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of Doctoral Students and Young Scientists

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BOOK OF EXTENDED ABSTRACTS

FOREWORD

Dear ladies and gentlemen, dear doctoral students,

Let me sincerely welcome you all to Book of extended abstracts Scientia Iuventa 2023. The current year was the 18th opportunity for doctoral students and young scientists to present their research results at the conference Scientia Iuventa. The conference was organized by the Centre for Research and Development of Doctoral Students in cooperation with the Faculty of Economics of Matej Bel University in Banská Bystrica.

Scientia Iuventa 2023 reflected contemporary doctoral research in areas as Tourism, Business Economics and Management, Finance and Public Economics and Politics and not only here in Slovakia, but also abroad. The conference created space for multidisciplinarity and mutual inspiration and getting know new and unknown. Scientia Iuventa became a platform where young people reveal their talent, move their research forward by gained advices and also add their value added to the scientific knowledge. The output of the conference is the Book of Extended Abstracts. The abstracts published in this way were thoroughly reviewed by the Scientific Committee for the scientific level and suitability of research results presented at the conference.

At the conference were 14 papers registered of which 10 were actively presented and 13 are published in this Book of extended abstracts. Moreover, participants gained possibility of preferential publishing of their paper in four scientific journals: Acta aerarii publici, Economic Review of Tourism, Journal of Economics and Social Research, and Statistika: Statistics and Economy Journal. All these represent international peer-reviewed journals that are respected in the academic community. Also, I would like to thank the organizers of this conference for their responsible approach, work effort and successful organization of Scientia Iuventa 2023.

Dear participants of Scientia Iuventa, on behalf of the Scientific Committee as well as the Organizing Committee, let me thank you for choosing our conference to present your results and I want to wish you all the best and good success in your research, study as well as in all other ways.

prof. Ing. Zdenka Musová, PhD.

Guarantor of the conference

LIST OF EXTENDED ABSTRACTS

ENERGY INDEPENDENCE - OPPORTUNITY OR RISK

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Keywords: investments, energy, renewable sources, energetic efficiency.

JEL classification: N7, P48, Q42

1 Introduction

The current geopolitical framework has forced European countries to redefine their energy relations and initiate rapid steps to become energy independent. In the last ten years, Europe has relied heavily on Russian oil and gas, especially countries like Germany or Italy, but this must change and Europe must find a quick solution to achieve energy independence.

Short-term solutions could represent steps backwards in achieving decarbonisation and sustainable development. An eloquent, local example is represented by the Oltenia Energy Complex's intention to increase coal production for 2023, at the same time submitting projects from the Modernization Fund worth 895 million for the development of electricity production capacities, including renewable energy.

This is also due to the lack of viability of alternative options. Thus, the Neptun Deep Project is currently on hold pending changes to offshore law. So far, the project to amend the offshore law has been submitted to the Parliament, being supported by the governing coalition. In the best-case scenario, Romania could start extracting natural gas from the Black Sea in 2026. Until then, the lack of investment in natural gas production will increase dependence on imports and consequently affect the country's path to energy independence.

The biggest opportunity is to accelerate the transition to clean energy, and increasing electricity generation from renewable sources will reduce both fossil fuel consumption and energy market prices. To achieve these goals, national governments and the European Union should focus on financing renewable energy, energy efficiency and new technologies.

As I said, alternatives exist - even outside the area of natural gas - but their valorization is not at all simple.

The Black Sea has a massive potential for wind energy generation - according to a study published by the World Bank, Romania can establish wind farms with a capacity of up to 72,000 MW. Both offshore wind and onshore as solar energy is of strategic importance for Romania's energy system: by 2030, as part of the National Energy and Climate Plan, Romania aims to implement an additional wind energy capacity of 2,302 MW and a solar energy capacity of 3,692 MW. Hydropower also plays a very important role in Romania's energy mix, representing approximately 30% of the national electricity production mix. In the long term, the modernization of existing plants would ensure a constant share of production coming from a renewable source.

On the other hand, nuclear plays a very important role on Romania's agenda. Given that Nuclearelectrica consistently holds a share of almost 20% in the electricity generation mix, the renovation of Cernavoda NPP Unit 1 by 2030, as well as the construction of the future Nuclear Units 3 and 4 show that nuclear still represents a solid opportunity to diversification and eventually achieving energy independence.

The connectivity of electricity networks at European level is an important topic with precise objectives: a target of at least 15% interconnectivity by 2030. Towards a green Europe, the solution of last resort that has received attention in recent years and has become more relevant in the current situation is the creation of green hydrogen power plants.

2 Material and methods

The EU has launched RepowerEU, a new program highlighting the need for action for more affordable, safer and sustainable energy. Urgent actions on inflationary trends, storing gas to ensure next winter's consumption and immediate measures to reduce dependence on Russian gas, such as speeding up authorizations for renewable sources or increasing the number of solar panels, heat pumps and energy saving are among some of the actions taken in view.

This is of course supported by the Green Deal agenda as well as the EU funds available for the green transition, including the RRF, which included €1.62 billion allocated under the Energy component, for investment in energy production and storage capacities wind and solar, green hydrogen production capacities, cogeneration, investments in the entire value chain of batteries, cells and photovoltaic panels, but also to ensure energy efficiency in the industrial sector.

EY Romania developed the EY Energy FiT (Financing Transition) platform considering the strategic importance of investments in the energy sector and the diversity and complexity of the programs that will provide financing for this field. EY Energy FiT is a comprehensive online platform that aims to help local companies identify EU funding opportunities for their energy projects.

The methods that I will use to identify the most opportune ways to develop energy resource utilization methods consist of: analysis of the national and European energy policy; exploring or analyzing general issues and PESTLE analysis.

3 Results

I propose that the obtained results highlight which is the most achievable and, at the same time, the most appropriate energy mix, taking into account the trends and the manifestation of the free competitive market (each energy resource accessed has its own costs). In the decision- making process, costs are compared with anticipated revenues to establish the viability of the proposed project.

4 Conclusions

In this paper I propose to highlight the impact that costs can have, especially in the investment field. In order to estimate the potential for improving energy efficiency and the impact on consumption, it is necessary to know (or make assumptions regarding) the technological level, the cost of the equipment, their degree of market penetration, consumer behavior and existing promotional measures. In the situation of limiting primary energy resources, in order to achieve sustainability in this field, it is necessary that energy be produced, supplied and consumed in a more efficient way than before. If changes are not made in the way energy is produced, transported and consumed, humanity could face a major energy crisis in the coming decades.

Within the European Union, the perspective of the years 2023-2030 will have in the foreground the reduction of dependence on oil, a policy closely related to that of climate change and the massive promotion of renewable energy resources. Technologies related to alternative sources of energy to the consumption of crude oil have been developed and are supported in the policies of the European Union regarding the reduction of carbon emissions.

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ENVIRONMENTALLY RESPONSIBLE CONSUMER BEHAVIOR WHEN PURCHASING CLOTHING

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Keywords: Responsible consumer behaviour, textile industry, new sustainable trends, responsible environmental trends.

JEL classification: M14, M31, Q56

1 Introduction

In the 21st century, the textile industry is rapidly growing in terms of production volume and employment. Therefore, its impact on society, the economy and the environment is enormous. Currently, it ranks among the sectors that are not only resource-intensive but also pollute the environment the most (Riba et al., 2020). Over the past two decades, the textile industry (which also includes clothing production) has doubled its production, and the average global annual consumption of textiles has almost doubled (from 7 to 13 kg per person) (Souchet, 2019; Shirvanimoghaddam et al., 2020). On average, 85% of the fabric is used and the remaining 15% is thrown away in the textile production process in China (Firth, 2016). This way, approximately 26 million tons of textile waste are produced annually. Moreover, there is an assumption that this number will increase in future. The current linear system (when textiles are produced, purchased, used, and thrown away) is not sustainable for our planet (Bonciu, 2014). A change is needed. First, through the introduction of the circular economy model into the practice of companies, which will concern e.g., clothing design, the use of improved materials that are more environmentally friendly, as well as improved processing and production phases (Pesce et al., 2020).

Secondly, improving the purchasing decisions of consumers and the user phase, which will ensure the prolongation of the use of products and efficient collection for repeated use, e.g., through repair, upcycling, and recycling of textiles, which help to reduce the need to purchase new products (Kasavan et al., 2021). Consumers must become aware of the current unsustainable situation and respond to it by changing their purchasing and post-purchasing habits and becoming environmentally responsible.

The paper deals with the behaviour of consumers when buying clothes and shoes in the context of current environmentally responsible trends. The paper aims to investigate consumer behaviour when buying clothes in Slovakia and the use of the so-called new environmentally responsible trends in this area.

2 Material and methods

Two types of research were conducted. Namely, secondary data analysis and primary quantitative consumer research. When preparing the literature review, we focused on examining the starting points of the issue, while several standard methods of scientific research were applied. Primary, the quantitative consumer research was conducted in November and December 2022 via an online Google questionnaire. We distributed the questionnaire through social networks (Facebook, Gmail).

The questionnaire contained 24 questions in four sections. Different types of questions were used in the questionnaire. Mainly, closed questions (answers with one or more answer options) and Likert scale questions. The data obtained from the questionnaire were processed using Excel software, tested using the IBM SPSS Statistics program, and subsequently analysed. We received 747 answers from Slovak respondents aged 18 to 65, of which 400 were women, 345 were men, and 2 marked the option other. The structure of the sample by age was as follows: Generation Z (18-26 years) – 104 respondents, Generation Y (27-42 years) – 296 respondents, Generation X (43-57 years) – 235 respondents, and the Baby Boomers generation (58- 65 years) – 112 respondents. We tested the sample of respondents using the Chi-Square Test in IBM SPSS Statistics. Its representativeness according to age was confirmed.

3 Results

By analysing the primary data obtained through the questionnaire survey, we found only a few respondents are influenced by the constantly changing trends in the clothing industry. Only 27 respondents (3.6%) said they buy a t-shirt/shirt/dress every time the fashion changes/always with a new collection, and 19 respondents often buy outerwear this way. We recorded the highest number of respondents (272 respondents - 36.4%) who stated that they buy clothes several times a year (more often than 2x, but max. 12x a year) when buying t-shirts/shirts/dresses. Respondents usually buy clothes and shoes in fashion chains and department stores. Second-hand stores were the third most common place to buy clothes. The most important factor influencing respondents when buying clothes and shoes is the product's price (up to 81.7% of respondents indicated this option), followed by the design/colour of the product, and the high-quality/sustainable material. Most respondents from new environmentally responsible trends use second-hand purchases (421 respondents).

