and negotiations to maximize and/or minimize utilities of collaborating partners in win-win situations or competing stakeholders in win-lose situations, and other mechanisms that are supported by traditional multi-criteria negotiation and bidding processes. To the best of our knowledge, there is no previous research that would
consolidate and integrate the two approaches. We expect that such consolidation would allow to efficiently apply many new, useful and economically viable business models in e-commerce.

d) results or expected results

Expected results are the following:

- systematic analysis of blockchain technologies and multi-criteria negotiation processes with regard to common properties and concepts that pertain to the consensus on distributed transactional data and multilateral utilities;
- assessment of the efficiency of standard blockchain mechanisms if directly applied to multi-criteria negotiations, and identification of required concepts that are not directly supported;
- a consolidated methodology for consensus seeking multilateral negotiations in large automated e-business systems with many collaborating or competing service providers and customers;
- an innovative application oriented protocol for the electricity energy distribution domain.

d) originality/value

To the best of our knowledge, this is the first research that combines blockchain technologies and the group decision and negotiation theory with regard to achieving a multilateral consensus on preferential utilities and secure transactional data. We assume that this could have a high potential impact and value for various business models in e-commerce and similar domains.

e) practical implications

There are many practical implications and possible applications, which include:

- scalable distributed auction and bidding protocols and systems;
- multi-criteria group decision-making systems and multilateral negotiations which are subject to big data, security issues and many potential participants;
- innovative business models in which service providers dynamically maximize their multi-criteria utilities by being able to gain an insight into secure transactional data, design and provide optimal services and service strategies, select the best possible consumers/costumers, and outperform their competitors, while consumers/costumers dynamically maximize their utilities by choosing the best available services and service providers;
- innovative business models in various domains, such as energy distribution and telecommunications;
- etc.
Use of outsourcing in the field of accounting in the process of managing a small and micro entity in the global market - opportunities and threats.

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Keywords: Outsourcing, accounting, economical information, management.

Purpose:
The process of globalization of the economy, dynamically changing market conditions (growing international competition) and formal and legal conditions of the entity enforce changes in the sphere of goals choices and shape a new way of business operations. The social and economic changes taking place determine also the process of changes in the accounting system, so that it shall be adjusted to the current conditions in which business entities operate. Changes in the accounting system take place in two directions - formal and qualitative. The formal aspect results from national and international regulations, e.g. EU directives, the Accounting Act and accounting standards. At the same time it should be emphasized that the applicable regulations have both obligatory nature, meaning absolutely mandatory, guaranteeing a presentation of a faithful view of a property and financial situation and a financial result of the entity, and optional, giving the individual the right to choose specific methods, rules or solutions permitted by the Act, e.g. methods for asset valuation and liabilities, a method of recording and presenting financial information (Kiziukiewicz 2003). Qualitative issues are related to the scope and value of information generated by the accounting system (reporting) for recipients, both external and internal. The purpose of modern accounting, including reporting, is to generate useful information for making rational economic decisions. It is worth emphasizing that ‘if financial information is to be useful, it must be useful and faithful to present what they are to present’ (International Financial Reporting Standards 2014). Business units are interested in a wide range of cross-sectional information generated by the accounting system, both financial and non-financial in business processes. Recently, quite significant changes in accounting have been introduced in Poland, mainly in reporting in connection with the implementation of two European Union directives (Directive 2013/34 /EU, Directive 2014/95/EU). These changes concern [Kamela-Sowińska, 2016]:
- the structure of the financial statements, including the scope of financial information disclosed therein, mainly by small and micro enterprises (in accordance with Directive 2013/34 /EU),
- the obligation to provide financial reporting for disclosures on non-financial related information from the so-called Corporate Social Responsibility (CSR) and diversity policy information applied to the entity’s administrative, management and supervisory bodies with respect to aspects such as age, sex or education and work experience, objectives of this diversity policy, how it is implemented, and effects in a given period reporting by some large entities and groups (in accordance with Directive 2014/95/EU). The changes in this case concern large public interest entities for now.

