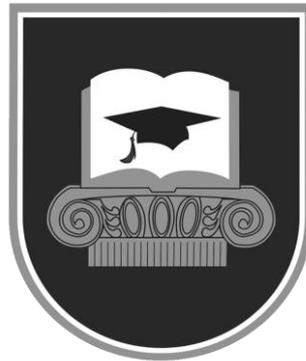


ISSN 1648-7974

**LIETUVOS VERSLO KOLEGIJA**  
**LITHUANIA BUSINESS UNIVERSITY OF APPLIED SCIENCES**



# VADYBA

**2021 Nr. 2 (37)**

*Journal of Management*



Name of publication: **Journal of Management** (ISSN: 1648-7974)

Issue: Volume 37/Number 2/2021

Frequency: Semianual

Languages of articles: English,

Office of publication: Klaipeda University Press

Herkaus Manto 84

LT-922294, Klaipėda

Lithuania

Editorial Office: Assoc. prof. Remigijus Dailidė

Scientific Research Department

Public Institution Lithuania Business University of Applied Sciences

Turgaus st. 21, LT-91429

Klaipeda, Lithuania

Phone +370 46 311 099

Fax +370 46 314 320

E-mail: remigijus.dailide@ltvk.lt

**Journal of Management Homepage:** <http://ltvk.lt/vadyba>

The journal is reviewed in:

Index Copernicus (IC) database <https://indexcopernicus.com/index.php/en/parametrisation-1/journals-master>

Central and Eastern European online Library (CEEOL) database <http://www.ceeol.com/>

EBSCO Publishing, Inc. Central & Eastern European Academic Source  
<https://www.ebscohost.com/titleLists/e5h-coverage.htm>

<https://www.mab.lt/paslaugos/lietuvos-mokslo-zurnalai/v/>

Every paper is revised by two reviewers.

© Lithuania Business University of Applied Sciences, 2021

ISSN 1648-7974 (Print)

ISSN 2424-399X (Online)

Leidinio pavadinimas: **Vadyba** (ISSN: 1648-7974)  
Leidimas: Volume 37/ Number 2/2021  
Periodiškumas: Leidžiamas dukart per metus  
Straipsnių kalba: Anglų  
Leidėjo adresas: Klaipėdos universiteto leidykla  
Herkaus Manto g. 84  
LT-922294, Klaipėda

Redakcijos adresas: doc. Remigijus Dailidė  
Mokslo-taikomųjų tyrimų skyrius  
Viešoji įstaiga Lietuvos verslo kolegija  
Turgaus g. 21, LT-91429  
Klaipėda  
  
Telefonas +370 46 311 099  
Faksas +370 46 314 320  
Elektroninis paštas: remigijus.dailide@ltvk.lt

**Žurnalo internetinio puslapio adresas:** <http://ltvk.lt/vadyba>

Žurnalas referuojamas:

Index Copernicus (IC) database <https://indexcopernicus.com/index.php/en/parametrisation-1/journals-master>

Central and Eastern European online Library (CEEOL) database <http://www.ceeol.com/>

EBSCO Publishing, Inc. Central & Eastern European Academic Source  
<https://www.ebscohost.com/titleLists/e5h-coverage.htm>

<https://www.mab.lt/paslaugos/lietuvos-mokslo-zurnalai/v/>

Kiekvienas straipsnis yra peržiūrimas dviejų recenzentų.

© Lietuvos verslo kolegija, 2021

ISSN 1648-7974 (Print)  
ISSN 2424-399X (Online)

### **Editor-in-Chief**

- Prof. dr. (HP) Valentinas Navickas, Kaunas University of Technology (Lithuania)

### **Vice-editors**

- Prof. dr. Angele Lileikiene, Lithuania Business University of Applied Sciences (Lithuania)

### **Editorial board**

- Prof. habil. dr. Arunas Lapinskas, Petersburg State Transport University (Russia)
- Prof. habil. dr. Borisas Melnikas, Vilnius Gediminas Technical University (Lithuania)
- Prof. habil. dr. Anna Korombel, Czestochowa University of Technology (Poland)
- Prof. habil. dr. Ariel Mitev, Corvinus University of Budapest (Hungary)
- Prof. habil. dr. Yuriy Bilan, Rzeszow University of Technology (Poland)
- Prof. dr. Yuri Kochetkov, Baltic International Academy (Latvia)
- Prof. dr. Pat Obi, Purdue University Northwest (USA)
- Prof. Van de Boom, Jensen Fontys Hogeschool Communicatie (Holland)
- Prof. dr. Vitalijus Denisovas, Klaipeda University (Lithuania)
- Prof. dr. Maria Fekete-Farkas, Hungarian University of Agriculture and Life Sciences (Hungary)
- Prof. dr. Irena Bakanauskiene, Vytautas Magnus University (Lithuania)
- Prof. dr. Ligita Gaspariene, Mykolas Romeris University (Lithuania)
- Prof. dr. Barbara Lubas, Warsaw Management School (Poland)
- Prof. dr. (HP) Joanna Paliszkiwicz, Warsaw University of Life Sciences – SGGW (Poland)
- Prof. dr. Prof Daniel F Meyer, Director of TRADE, NWU (South Africa)
- Prof. dr. Ivana Načinovic Braje, University of Zagreb (Croatia)
- Assoc. prof. dr. Jurgita Martinkienė, Lithuania Business University of Applied Sciences (Lithuania)
- Assoc. prof. dr. Valentas Gružas, Kaunas University of Technology (Lithuania)
- Assoc. prof. dr. Robert Jeyakumar, Multimedia University (Malaysia)
- Assoc. prof. dr. Alli Al-Maqousi, Petra University (Jordan)
- Assoc. prof. dr. Małgorzata Okręglicka, Czestochowa University of Technology (Poland)
- Assoc. prof. Eng. Waldemar Gajda, Warsaw Management School (Poland)
- Assoc. prof. Marios Socratous, The Philips College (Cyprus)
- Assoc. prof. dr. Sergej Polbitsyn, Ural Federal University (Russia)
- Assoc. prof. dr. Natanya Meyer, University of Johannesburg (South Africa)
- Assoc. prof. dr. Janis Grasis, BA School of Business and Finance (Latvia)
- Assoc. prof. dr. Szergej Vinogradov, Hungarian University of Agriculture and Life Sciences (Hungary)
- Assoc. prof. dr. Vass Laslo, Budapest Communication School (Hungary)
- Assoc. prof. dr. Rita Remeikiene, Mykolas Romeris University (Lithuania)
- Assoc. prof. dr. Isil Arikan Saltik, Mugla Sitki Kocman University (Turkey)
- Assoc. prof. dr. Snezana Bilic, International Balkan University (IBU) (North Macedonia)
- Assoc. prof. dr. Festim Halil, University of Tetova (North Macedonia)
- Assoc. prof. Ing. Marcel Kordoš, Alexander Dubček University in Trenčín (Slovakia)
- Assoc. prof. dr. Agon Memeti, University of Tetova (North Macedonia)
- Assoc. prof. dr. Faton Shabani, University of Tetova (North Macedonia)

### **List of reviewers**

- Prof. habil. dr. Aleksandras Vytautas Rutkauskas, Vilnius Gediminas Technical University (Lithuania)
- Prof. habil. dr. Robertas Jucevičius, Kaunas University of Technology (Lithuania)
- Prof. dr. Albinas Drukteinis, Klaipeda University (Lithuania)
- Prof. dr. Stasys Paulauskas, Klaipeda University (Lithuania)
- Assoc. prof. Marios Socratous, The Philips College (Cyprus)
- Assoc. prof. Erika Zuperkiene, Klaipeda University (Lithuania)
- Assoc. prof. Genovaite Avizoniene, Lithuania Business University of Applied Sciences (Lithuania)
- Assoc. prof. Giedre Straksiene, Klaipeda University (Lithuania)
- Assoc. prof. Deimena Kiyak, Klaipeda University (Lithuania)
- Assoc. prof. Algirdas Giedraitis, Klaipeda University (Lithuania)
- Assoc. prof. Aelita Skarbaliene, Klaipeda University (Lithuania)



## **Turinys / Contents**

Vedamasis žodis / Editorial .....	7
<b>SOCIAL SCIENCES</b>	
Çuhadar Sevinur, Çakmakçı Yusuf .....	9
The Relationship between Dimensions of Consumer Based Brand Equity and Purchasing Decision of Consumer for Sports Shoes (Case of Turkey)	
Gružauskas Valentas, Pačėsaitė Kotryna.....	19
Expert System for the Freight Coordination Based on Artificial Intelligence	
Karsokienė Rima, Giedraitis Algirdas.....	25
Tourism Service Supply Chain Management Model in the Context of the Pandemic	
Lileikienė Angelė, Obi Pat, Valackienė Asta.....	35
An Examination of the Safety and Profitability of EU and US Banks Since Basel III	
Martinkienė Jurgita, Valackienė Asta, Vaikšnoras Modestas .....	45
Leadership through Empowerment of Human Resources during the Pandemics	
Nedzinskas Egidijus, Zat'ko Jozef, Šliažienė Renata .....	55
Responsibility of Future Law Enforcement Officers: Results of Expert Interviews	
Palomo-Domínguez Isabel .....	63
Design Thinking: an Innovative Educational Method in Advertising	
Šlajienė Vilija, Šliažienė Renata .....	71
Peculiarities of Application of Interim Measures in Arbitration	
Budreikaitė Asta, Kontautienė Vytė, Tamoševičienė Raimonda, Grigolienė Rasa.....	79
Students' Attitude Towards Volunteering in Sport	
<b>REIKALAVIMAI STRAIPSNIŲ RENGIMUI .....</b>	<b>89</b>
<b>REQUIREMENTS FOR THE PREPARATION AN ARTICLE</b>	



## EDITORIAL

“Journal of Management“ is periodically published applied sciences journal by Lithuanian Business University of Applied Sciences. The journal is periodically published since 2002 and has gained a lot of experience and international recognition. It has been positively evaluated by foreign scientists and number of international scholars publishing is constantly increasing. Currently, 37<sup>th</sup> number of the journal is released to readers.

Editorial board of “Journal of management” seeks for published academic researches to cover different economic directions and be relevant to different countries around the world. At the same time, the focus is on ongoing changes in industry, human resources, and governance. Based on these criteria, articles are selected for publication in the journal. Focusing on relevant areas of change is expected to encourage further scientific discourse and development of social science ideas.