Subsequently, we investigated the positive perception of the environmental global trends when buying clothes and shoes in correlation with the age of the respondents. Most consumers perceive the new environmental global trends in the textile industry positively or rather positively. The positive perception of second-hand and patchwork purchases does not depend on the age of the consumer. Other environmental global trends in the textile industry show a weak, indirect dependence, or the younger the consumers, the more positive the perception of trends. Respondents use it at least three times a year: second-hand shopping, slow fashion, renting clothes, swapping, buying clothes from recycled materials, making vegan products, and making ethical products. However, less than half of research consumers use upcycling and patchwork more than three times a year.

Durability, sustainability, and the quality of the materials used are the dominant influencing factors when shopping for environmentally friendly clothes. Only slightly fewer respondents consider the price to be the most important factor, which is also confirmed by several domestic and foreign studies. In the case of products with an environmental dimension, the usually higher price can also be one of the barriers to purchase.

For the investigation of the interrelationship of the use of environmental global trends in the acquisition of clothing with the demographic data of the respondents, we used Spearman's correlation coefficient at the significance level $\alpha < 0.05$. From the results, we can state that the dependencies in the age and education of the respondents were not confirmed, and in the other demographic data, weak dependencies have been confirmed only in some trends, e.g., women more often use second-hand shopping and the production of ethical products. Therefore, we also focused on other factors that could influence the realization of the purchase of environmentally responsible trends. To test the relationship, we also used Spearman's correlation coefficient at the significance level $\alpha < 0.05$. The results of the test show that respondents who are interested in the environment use more often the following concepts/trends: buying second-hand, upcycling, patchwork, buying recycled clothes, buying ethical products, or buying vegan products. We also found that respondents influenced by the product´s price more often use slow fashion, clothing rental, upcycling, and patchwork.

4 Conclusions

Each consumer is specific and approaches the satisfaction of their needs in different ways. It is influenced by a whole range of different factors. In the other period, under the influence of negative developments in the environment, as well as higher information, education and demanding consumers, shopping for clothes is also changing. In the mentioned contexts, the contribution focused on consumer behaviour in this area, emphasising the use of new, environmentally responsible trends. The test results partially confirmed the assumption that younger respondents use environmental global trends in the textile industry more often than other consumers, except for shopping second-hand and patchwork, which did not depend on the respondent's age. The most represented factor influencing the purchase of an environmentally friendly textile product was the durability/sustainability/quality of the materials used, the second such factor was the price of the product.

The research results are relevant for business entities, which, based on the examination of the characteristics of different consumer segments with specific needs and wishes (also in sustainability and circularity), can more precisely target their environmentally responsible offers to these requirements. Moreover, businesses that deal with sustainable fashion can further use the information obtained for marketing purposes and promote sustainable fashion more intensively. However, the results could be also relevant for consumers who are interested in responsible shopping. Consumers can also help with this situation. Although it is undoubtedly difficult, they can e.g., appeal to businesses to become environmentally conscious. At this stage, the contribution was focused only on the investigation of selected contexts of the issue concerning the age differences of the respondents, in the future investigation we will also expand our attention to the influence of other socioeconomic characteristics on the perception and use of new environmentally responsible procedures when buying clothes.

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DECREASING OF LOGISTICS RISKS BY USING INTELLIGENT TECHNOLOGIES IN INDUSTRIAL COMPANIES OPERATING IN FOREIGN MARKETS

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Keywords: Supply chain risk, mittigation of risk, logistic risks, industry 4.0, international business.

JEL classification: F00, O31, R41

1 Introduction

Every business entity, within the framework of its operation in the market economy, faces several risks that can lead to a decrease in the value of the business or even to its complete demise. The effort to prevent the negative effects of risk factors and to reduce their impact is one of the important tasks of managers working in companies. Currently, digital transformation is increasingly being promoted in companies, which continues across all sectors of the economy and is constantly developing and progressing. The onset of new technologies is most rapidly manifested in logistics and production due to the overall benefits they bring to companies and companies are currently investing more heavily in Smart Industry 4.0 solutions.

Since intelligent and smart technologies are constantly being improved, the question of their use to protect against potential risks and possible risk reduction is raised. The goal of this paper is to present a study that identifies which of the intelligent technologies can be used for reduction of logistic risks in industrial copanies and explains ways and capabilities of intelligent technologies for logistic risk reduction.

2 Material and methods

The analysis was performed using the snowball method, on a sample of publications collected from the databases Science Direct, Scopus, ResearchGate, Emerald and the freely available Google Scholar database. Keywords were searched in the English language in the title of the article, in the abstract as well as in the keywords. Ali et al. (2021) investigated three supply chain risks (1) supply-demand mismatch, (2) manufacturing risks, and (3) transportation risks, the extent of their impact on firm performance, and the potential impact of Industry 4.0 smart technologies in reducing and mitigating these risks. He found that the mismatch between supply and demand, production risks and transportation risks are currently the main sources of supply chain disruption, and notes that Industry 4.0 technologies significantly alleviate the mismatch between supply and demand, production risks and subsequent supply chain disruptions.

Simonetto et al. (2022) prepared a study that focuses on analyzing the benefits that Industry 4.0 technologies can provide in terms of mitigating risks in a closed supply chain, with a specific focus on process and logistics risks, and investigates the impact of Industry 4.0 technologies on mitigating these risks. He found that intelligent Industry 4.0 technologies have proven their positive impact on reducing risks, mainly in the production and logistics area. Many authors present that by analyzing big data using simulation and case studies, companies are interested in reducing carbon emissions, optimizing transportation routes and production, identifying the best place to open new facilities, and predicting the lifetime of production facilities (Jiao et al., 2018; Tao et al., 2018; Massaro and Galiano, 2020; Mishra and Singh, 2020).

According to Zimmerman et al. (2019) cloud and software solutions, present numerous opportunities to reduce supply chain risk. Through simulations and applications of Cyber-Physical System (CPS), Wang et al. (2016), Bogataj et al. (2017) and Hofmann and Rüsch (2017) tried to optimize the production and distribution of products. Several authors investigated the possibilities of improving supply chain performance through Artificial Intelligence solutions and focused their research on studying the relationship between the manufacturer and the supplier through simulations (Cavalcante et al., 2019; Vo et al., 2020).

Ali and Gölgeci (2019) state that mitigating transport risks is possible based on Internet of Things (IoT) enabled electronic data exchange and real-time information updating, which provides the company with better insight into when their goods will arrive at their destination. Ramón-Lumbierres et al. (2020) examined how additive manufacturing can affect the organization of activities in the supply chain and argued that additive manufacturing can reduce supply, manufacturing and distribution risks, as reducing the number of components needed to create the final product can reduce their number of necessary suppliers of individual components. Nandi et al., (2020), Stranieri et al., (2020) state that based on the information collected in the blockchain, companies can mitigate the risks related to the production and distribution of products and very flexibly identify any errors in the production or transportation of their products.

3 Results

The outcome of the analysis of literature articles shows that the reduction of logistical risks is possible by using specific intelligent technologies. Identification of which smart technology is suitable for reduction of the particular logistic risks will be presented by the cross-sectional matrix of the risks with benefits of Industry 4.0 technology. This cross-sectional matrix can be useful for managers in industrial companies and can help them clearly identify the potential risks they may face and get an idea of how they can mitigate these risk by using different smart technolgies.

4 Conclusions

The most discussed intelligent technologies of the industrial revolution Industry 4.0 in the current literature are the use of Big Data, Internet of Things, Cloudcomputing, Artificial Intelligence, Cyber-Physical Systems. By connecting intelligent technologies with the production process, with the links of the entire supply chain and logistics, trade and customer service, it brings new dimensions to business risk management. Using the digitalization of the industrial revolution Industry 4.0 in risk management allows companies to obtain benefits that will increase competitiveness and position companies in the domestic and international markets.

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DESTINATION MANAGEMENT ORGANIZATIONS IN SLOVAKIA AND THEIR ACTIVITIES

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Keywords: Destination management organization, management organization activities, tourism destination.

JEL classification: L83, Z30

1 Introduction

The main goal of the destination management organization was initially to increase the number of visitors through marketing activities (Gowreesunkar, Séraphin, Morrison, 2018; Romão, 2018). According to Slovak and Czech authors (Holešinská, 2007; Nejdl, 2010; Gajdošík, 2019; Gúčik, 2020), under the influence of changes in demand, the main task of destination management has become cooperation and communication between individual stakeholders in the destination. Foreign authors (Eckert et al, 2019; Nadalipour, Imani Khoshkhoo, Eftekhari, 2019) also consider the most important role of the management organization to be the representation of the interests of stakeholders and the development of cooperation between them, while also adding participation in the creation and distribution of the product, in the marketing communication of the destination, as well as on the creation of plans and determination of the strategic direction of tourism development in the destination.

The budget of management organizations at the regional and local level in Slovakia is created by subsidies (40%), member contributions (56%) and own activities (4%), and the activities of management organizations for which subsidies can be drawn are defined in the Tourism Support Act (Zákon o podpore cestovného ruchu, 2022).

Since a substantial part of the organization's budget is made up of public resources, the aim of this paper is to identify how the legal act affects the activity of destination management organizations at the regional and local level in Slovakia. We were therefore interested in the structure of management organizations' expenses for individual activities (RQ1) and how the representatives of these organizations perceive the division of activities based on the legal act (RQ2).

2 Material and methods

There are currently 8 regional and 39 local destination management organizations operating in Slovakia. The survey of expenses for individual activities of management organizations was carried out at the beginning of 2023 through the analysis of the profit and loss statements of all 47 management organizations, which are available in the register of financial statements (RQ1). We ascertained the views of representatives of management organizations on the division of activities through the legal act through structured interviews (RQ2). The interviews were held at the beginning of 2023, and the representatives answered the question "The Tourism Support Act defines the activities for which you can use subsidies. Are you satisfied with the scope of these activities? Feel free to justify your claim."

Representatives of all destination management organizations in Slovakia were approached, and 4 regional and 16 regional management organizations were interviewed.

For the purposes of this paper, we wanted to analyze only the use of subsidies for the activities of management organizations and the opinions of their representatives on defining these activities through the legal act, as subsidies are a public resource that makes up approximately 40% of the budget of destination management organizations in Slovakia.

3 Results

Despite the fact that destination management organizations can be established in Slovakia since 2012, their activity is still largely dependent on public resources - subsidies from the Ministry of Transport of the Slovak Republic. To answer our RQ1, the largest volume of funds (44%) is spent on marketing activities. From 2020, the use of subsidies for the creation of sustainable tourism products has been changed, previously it was the creation of tourism products, and this activity makes up approximately 27% of the expenses of management organizations. Approximately 17% of expenses are directed to the tourism infrastructure development in the destination, and approximately 5% of expenses are spent on supporting the attractiveness of the location and inforoads. Minimal expenses are spent on activities related to the activity of the tourist information center, on activities related to education and to the creation of strategic, conceptual and analytical materials and documents, statistics and surveys. Almost no expenses are associated with activities aimed at the creation and operation of the information (reservation) system.