In the era of social and economic changes, strong competition, changing legal regulations, market survival and the effective functioning of micro and small entities, it is possible by delegating the provision of outsourced services to highly specialized entities. In the literature on the subject, ‘the commissioning of certain services or tasks to external companies specialized in a given field’; (Bielecki, 2001) is defined by the authors as outsourcing. Some authors express the opinion that ‘outsourcing considered from a strategic perspective is today one of the most important and most profitable business methodologies, because it allows organizations to fully use their capabilities and achieve optimal efficiency and flexibility in responding to customer needs’ (Gay, Essinger, 2002). Sobańska sees outsourcing as ‘the type of decision to eliminate specific activities from the organization, services that do not contribute to the growth of the company’s value and the strength of its competition’(Sobanska, 2003). The aims of the article is to present the
opportunities and threats resulting from the use of outsourcing in the process of making business decisions by managers of small and micro entities on the global market - the results of empirical research.

Methodology:
The method of literary analysis, business documentation, content of legal regulations as well as methods of comparison and inference were used to solve the presented research problem.

Theoretical base:

Results:
Demonstration of opportunities and threats resulting from the use of outsourcing in the field of accounting in the process of managing a small and micro entity in the global market - results of empirical research.

Originality:
Demonstration of opportunities and threats resulting from the use of outsourcing in the field of accounting in the process of managing a small and micro entity in the global market - results of empirical research.

Practical implications:
Application in business processes in a global and competitive market.
White lie or true blue: Consumers’ packaging choices depend on color of retail environment

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Keywords:
Color; retail environment; packaging; purchase intention; attractiveness.

Purpose:
Considering that color is one of the most determining stimuli in visual perception (Babin et al. 2003), here we chose to explore the relation between packaging color and contextual color. Specifically, we were interested in investigating the role of complementary colors (product × store environment) in consumer behavior. The attractiveness and purchase intention of two different category products (chocolate and soap) were measured in different situations obtained by the manipulation of the color of the product as well as of the store environment. Moreover, we investigate if these choices are product dependent (e.g., do food and non-food products evoke the same packaging color choices in a given retail color context). We predicted that product and retail environment would interact affecting the products’ perceived attractiveness and purchase intention.

Methodology:
We consider that the decision-making process in the acquisition of a product cannot be dissociated from: (i) the product itself; and (ii) the environmental context. Due to the complexity involved in color symbolism and perception, we have tested the same setting in two different product categories: a food product (chocolate) and a non-food product (soap). Thus, we suggest that the emotional weight of stand-alone products might differ from that of context-embedded products. Moreover, we posit the following hypotheses:
H1a: When products have complementary colors to those applied in the store, purchase intention increases. H1b: When products have complementary colors to those applied in the store, product attractiveness increases. H2: The preferred color for chocolate differs from the preferred color for soap.
We conducted an online questionnaire (Prolific Academic and Qualtrics) where 436 participants compared two scenarios (orange store × blue store) and two products (chocolate × soap). The products varied in color, and were evaluated in isolation and embedded in the store context, through image manipulation.

Theoretical base:
Color is a valuable marketing tool and its symbology is applied to achieve brand strategy (Seo and Scammon 2017). Color meaning also depends on the context – that is, it will be cognitively different to look at a yellow package knowing from the outset that it is a milk chocolate, and to look at a yellow package knowing that it is a bleach pack (see, for a review, Elliot and Maier 2014; Labrecque et al. 2013; Shevell and Kingdom 2008). Thus, the symbolic association of each color might vary depending on the context. For example, favorite personal colors are not the same for objects, such as clothes or for painted walls (Jonauskaite et al. 2016). Previous psychological and physiological literature on color states that the perception of complementary colors produces a high contrast and visibility due to the hue cancellation phenomenon (Schwartz and Krantz 2014). Consequently, each of the colors is perceived with maximum vividness, meaning that, for instance, green is greener if preceded by red, and vice- versa (Conway 2001). Bearing in mind the influence of complementary colors on visual perception, we sought to understand the impact of complementary colors between product and retail environment.
environment. Products are physically available to the consumer, through the most varied commercial spaces. The environmental context in which a product is inserted is crucial for its evaluation.

Results:
Findings suggest an interaction between store and product color significantly affecting both product attractiveness and purchase intention. Importantly, we found that the product category might modulate the complementary color-effect, in terms of attractiveness and purchase intention.