The vast majority of scientific articles are prepared by foreign researchers residing in different scientific institutions. This situation creates conditions for research from different perspectives in different fields of science. One of such researches is made by Turkish scientists S. Çuhadar and Y. Çakmakçı, where they analyse the relationship between dimensions of consumer based brand equity and purchasing decision of consumer for sports shoes in Turkey. Authors state that one of the main ways to increase the success of firm and make a difference in the market is building the consumer-based brand equity that is described as perceived sense of brand by the consumers. Therefore, to understand such concept in more depth, scientists are developing a conceptual framework for analyzing the link between consumer-based brand equity and purchasing decision of consumer.

Another article in 37<sup>th</sup> number of the journal scientists A. Lileikienė, P. Obi and A. Valackienė, where they are examining the safety and profitability of EU and US Banks since Basel III. Scientists are analysing key findings in the literature as well as multi-year bank performance. Main focus of the article are regulatory requirements on capital adequacy and liquidity and how they affect profitability. Authors also find evidence of improving safety standards across the board. Additionally, authors are providing evidence that the strive toward higher capital and liquidity standards comes with the price of reduced profitability.

In another case, Lithuanian scientists V. Gružas and K. Pačėsaitė are analysing the system for the freight coordination based on artificial intelligence. A constantly changing dynamic structure of the supply chain poses numerous interesting challenges to effective system coordination, therefore many sectors earn high profits from AI-based solutions and automation of robotised processes in business attaining advanced results, from customers to companies and manufacturing enterprises. Authors of the paper are attempting at examining the benefits of the

supply chain management service and its improvement conferred by automated decision-making and coordination. The paper discusses the conception of artificial intelligence and methods for its application as well as the benefits resulting from the application of these technologies in transport companies to improve the employee performance.

However, Editorial cannot review all of the researches, therefore we encourage familiarizing with them in the Journal, which currently is under the indexing process with Scopus and WoS.

We invite scientists to actively publish in the Journal, share their research results and methodological insights. We expect for close cooperation.

Prof. Dr. (HP) Valentinas Navickas, Editor-in-Chief



## THE RELATIONSHIP BETWEEN DIMENSIONS OF CONSUMER BASED BRAND EQUITY AND PURCHASING DECISION OF CONSUMER FOR SPORTS SHOES (CASE OF TURKEY)

Sevinur Çuhadar<sup>1</sup>, Yusuf Çakmakçı<sup>2</sup>

<sup>1</sup>Hungarian University of Agriculture and Life Sciences/ Doctoral School of Economic and Regional Sciences (PhD Student) /Gödöllő/ Hungary,

<sup>2</sup>Tekirdag Namik Kemal University/Faculty of Agriculture/Department of Agricultural Economics (PhD Student) / Tekirdag/Turkey

### Abstract

Brand equity has become essential variable that impacts on purchase decision and enhances the value of product due to the effects on customer loyalty and customer satisfaction. Nowadays, information and communication technologies have been developed rapidly that causes wide range of product and brand choices in the market. Therefore quality level and features of products have been become similar. In this case firms need to differentiate their products and compete each other to sustain their success and to exist in the market forever. One of the main ways to increase the success of firm and make a difference in the market is building the consumer-based brand equity that is described as perceived sense of brand by the consumers. Companies must compete aggressively to attract and keep loyal customers. Brand equity is one of the company's most valuable asset to keep the potential consumers. Companies are increasingly understanding that brands are key factors in competitiveness. People are more likely to purchase or consume products are supplied by a corporation if corporation's brand equity is stronger. Because of this, purchase decisions are heavily impacted by customer opinions about these brands. The goal of this study is to develop a conceptual framework for analyzing the link between consumer-based brand equity and purchasing decision of consumer. Research was to examine the impact of four dimensions of customer-based brand equity on consumer purchasing decisions: brand loyalty (BA), perceived quality (PQ), brand awareness (BAW), and brand association (BA) on consumer purchase decisions (CPD). The study's research model was influenced by Aaker's consumer-based brand equity model. Brand loyalty, perceived quality, brand awareness, and brand association were independent variables. Dependent variable was consumer's purchase decision. Data was obtained from 407 respondents in Turkey using an internet survey to test the hypothesis. The respondents' favorite sports shoes brand was used to frame the questions. The data were examined by descriptive statistics, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The results showed that brand equity dimensions affect Turkish consumer's purchasing decisions based on consumer's favourite sport shoes brand. Statistically, there is positive impact of both BAW (coefficient 0.853,  $p=0.000<0.01$ ), BL (coefficient 0.255,  $p=0.019<0.05$ ) on CPD. Both PQ ( $p=0.870>0.05$ ) and BA ( $p=0.538>0.05$ ) have no positive impact on CPD.

KEY WORDS: Consumer-Based Brand Equity; Consumer Purchase Decision; Brand Loyalty; Brand Association; Perceived Quality; Brand Awareness.

JEL classification: M31, M37, M30

### Introduction

Increasing competition and number of identical products on the market put firms under pressure to compete and make a difference on the market. The brand affect company's competitive strategy in a positive way and to help company for making a difference on the market (Kotler, 2000; Ural, 2009). When it comes to purchasing a product, consumers are heavily influenced by brand. (Ahmed, 1991). Nowadays, consumers have more brand and product options, Hence, firms must develop brand equity that is seen positively by customers in order to distinguish themselves from competitors and gain a competitive advantage. (Çifci et al., 2016). Brand equity has been identified from two perspectives: the consumer's and the firms. The financial worth of a brand is measured by firm-based brand equity (FBBE). (Simon, Sullivan, 1993) and from the view of cognitive psychology, consumer-based brand equity (CBBE) is defined. (Christodoulides, Chernatony, 2010). Consumer-based brand equity affects the purchasing decision

process of consumers when purchasing goods and services (Sukumaran, 2015).

In the sports sector, brand equity is extremely important. There are many different brands and high-quality products are popular among consumers. Especially the product category for athletic footwear has become one of the most popular product group in worldwide market with its high sales volumes. According to grand view research (Grand View Research, 2021), size of global sports footwear market was worth USD 64.30 billion in 2017 and market size is predicted to expand at a compound annual growth rate of slowly over 5% from 2018 to 2025. Statista (statista, 2021) shows that, Nike is still number one of all athletic footwear brands with a sales volume of USD 28.0 billion follows by Adidas with a sales volume of USD 13.7 billion in May 31, 2021. Customers of athletic footwear industry are influenced by the teams they follow, sports figures that inspire them and brands they love to wear (Newbery, 2008). In that sport environment, The term "brand equity" refers to the value that fans engage to their favourite team's symbol and name (Gladden, Milne, 1999). For this

reason, brand equity has a significant role in sportswear industry in order to help managers of this industry for obtaining competitive advantage and making strategic decisions (Simon, Sullivan, 1993).

This paper provides brief information about consumer based brand equity characteristics such as brand awareness, perceived quality, brand loyalty, and brand association have a relationship with consumer purchase decision based on favourite sport shoes brand in Turkey.

## Literature Review

### Brand Equity

Brand is a distinctive symbol and name such as logo, design of package of product and trademark, used by a single provider or a group of providers to specify their services and goods and to distinguish them from their competitors. A brand notify the consumers about product's source and preserves both producer and consumer from rivals who endeavour to produce identical products (Aaker, 1991). Consumers appreciate, choose and buy goods and services based on several features: from perceived image to overall quality, functional performance to raw materials and more. However brand and brand equity are the most important drivers for the decision process of consumers (Brunetti, Confente, Kaufmann, 2019). Clarifying relationship between consumers and brands generates phrase of brand equity in literature of marketing (Wood, 2000). Many research has been done on brand equity and several definitions for the concept itself have been created proposed (Leone, Rao, Luo, McAlister, Srivastava, 2006). According to Aaker, brand equity is group of brand assets and liabilities related to a brand, brand's symbol and name that increase to or decrease from the value ensured by service or a product to a firm or firms' customers. (Aaker, 1991). In addition to this, Keller defines brand equity as an added value to a product which accumulates past investment's results in the marketing activity for the brand. Briefly, brand equity is the bridge between future of brand and past of brand (Keller, 2013). Most of research and definition related to brand equity have been done based on consumer perspective (Leone et al., 2006). Christodoulides and Chernatony (2010), defines consumer based brand equity (CBBE) is a combination of customer knowledge, attitudes, beliefs, and behaviors when it comes to a brand's utility and ability to increase profits and volume.(Christodoulides, Chernatony, 2010). From the point of view of Vazquez, Del Rio and Iglesias , CBBE represents the sum of the symbolic and functional benefits that customers derive from using the brand. (Vázquez, del Rio, Iglesias, 2002). Specifically, the CBBE focuses on consumer psychology when it comes to brand choosing and identifies the sources of brand values. (Baker, Nancarrow, Tinson, 2005; Yoo, Donthu, 2001). Most of the studies based on CBBE have been developed on basis of two important frameworks: Keller's consumer-based brand equity model and Aaker's brand equity model. According to Keller, customer-based brand equity is described as brand knowledge has a distinct influence on consumer response to the brand's marketing. Keller's definition consists of three important concepts:

consumer's reaction to the marketing of the brand, brand knowledge and differential impact. Consumer reaction to the marketing of the brand that is described in terms of preferences, perceptions, behaviours are deriving from marketing mix activities. Comparison of brand-specific and non-brand-specific customer responses determines differential impact. Lastly, brand knowledge is described in terms of brand image and brand awareness according to the characteristics of brand association (Keller, 1993). According to Aaker's framework, four major components for concept of brand equity are brand awareness, perceived quality, brand loyalty and brand association. He claims that CBBE would be stronger if customers are aware of product's brand, loyal to it, and perceive high quality from the same product brand (Aaker, 1991).

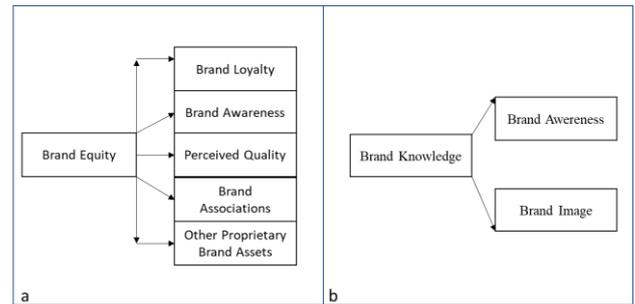


Fig. 1: a: Aaker (1991), b: Keller (1993) Brand Equity Models

### Brand Loyalty

Consumer-based brand equity consists of four components: perceived quality, brand awareness, brand association, brand loyalty, Brand loyalty is one of the main elements in marketing which is important for measuring of link between consumer and brand (Aaker, 1991). Brand loyalty is defined as an engagement to favourite product and services that is continuously purchased and will be purchased in the future (Oliver, 1999). Brand loyalty reflects how consumers change the brand one to another while prices and features of product are changed (Aaker, 1991). Today, primary goal of firms is to create a consumer group that is loyal to their own brand and product. Nowadays, competition causes growth in number of new products and brands in market and today's marketing perspective accepts customer as an essential factor that causes increase in importance of loyalty. There are two components to brand loyalty that have been studied before: attitude and behavior. (Bandyopadhyay, Martell, 2007). Loyalty in the context of behavior is consumer's purchase frequency with a specific brand or company. Strong behavioural intention of consumers leads them to repurchase the brand (Kahn, Kalwani, Morrison, 1986). Attitudinal loyalty is described brand or seller's image in the consumer's mind (Dick, Basu, 1994). This attitudinal strength triggers consumer's emotional attachment to the brand (Chaudhuri, Holbrook, 2001). Studies show that brand loyalty concerns with the link between buyers and sellers, and that generates a sense of engagement between consumers and producers (Pedeliento, Andreini,

Bergamaschi, Salo, 2016). Having a loyal customer base increases the value of a brand or company since they are less likely to move to a rival because of pricing. (Baalbaki, Guzmán, 2016).