These results can of course be influenced by the fact that the costs of marketing activities are the highest and more significant than the costs of other activities. In order to support secondary data sources with primary sources, we conducted interviews with representatives of destination management organizations, thus answering RQ2. Based on content analysis, we evaluated the most frequently used associations that managers of organizations have in connection with the Tourism Support Act. They are gratitude, definition of activities and labor costs. The activities defined by the legal act are generally considered correct by the representatives of the organizations.

However, they would welcome a more precise definition, or a more specific definition of the use of subsidies for individual activities, as they encounter the rejection of a certain amount of financial resources provided as a result of not knowing what specific activities the subsidies can be used for. Representatives of organizations at the local level also expressed a request for the possibility of using a subsidy for wage costs, as they have difficulty paying more than one or two employees from membership contributions or from their own activities.

Our study contributes to the knowledge of the activities of destination management organizations in Slovakia at the regional and local level. Since the resources of these organizations are largely created by public funds, it is important to examine the use of these resources.

4 Conclusions

The activities of destination management organizations transform over time, and nowadays they should represent a leader in the tourism development in the destination, who is responsible for coordinating stakeholder relations, for developing sustainable tourism and for increasing the destination's competitiveness on the tourism market. Even though in 2011 Slovakia adopted the Tourism Support Act, which regulates the activities of destination management organizations, this legal act does not pay much attention to the activities of these organizations and its amendments do not correspond to the requirements of the current state of tourism development. Through the analysis of expenses for the activities of management organizations, we have shown that the majority of expenses are focused on the marketing activities of management organizations, not on the strategic management of tourism development. Based on interviews with representatives of management organizations, we identified the main shortcomings of the activities defined in the legal act.

Our paper can be used for further research into the activities of destination management organizations in Slovakia and as a basis for further research into the impact of the Tourism Support Act on the activities of these organizations. The results of the study are influenced by the low number of conducted interviews, as well as the absence of the perspective of public officials who are responsible for creating tourism policy in Slovakia.

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CORPORATE SOCIAL RESPONSIBILITY IN SUPPLY CHAIN MANAGEMENT

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Keywords: Responsible supply chain management, sustainability, corporate social responsibility, literature review.

JEL classification: M10. M14**.** R49

1 Introduction

Many of current producers depend on global supply chains across continents. The complexity and size of global supply chains makes them difficult to manage (Chen et al., 2018). Their functioning is associated with the acquisition of resources or labour from less developed countries, which has caused that companies have shifted their responsibilities beyond the boundaries of ownership and control. Corporate social responsibility is no longer considered a company issue but is an aspect that needs to be addressed at the supply chain level (Hsueh, 2014).

Consumers do not differentiate among members of the supply chain when it comes to unsustainable or irresponsible behaviour. They hold the central company responsible for everything that happens in the supply chain, and this creates the so-called chain responsibility effect (Hartmann, Moeller, 2014).

The aim of this paper is to introduce the issue of responsible supply chain management and to answer the questions why this area of corporate responsibility is important and needs attention as well as energy in companies, and how it can be implemented. At the same time, the paper also provides an overview of the research methods used so far in the reviewed studies.

2 Material and methods

To achieve the stated objective, we have obtained information from secondary sources. Secondary research was carried out by searching and studying relevant articles and papers preferably from available databases: ScienceDirect, SPRINGERLink, Wiley Online Library, Google Scholar, as well as from the websites of organizations dealing with the issue under study. The selection of articles was made by searching through keywords in Slovak and English: responsible supply chain management, sustainability, supply chain management, corporate social responsibility, supplier relations, transparency and visibility in the supply chain, sustainable business.

Based on the keywords and the evaluation of the relevance of the sources, we used 64 articles and summarized them into a comprehensive paper. Most of the sources consist of foreign literature. In the paper, we used the methods of analysis and synthesis. With the help of analysis we reached a better understanding of the studied phenomena and thanks to the synthesis we formed a holistic picture of the studied issue.

3 Results

According to Arslan (2020), socially responsible supply chain management (RSCM) began to develop in the 1990s as a societal response to human rights violations and has received increased attention due to the impact of globalization. In the last two decades, sustainable supply chain management (SSCM) activities have addressed the integration of environmental, economic and social objectives into a company's production process, operations and supply chain strategies to promote overall sustainability (Khan et al., 2021). As socially responsible supply chain management contributes to building sustainable business relationships, Markley (2007), Maloni and Brown (2006) agree that thanks to this we can use sustainable supply chain management as its synonym.

Motivations for implementing CSR into SCM can vary. Chen (2022) sees the scandals that have unfolded among suppliers of major players as one of the contributing factors to stronger societal pressure for transparency and accountability in supply chains. On the other hand, researchers Jacobs and Singhal, (2017) argue that the potential economic threat from loss of reputation and legitimacy may not be strong enough to force companies to implement SSCM. Huq et al. (2016) declare that stakeholder pressure plays a significant role in the implementation of responsible activities, in which they agree with Hartmann and Moeller (2014) and Gong et al. (2019). According to Eriksson and Svensson (2015), in the process of implementing social responsibility in supply chains, it is important to take into account that the relationship between buyer and supplier, namely the impact of power, drives or hinders this social responsibility.

For practical purposes, Huq et al. (2016) see possibilities for buyer evaluation of suppliers in monitoring, guiding, and controlling suppliers' internal activities related to employee welfare, working hours, working conditions, occupational safety and health, and the rejection of child labour. Ciliberti (2020) mentions that companies often develop and implement codes of conduct as a necessary framework of basic expectations and norms of acceptable supplier behaviour.

Studies offer a wide range of data from a variety of research. Repeatedly mentioned methods used in the research were: snowball sampling, analysis and synthesis of secondary data from available literature, questionnaire survey, interviews, case studies, as well as the creation of custom models to offer a new perspective on the issue under investigation.

The benefits of a sustainable way of managing supply chains have been investigated by several authors. Klassen, Vereecke (2012) point to the economic benefits whereby supplier sustainability efforts not only improve social performance but can contribute to the competitive advantage of the entire supply chain, which in turn reduces costs and increases market share. The adoption of social sustainability in the supply chain, according to Carter and Rogers (2008), is paramount for production economies as it leads to reduced health and safety costs, improved product quality and hence improved reputation. The pontis foundation (www.nadaciapontis.sk, 2015) has found through research on a sample of several large companies that in the social sector there have been improvements in for example health care or labour standards, environmental responsibility contributes to reducing the carbon footprint and business benefits represent a reduction in business risk.

4 Conclusions

Companies have several options to implement responsible activities into the supply chain. It is important to build transparent and trustworthy relationships with suppliers. Although RSCM will increase costs for the company, it will also bring several benefits. RSCM provides a competitive advantage and, among other things, helps to build a company's reputation.

This paper introduces the issue of responsible supply chain management, offering an overview of various opinions on RSCM, the importance of sustainability, and the implementation of responsible activities. It presents some generally applicable ways in which companies can emphasize responsible behaviour, such as the introduction of codes of conduct for suppliers. For future research, it provides an inspiration of possible research methods used by the authors in the studies. For our further research we will consider the use of semi-structured interviews, we also do not preclude the use of a questionnaire collection and consequently the case study method is also worth considering.

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JOB CRAFTING AND WORK PERFORMANCE. A SYSTEMATIC LITERATURE REVIEW

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Keywords: job, work performance, job crafting, work place.

JEL classification: M11, M12, M54.

1 Introduction

In recent years, we have witnessed a surge in theories that attempt to describe the factors that are essential to work performance. Wrzesniewski and Dutton (2001) define job crafting as a complement to theories of job design and social information processing, specifically explaining job crafting as a way in which people redesign or adapt work to increase its meaning and self-identity. More recent approaches consider job crafting based on employees' strengths and interests (Kooij et. al., 2017; Kuijpers et al., 2020). As a result of the above theories, Kooij et. al., (2020) that job crafting is a process of continuously adapting work to changing personal preferences, motives, and abilities that leads to positive employee outcomes. Wrzesniewski and Dutton (2001) further argue that job crafting is an employee's everyday behavior. Bruning and Campion (2022) refer to job crafting as an employee's active response to job design that allows them to change their tasks and push the cognitive boundaries of the job. Employees are allowed to craft the job based on the requirements and resources of the job (Ifran et. al., 2020). For the job design process, employees must perform certain activities that are important to create a more meaningful and personally rewarding work experience (Demerouti et. al., 2020).

Empirical findings in recent years suggest a positive impact of job crafting on work performance, but a systematic and comprehensive view on the nature of job crafting and, in particular, its relationship to work performance is still missing.

The aim is therefore to identify the main research themes in the area of job crafting and their relevance for work performance in 2020-23. As the main methodological approach, we have chosen a systematic literature review conducted in journals indexed in the SSCI Web of Science database.

In addition to identifying the main research themes for the period, we set out two research questions. What is the most significant keyword used by the authors of scientific articles in their papers? Which author of scientific articles is the most prominent in the topic?
The results of the study contribute to the systematization of knowledge on the relationships between job crafting and work performance and also provide important practical recommendations for managers in companies.

In the following sections of the paper, we specifically describe the chosen methodological approach and the obtained results. We conclude with practical implications to support the direction of future research and also present the identified limitations of the research.

2 Material and methods

The essence of a systematic literature review is to provide a clear and comprehensive set of relevant literature that reflects the current state of the subject under review. The aim is to identify the main research themes in the area of job crafting and their relevance for work performance in 2020-23. In addition to the main objective, we set two research questions.