Originality:
We verified that the complementary color contrast between the local where products are exposed, and the products themselves, contributes to enhance attractiveness and purchase intention depending on product category. These results confirm and extend prior research that found spatial characteristics and color contrast to affect consumer behavior. Here we hope to shed new light and extend research on the color interaction effect in marketing, as a tool that will affect consumer behavior.

Practical implications:
Color preferences are dependent upon the topic and personal characteristics (Bakker et al. 2013). To test color preferences related to a specific product category, we could hereafter extend our present investigation, also testing the Associative Learning theory (Amsteus et al. 2015). Our brains do not recall information in isolation, thus the information is grouped together into one associative memory. Following Amsteus et al. (2015) investigation, and in line with our findings, we could continue to explore the concept that universal associations with colors are different depending on the specific context where they are displayed.
Winning business model for the 4th industrial revolution

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The objective of this paper is to analyze the impact of the Industry 4.0 on business models considering technological change as a driver of strategic innovation. The research aims to provide the key to interpreting a process of innovation that, starting from the technological transformation, translates it into a broader change of business models.

To achieve our aim, a structured literature review (according to Massaro et al., 2016) has been developed analyzing 144 sources divided into scientific papers, reports from consultancy firms and institutional reports. This method allowed us to identify the importance given by the literature to the technologies and their impact on the single building blocks of the business model. The research has led to the identification of 12 types of business models. These can represent a framework through which it is possible to understand the crucial issues to be applied to interpret the Industry 4.0 phenomenon strategically. A questionnaire analysis of a sample of 111 companies based in Italy then allowed us to compare the results of theoretical research with the perceptions of Italian entrepreneurs.

When a sector matures, the strategic innovation of the business model of its companies becomes fundamental. There are no mature sectors, but only mature strategies. When the sector becomes “old,” in fact, it is possible to change the rules of the game, and this thanks to subversive and radical innovation in the business models of companies.

The innovation of the business model is, according to some, the only way for companies to renew their position of success. At the same time, it is also a way that new entrants have to overcome the significant disadvantages compared to firms already present in the market. Companies that create radically new business models or whose strategies represent turning points for the entire sector will not always be able to derive from this results in economic terms. The objective is to shift the focus on the innovation of the business model, and, therefore, on “Strategic Innovation.”

Today, we are witnessing a new wave of technological advances that, when combined, are starting the fourth industrial revolution, also known as Industry 4.0. Industry 4.0 is transforming all the building blocks of the business model. Industry 4.0 disrupts the value chain, and therefore companies must not limit themselves to a technological analysis of transformation. They are indeed forced to rethink their business model, their way of operating and create value for their customers.

The framework adopted in the research is the one developed by Biloslavo et al. (2017) which consists of a reworking of the well known “Business Model Canvas” of Osterwalder and Pigneur.

The technologies of the Industry 4.0, if adopted following a universal strategic design, allow the development of new business models. In this way, it is possible to start a strategic innovation, i.e., the redefinition of business models, and create new markets through a unique value proposition.

In this study, twelve business models were identified for Industry 4.0, grouped into four categories: paradox transformation business model, data & analytics business model, as a service business model and platform business model.

The analysis led to understand the potential of Industry 4.0 not only regarding technological
innovation but above all of the strategic innovation of business models. For each business model, the characterizing technologies and the extent of the change in the individual building blocks are identified. The results of the research make it possible to understand the technologies that a company must equip to implement a specific business model. On the other hand, they allow us to think about which business models can be developed given the adopted technologies.

One of the objectives of the research is to compare the literary vision on the phenomenon of Industry 4.0 and the Italian entrepreneurial one. We evaluated the point of view of Italian entrepreneurs coming from various sectors and compared it to the international literature on the topic. This comparison leads to outline the main differences between the two visions and to make companies understand how it is now essential to invest in Industry 4.0 to innovate their ways of operating and doing business.