### Perceived Quality

Perceived quality refers to a product's general opinion that it is superior. (Keller, 2013; Zeithaml, 1988). Perceived quality is not necessarily indicative of real quality, It is the consumer's subjective judgement of a product's superiority or perfection. (Avcılar, 2008). According to Aaker (1991), high perceived quality causes consumers to buy the brand constantly (Aaker, 1991). Once consumers trust the quality of a brand they prefer to buy that specific brand among all brands even the other brands have lower cost products (He, Wang, 2015). It is hard to make a rational judgement of the quality by the consumers. Therefore, consumers use characteristics of products such as physical characteristics; color, flavor, size, aroma, appearance. The attributes that are not the physical characteristics of the product; brand image, price, availability of production information, warranty, manufacturers image, advertising (Aaker, 1991; Bernués, Olaizola, Corcoran, 2003).

Perceived quality should not be confused with satisfaction and attitude. Consumer who has low performance expectations might satisfy with poor performance product. Likewise, a low-quality product generates positive attitude in the mind of customers due to the cheapness of product, while a high-quality, expensive product may not create the same positive attitude for another consumer(Aaker, 1996).

### Brand Association

Brand association is defined as everything that is associated with a brand in the mind (Aaker, 1991), such as, brand name (Zinkhan, Prenshaw, 1994), price and the amount of advertising used (Aaker, 1996), and product attributes (Yoo, Donthu, 2001). According to Keller “customer-based brand equity occurs when the consumer is aware of the brand and holds some favourable, strong, and unique brand associations in memory” (Keller, 1993). Brand connection may take many shapes and is a reflection of the product's overall quality. (Cheng-Hsui Chen, 2001). Consumers use brand associations to process, arrange, and recall product information, which helps them to make purchasing decisions (Aaker, 1991). Associations affect consumer intentions, preferences, choices to purchase the brand and pay a premium price for it and they suggest the brand to others (Low, Lamb, 2000).

### Brand Awareness

Ability of consumer to recognize that brand belongs to significant product group refers to brand awareness (Aaker, 1991). Awareness of a brand is comprised of two components: brand recognition and brand recall. As the name suggests, brand recognition is the buyer's ability to recognize a particular brand among others. Brand recall

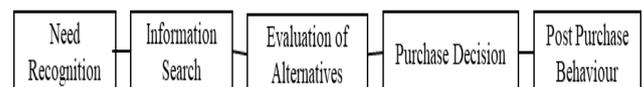
refers to a buyer's ability to remember a brand. Keller (1993), brand awareness is related to skill of consumers identify the brand under different conditions (Leone et al., 2006).

The importance of brand recognition in the purchase decision-making process cannot be overstated. The likelihood that a brand will be included in a consideration group grows with brand awareness. Even in the absence of any brand connections in customers' brains, brand awareness influences decisions regarding brands. There is a minimal degree of brand awareness required to make final judgments in low-involvement decision contexts. (Keller, 1998). For example, research has shown that there is simple decision rule that is embraced by consumers which is well established and familiar brands are bought by consumers (Jacoby, Szybillo, Busato-Schach, 1977).

### Purchase Decision

It is the process through which customers make a choice about whether or not to acquire services and commodities that are available on the market. (Ansari, Ansari, Ghori, Kazi, 2019). According to Nugroho (2003), purchase decision is a combination process that integrates the attitude of knowledge to decide two or more alternative behaviours, and chooses one of them(Setiadi, Puspitasari, Ekawati, 2015).

Every consumer has five stages while they make purchasing decision: identification of the problem, collecting information, assessment of choices and make purchase decisions, post purchasing behaviour (Doostar, Akhlagh, Kazemi, 2012). A marketer must understand these stages in order to properly convince a consumer to purchase a brand of product and close the sale (Kotler, Armstrong, 2011).



**Fig. 2:** Stage of the Purchase Decision Process  
Source: Kotler and Armstrong (2011)

The decision process starts with first stage that is called “Need Recognition”. Needs emerge as biological needs or they may also emerge with a step ahead of basic needs by external influences such as advertising, hearing or seeing. Buyers recognize needs when confronted with a challenge. For example, if the buyer is hungry and in need of food, and the buyer realizes that hunger is a problem and that the need is to get a food, the buyer is in the state of buying (Kotler, Keller, 2012).

The second stage is called the “Information Search”. Potential customers identify the need and make a purchasing decision and they start to search information about product. Buyer identifies alternatives after research (Durmaz, 2008). The person searches the information from his/her friends, family, web sites, advertisements, social media and using the product(Kotler, Kartajaya, Setiawan, 2017).

At the third stage of decision-making, which is called "Alternatives Evaluation", a consumer ask her/himself those questions like: if she/he really needs that product or not?" Are there any other options out there? Is the original product that bad? Generally, the buyers prefer one of the most important key features of the product to make a final decision or using cut off method (e.g., brand, price, quality etc.) (Stankevich, Akhunjonov, Obrenovic, 2017).

The next step after the Alternatives Evaluation is the "Purchase Decision". The buyer makes a decision about product group that is most suitable among his/her alternatives. However, sometimes unexpected conditions may affect consumer's decisions in a negative way. Such as decline in income, unemployment etc. (Kılıç, Göksel, 2004).

Next and the last step is called "post purchase evaluation". At this stage, buyers have dilemma on whether or not to repurchase a product or buy other products. Then, once completed, it might not be exactly the same what they intended to purchase, and they question whether their decision was right (Yee, Yazdanifard, 2014).

Buyers make a purchase decision about the product if they know the brand. The more customers can remember the brand, the more they will purchase it (Keller, 1993). Consumer's purchase decision can be simplified by dimensions of brand equity as different wide range of brand groups in the market that provide product groups with similar features. Therefore, while customers make a purchasing decision about product, buying process might be little difficult for them but brand equity will be a tool that affect the purchasing decision process and help consumer to make a quick decision about the product (Gunawardane, 2015).

## Research Methodology

### Data and Data Collection Method

The data were gathered through an online survey conducted across Turkey between January and March 2021. The survey was divided into two sections. In the first section, participants' socio-demographic and economic variables were determined using questionnaires (gender, age, education etc.). The second section includes questions such as "favorite sport shoes brand" and 17 factors on a 5-point Likert scale (1: I strongly disagree, 5: I strongly agree).

The sample size was determined by the formula proposed by (Newbold, 1995) form a population whose main population is known.

$$n = \frac{N \left[ \left( \frac{t}{d} \right)^2 p q \right]}{(N-1) d^2 + t^2 p q} \quad (\text{formula 1})$$

N: population (Turkey's total population= 83 million people), n: Number of samples, p: the occurrence rate of the event p, q: the non-occurrence rate of the event p, d: margin of error (0.075) for event p, t: significance level (1.96 for t table at 0.5). Based on the formula calculation

(n=384.8 surveys were the minimum number that should be conducted).

A total of 481 individuals responded to the questionnaire. However, 74 of these responses were excluded because they were duplicates. And after removed the duplicated questionnaires, there were 407 remaining. Final analyses were performed on 407 questionnaires.

### Theoretical Framework and Analytical Method

The questionnaire form, which was prepared using the "Google survey" was sent to consumers through social media platforms (Facebook, WhatsApp, and Instagram) across Turkey between January and March 2021. Feedback was received from 407 individuals from 51 cities. The distribution of participation by cities is given in Fig.3. In terms of provinces with the most participation, Izmir ranks top with 85 individuals, Istanbul ranks second with 45 individuals, and Ankara ranks third with 35 individuals. The fact that these provinces are the most populated provinces of Turkey increases the representative power of the sample for the main population.



Fig. 3. The cities covered by the survey are presented on a map (51 cities from 81)

Descriptive statistics and Exploratory Factor Analysis (EFA) were carried in the SPSS program. Structured Equation Model (SEM) and Confirmatory Factor CFA (Analysis of Moments Structures) analyses were performed using AMOS programme. The model of research has been provided (Fig. 4).

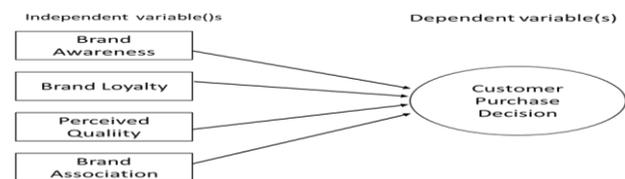


Fig. 4. The study models(Aaker, 1991).

The aim of using EFA in this study was to reduce dimensions. Moreover, to brings together observed variables (17 variables) under fewer factors that were meaningful and could be explained better. For this aim EFA analysis was applied to 17 variables. The purpose of using CFA analysis, which is a type of "Structured Equation Modelling (SEM)" in the study, was to test the validity and accuracy of EFA analysis. And "Kurtosis" and "Skewness" values were used to test whether the

variables showed multiple normal distributions (Muzaffar, 2016). "Goodness of fit" criteria were used to test the validity of the CFA (Alavi et al., 2020; Gatignon, 2010; Hooper, Coughlan, Mullen, 2008; Schermelleh Engel, Moosbrugger, Müller, 2003).