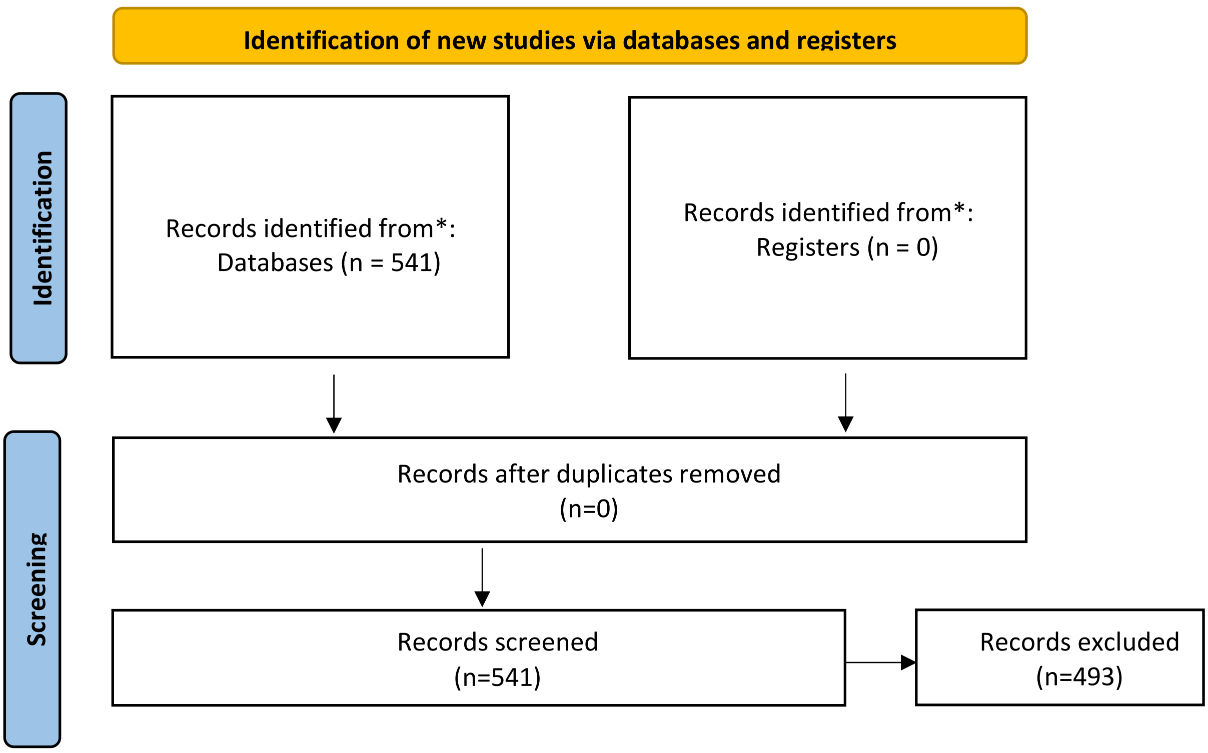
RQ1 What is the most significant keyword used by the authors of scientific articles in their papers?

RQ2: Which author of scientific articles is the most prominent in the topic?

For the purpose of collecting the necessary literature, we used the Web of Science (WoS) database, which provides a wide range of high-quality peer-reviewed journals. We focused on journals that are indexed as Q1 and Q2 in SSCI's management category scale. We did not consider books and conference proceedings in this case.

For the purpose of selection and retrieval of relevant scientific articles, we used the PRISMA method, which has several advantages. These advantages consist in the clearly defined rules of the method, which minimize the author's attitude towards scientific articles and also eliminate the author's emotional influences that could affect the selection.

First, we determined the keywords to be used in the search, namely "work performance and work crafting". After the search, we obtained, the studies (n=541) to be filtered, based on the desired criteria. We aimed to find research published in 2023, 2022, 2021 and 2020. After adjusting the filter, we retrieved the studies (n=301) that most closely represent the current state of the field. We focused on articles (n=285) that are published in journals ranging from Q1 to Q4. Because we focused on the issue from a management perspective, we excluded all other categories (n=115). In the extended filter, we selected the category of journals that are rated on the SSCI scale (n=87). In the extended filter, we organized the retrieved studies on the basis of journals, from which we tried to select those that are rated in Q1 and Q2 categories. For this purpose, we used the Journal Citation Report product. We identified the 15 top-ranked journals. We searched the final number of studies (n=48) in order to assess the current status of the issue under study. The selection process is illustrated in Figure 1.



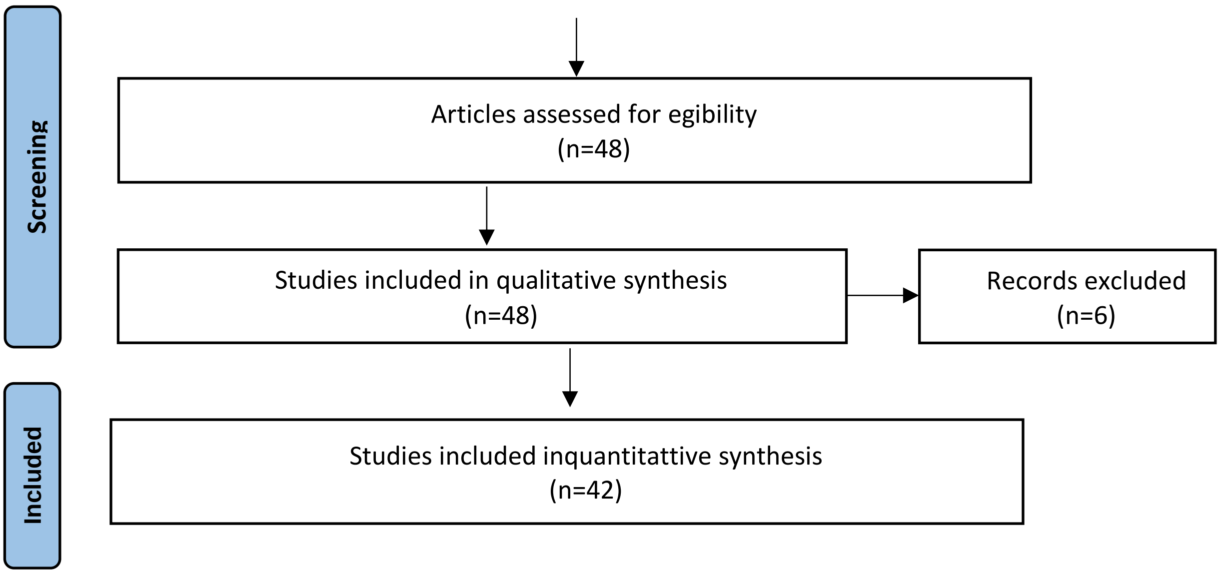


Figure 1: PRISMA-based article selection process

Using the WoS database, we identified 541 studies that were published between 2020 and 2023. Based on a series of measures and queries, we identified studies that were published in 15 journals indexed in the SSCI scale as Q1 and Q2.

By analyzing 48 scientific articles, we excluded 6 papers that were not directly related to job crafting and work performance.

The selection process generated 42 scientific articles, which will be used to identify the main research topics. In addition to the main objective, we set the research questions. What is the most significant keyword used by the authors of scientific articles in their papers? For this purpose, we will use the bibliometric analysis method mediated by the VOSviewer program. Bibliometric analysis is a tool that helps to structure and analyze the literature. It provides quantitative data on research and contributes to a better understanding.

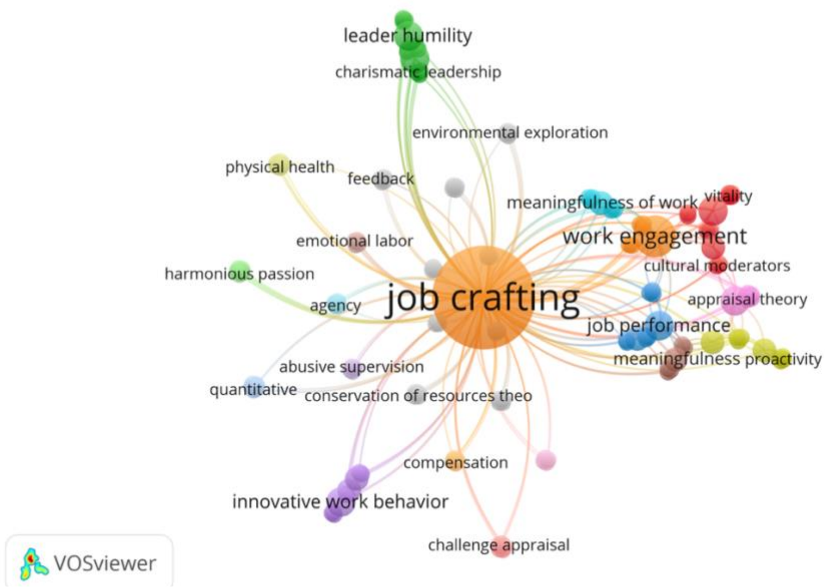


Figure 2: Bibliometric analysis: key words

Figure 2 shows the bibliometric analysis of the keywords used by the authors in their scientific articles. The size of the cell represents the frequency of occurrences of the word. The connections between the cells represent the occurrences of the term in other studies and likewise show their association. The keyword "job crafting" dominates the majority of cases, specifically appearing in 35 papers.

Bibliometric analysis provides information not only on keywords, but also on the authors involved in the production of the studies in question. Based on the size of the individual cells in the analysis, it is possible to identify the author who has contributed the most in the production of scientific articles in the field of "job crafting and work performance."

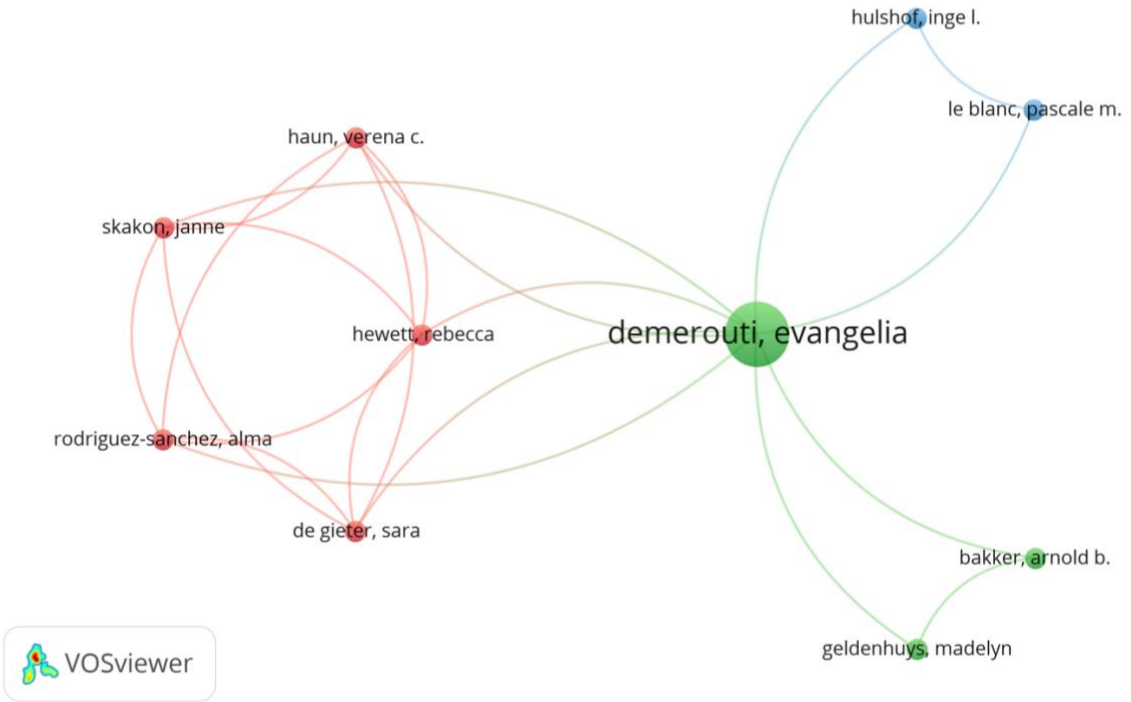


Figure 3: Bibliometric analysis: Authors

Figure 3 shows the authors who appear most frequently in scientific articles on a given topic from 2020 to 2023.The assumption is that authors with more articles on a given topic provide more relevant outputs within their scientific papers.