The business models developed by our research can be adopted by companies. The challenge of the Industry 4.0 can be taken by firms, especially the Italian ones, trying to find an original synthesis between the humanistic culture (that is at the base of the success of the “made in Italy”) and the technical culture that the new technologies impose.
Who is an “older worker” and why? A co-workers’ perspective
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INTRODUCTION
In most European countries the population and the workforce are ageing and this phenomenon has been labelled the social challenge of the 21st century. The age structure of the EU population is projected to change significantly in the coming decades. The demographic old-age dependency ratio (people aged 65 or above relative to those aged 15-64) is projected to increase significantly in the EU as a whole, being about 25% in 2010, it has risen to 29.6% in 2016 and is projected to rise further, and eventually reach 51.2% in 2070 (European Commission, 2017). Portugal follow the EU trends, the number of workers aged 25-44 was 50% in 1997 and decreased to 47% in 2017. In the same period, workers aged 55-64 increased from 11.2% to 16.2% in 2017. Within this context, in order to ensure that talent and skills will be available in the near future organizations will have to implement HR policies and practices that match the needs, the expectations and the motivation of older workers, and that exploit the full potential of an aging workforce. But there is still a current lack of consensus on the term “older worker” and this may present a critical issue for policy makers and organizational decision makers alike (Truxillo et al, 2012). In particular HR policies need to be adjusted to an aged workforce and, therefore, how older workers are considered in organizations by managers and co-workers will have an important influence on the design and implementation of appropriated HR practices. Previous important work suggest that HR managers and supervisors decisions on identification of talent for promotion or access to training and development opportunities at work are based on the view of who constitutes an older worker (McCarthy, Heraty, Cross & Cleveland, 2014), and age discrimination in the workplace has been referred for decades and remains a consistent problem (Hirsch et al, 2000; Kite & Johnson, 1988). A first approach to who is an “older worker” suggest that the way employees are managed in organizations in relation to their age is likely to be determined by certain underlying general conceptualizations of ageing (Schalk et al, 2010). However, research has been focused on organizational practices discrimination to older workers and less attention has been taken to the co-workers perspective. Who they consider an “older worker” to be and why they consider such a worker to be “older”, and which attributes co-workers link to an older colleague. This study offers an empirical investigation of the construct of age in the workplace and addresses calls for further studies at the context of the organization by trying to identify the co-workers’ perception about “older workers”, a perspective yet less researched. A first contribution in this study explore at what age a worker is perceived by colleagues as “older”, a second contribution is to empirically explore if the identified age is the same for a male and for a female “older worker”. Finally this study aims to identify the attributes, or explanatory factors, that are behind the definition of an “older worker” based on a co-workers perspective.

Research questions:
At what age will co-workers in organizations define a colleague as an “older worker”? Will the age of a “Male older worker” be the same of a “Female older worker”? How will co-workers conceptualize an “older work
Workshop on spatial aspects of tourism (“Tourism in Switzerland under the TALC model”)
Justyna Majewska

a) purpose
The aim of the research is threefold: 1) to explain the appearance and evolution of spatial clusters in tourism, 2) to propose and apply the method of identifying stages of tourism destination development (tourism area lifecycle) for Swiss regions by considering the level and development of tourism agglomeration processes, in the context of agglomeration economies and including geographical and knowledge spillovers, 3) to determine the role of local government and changing nature of tourism policies in relation to the lifecycle by examining governmental instruments of local tourism policy (the scope, nature, structure and intensity of instruments used).

b) design/methodology/approach
There are two main stages of the research procedure. Within the first stage the main tasks are as follows: 1) determining spatial agglomeration processes, i.e. tourism destination clustering including spillover effects based on registration data of tourism entities localized in communities in Switzerland (GPS-based measurement of the level of agglomeration in different periods of analysis) as well as on demand data (tourists arrivals and they length of stay), 2) developing method of measuring and distinguishing stages of tourism area lifecycle (for group of destinations at different stages of tourism development in a given time period) and based on supply-side data (“agglomeration approach”), 3) classification of Swiss communities/tourism destinations according to TALC stages; selection some of them (being at different stages of TALC) for further field studies.

For the first stage of the research we use the statistical data collected by The Swiss Federal Statistical Office, in particular geocoded individual data from the statistics of the company structure STATENT and from the business censuses as well as data from the accommodation statistics (HESTA) for the period 1995 – 2017.