**Exploratory Factor Analysis, Confirmatory Factor Analysis and Structured Equation Model**

Factor analysis, divided into two categories as Explanatory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The EFA is a factor analysis approach that is used to identify the relationship between variables as well as the number of components to keep. And a common name representing all the variables assembled under each factor was used to name each factor derived from the EFA analysis. On the other hand, CFA analysis is an analysis technique that enables to examination of whether the structure or model determined by scale development or exploratory factor analysis is confirmed or not (Seçer, 2015). In addition to, CFA is a form of analysis that converts group in new variables in a wide range of groups, preserving the relationship between the variables in each group to the highest degree and the link between the groups to the lowest degree (Shen, 2016). Cronbach's Alpha value was used to measure the scale reliability. References Criterias for reliability of the scale are  $0 < x < 0.40$  "not reliable",  $0.40 < x < 0.60$  "low confidence",  $0.60 < x < 0.80$  "reliable",  $0.80 < x < 1, 00$  is "highly reliable" (Allen, 2006).

SEM analysis is a statistical technique used to test models in which causal relationships and correlation relationships between observed variables and latent variables coexist. It is a multivariate method that combines analysis of variance, covariance, factor analysis, and multiple regression to predict dependency relationships (Dursun, Kocagöz, 2010; Tüfekçi, Kürşad, 2006). It starts with a predetermined hypothesis or a model. In this hypothesis or model, which variables will be related to which factor or which factors will be related to each other are determined and tested with the help of CFA (Stapleton, 1997). CFA is used to assess the overall

fit of the overall measuring model and to achieve the final estimations of the parameters of the measurement model. While it is occasionally done on the same sample as analysis of an exploratory component, it is preferable to perform confirmatory factor analysis on a new sample when it is possible to collect more data (Gatignon, 2010). The "Absolute fit indices (AFI)" value is used to test the validity of the model obtained as a result of CFA. AFI determines how well its previous model fits the sample data. This index indicates that the suggested model fits the data the best. It is the most fundamental indicator of how well the acquired data fits the suggested hypothesis. Unlike incremental fit indices, their computations are based on how well the model fits against a model using the Chi-Squared Test, rather than a comparison to a base model, RMSEA, GFI, AGFI, RMR, and SRMR (Hooper et al., 2008; Xia, Yang, 2019). The study employed the maximum probability (ML) technique. The ML estimator presupposes that the models are normal multivariates. In other words, the common distribution of variables is derived from a normal multivariate distribution (Schermelleh Engel et al., 2003).

**Results and Discussion**

**Descriptive statistics**

Table 1 showed the socio - economic and demographic characteristics of the respondents. According to descriptive statistics, 52.1 percent of respondents were "Female" and 47.9 percent were "Male." The respondents' average age was 36.6 years. More than 70% of those who involved were under the age of 40. Average monthly income was 3964.84 TL. Approximately 83% of the participants had at least a bachelor's degree or higher. The majority of the participants were students (27.5%), followed by private sector employees (22.9%).and public sector employees (19.9%), respectively. A small percentage of the participants were unemployed (3.7%), housewives (3.9%), workers (4.4%) and own business (4.4%).

**Table 1.** Social-Demographics and Economics Features of Participants

<b>Gender</b>	<b>N</b>	<b>%</b>	<b>Education</b>	<b>N</b>	<b>%</b>
Female	212	52.1	Pre-high School	17	4,2
Male	195	47.9	High School	54	13,3
<b>Total</b>	407	100.0	Bachelor Degree	264	64,9
<b>Age</b>			Master Degree	52	12,8
23 and below	85	20.9	PhD Degree	20	4,9
24-30	137	33.7	Total	407	100,0
31-39	64	15.7	<b>Occupation</b>		
40-50	50	12.3	Retired	54	13.3
51+	71	17.4	Housewife	16	3.9
<b>Total</b>	407	100.0	Worker	18	4.4
<b>Income</b>			Unemployed	15	3.7
2000 TL and less	105	25.8	Own Business	18	4.4

2001 TL-3500 TL	134	32.9	Public Servant	81	19.9
3501 TL -5000 TL	73	17.9	Student	112	27.5
5001 TL and higher	95	23.3	Private Sector Employee	93	22.9
<b>Total</b>	<b>407</b>	<b>100.0</b>	<b>Total</b>	<b>407</b>	<b>100.0</b>

### Exploratory Factor Analysis

Result of factor analysis are given in Table 2. The KMO (0.949,  $P < 0.05$ ) and Bartlett's test of sphericity (Chi square  $[X^2(407)] = 4946,715$ ,  $P < 0.01$ ) suggest that the dataset was suitable for Factor Analysis. The

Cronbach-Alpha values of the five components obtained were higher than 0.8, indicating that these components were highly reliable.

**Table 2.** Social-Demographics and Economics Features of Participants

Rotated Component Matrix <sup>a</sup>					Cronbach-Alpha	KMO and Bartlett's Test
	1	2	3	4		
PQ1	0,773					0,893
PQ2	0,772					
PQ3	0,702					
PQ5	0,656					
BAW2		0,761				
BAW1		0,632				
BAW3		0,629				
BAW5		0,620				
BL2			0,815			0,867
BL1			0,789			
BL3			0,745			
CB1				0,822		0,805
CB2				0,762		
CB3				0,684		
BA3					0,827	0,881
BA2					0,680	
BA4					0,549	

<sup>a</sup> Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 6 iterations

### Structured Equation Model (Confirmatory Factor Analysis)

Kurtosis and Skewness values of 17 variables were found to be in the range of -2, +2 separately. It means that these variables meet the "multivariate normal distribution" criterion. Table 3' shows the validity criteria for CFA as well as the findings of the CFA analysis, and Figure 3 shows the Model's Path Diagram as a consequence of the CFA study. The values of  $\chi^2/df = 1,779$ ,  $IFI = 0,984$ ,  $GFI = 0,946$ ,  $TLI = 0,979$ ,  $AGFI = 0,930$ ,  $RMSEA = 0,044$  show that there was a good level of consistency between the model and the observed data.

Table 3: Goodness of fit references and analysis results

Criteria	References values	Analysis results	Criteria	References values	Analysis results
$\chi^2/df$	$\leq 5$	1,779	IFI	$\geq 0,90$	0,984
GFI	$\geq 0,90$	0,946	TLI	$\geq 0,90$	0,979
AGFI	$\geq 0,85$	0,930	RMSEA	$\leq 0,05$	0,044
CFI	$\geq 0,90$	0,984			

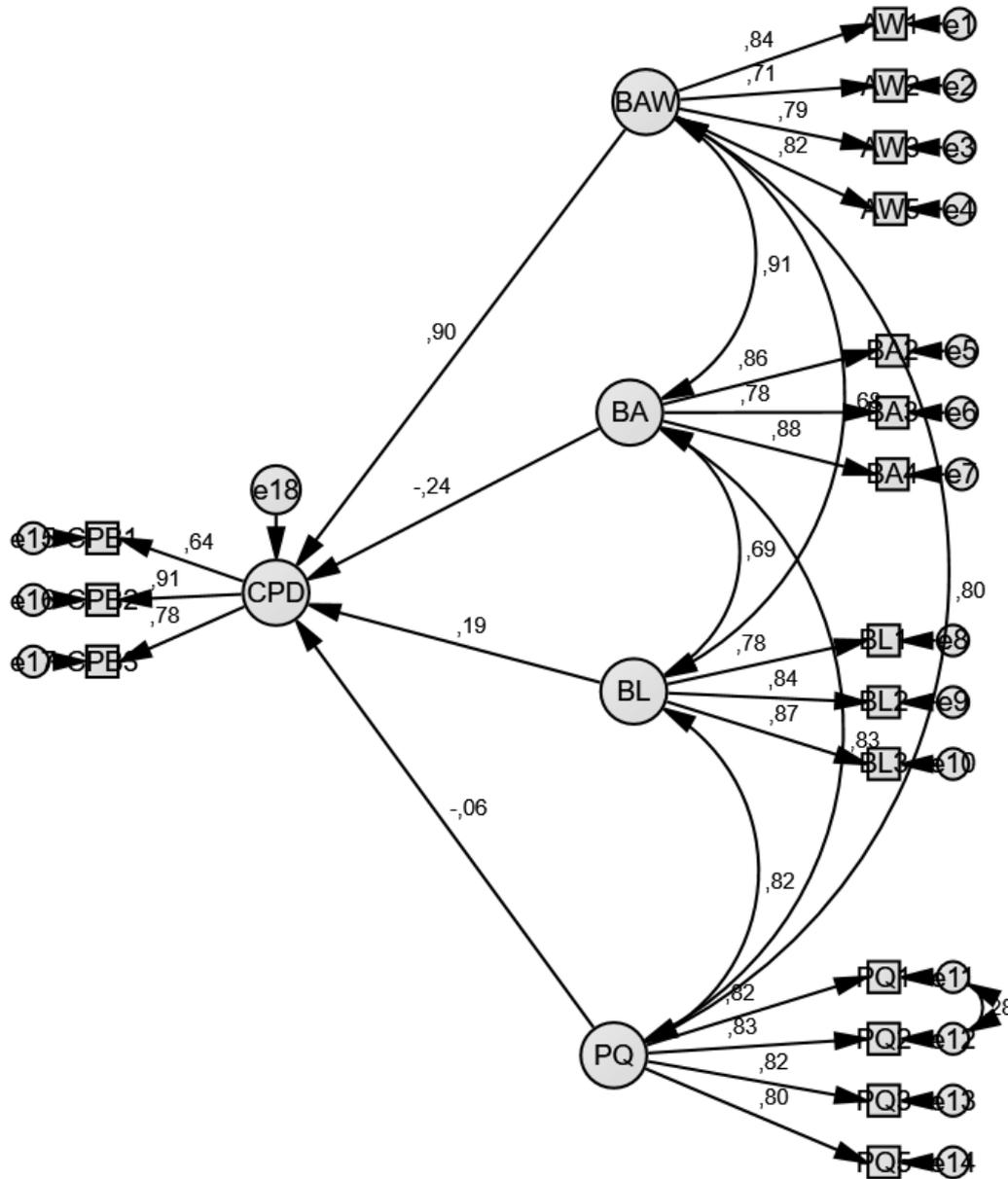


Fig. 5. The Model's Path Diagram

The CFA analysis was used to put the hypotheses to the test. H1 and H2 were accepted, while H3 and H4 were rejected (Table 4).