Demerouti, E. is the author who has the most publications that deal with the issue of "job crafting and work performance." Specifically, she has published an article annually that has been included in the Web of Science database.

One of the limitations of bibliometric analysis is its focus on quantitative aspects and the absence of an assessment of the quality of the scientific articles themselves. In order to obtain reliable results, it is important to select high quality scientific articles at an early stage of the research, which will be subsequently analysed. For this purpose, it is important to establish clear rules and criteria. In our paper, we used the PRISMA method, which has strict rules for selecting scientific articles with the highest quality.

3 Results

In our paper, we provide a systematic literature review that focuses on publications related to the issue of "job crafting and work performance". The SLR resulted in 42 articles that focus on the issue and provide the current state of the problem under study. The articles are published in 15 journals that are indexed in the SSCI scale as Q1 and Q2, which provides us with a guarantee of the quality of the reported outputs. The final outputs of the studies are eliminated by books and conference proceedings and are published from 2020 to March 2023. The range of years provides us with the best information on the current status of the issue under study. We also identify an increasing trend of publications on the topic in the years under review.

The theme of employee 'spillover initiatives' appears to be a remarkable one, which is based on the job demands-resources theory. The idea is that employees who take more initiative in creating jobs at work transfer this initiative to their non-work life (Demerouti et. al., 2020). A fundamental factor of job creation is the meaningfulness of work for the employee. The study by Geldenhuys et. al., (2021), uses work creation theory to support the proposition that experienced meaningfulness plays a mediating role in the link between task behaviour, cognitive and relational work creation, and peer appraisal of work performance. We consider the creation of interests and meaningfulness of work to be an important topic for older workers as well. The study by Kooij et. al., (2020) reflects the current situation of the ageing workforce. They support the theory of creating jobs and adapting work to older workers in order to increase job engagement and retention.

Another research topic is work engagement in the context of job crafting. The research conducted by Jindal et. al., (2020) focused on work engagement with job autonomy as factors influencing job crafting in employees. They found that high engagement and autonomy are associated with higher levels of job crafting. Sharma and Nambudiri (2020) found that job engaged employees show higher levels of innovativeness, creative behavior and autonomy in job crafting.

In addition to the main research topics, we identified the most used keyword that authors used in their research articles. The keyword "job crafting" occurred in most of the studies. Likewise, we tried to identify the most prominent author publishing on the topic. Demerouti E., is a researcher, working in prestigious universities. She has more than 160 publications in the Web of Science database. She has been cited more than 27,000 times and her H-index is 68.

4 Conclusions

Job crafting has recently become an interesting method that supports work performance. The popularity of job crafting is evidenced by the number of studies that look at the positive and negative aspects of this method. Despite the rich literature, there is no systematic review of studies that groups together the main research streams on job crafting. The aim of our study was to identify the main research themes in job crafting and its relevance to work performance.

We used the Web of Science database to obtain the necessary studies. We identified a total of 541 studies based on the keywords “work performance and job crafting". We then focused on articles published from 2020 to March 2023. We used the SSCI index to identify articles that were published in journals categorized as Q1 and Q2. This resulted in 42 relevant articles. By analyzing the abstracts of each article, we identified the main research directions of the studies.

The results of our research may be useful for companies seeking to improve the work performance of their employees. Job customization is directly related to employees' job performance and increases their job satisfaction. They can also be beneficial for future research that will focus on the issue of work adjustment.

The limitations of the research lie mainly in the range of published years. The scope of the period studied was chosen in order to identify current research topics. For the purpose of collecting relevant articles, we used the Web of Science database, but we did not take into account articles published in the SCOPUS database. In addition, our interest was directed exclusively to articles published in journals that were ranked by SSCI as Q1 and Q2. We did not consider Q3 and Q4 journals. Likewise, we focused exclusively on the SSCI scale and did not consider the AIS scale.

Further research should include information from subsequent years. Similarly, future research may focus on the impacts of factors such as the COVID-19 pandemic on job creation in the public or private sectors. In addition, future research may also focus on job crafting in home-office.

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THE IMPORTANCE OF HUMAN CAPITAL DEVELOPMENT AND ITS DETERMINANTS

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Keywords: Literature review, human capital, education, labour market policy.

JEL classification: J24, O47

1 Introduction

The importance of human capital development is constantly growing, in connection with the sustainable development of the country and the competitiveness of companies. The American economist Schultz (1961) speaks about the importance of human capital and its development in the modern economy, which stimulates technological innovation and the international division of labour. As a result of the ever-increasing differences in the quality of education departments, the education system must contribute to the prosperity of Europe, which brings to the fore the finances from the European Union, which is also edited by the authors Aristovnik (2011) and Kosor et al. (2019). There are well-known published, mostly foreign studies pointing to the connection between public financing from EU sources and the development of human capital (Romer, 1986; Lucas, 1988). Theories that focused on the mechanism by which knowledge was acquired emphasized the role of human capital. According to Lucas (1988), the source of higher growth is an investment in human capital. Romero's model (1986) of endogenous theory presents a model in which externality takes place in the creation of all knowledge. The author emphasized that investments in physical and human capital create positive externalities. Positive externalities increase the production capacity not only of investing companies and workers but also of others. This positive externality is the increasing returns from the scale of investments in human capital.

The development of human capital, specifically the support of education and employment through financing from the European Union using its returnable forms of financing, represents a new phenomenon of support policy. The analysis of the impact of the use of financial instruments and methods of their evaluation represents a research problem that will be addressed. The overview study aims to evaluate the overview of the available literature, which maps the ways of using methods for evaluating the use of financial instruments from ESF resources and determining their impact on the creation of policies to support education and employment in EU countries. For this purpose, we formulated the following research questions: What is the significance of human capital development? What determinants influence the development of human capital?

2 Material and methods

The collection of information was based on available scientific studies that were collected and compiled from November 2022 to December 2022 to evaluate the available literature focused on human capital and its determinants. To achieve this goal, we chose a specific method of data collection, namely the snowball method. When acquiring literary sources, we mainly worked with the foreign databases Google Scholar and Science Direct, supplemented by scientific journals Web of Science, Elsevier and Scopus, in which we searched for studies using keywords in the English language (human capital and measurement, human capital and public support, human capital and employment, etc.).

Based on the keywords we selected, we obtained 54 studies for the period 2010-2022, which we developed into a literature review. We document the positive impact of these determinants on human capital using the examples of countries that, based on these determinants, have increased the level of human capital as tools for the sustainable development of the country's economy and the prosperity of companies.

3 Results

The importance of the development of human capital and its determinants is currently becoming a monitored quantity at the macroeconomic level, which predicts the sustainable development of the country. In the work, we focused on evaluating the authors' approaches to defining the determinants of human capital development from different perspectives of the meaning of human capital. The results of our review of the literature indicate a relatively high interest of theorists in connecting human capital and economic growth of the country in the relative value of almost 30% of the total sample (14) and the prosperity of the company associated with competitiveness at the international and regional level, the internationalization of enterprises and, above all, professional competences, complex functions and basic skills, which represent human capital stocks that bring about an increase in labour productivity, the given nexus reached the value of 28% of the total sample (13), the given two areas ultimately confirmed the link, as the well-known connection between the competitiveness of enterprises and the economic growth of the country (Wennekers, Thurik, 1999; Simionescu, 2016).

The results of our literature review further reveal the main determinants of human capital development that directly affect the sustainable development of a country. The most frequent determinants of human capital development in studies were education (31.48%) and employment, labour market policies (16.67%), followed by support for science and research (12.97%), which is closely related to education. From the authors' point of view, education was considered a key business strategy for the success of the company. The connection between education and employment represents the sustainable development of the country, because just as the level of education affects economic growth, economic growth affects the maintenance of existing jobs and the creation of new jobs.

In connection with the research objective and research questions, we can state that the importance of human capital development ultimately lies in the sustainable development of the country, which is closely related to the competitiveness and prosperity of enterprises in the country. Among the main determinants of human capital development are education and employment, which contribute to labour productivity and the creation of new jobs.

4 Conclusions

Due to the influence of the development of human capital, various determinants that contribute to the development of the country's economy, the prosperity of the company, the environment, etc., come into focus. In the studies, two determinants of human capital development were most often found, namely education and employment, labour market policy. Direct investments were an important determinant of the country's development and the company's competitiveness. Considering the displacement of a less educated workforce by a more educated workforce, the importance of investments in the development of human capital is demonstrable. It is clear from the results of the studies that the sustainability of the economic growth of the country or the prosperity of the company in connection with the development of human capital can be maintained by regular investments in human capital. From the point of view of employment, as the second most represented determinant of human capital development, we can confirm on the basis of studies the crowding out of private employment by public employment, and therefore for the creation of future policies it is necessary to take into account the need to increase interventions in order to improve the fiscal position of countries.

Maitra (2016) and Marinas (2015) pointed out that when economic growth fluctuates, investment in both human capital and labour force have a significant causal effect, and in the absence of available resources, EU cohesion policy funds are considered crucial and can significantly contribute to the development of human capital. capital. Also, in connection with the given statement of the authors, future research in the field of human capital development would be appropriate to focus on the potential of using resources from the European Union to support and develop human capital in EU countries.

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TECHNOLOGICAL TRENDS IN TOURISM AND THEIR INFLUENCE ON THE SUPPLY OF HOTELS

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Keywords: hotel, literature review, trends in tourism.

JEL classification: L83, O33, Z30

1 Introduction

Trends in the tourism industry are a set of phenomena and relationships on the supply and demand side, which also significantly affect the events in the hotel industry. These trends are generally based on the practice of economically developed countries with a long-term tradition of tourism development (Medveďová, 2015). Due to the influence of strong globalization tendencies on the tourism market, these trends are subsequently reflected in the supply and demand for tourism in other countries as well (Conrady, Buck, 2012). It is necessary to identify the decisive influences shaping supply and demand on the side of hotels and take the necessary measures to create conditions for stabilization and growth in the competitive market in the future (Moutinho, 2010; Varma, 2010).