The second stage of the research – which is the filed study in tourism destinations at different stages of tourism development, selected in the first stage of research – includes: 4) designing a classification form of the available local government's instruments and adopting appraisal system to gather and analyse data from primary (interviews, questionnaire surveys) and secondary sources such as planning, financial and other documents, 5) identifying the scope, nature, structure and intensity of instruments used by local government in Swiss communities/tourism destinations, 6) comparing types and intensity of instruments used by Swiss local government of communities/tourism destinations at different stages of tourism area development, 7) identifying recommendations for tourism policy at different stages of tourism development.

For qualitative analysis we use secondary data on local policy and primary data from interviews, questionnaire surveys considering local tourism policy and instruments used as well as perception of the contemporary and desirable role of government in tourism development processes.

c) theoretical base
The evolutionary nature of tourism destinations has long been a topic of preoccupation for scholars, including geographers and regional scientists (Ioannides, Halkier and Lew, 2014). Models of spatial development of tourist destinations proposed in literature often refer to their evolutionary nature (Christaller, 1963; Plog, 1973; Gilbert 1939; Stansfield, 1978; Cohen, 1972; Wolfe, 1983) and they are usually based on the relationship between tourist arrivals and the character of a given area, underlying the various aspects of changes experienced by tourist destinations. The most commonly cited model is the tourism area life cycle (TALC) model
(Butler, 1980) which is still being utilised in contemporary research (e.g. Butler, 2006a, 2006b; Chapman and Speake, 2011; Butler, 2015). However in determining changes in tourism destination development the more recently approach emphasized more supply side instead of considering tourist arrivals. According to Butler and Weidenfeld (2012) – the level of agglomeration reflect tourist destinations development within the TALC. They suggest an conceptual framework for the study of the dynamic nature of the cooperation, competition, and spatial proximity between tourism firms and the interrelationships between these aspects throughout the TALC, where multiple and changing relations between enterprises are influenced by the spatial factors.

Recently Ma and Hassink (2013) have pointed out that the TALC framework would benefit markedly by incorporating key concepts of evolutionary economic geography (EEG) for better understanding economic space (Coe, 2010) and how tourism evolves through time and influences regional development. Among its goals, EEG seeks to explain the appearance and evolution of spatial clusters (Ioannides, Halkier and Lew, 2014). As such this incorporation of EEG offers a promising avenue of research and theory building in the economic geography of tourism (Halkier and Therkelsen, 2013; Ioannides and Debbage, 2014) due to importance of agglomeration economies in tourism, in particular geographical and knowledge spillovers.

d) results or expected results

We have explained the agglomeration processes in tourism in Swiss regions applying supply-side approach and based on that we have identified different stages of tourism development in a comparative manner for the group of tourism destinations. The expected results show the differences in local policy approach which are potentially more or less efficient in tourism destination management, in particular in knowledge and spillover effects management and enhancing benefits from positive externalities from agglomeration economies in tourism clustering.

e) originality/value

Measuring the spatial agglomeration processes of individual tourism entities to determine TALC stages of tourism destinations in a novel, more close to reality, manner is an original research gap that need to be empirically verified. Especially since there has been still little focus in the literature on the role of entrepreneurs in the development of tourism destinations (Reintinger et al., 2016; Nicholls et al., 2016), although their activity can significantly change the relationships between a destination and its markets and the nature of interactions within a tourism clusters (Butler and Russell 2010; Butler and Weidenfeld 2012). As such a role of local government in shaping the local policy and circumstances within which entrepreneurs and other actors/ local entities operate seems to be leading and influential on the further TALC trajectories and the way of tourism destination development.

f) practical implications

Recommendations for tourism policy at different stages of tourism development – as governmental interventions and regulations could affect the direction and speed of tourism development in a destination (Zhong, Deng, and Xiang, 2008; Weizenegger, 2006; Douglas, 1997; Ioannides, 1992) and also how destination can benefit from positive geographical and knowledge spillovers. Thus, local policy (actions of public managers) should vary at different stages of a tourism area lifecycle (Martin, Uysal, 1990; Majewska 2012; McLennan et al., 2014).