Table 4: The hypothesis

Hypothesis	Decision
H1: Brand Awareness has a positive impact on Consumer Purchasing Decision	Accepted
H2: Brand Loyalty has a positive impact on Consumer Purchasing Decision	Accepted
H3: Brand Association has a positive impact on Consumer Purchasing Decision	Rejected
H4: Perceived Quality has a positive impact on Consumer Purchasing Decision	Rejected

## Discussion

The goal of this research was to define the ideas of brand equity dimensions (BED). Furthermore, the impacts of BED on Turkish customers' favorite sport shoes purchase decisions will be investigated. The findings of the study revealed a connection between BED and the purchase behavior of sports shoes by customers. However, this relationship/influence level differs for each dimension level. Similarly, several research have been conducted to explore the link between brand equity dimensions and customer purchase decisions (Akhtar, Qurat-ul-ain, Siddiqi, Ashraf, Latif, 2016; Mowla, Ahsan, Alauddin, 2019; Satvati, Rabie, Rasoli, 2016; Tüfekçi, Kürşad, 2006; Uygurtürk, Aksoy, 2019). Moreover, the outcome of this study showed that brand loyalty (BL) and brand awareness (BAW) had significant influence on the Turkish consumers' favourite sport shoes purchasing decisions, however brand association (BA) and perceived quality (PQ) did not have any effect on purchasing decision process of Turkish customers considering favourite sport shoes brands. Some previous researches reported that BL and AW had an effect on the customers' purchase decisions (CPD) (Akhtar et al., 2016; Mowla et al., 2019; Uygurtürk, Aksoy, 2019). On the contrary, Rahma (2018), reported that there was no significant effect of BL on the CPD. (Rahma, 2018). The reasons differentiate these relationships can occur by differences from sectors, products, and societies.

## Conclusions

The purpose of this study is to quantify the aspects of consumer-based brand equity influence on consumer purchasing choice based on favorite sport shoes brand. The outcome of this research shows that Brand loyalty (BL) and brand awareness (BAW) are significantly influence purchase decision of customers. However, brand association (BA) and perceived quality (PQ) do not have any effect on purchase decision process of Turkish customers considering favourite sport shoes brands. When the "Regression Weights" values in the CFA analysis results are examined, it can be said that the brand equity dimensions BAW (Coefficient 0.853,  $p=0.000<0.01$ ) and BL (Coefficient 0.255,  $p=0.019<0.05$ ) have a statistically significant and positive effect on consumer purchasing decision. One unit of improvement in BAW will increase the perception of BAW on the CPD by 0.853. On the contrary, a one-unit deterioration in BAW will reduce the perception of BAW on the CPD by 0.853. Similarly, one unit of improvement in the BL will increase the perception of BL on the CPD by 0.853 units. On the contrary, a one-unit deterioration in BL will reduce the perception of CPD by 0.255 units. However, no statistically significant relationship was found between the dimensions of PQ ( $p=0.870>0.05$ ) and BA ( $p=0.538>0.05$ ) and CPD.

## References

- Aaker, D. A. (1991). *Managing Brand Equity-Capitalizing on the Value of a Brand Name*. The Free Press Division of Simon & Schuster Inc. 1230 Avenue of the Americas New York, N.Y. 10020: The Free Press.
- Aaker, D. A. (1996). *Building Strong Brands*: Free Press, New York, NY.
- Ahmed, Z. U. (1991). The influence of the components of a state's tourist image on product positioning strategy. *Tourism Management*, 12(4), 331-340. doi:[https://doi.org/10.1016/0261-5177\(91\)90045-U](https://doi.org/10.1016/0261-5177(91)90045-U)
- Akhtar, N., Qurat-ul-ain, Siddiqi, U. I., Ashraf, A., & Latif, M. (2016). Impact of a Brand Equity on Consumer Purchase Decision in L'Oreal Skincare Products. *International Review of Management and Business Research*, 5, 808.
- Alavi, M., Visentin, D. C., Thapa, D. K., Hunt, G. E., Watson, R., & Cleary, M. (2020). Chi-square for model fit in confirmatory factor analysis. *J Adv Nurs*, 76(9), 2209-2211. doi:10.1111/jan.14399
- Allen, K. (2006). *THE STATISTICS CONCEPT INVENTORY: DEVELOPMENT AND ANALYSIS OF A COGNITIVE ASSESSMENT INSTRUMENT IN STATISTICS* (Doctor of Philosophy). Norman, Oklahoma. (3212015)
- Ansari, S., Ansari, G., Ghori, M. U., & Kazi, A. G. (2019). Impact of brand awareness and social media content marketing on consumer purchase decision. *Journal of Public Value and Administrative Insight*, 2(2), 5-10.
- Avcılar, M. Y. (2008). Tüketici Temelli Marka Değerinin Ölçümü. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 17(1), 11-30. doi:<https://dergipark.org.tr/pub/cusosbil/60007>
- Baalbaki, S., & Guzmán, F. (2016). A consumer-perceived consumer-based brand equity scale. *Journal of Brand Management*, 23(3), 229-251. doi:10.1057/bm.2016.11
- Baker, C., Nancarrow, C., & Tinson, J. (2005). The Mind versus Market Share Guide. *International Journal of Market Research*, 47(5), 523-540. doi:10.1177/147078530504700505
- Bandyopadhyay, S., & Martell, M. (2007). Does attitudinal loyalty influence behavioral loyalty? A theoretical and empirical study. *Journal of Retailing and Consumer Services*, 14, 35-44. doi:10.1016/j.jretconser.2006.03.002
- Bernués, A., Olaizola, A., & Corcoran, K. (2003). Extrinsic attributes of red meat as indicators of quality in Europe: an application for market segmentation. *Food Quality and Preference*, 14(4), 265-276. doi:[https://doi.org/10.1016/S0950-3293\(02\)00085-X](https://doi.org/10.1016/S0950-3293(02)00085-X)
- Brunetti, F., Confente, I., & Kaufmann, H. (2019). The human dimension of a brand influences brand equity: an empirical examination in the context of a luxury and a convenience brand. *Journal of Brand Management*, 26. doi:10.1057/s41262-019-00162-w
- Chaudhuri, A., & Holbrook, M. (2001). The Chain of Effects From Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty. *Journal of Marketing*, 65, 81-93. doi:10.1509/jmkg.65.2.81.18255
- Cheng-Hsui Chen, A. (2001). Using free association to examine the relationship between the characteristics of brand associations and brand equity. *Journal of Product & Brand Management*, 10(7), 439-451. doi:10.1108/10610420110410559
- Christodoulides, G., & Chernatony, L. (2010). Consumer-Based Brand Equity Conceptualization and Measurement: A Literature Review. *International Journal of Market Research*, 52.

- Çifci, S., Ekinçi, Y., Whyatt, G., Japutra, A., Molinillo, S., & Siala, H. (2016). A cross validation of Consumer-Based Brand Equity models: Driving customer equity in retail brands. *Journal of Business Research*, 69(9), 3740-3747. doi:<https://doi.org/10.1016/j.jbusres.2015.12.066>
- Dick, A. S., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*, 22(2), 99-113. doi:10.1177/0092070394222001
- Doostar, M., Akhlagh, E. M., & Kazemi, M. (2012). *Analysis of the Impact of Brand Assets on the Buying Decisions of Final Consumers Brand of Iran's Milk Industry Company (Pegah)*.
- Durmaz, Y. (2008). Tüketici Davranışı, Detay Yayıncılık. In: Ankara.
- Dursun, Y., & Kocagöz, E. (2010). Structural Equation Modeling and Regression: A Comparative Analysis. *Erciyes University Journal of Economics and Administrative Sciences*. doi:<https://dergipark.org.tr/en/pub/erciyesiibd/77926>
- Gatignon, H. (2010). Confirmatory Factor Analysis. In H. Gatignon (Ed.), *Statistical Analysis of Management Data* (pp. 59-122). New York, NY: Springer New York.
- Gladden, J. M., & Milne, G. R. (1999). Examining the importance of brand equity in professional sports. *Sport Marketing Quarterly*, 8(1), 21-30.
- Grand View Research. (2021). Retrieved from <https://www.grandviewresearch.com/>
- Gunawardane, N. (2015). Impact of Brand Equity towards Purchasing Decision: A Situation on Mobile Telecommunication Services of Sri Lanka. *Journal of Marketing Management (JMM)*, 3. doi:10.15640/jmm.v3n1a10
- He, J., & Wang, C. L. (2015). Cultural identity and consumer ethnocentrism impacts on preference and purchase of domestic versus import brands: An empirical study in China. *Journal of Business Research*, 68(6), 1225-1233. doi:<https://doi.org/10.1016/j.jbusres.2014.11.017>
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural Equation Modeling: Guidelines for Determining Model Fit. *The Electronic Journal of Business Research Methods*, 6.
- Jacoby, J., Szybillo, G. J., & Busato-Schach, J. (1977). Information Acquisition Behavior in Brand Choice Situations. *Journal of Consumer Research*, 3(4), 209-216. Retrieved from <https://EconPapers.repec.org/RePEc:oup:jconrs:v:3:y:1977:i:4:p:209-16>
- Kahn, B. E., Kalwani, M. U., & Morrison, D. G. (1986). Measuring Variety-Seeking and Reinforcement Behaviors Using Panel Data. *Journal of Marketing Research*, 23(2), 89-100. doi:10.2307/3151656
- Keller, K. L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of marketing*, 57(1), 1-22. doi:10.1177/002224299305700101
- Keller, K. L. (1998). *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*. New Jersey: Prentice Hal.
- Keller, K. L. (2013). *Strategic Brand Management Building, Measuring, and Managing Brand Equity Global Edition*. England: Pearson Education Limited.
- Kılıç, S., & Göksel, A. (2004). Tüketici Davranışları: İndirim Kartlarının Tüketici Satın Alma Karar Süreci Üzerindeki Etkisine Dair Ampirik Bir Çalışma. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 6 (2), 147-163 Retrieved from <https://dergipark.org.tr/pub/gaziuibfd/issue/28341/301250>
- Kotler, P. (2000). *Marketing Management: The Millennium Edition*.
- Kotler, P., & Armstrong, G. (2011). *Principles of Marketing*: Pearson Prentice Hall.
- Kotler, P., Kartajaya, H., & Setiawan, I. (2017). *Marketing 3.0. Moving from Traditional to Digital*. Hoboken: John Wiley & Sons, Inc.
- Kotler, P., & Keller, K. L. (2012). *Marketing Management*. New Jersey: Prentice Hall.
- Leone, R., Rao, V., Luo, A., McAlister, L., & Srivastava, R. (2006). Linking Brand Equity to Customer Equity. *Journal of Service Research - J SERV RES*, 9, 125-138. doi:10.1177/1094670506293563
- Low, G. S., & Lamb, C. W. (2000). The measurement and dimensionality of brand associations. *Journal of Product & Brand Management*, 9(6), 350-370. doi:10.1108/10610420010356966
- Mowla, M., Ahsan, A., & Alauddin, M. (2019). Impact of Brand Equity on Consumer's Purchase Intension-A Study on Some Furniture Companies in Bangladesh. 11-16.
- Muzaffar, B. (2016). The Development and Validation of a Scale to Measure Training Culture: The TC Scale. *Journal of Culture, Society and Development*, 23, 49-58.
- Newbery, M. (2008). *Global market review of active sportswear and athletic footwear- forecasts to 2014 (2008 edition)*. United Kingdom: Aroq Limited
- Newbold, P. (1995). *Statistics for Business and Economics*. New Jersey: Prentice-Hall International.
- Oliver, R. L. (1999). Whence Consumer Loyalty? *Journal of marketing*, 63(4\_suppl1), 33-44. doi:10.1177/00222429990634s105
- Pedieliento, G., Andreini, D., Bergamaschi, M., & Salo, J. (2016). Brand and product attachment in an industrial context: The effects on brand loyalty. *Industrial Marketing Management*, 53, 194-206. doi:<https://doi.org/10.1016/j.indmarman.2015.06.007>
- Rahma, V. A. (2018). The Influence of Brand Equity to Purchasing Decisions on Wardah Products (studies conducted at Wardah Beauty House stores, Surabaya). *JIEEB nternational ournal of ntegrated ducation*, 1(1), 53-60. doi:<https://doi.org/10.29138/ijeeb.v1i1.796>
- Satvati, R. S., Rabie, M., & Rasoli, K. (2016). Studying the relationship between brand equity and consumer behavior. *International Review*(1-2), 153-163.
- Schermelleh Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the Fit of Structural Equation Models: Tests of Significance and Descriptive Goodness-of-Fit Measures. *Methods of Psychological Research Online*, 8, 23-74.
- Seçer, İ. (2015). *Psikolojik test geliştirme ve uyarlama süreci: SPSS ve LISREL uygulamaları*: Anı yayıncılık.
- Setiadi, N., Puspitasari, M., & Ekawati, L. (2015). The effect of product attributes on the brand equity of scootermatic: Customer experience as amediating variable. 13, 5827-5843.
- Shen, H. (2016). Factor analysis. In J. Jafari & H. Xiao (Eds.), *Encyclopedia of Tourism* (pp. 347-348). Cham: Springer International Publishing.
- Simon, C. J., & Sullivan, M. W. (1993). The Measurement and Determinants of Brand Equity: A Financial Approach. *Marketing Science*, 12(1), 28-52. Retrieved from <http://www.jstor.org/stable/183736>
- Stankevich, A., Akhunjonov, U., & Obrenovic, B. (2017). Explaining the Consumer Decision-Making Process: Critical Literature Review. 7-14.
- Stapleton, C. D. (1997). Basic Concepts and Procedures of Confirmatory Factor Analysis.
- statista. (2021). Retrieved from <https://www.statista.com/>