Technological trends, i.e. the use of information technology (IT), are one of the most current trends in tourism. Ignorance of information technologies makes the hotel less competitive, while it can also have a negative impact on the guests' experience, which can ultimately damage the hotel's reputation (Čechurová et al. 2014). The aim of this paper is to present a review of academic literature and studies focused on technological trends in tourism and their influence on the supply of hotels. Our paper addresses the following research question: What is the current state of research on the trends in tourism and their influence on the supply of hotels?

2 Material and methods

The literature review was performed between November 2022 and January 2023. To find the right studies and thus answer for our research question the keywords were represented by “trends in tourism“, “technology trends in tourism“ and “technologies in tourism“. Studies were collected from Scopus, ResearchGate, Google Scholar and Science Direct databases. We have selected 49 articles and studies from the available sources, the literature review also contains 8 contributions from book publications and 5 conference contributions, in total it was 62 studies. The publication period of the found studies is 2005-2022.

3 Results

In search of an answer to our research question, we first focused on studies that identify trends in the tourism industry, which include, for example, sustainability, new forms of tourism or the use of technology in the tourism industry. The number of studies that deal with trends in the tourism industry was 13. Subsequently, we focused on specific trends, technological trends in the tourism industry and their influence on the supply of hotels. The subject of the investigation were specific technological trends that are used and influence the supply of hotels, namely digitization, mobile technologies, the Internet of Things (IoT) and artificial intelligence (AI). Digitization in hotels, the essence of which is the implementation of digital technologies in business processes, was addressed in 5 of the studies. A larger number of studies (11) were devoted to the use and implementation of mobile technologies and the associated use of mobile applications. 10 of the studies were devoted to the Internet of Things technology and the personalization of services through the collection of big data. Most of the reviewed studies focused on technologies powered by artificial intelligence (14).

The largest increase in studies on technology trends in tourism was recorded in 2020-2022 which was also caused by the impact of the COVID-19 pandemic and the increased acceptance of technology in the hotel industry, in order to reduce personal contact and limit the spread of the disease, 9 studies focused directly on the impact of the pandemic on the use of technology in tourism.

4 Conclusions

The aim of this paper was to present a review of academic literature and studies focused on technological trends in tourism and their influence on the supply of hotels. Processing 62 papers, we were able to answer the research questions and thus fulfill the aim of the paper.

In today's conditions of the tourism market, it is difficult to ensure the providing of quality services without the application of the latest technological trends. From the review of the literature, we can find out that the authors attached importance to the use of technological innovations in the hotel industry already 17 years ago (Theobald, 2005), when technologies were not on the rise as they are now. Application of the technological trends is a necessity for hotels, but on the other hand, there is the issue of the security of keeping and collecting data about guests. This paper tries to point out areas where hotels can implement technological trends and what influence this has on supply of hotels.

The results of our survey are limited by the number of studies in the literature review, which consists of only 62 academic articles and studies. The literature review can be used by other authors as a basis for researching technological trends in the tourism and their influence on the supply of hotels.

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Supported by the grant project VEGA – 1/0136/23 From resilience to sustainability. The impact of data on sustainable and competitive development of tourism.

ANALYSIS OF CHANGES IN THE MANAGEMENT OF HOSPITALITY BUSINESSES IN SLOVAKIA IN THE CONDITIONS OF THE CRISIS CAUSED BY THE COVID-19 PANDEMIC

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Keywords: Hospitality management, accommodation establishments, catering establishments, COVID-19 pandemic.

JEL classification: M21, Z32.

1 Introduction

During the COVID-19 pandemic, the sectors most affected are the hospitality industry, which has been feeling the impact of the pandemic on the largest scale since its inception (Gallo et al., 2021). Hospitality businesses includes accommodation establishments, catering establishments and other establishments (e. g. recreation and entertainment establishments) (Hui et. al, 2019). Hospitality industry is the first to feel negative effects and the last to recover and return to its original state after the crisis (Davahli et al., 2020). After a period that was referred to as a "world lockdown", individual economies had to take responsibility for their own measures and take the pandemic situation into their own hands. The further course of the COVID-19 pandemic was accompanied by decisions by individual governments that interfered with social and working life (Shapoval et al., 2021). The pandemic has also led to unprecedented job and income losses, resulting in the loss of millions of jobs and the loss of potential revenues in billions of euros (Dube et al., 2020); (Metha & Panse, 2022).

Measures against COVID-19 in Slovakia have changed cyclically according to the current situation. After the summer period of 2020, when the number of positive cases did not increase daily, anti-pandemic measures were in place to a minimum extent. However, the situation changed rapidly with the arrival of autumn, when the number of positively tested citizens began to increase again. After a period in which hospitality and accommodation establishments were subject to almost no measures, the operation of operations was again restricted. The new measures that were introduced before the arrival of 2021 caused the number of guests in accommodation facilities to drop by up to 94%, which is the second worst situation since April 2020, when the pandemic began to spread (Statistical office of Slovakia, 2021).

At the same time, the COVID-19 crisis has raised the important question of whether hospitality businesses are ready to sustain and successfully recover from the period of operational discontinuity caused by the waves of the outbreak of the pandemic. Businesses have had to face a sudden outflow of customers and the inability to generate cash flows from sales, putting them at great risk (Wieczorek-Kosmala, 2021); (Khawaja, Sarfraz & Rasid, 2022).

All these situations and changes to which businesses in the hospitality industry had to adapt became the subject of our research. The aim of our research was to investigate changes in the management of accommodation and catering establishments in Slovakia in the conditions of the crisis caused by the COVID-19 pandemic.

2 Material and methods

We examined all of changes in the management of accommodation and catering establishments with the questionnaire method. A total of 310 respondents were interviewed, but in the process of sorting the data, we included only responses from 94 respondents that were relevant and met the research criteria set by us. The research criteria were that establishment has been operating in the hospitality industry in Slovakia, and it has been only accommodation establishment or catering establishment.

For data collection we use two questionnaire surveys – the first was designed for accommodation establishments and the second was designed for catering establishments. Surveys were conducted on the territory of the Slovak Republic for Slovak accommodation and catering establishments. Surveys were constructed by the authors and data collection took place in the period from 1 February 2022 to 10 March 2022.

The research sample consisted of 94 respondents, of whom 54 were from accommodation establishments and 40 respondents from catering establishments. These respondents were selected through probability systematic sampling. Among the data obtained from the questionnaire surveys, we set three research questions, which we will verify by Pearson correlation coefficient:

1. Is there statistically significant relationship between using/presence of the crisis plan in the establishment and better management of crisis cause by the pandemic?
2. Is there statistically significant relationship between time of active operating of establishment and better management of crisis cause by the pandemic?
3. Is there statistically significant relationship between knowledge of employees how to manage crisis and better management of crisis cause by the pandemic?

3 Results

As part of the analysis of the responses from the respondents, we came up with interesting results. In terms of individual management changes, during the peak of the pandemic, facilities were forced to find other solutions that would help them manage this crisis in the best way. Through a questionnaire survey, we found out which specific interventions in the operation were. While for catering establishments the most significant changes were the opening of the dispensing window (65% of respondents) and the introduction of delivery (55% of respondents), for accommodation facilities it was mainly a change in opening hours (64.8% of respondents).

Many establishments create a contingency plan for similar cases. Such a plan helps the enterprise to better cope with the situation that has arisen in times of crisis. From respondents' responses, we found that 22.5% of facilities were not forced to use a contingency plan during the COVID-19 crisis. For accommodation facilities, 48 establishments used the contingency plan during the COVID-19 pandemic, which representing 88.9% of respondents. As for catering establishments, 31 facilities used the contingency plan here - 78.5% of respondents. For this reason, we constructed the first research question.

The mitigation of the effects of the crisis can also be influenced by the period of active operation. Facilities that have been on the services market for many years tend to adapt better to different market situations. From the respondents' responses, we found that 46 installations with active operating times greater than 10 years participated in our survey and had to use the contingency plan. Facilities with a period of operation of less than 10 years that benefited from the contingency plan were 33. The contingency plan was not used by 15 facilities, 6 of them with an active operating period of less than 10 years and 9 of them with a period of operation of more than 10 years. We take this fact into account with our second research question.

At the same time, as many as 68 respondents out of 94, told us in the survey that they could estimate the duration of the crisis. Respondents also expressed their agreement with the opinion that a crisis in the hospitality industry could be avoided – the number of respondents with this opinion was as high as 58. These results tell us that theoretical knowledge of the hospitality crisis is sufficient for potential crisis management. It connected with our third research question.

4 Conclusions

Main goal of research focused on changes in the management of accommodation and catering establishments in Slovakia in the conditions of the crisis caused by the COVID-19 pandemic, as we observed various changes in the facilities, such as shortening operating hours, opening the dispensing window, or introducing a delivery service, etc.

At the same time, based on the results of the correlation analysis through Pearson correlation coefficient, we found that between each research variables weren´t statistically significant relationships. From above we can argue that the successful management of the crisis caused by the COVID-19 pandemic in accommodation and catering facilities in Slovakia is not affected either by the thorough preparation of the crisis plan, not by the period of active operation of the facility, not by the knowledge of employees about crisis management. From the above, Slovak hospitality businesses cannot adequately prepare for large-scale crisis as the COVID-19 pandemic but can only mitigate its negative impact of crisis by changing management. Also, we can argue that this contribution expand knowledge in the field of crisis management in hospitality industry.

However, we believe that all these claims may not be universally binding, but we assume that they are only valid for a small sample of respondents, as it was in our case. We think that the research sample was relatively small, since out of the total number of respondents (310), less than a third of the respondents (94) participated in the research. We consider that the return on the questionnaire was also influenced by the duration of the questionnaire survey, which was relatively short (only one month and 9 days). In our opinion, an analysis extended by the responses of respondents from other countries would also yield interesting results.

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ACCESSIBILITY OF MUSEUMS AND GALLERIES IN SLOVAKIA

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Keywords: accessibility, museums, galleries.

JEL classification: L83, Z32

1 Introduction

People with different types and degrees of disability face specific barriers and therefore require adapted tourism services and products (Figueiredo et al., 2012; Kaganek et al., 2017). The process of removing these barriers is called debarierization and it is a basic condition for the inclusion of disabled people in society. The goal of universal design, which is associated with debarierization, is to create a generally accessible, user-friendly and safe environment for a wide range of users (Buhalis, Darcy 2011; Rollová, Čerešňová, 2015).