- Sukumaran, A. K. S. (2015). Consumer-based brand equity and purchase decision of Indian gold jewellery. *International Journal of Advanced Intelligence Paradigms (IJAIP)*, 7, 382-393. doi:10.1504/IJAIP.2015.073716
- Tüfekçi, N. T., & Kürşad. (2006). The Value Created By Distinguishing Superitory and Customer Loyalty In Banking Sector: An Application In City Of Isparta. *Journal of Suleyman Demirel University Institute of Social Sciences*, 2(4), 170-183. doi:https://dergipark.org.tr/en/pub/sbe/247876
- Ural, T. (2009). *Markalamada Yol Haritası*. Ankara: Nobel Yayıncılık.
- Uygurtürk, H., & Aksoy, R. (2019). Marka Değerini Oluşturan Faktörlerin Analizi: A Grubu Seyahat Acentaları Müşterileri Üzerine Bir Araştırma (Analysis of Factors Establishing Brand Equity: A Research on Group A Travel Agent). *11*, 379-406.
- Vázquez, R., del Rio, A. B., & Iglesias, V. (2002). Consumer-based Brand Equity: Development and Validation of a Measurement Instrument. *Journal of Marketing Management*, 18, 27-48. doi:10.1362/0267257022775882
- Wood, L. (2000). Brands and brand equity: definition and management. *Management Decision*, 38(9), 662-669. doi:10.1108/00251740010379100
- Xia, Y., & Yang, Y. (2019). RMSEA, CFI, and TLI in structural equation modeling with ordered categorical data: The story they tell depends on the estimation methods. *Behavior Research Methods*, 51(1), 409-428. doi:10.3758/s13428-018-1055-2
- Yee, C. C., & Yazdanifard, R. (2014). How Customer Perception Shape buying Online Decision. *Global Journal of Management and Business Research: E Marketing*, 14(2), 13-20.
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1-14. doi:https://doi.org/10.1016/S0148-2963(99)00098-3
- Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of marketing*, 52(3), 2-22. doi:10.1177/002224298805200302
- Zinkhan, G., & Prenshaw, P. J. (1994). Good Life Images and Brand Name Associations: Evidence From Asia, America, and Europe. *ACR North American Advances*, 21, 496-500.

---

RECEIVED: 2 July, 2021

ACCEPTED: 13 September, 2021

---

**Sevinur Çuhadar** is a PhD student in the Doctoral School of Economic and Regional Sciences, Hungarian University of Agriculture and Life Sciences. Her research profession is Leadership and Sustainable Leadership, Leadership Styles in Organizations. Sevinur holds a Bachelor of Arts degree in Economics from the University of Dokuz Eylül, Turkey and Master Degree in Management and Leadership from Szent Istvan University in Hungary. Address: Hungarian University of Agriculture and Life Sciences, Páter K. Str. 1, H-2100 Gödöllő, Hungary. E-mail:sevinurcuhadar@gmail.com Telephone: +36 70 255 33 28.

**Yusuf Çakmakçı** is a Ph.D. student at the Department of Agricultural Economics at Tekirdag Namik Kemal University in Tekirdag, Turkey. He holds a Master's degree in the field of agricultural economics. His studies focus on customer-producer behavior, supplier marketing techniques, and retailer marketing strategies. E-mail: cak76yusuf@gmail.com, Telephone: +905535497033.



## EXPERT SYSTEM FOR THE FREIGHT COORDINATION BASED ON ARTIFICIAL INTELLIGENCE

Valentas Gružasuskas, Kotryna Pačėsaitė

Lithuania, School of Economics and Business, Kaunas University of Technology

### Abstract

With the rising of the Industry 4.0, new technologies are emerging that open new opportunities for the transformation of business. These technologies change the supply chains and promote new ways for business value creation (Arenkov, Tsenzharik, Vetrova, 2019). Intelligent solutions and systems based on artificial intelligence (AI) allow for automated management of information, while high level of automation in an organisation and sustainability that has been quickly gaining momentum are very important seeking not to lag behind the rapidly changing market. Many researchers have been trying to solve the transport route planning problem during the recent decades using various methods with different techniques. However, establishing the lowest price and the highest effectiveness is very complicated. One of the methodologies invoked for performing the operations of this type refers to the artificial intelligence machine learning system. A constantly changing dynamic structure of the supply chain poses numerous interesting challenges to effective system coordination. Many sectors earn high profits from AI-based solutions and automation of robotised processes in business attaining advanced results, from customers to companies and manufacturing enterprises. Transportation and logistics sector has also been increasingly seeking to introduce the innovations of these technologies in its processes. Automated logistics reflects the global trend of the logistics industry development, considering the rapid recent development of big data, internet of things, automated processes, and other technologies. Essentially, automation of intelligent logistics determines the effectiveness of logistics activities and service level growth (Li, 2018). Artificial intelligence is invoked in various industries, especially in automated production companies, to free up the human activities and to set a standard of advanced skills and techniques in business processes; it is also an excellent solution for the transportation and logistics sector (Lin, Shih, Yang, Lin, Kung, 2018). This research paper represents an attempt at examining the benefits of the supply chain management (SCM) service and its improvement conferred by automated decision-making and coordination. The paper discusses the conception of artificial intelligence and methods for its application as well as the benefits resulting from the application of these technologies in transport companies to improve the employee performance. Finally, a design of expert system for freight coordination is presented summarising the application of artificial intelligence, which can confer a competitive advantage to the company.

KEY WORDS: Artificial Intelligence; Business Process Automation; Logistics and Transportation.

JEL: L9; R40.

### Introduction

The transportation and logistics sector has been changing and improving annually. The United States represent one of the largest developed markets in the world. Trucks are used in the US to transport more than 70% of freight. It is estimated that out of those, in 2021, full truckload (FTL) carriage market in the US will amount to more than US\$196 bill., whereas less-than-truckload (LTL) market – more than US\$80 bill. (Mazareanu, 2021). In recent years, the transportation and logistics sector has been constantly growing due to improving domestic transportation economy. These indicators show high income generation compared to any other sector in the US. Almost 6% of the population of this region are fully employed in transport companies, representing almost \$700 bill. annually. Considering the market size, we can assume that LTLs represent a sufficiently large market share. This suggests non-effectiveness of carrying less-than-fully loaded trailers. However, many companies of this sector still lag behind the innovations emerging in the world and are slower to join the digitalisation path due to high investment costs, thus diminishing their competitive ability. Seeing that logistics companies often provide their services remotely, various challenges are encountered: how to attain the maximum possible effectiveness, and how to improve the transport service processes meeting the client, employee and customer needs while maintaining the lowest costs.

Human resources in an organisation carry out a substantial share of processes that reduce the effectiveness of certain activities. Freight coordination is one of those. This is one of the activities that require significant human involvement. Generally, logistics companies provide sufficiently stable processes irrespective of the customer type; however, frequently, not all resources are effectively utilised. The reason for this is the fact that coordination encompasses orders of FTL and LTL. Automation of decision-making processes is one of the ways to accelerate the operations of the company and enhance the effectiveness (Juan, Mendez, Faulin, Armas, Grasman, 2016). Traditional tasks taking up the employee working time are becoming less-effective. Seeking to avoid this situation, organisations have the opportunity to introduce artificial intelligence solutions such as chat bots or decision support systems that stimulate smooth work in real time and reduce the time costs that would be sustained if employees did the work manually (Alpaydin, 2020). Digitalisation of activities also helps companies to avoid the bottleneck processes. This new technological stage introduces the internet of things, digital networks, and machine learning into the production environment and processes (Gunasekaran, 2016; Grossetete, 2020; Zhu, 2018). Using AI to automate these processes would help utilise the same resources more effectively, thus increasing the company's profit and the speed of carrying out the tasks. The purpose of the paper is to propose an artificial

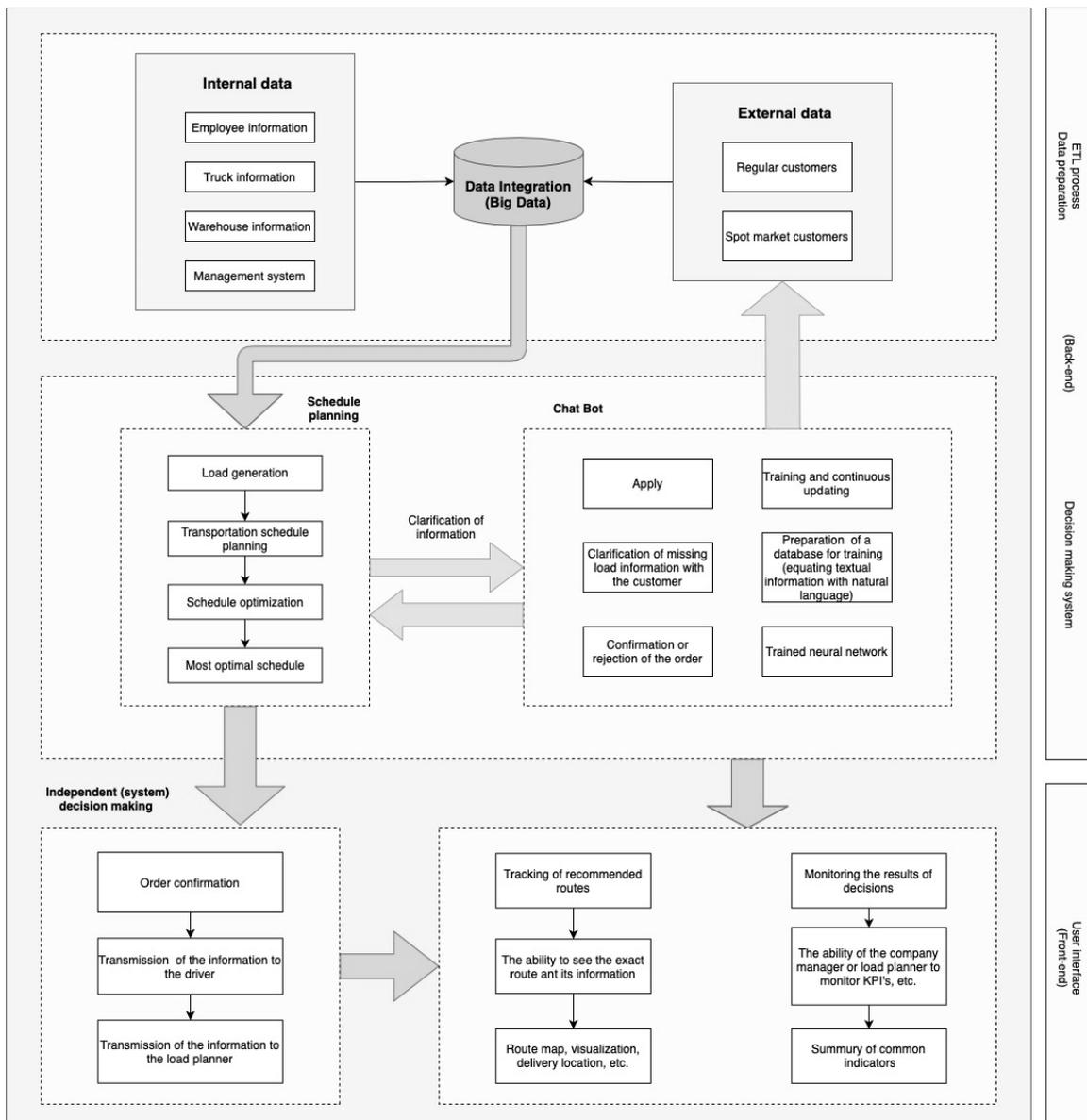
intelligence-based expert system solution for freight coordination and to conduct a survey to justify the proposition. In order to attain this purpose, the following goals will be achieved: 1. To conduct a review of literature pertaining to the integration of artificial intelligence into operational processes; 2. To perform a case analysis of a logistics provider.

**Theoretical solutions of logistics automation**

In contemporary global economy, process digitalisation is becoming inseparable from the supply chain management (SCM). Transportation and logistics sector is no exception. Fierce competition forces organisations to employ new methods and to adapt under conditions of high uncertainty and risk. Automation of operations enables the companies to meet new requirements of their customers, enhance the supply chain effectiveness and prepare themselves for challenges. Lately, researchers started focusing on

organisational resilience that is necessary for maintaining competitiveness (Ralston, Blackhurst, 2020). It is therefore very important for the companies to be capable of identifying the prevalent risks, vulnerability level and possible mitigation methods for minor and major disturbances. Intelligent solutions and systems based on artificial intelligence allow for autonomous management of information – when seeking to go hand in hand with the rapidly changing market, high level of automation and sustainability are very important. A constantly changing dynamic structure of the supply chain poses numerous interesting challenges to effective system coordination. Hence, when analysing the theoretical aspects, a design of the freight coordination system is presented seeking to summarise the integration of artificial intelligence and present different ways of application that would help making the most appropriate decision (Fig. 1), reducing the time costs and, after taking all the limitations of the truck into account, selecting the most suitable freight.

As the process digitalisation increases, load planners



**Fig. 1.** Design of the expert system for freight coordination

are enabled to process more data during a limited period of time. The use of modern decision support systems is generally based on scientific, informative thinking and artificial intelligence approaches. This facilitates the visualisation of results and their presentation to the end user. Monitoring of traffic conditions, listing all the possible route options or calculation of prices are now all part of the everyday transport coordination. Hence, seeking for process automation, artificial intelligence is increasingly invoked to make the decisions faster, to avoid unexpected occurrences on the road, and to ensure effective transportation. Visualisation discusses the following steps:

- Information sharing technology that, as was observed, became a crucial success factor in SCM (Zhou, Benton, 2007). Sharing of information in the supply chain could be defined as the sharing of data, information, and knowledge by an organisation in the supply chain (Kembro, Naslund, 2014).
- Decision-making optimisation in the route planning. When modelling routes, logistics companies often encounter discrepancies and are forced to carry empty trailers. An incorrectly chosen decision might bring loss to an organisation. Decision support system has the possibility to access external and internal data and information of the database containing big data as well as to model different scenarios and to create graphic reports based on the user needs. According to the researchers, seeking to automate the solution of actual practical transport route planning problems, it is helpful to employ a decision support system that combines optimised solutions and simulation-based route schedules considering the truck limitations (Ocalir-Akunal, 2016). When searching for more than one solution, optimisation and DSS are the key two stages of the decision-making (Türkşen, 2015).
- Automation of intelligent processes. Essentially, automation of intelligent logistics determines the effectiveness of logistics operations and service level growth (Li, 2018). Artificial intelligence is invoked in various industries, especially in automated manufacturing companies while relieving the people from monotonous activities and seeking to set a standard of advanced skills and techniques in business processes; it is also an excellent solution for the transportation and logistics sector (Lin, Shih, Yang, Lin, Kung, 2018). Artificial intelligence is capable of learning from its errors, reasoning and even rectifying errors made. The most popular areas of artificial intelligence application can be observed in video, speech, and sense recognition applications. Various chat bots use the natural speech recognition function when providing services to customers online. Natural speech processing (NSP) is an integral tract of artificial intelligence and linguistics aimed at making computers understand statements or words written in the human languages (Khurana, Koli, Khatter, Singh, 2017). The key reason why NSP is so important for the future is that the system records certain information as input, processes it and presents a text or voice output in the natural language

understandable to the user. Considering the fact that the system has access to the big data and higher availability of the computational capacity, we can conclude that it is significantly more effective than a human being performing tasks of the same nature and creates higher added value in meeting the arising needs of the transportation systems (High, 2012), (Tizghadam, Khazaei, Moghaddam, Hassan, 2019).

Automated processes refer to a technology that actively collects data, transforms information and is capable of making decisions and controlling processes (Lee, Seen, 2004). Due to this reason, the design of the expert system for freight coordination proposes digitalising the operational processes by invoking artificial intelligence. After analysing the theoretical approaches and seeking to validate this system, the authors carried out a case study of UAB Unlimited Carrier. Actions are examined according to the current transportation services provided by the company and work processes.

## Research and findings

### *Description of the selected case of logistics services provider*

UAB Unlimited Carrier is a rapidly developing United States company operating in Lithuania. The company experiences great pressure to provide premium quality services at low costs. However, operational processes of the organisation, e.g. freight ordering, freight coordination, supervision of drivers, communication with the customers, route planning etc. become protracted due to the involvement of the human factor. In current freight coordination processes, employees experience numerous issues on a daily basis. The time it takes to find the freight and to compile a schedule, and activities of interacting with brokers for the purpose of specifying the information are based on a human factor that wastes a substantial portion of time and does not ensure the highest quality of processes. Their key object is artificial intelligence that is intended to be used for automation of the company's process solutions.

## Methodology

According to the respondents, the selection process is made more difficult by the fact that in 70% of cases,

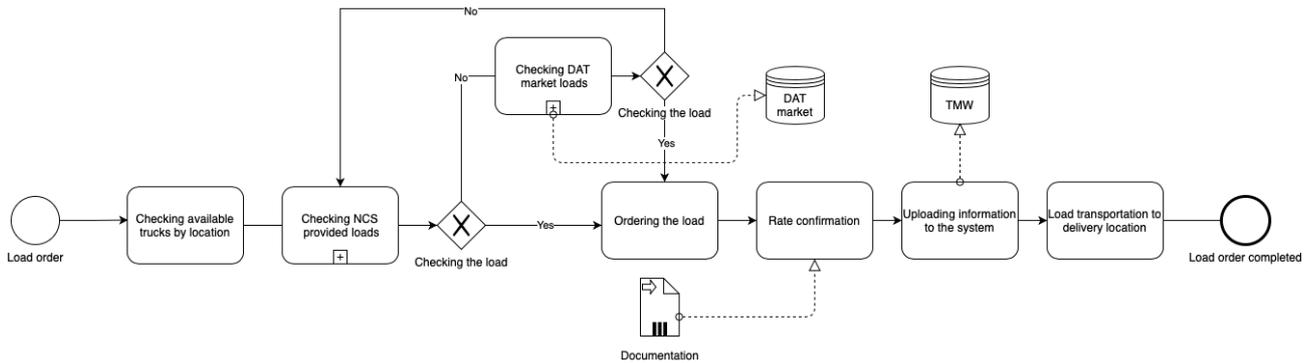
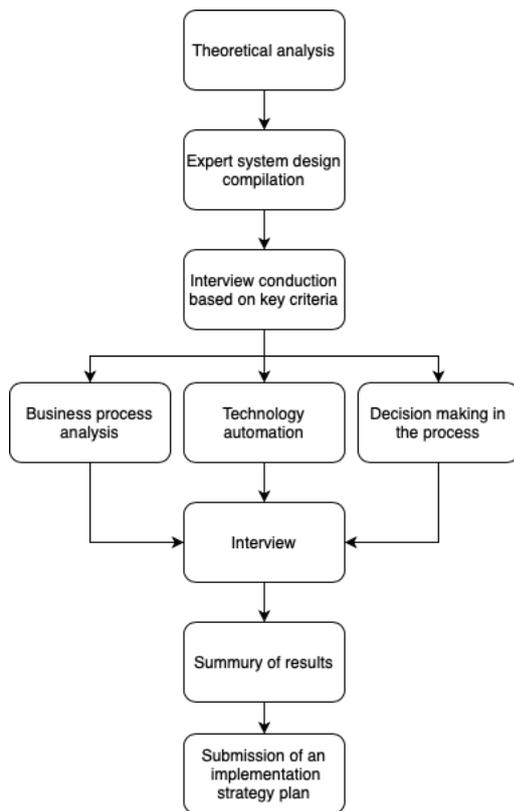