Over the years many authors paid attention to the issue of disabled people and their travel options (Leidner, 2006; Buhalis, Darcy 2011; Figueiredo et al., 2012; Kaganek et al., 2017; Marčeková, Šebová, 2020; Reyes-García et al., 2021). The creation of tourism products considering the specific needs and requirements of disabled people, which also benefit seniors, pregnant women, people with strollers, oversized luggage or people with temporary health issues, not only increase the attractiveness of the environment, but can also represent a business opportunity for stakeholders that will ensure success on the tourism market (Marčeková, Šebová, 2020). Creating a chain of tourism products and services adapted to the needs of people with disabilities contributes to the economic growth and employment (Leidner, 2006). Meskele et al. (2018) also emphasize the importance of making tourism attraction accessible, while it mainly requires a holistic (Andani et al., 2013) and systematic approach, as it is a multidimensional phenomenon (Partarakisa et al., 2016). The accessibility of tourism attraction is also largely influenced by the level of development of the country, which means that despite the higher prevalence of disabled in developing countries, the implementation of accessibility is lower (Marsin et al., 2014; Reyes-García et al., 2021).

The aim of this paper is to examine the current state of museums and galleries accessibility for physically disabled people in Slovakia, as culture can be considered an important factor of economic and social changes in Europe (Pahos et al., 2010) and accessibility and inclusion should be a common standard in museums (Reyes-García, 2021).

2 Material and methods

The aim of the paper is to examine the current state of museums and galleries accessibility for physically disabled people in Slovakia. Our paper addresses the following research questions: RQ1: To what extent are museums and galleries adapted for physically disabled visitors? And RQ2: On the removal of which barriers do managers of museum and galleries pay the most attention?

A population consisted of 154 registred subjects. An overview of registered museums and galleries in Slovakia are maintained by the Ministry of Culture of the Slovak Republic in the Register of Museums and Galleries. Only those facilities that meet the conditions for performance of basic professional activities are entered in the register. The primary data collection tool was a structured questionnaire. The survey recipients were contacted electronically by e-mail between June 2022 and March 2023. Managers of museums and galleries evaluated access to the building, interior accessibility, adaptation of ramps and elevators, sanitary facilities, provision of information on the website and provision of financial benefits. A total of 40 museums and galleries participated in the survey. We will process the obtained data using selected mathematical-statistical methods.

3 Results

Despite the trend of ageing population and the growing number of people with disabilities, managers do not pay much attention to the issue of accessibility. Based on the findings we can state that not a single museum or gallery in Slovakia meets the necessary requirements for 100%. The adaptation of Slovak museums and galleries for physically disabled visitors varies between 24% and 73%, whereas 7 objects are not accessible at all (RQ1). We noticed the biggest shortcomings in ramps and elevators, which should be one of the options to facilitate access for physically disabled.

Communication, behaviour, willingness to help, and thus the overall competence of the staff to work with disabled visitors was closer to the value of complete competence on the rating scale, even though only three facilities employ staff specially trained for work with disabled visitors. The most common financial benefit is a discounted entrance fee for disabled visitors, which is provided by up to 62.5% of museums and galleries, while the amount of discounted admission varies from 30% to 70% of a total price of the entrance fee. On the other hand, 32.5% of museums and galleries provide free admission for disabled visitors as well as for accompanying person.

Providing as much information as possible for disabled people leads to a gradual elimination of information barriers. The rate of providing information for people with disability is low and on the Likert scale it was closer to the value indicating that objects do not provide information for disabled people at all. In fact, almost 18% of objects do not even manage their own website at all.

Managers of Slovak museums and galleries evaluated on the Likert scale the extent to which they pay attention to removal of barriers. The results of the survey point to the fact, that the greatest emphasis is placed on removing social barriers (RQ2). As can be seen from the previous results, relatively little attention is paid to information barriers, while the least emphasis is placed on the removal of architectural barriers.

4 Conclusions

In this paper we dealt with the issue of tourism attractions accessibility specifically, whether Slovak museums and galleries are accessible to visitors with physical disability. Based on our research we can conclude that the highest overall level of adaptation of museums and galleries achieved is 73%, while 7 facilities out of 40 that participated in our survey, are not accessible at all.

However, debarierization is not only related to the removal of architectural barriers, but also financial, social and information barriers, which we also paid attention to in our survey. We conclude that managers are not sufficiently aware of the importance of eliminating information barriers. On the contrary, the best approach they have to the removal of financial barriers by providing free or discounted admission. Even though that museums and galleries do not employ trained staff, managers state that they pay the most attention to removing social barriers.

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DOES ESG HAVE AN IMPACT ON A COMPANY’S FINANCIAL PERFORMANCE? EMPIRICAL EVIDENCE ON EUROPEAN LISTED COMPANIES

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Keywords: ESG, profitability, stakeholder management, company performance, sustainability.

JEL classification: M14; M21; M31

1 Introduction

As environmental concerns and sustainable development become increasingly popular, companies are facing new social and economic threats and increased demand for non-financial disclosures from the public. According to a global survey by KPMG (2022), 96% of the world's 250 largest companies report on sustainability or ESG matters, with 64% identifying climate change as a risk to their business. Similarly, 71% of the top 100 companies in 58 countries identify material ESG topics. Despite this, there are still debates and studies showing a negative or mixed influence on some financial performance ratios.

To address these concerns, many companies are turning to unified performance measurement systems that align their performance with stakeholder expectations. This approach was introduced by Freeman's stakeholder management framework in 1984, which shifted the focus from short-term profit maximization to long-term sustainability through stakeholder analysis. This means that companies must analyze their environment and stakeholders, including customers, suppliers, employees, governments, investors/shareholders, and other interest groups, and consider their interests even when they conflict.

One of the most common performance measurement systems today is ESG metrics, which represent the rights and needs of various stakeholders and aim to bring long-term sustainable growth to businesses and their stakeholders. This system goes beyond environmental concerns and includes data on community matters, employee satisfaction, health and safety, diversity, equality, and human capital questions. In publicly traded businesses, ESG has become increasingly common as companies try to engage with stakeholders, respond to public and investor pressure, compete with rivals, and survive during crises.

2 Material and methods

The article explores the impact of ESG disclosure on a company's financial performance. It highlights the ongoing debate among academics regarding the relationship between ESG disclosure and corporate financial performance, citing inconsistencies in results based on various factors such as market/geography, type of panel data, and ESG database. The article highlights that the majority of the world's largest companies report on sustainability or ESG issues, except China-based firms, where new regulations are expected to change this.

The article reviews several studies that support the stakeholder theory, indicating that adaptation of stakeholder management and a sustainable long-term approach benefits a company's performance. However, some studies show negative relationships between ESG scores and financial performance. A meta-analysis of more than 1,000 studies by Whelan et al. (2021) reveals that ESG positively impacts financial performance over the long term, provides downside protection, and increases risk management and innovation. The article concludes that investing in sustainability has a positive impact on a company's financial performance, including low carbon emission goals, but that disclosure on its own does not improve the financial situation of a company. The studies reviewed in the article demonstrate the complexity of the relationship between ESG disclosure and financial performance and highlight the need for more research in this area.

3 Results

The primary objective of the research study is to explore the impact of ESG (Environmental, Social and Governance) disclosure practices on the financial performance of non-financial companies in the STOXX Europe 600 index. The research data covers the period from 2017 to 2021, including the volatile period during and after the COVID-19 pandemic, during which ESG metrics are expected to display their strengths or weaknesses in supporting business sustainability through better stakeholder engagement. The research team analyzed panel financial data obtained from Investing (2023) along with ESG performance ratings, which were taken from the CSR Hub (2023) database. The CSR Hub ratings were on a 100-point scale, covering four sub-ratings, namely, Community, Employees, Environment, and Governance. To avoid multicollinearity, each ESG rating, along with selected financial ratios, was used in separate models, following Aydogmus et al. (2022).

The research hypotheses are as follows: H1 - ESG rating has a significant impact on a company's profitability, and H2 - ESG sub-ratings (community, employees, environment, and governance) have a significant impact on a company's profitability. In each model, the control (financial) variables were (total) leverage and (total) liquidity, and lin-log models were also applied as a robustness check. White standard errors were applied to avoid heteroscedasticity, and random effects were used instead of fixed affects based on Hausman tests.

The research results showed that the impact of ESG ratings on profitability was insignificant, except in the case of the ESG community sub-rating. The community sub-rating achieved a regression coefficient of $\beta = -0.000842$ and a p-value of 0.0888, which is a weak negative impact on profitability. Leverage was found to be the most significant determinant of profitability in all the models presented. In the lin-log models, the results were similar, with the ESG community sub-rating having the most significant p-value. The research study found that the relation between capital structure and profitability was much stronger for the European listed companies in comparison with the impact of ESG on their profitability.

In contrast to the research study's results, the analysis by Aydogmus et al. (2022) on the 5000 publicly listed companies from the Bloomberg database from 2013 to 2021 and ESG data from Refinitiv database showed that cumulative ESG score has a highly significant positive relationship with ROA. Similarly, Agoraki et al. (2022) found that firms with lower ESG reputation risk perform better financially. Nguyen et al. (2022) also conducted research on the time period from 2018 to 2020, taking a sample of 57 nonfinancial S&P 500 companies, which showed mixed results. Overall, the research study concludes that only the ESG community sub-rating has a weak negative effect on profitability, and the overall impact of ESG on profitability is not confirmed for the dataset used in this study. However, applying detailed sub-ratings seems to be more meaningful than ESG combined rating.

4 Conclusions

The objective of this research was to examine the relationship between stakeholder engagement model through ESG scores and financial performance based on the stakeholder theory. The study used the CSR Hub cumulative ESG score and its four sub-scores, and financial ratios of nonfinancial STOXX Europe 600 companies to analyze the impact of ESG ratings on financial performance. The empirical results of the analysis showed that the impact of cumulative ESG rating on profitability is insignificant, while the effect of ESG sub-scores, except for the ESG Community score, is also insignificant. Interestingly, the ESG Community score had a surprisingly negative effect on profitability. Overall, the research found no significant evidence of negative influence of ESG usage on financial performance, except for a weak negative Community influence. However, to reduce limitations, future research should observe a longer time scale and compare ESG databases with company financial performance. Ultimately, the research concludes that further research is needed to prove the convergence between ESG usage and corporate financial performance.

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TRADITIONAL COSTING METHOD COMPARED WITH ALTERNATIVE COSTING METHOD FOR A PRODUCT FROM RECYCLED RAW MATERIALS

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Keywords: Circular economy, wood-plastic composite, costing method, machine hour rate

JEL classification: D24, D61

1 Introduction

There is a growing potential for the circular economy to be realized through innovative products, including wood-plastic composites. In light of the emphasis on environmental protection, an efficient use of input resources is necessary in repeated product life cycles. The increasing share of plastic waste combined with wood raw material creates great potential for meeting the environmental criteria. Selected Slovak universities and the Automotive Industry Association of the Slovak Republic are looking for vehicle waste recovery solutions in innovative products. The project also includes research that takes place at the Technical University in Zvolen, including the assessment of the production of composites containing wood and waste plastic or recycled tyres (rubber waste). This paper presents an innovative methodological calculation of overhead costs. It is aimed at proposing modifications to the traditional method of overhead cost calculation, as well as comparing the results of the innovative methodological calculation method. It is based on the investment plan of the manufacturing operation that uses recycled wood and plastic.

2 Material and methods

This study is focused on the economic impact of a product derived from recycled wood-plastic raw materials, namely WPC with dimensions of 2,500 x 1,250 x 20 mm (height, width, thickness), and a weight of 48.5 kilograms. According to the investment plan, an extrusion line for WPC profiles was identified as an appropriate technological procedure, as well as the cost associated with the acquisition. The technological line consisted of a pulveriser, homogenizer silo, drum dryer, cladding machine, and auger conveyor. In terms of production capacity, the extrusion line mixture will be able to produce 1,600 kg in a shift of eight hours at 87.5% capacity, resulting in a total annual output of 2,800 tonnes. It is possible to model cost item structure using this data using a type of calculation formula. Despite many theoretical and practical influences, the structure of the type of calculation formula for the application of the traditional overhead cost calculation is not only based on recommendations from many theoretical sources (Král et al., 2018; Coenenberg et al., 2016; Potkány and Krajčírová, 2015; Popesko, 2009; Däumler and Grabe, 2002), but also on practical applications for the production of similar products. As part of the allocation of overhead costs, the business plan must identify the group and the overhead cost values.

Following this, the rates of overhead costs can be determined for the items of production, administrative, and sales overheads using type allocation bases. Surcharges are presented mathematically in the form of relationships. A disadvantage of this approach is that overhead costs are averaged. As a result of the paper's stated objective, it has been possible to formulate the following research questions (RQs): RQ1: How should the traditional cost method be adjusted in the context of automating the production of a recycled raw material-based product?

3 Results

The greatest impact of calculation of Machine Hour Rate is expected in eliminating inaccuracies in overhead cost calculation through the use of fixed machine hour rates (Ostermann, 2010), but this proposal provides the opportunity for a very quick response and flexible adjustment to changing conditions. There are several aspects to this concept, such as a quick and flexible adaptation to changes in technological energy consumption or inflationary effects on material inputs, as well as depreciation and interest rates reflected in investment costs. Due to the frequent changes and uncertainty associated with the current economic climate, this calculation provides the ideal option for making quick decisions despite the prevalent technicalization of the production process. A summary of the methodological procedure had been presented in the paper, as well as a practical example of how the innovative procedure had been applied in practice for potential candidates. Also, it provided a database for future discussion and comparison of similar studies within the identified research gap.

4 Conclusions

When applying the Calculation of Machine Hours Rates, it is necessary to identify precisely the production capacity in terms of machine hours so that the Calculation of Machine Hours Rates can be applied. Even though there was no significant change in cost allocation based on the comparison of price differentiation, it could differ due to variations in other dimensions of the surface and volume of the product, changes in the proportion of wood to plastic component, or subsequent modifications to the surface.

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HAS THE EUROPE 2020 STRATEGY BEEN FULFILLED OR NOT BY THE EU27 COUNTRIES? - EMPIRICAL STUDY

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JEL classification: I38, O11, O47, O52

1 Introduction

At the turn of the 20th and 21st centuries, the European Union (EU) faced many major challenges related primarily to globalization, international competitiveness, technological and telecommunication development. In 2000, these facts led to the signing of the Lisbon Agreement, the aim of which was to increase the EU's competitiveness on the global market. At the same time, this agreement obliged the European countries to maintain the social values necessary for European citizens. The main assumption of the Lisbon Agreement was that the European Union would become the most competitive and dynamic economy in the world by 2010 (Capello a Lenzi 2013; Kasza 2009; Steurer a Hametner 2013; Sulmicka 2016). However, the emergence of the global financial crisis (GFC) in 2008 and subsequent economic and political developments significantly affected the fulfilment of this aim and revealed weaknesses in the economy of the European Union (Basarac Sertić et al., 2015; Breman, 2011). In 2010, in the direct aftermath of the GFC, the European Commission, headed by Jose Manuel Barroso, launched the program "Europe 2020 Strategy", whose aims were focused on 3 basic pillars. These were oriented to supporting smart, sustainable and inclusive growth. Smart growth can be understood as the creation of an economy based on innovation and knowledge; sustainable growth as support for a more ecological and competitive economy with efficient use of resources and inclusive growth as support for achieving higher employment that contributes to economic, social and territorial cohesion (European Commission, 2010).

In order to examine the level of progress achieved in each area of the Europe 2020 Strategy, it is necessary to have not only reliable and quantifiable data, but also tools to reliably monitor, measure, evaluate and compare the results of the strategy. The purpose of the study is to assess the fulfilment of the goals set in the Europe 2020 Strategy in 27 countries of the European Union, as well as the progress achieved by individual countries during the period of implementation of this strategy. As part of the methodology for evaluating the fulfilment of goals, we rely primarily on the approach of the Pasimeni (2013, 2016), which we modify with new approaches and knowledge from the given field.

The Europe 2020 Strategy prioritizes monitoring eight main goals that should be fulfilled by 2020. These goals are directly connected to the area of employment, science and research, climate and energy, education, social inclusion and poverty reduction. With the intention of monitoring progress in the given areas, individual goals were clearly defined and quantified (European Commission, 2010). The goals of the Europe 2020 Strategy as well as their desirable values are shown in Table 1.

Table 1 Objectives of the Europe 2020 Strategy

Area of interest	EU Target 2020
Employment	75% of people aged 20-64 should be employed
R&D	3% of GDP should be invested in R&D
Climate change and Energy	Greenhouse gas emissions 20% (or even 30% if conditions are met) lower than 1990
	20% of energy from renewable sources
	20% increase in energy efficiency compared to 2005
Education	>10% of people leave school early
	>= 40% of people with tertiary education
Poverty	by 20 million fewer people at risk of poverty (25%)

Source: Own processing according to the Europe 2020 strategy (2010)

A close relationship and connection can be seen between the individual goals, which means that in some cases the fulfilment of one goal explicitly leads to the achievement of another goal. An example could be the level of education and the employment rate. A higher level of education helps to increase the unemployment rate, and at the same time acts as a positive determinant of reducing economic poverty. More resources for science and research, as well as new innovations in various areas of the economy, combined with increased resource efficiency, improve competitiveness and support job creation.

2 Material and methods

In the contribution, we work with data for the period 2009 to 2020, which we gained from the Eurostat database. We work with nine main indicators quantifying the state of fulfilment of the goals of the Europe 2020 Strategy, which are:

- TEDU - Tertiary educational attainment, age group 30-34 (%) (S)
- GERD - Gross domestic expenditure on R&D by sector (% of GDP) (S)
- GGE - Greenhouse gas emissions in effort sharing decision (ESD) sectors (D)
- RNEW - Share of renewable energy in gross final energy consumption (%) (S)
- PEC - Primary energy consumption (D)
- FEC - Final energy consumption (D)
- EMPL - Employment rate by sex, age group 20–64 (%) (S)
- SCHO - Early leavers from education and training, age group 18-24 (%) (D)
- POV - People at risk of poverty or social exclusion (%) (D)

These nine indicators reflect various aspects of economic development. However, the indicators themselves are presented in different units and scales, and at the same time, several of them have a different direction of extremalization. In order to be able to compare these indicators with each other, it is important to ensure their comparability. We ensure comparability by normalizing the data or by rescaling them to a score considering the direction of extremalization of a specific indicator. As we indicated, among the indicators there are indicators with different direction of extremalization, i.e. what values of the indicator are requested. Based on this, we divide the indicators into stimulants (S) and destimulants (D). Relatively higher values are desirable for stimulants and the nature of extremalization is maximization, on the contrary, relatively lower values are recommended for destimulants and the nature of extremalization is minimization.

Then we aggregate the normalized values of the indicators into three sub-indices, which can be considered the basic pillars of the Europe 2020 Strategy. These are the indexes:

- SMGI (smart growth index) representing smart growth,
- SUGI (sustainable growth index) representing sustainable growth,
- INGI (inclusive growth index) representing inclusive growth,

from which we subsequently construct one synthetic indicator – Europe 2020 Index.

3 Results and Conclusions

The Europe 2020 Strategy contains standards that countries should achieve in key areas of their development, such as employment, innovation, energy policy and climate, education, and poverty. The progress of individual countries was measured through specified indicators in each area. We chose three variables for the areas of Smart growth, 4 variables for the area of Sustainable growth and 3 variables for Inclusive growth.

Our results shows that Sweden, Finland, and Denmark are among the top performers, our results confirm Pasimeni's 2012 research. The biggest improvement from 2009 to 2020 was achieved by Portugal, which moved from 24th place to 10th, Spain (from 22nd to 17th), the Czech Republic (from 19th to 14th), the Netherlands (from 9th to 4th) and Slovakia (from 25th to 21st). On the contrary, we can also observe more significant falls, when Poland moved from 16th place to 24th, Italy (from 18th to 23rd) and Hungary (from 14th to 19th). We can evaluate these significant deteriorations as a consequence of the crisis, the impacts associated with the introduction of new policies. In 2020, the countries of Sweden, Belgium, and Denmark (in that order) dominated the smart growth sub-index. Within the sustainable growth sub-index Sweden, Greece and Portugal fared best and, last but not least, inclusive growth the Czech Republic, the Netherlands and Slovenia did best. On the other hand, Romania and Malta finished last in the SMGI index, Bulgaria and Poland did the least in terms of sustainable growth, and we recorded the lowest progress in inclusive growth in Greece and Romania. In general, we can evaluate that our results confirm the partial conclusions that were presented in the studies of Pasimeni (2012, 2013); Rappai (2016); Becker et al. (2020); Walesiak (2021).

The fulfilment of the Europe 2020 Strategy was also greatly influenced by the fact that each country could set its own national goal within the framework of the main goal, which was set equally for all EU27 countries by the European Union, based on their policies and the current economic and ecological setting of the country. In the study, we focused on evaluating both the main goals of the European Union through the Strategy 2020 Index, as well as on the evaluation of the fulfilment of individual national goals and thus provide a comprehensive picture of the current state of the strategy. The results of the analysis suggest that national policy making plays an important role in determining the effectiveness of the strategy. Our analysis confirmed the idea declared by Pasimeni (2016) that a large part of the differences in the performance of individual countries depends on the quality of governance at the national level.

For the future, the European Union has already declared new goals until 2030. These goals are mainly aimed at supporting the reduction of energy dependency, reducing greenhouse gas emissions and increasing the share of energy from renewable sources, as well as energy efficiency. At the same time, in March 2021, the European Commission published a new Action Plan until 2030, which focuses on three key areas: increasing the number and quality of jobs, skills and equality, social protection and inclusion (MPSVR SR, 2022).

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