Fig. 2. Visualisation of the freight ordering process using BPMN

Seeking to ensure a higher degree of data provision, business process modelling notation (BPMN) visualisations are carried out based on the process documentation of UAB Unlimited Carrier. This is an observation-based method used to analyse the obtained secondary documents of the company, employees, their activities, service provision, and other processes. The process visualisation scheme analyses in more detail the proceeding of freight ordering starting with the identification of the driver's location to transmitting the order information to the driver. Clear steps are provided seeking to understand how the process operates and the decisions that must be made to order FTL and LTL freight as well as the sharing of information on the level of divisions and the entire organisation. Smooth and effective operations of the organisation help avoid unnecessary labour force resources, reduce the inaccuracies of the human factor and optimise the freight coordination (Fig. 2).

The second method used for the research was expert interview with the employees of UAB Unlimited Carrier conducted according to the aspects analysed in the theoretical part. Respondents included the employees from the human resources and quality control, accounting, information technologies, and transport coordination divisions. The main advantage in the collection of data of such type lies in diverse types of questions allowing the authors to find out various activities engaged in by the company and gain in-depth understanding of the business process functioning. When preparing for the interview, questions were divided into three categories: 1. Questions pertaining to business process analysis; 2. Questions on automation technologies; and 3. Questions pertaining to decision-making in the course of the process. The main objective of the semi-structured interview was to analyse the operational processes and propose suggestions for decision-making improvement in the organisation's processes. The course of the interview is presented in Fig. 3. The conducted interview showed that in the company, psychological factors play an important role. Load planners spend probably the most of their time searching for and ordering freight. This occurs due to the fact that freight is sought for each driver individually considering their location. Online cargo exchanges represent one of the options for searching for freight in real time.

brokers upload inaccurate information; the remaining 30% of cases represent brokers with whom the company has worked before. Nonetheless, an order cannot be finally confirmed until all the required information has been obtained. Thus, because of this, load planners waste significant time. Questions of the second part revealed that the applications used and listed by the respondents were not intelligent, interlinked or specially tailored to the organisation's content. As a result, the human factor manifests even more when attempting at linking all these applications into a whole. Planning occurs in real time, taking various factors into account; hence, acceleration of this process would enhance the process effectiveness. Questions of the third part associated with the decision-making showed that the company's employees would not be inclined to trust the decisions proposed by artificial intelligence entirely. Considering the fact that employees are bound by close interrelationships, the human factor in this case has the decisive role. The replies collected during the interview show that the majority of respondents were positive about the application of artificial intelligence in work processes. Possibility to revise the information to correct the inaccuracies using the chat bot would be helpful when sending emails. Using the generated voice messages to revise the information to correct the inaccuracies would be complicated due to additional questions arising in a conversation that would probably be impossible for the robots to answer. However, all the surveyed respondents concluded that, if possible, they would first start applying the artificial intelligence technologies to the freight planning and route optimisation.



**Fig. 3.** Visualisation summing up the interview

### Findings

Based on the conducted research, a recommendatory plan was drawn up for the improvement of organisation's processes. According to the authors, it is recommended to introduce the expert system for freight coordination in three stages. In the first stage, introduction and testing of the system should be started that would, invoking AI, select the freight according to the set criteria. Freight generated by the system would be prepared separately for each driver, thus ensuring individual requirements. In the course of the process, it is proposed to check which steps were justified and which ought to be eliminated. Thus, improving each time, the system would realise what is the ultimately expected result and how to distinguish it. Route optimisation is the second stage of introduction. Seeing that currently UAB Unlimited Carrier applies no route planning system, the driver decides which road to take and how to reach the destination. However, the likelihood of the driver choosing the shortest, most fuel-saving and most effective route is low. The authors contend that due to constantly increasing real-time demand and current pandemic situation the route optimisation and application of technologies are turning into an increasing advantage. Use of intelligent transport systems for company's route planning would help avoiding traffic jams on the roads, planning for bypasses of accidents in real time, estimating road charges and calculating the most cost-efficient route while avoiding the gas emissions to the air. After implementing a system of this type, the company would save fuel and costs. The third stage of introduction refers to the chat bot installation. Although the respondents stated that chat

robots would not be an effective form of communication with brokers and regular customers, according to the authors, as the technologies improve, interaction with machines based on artificial intelligence will gain popularity. Considering the fact that in transportation and logistics industry, human beings will always make the final decision, the constantly improving robots will also come in handy supporting the decisions. At present, many automated systems specialists are working on the improvement of the chat bot technology so that it is able to perceive emotions and distinguish the essence of the conversation. Taking into account the potential added value of this innovation, it is very important to start introducing it, albeit in small steps.

### Conclusions

Based on the analysed data, we conclude that the processes of UAB Unlimited Carrier are not sufficiently automated and effective. The society is changing and developing rapidly; technologies are improving simultaneously. Seeking not to lag behind the competitors and to utilise innovations, companies must improve their operational processes. Seeing that the organisation expands each year, the managers should also take the application of new technologies into account, thus ensuring growth and improvement hand in hand with the transportation and logistics sector. Employees are forced to perform monotonous acts and to make the decisions wasting a substantial portion of their time. Hence, the main proposition is to improve the expert system for freight coordination by introducing artificial intelligence. While introducing this solution, it is necessary to ensure constant testing in order to avoid any risks or system failure by preventing excessively long freight order placement, selecting freight according to the set criteria, carrying out effective route planning and increasing customer satisfaction with the assistance of chat robots. Artificial intelligence and application of the required automated systems help accelerating the processes, eliminating redundant workforce, and increasing the profits with the same resources, thus ensuring the pay-off of the investment and implemented initiative in the future. Innovative technologies are now part of the rapidly developing world. Consequently, applying them increases awareness, helps becoming a leader among the competitors, ensures decision-making in real time, and reduces the risks. The performed survey allows concluding that the company's employees are positive about the application of automated systems and would be willing to embrace innovations of this type. An expert system design would ensure smooth sharing of data, precise route calculations and beneficial freight generation technology. Chat bots also have great prospects in the transportation and logistics sector seeking to simplify the processes of information revision. The constantly improving effectiveness of artificial intelligence application could improve the quality of transportation services in real time.

## References

1. Alpaydin, E. (2020). *Introduction to machine learning*. MIT press.
2. E. Mazareanu, (2021). Less-than-truckload market size in the U.S. 2018-2021. Reference: <https://www.statista.com/statistics/1171549/less-than-truckload-market-size-us/>
3. E. Mazareanu, (2021). Truckload market size in the U.S. 2018-2021. Reference: <https://www.statista.com/statistics/1171533/truckload-market-size-us/>
4. High, R. (2012). The era of cognitive systems: An inside look at IBM Watson and how it works. IBM Corporation, Redbooks, 1, 16.
5. I. Arenkov, M. Tsenzharik M. Vetrova. (2019, September). Digital technologies in supply chain management. In *International Conference on Digital Technologies in Logistics and Infrastructure (ICDTLI 2019)* (pp. 448-453). Atlantis Press.
6. Juan, A. A., Mendez, C. A., Faulin, J., De Armas, J., & Grasman, S. E. (2016). Electric vehicles in logistics and transportation: A survey on emerging environmental, strategic, and operational challenges. *Energies*, 9(2), 86.
7. Khurana, D., Koli, A., Khatter, K., & Singh, S. (2017). Natural language processing: State of the art, current trends and challenges. arXiv preprint arXiv:1708.05148.
8. Lee, J. D., & See, K. A. (2004). Trust in automation: Designing for appropriate reliance. *Human factors*, 46(1), 50-80
9. Li, X. (2018). Development of intelligent logistics in china. In *Contemporary logistics in China* (pp. 181-204). Springer, Singapore.
10. Lin, S. C., Shih, L. H., Yang, D., Lin, J., & Kung, J. F. (2018, September). Apply RPA (Robotic Process Automation) in Semiconductor Smart Manufacturing. In *2018 e-Manufacturing & Design Collaboration Symposium (eMDC)* (pp. 1-3). IEEE.
11. Ocalir-Akunal, E. V. (2016). Decision support systems in transport planning. *Procedia engineering*, 161, 1119-1126.
12. P. Grossetete, (2020). IoT and the Network: What is the future? Reference: <https://blogs.cisco.com/networking/iot-and-the-network-what-is-the-future>
13. Ralston, P., & Blackhurst, J. (2020). Industry 4.0 and resilience in the supply chain: a driver of capability enhancement or capability loss?. *International Journal of Production Research*, 58(16), 5006-5019.
14. Shang, S., Yuan, B., Deng, K., Xie, K., Zheng, K., & Zhou, X. (2012). PNN query processing on compressed trajectories. *GeoInformatica*, 16(3), 467-496.
15. Tizghadam, A., Khazaei, H., Moghaddam, M. H., & Hassan, Y. (2019). Machine learning in transportation.
16. Türkşen, Ö. (2015). Optimization and decision making stages for multiple responses: an application of NSGA-II and FCM clustering algorithm. *Gazi University Journal of Science*, 28(2), 321-330.
17. Wang, G., Gunasekaran, A., Ngai, E. W., & Papadopoulos, T. (2016). Big data analytics in logistics and supply chain management: Certain investigations for research and applications. *International Journal of Production Economics*, 176, 98-110.

RECEIVED: 4 July 2021

ACCEPTED: 13 September 2021

---

PhD **Valentas Gružasuskas** – Assoc. Prof., Kaunas University of Technology, School of Economics and Business, Sustainable Management Science Group. Field of scientific research: artificial intelligence, agent-based modelling, business analysis, valuation. Address: Gedimino str. 50-524, LT- 44239 Kaunas, Lithuania, Phone: +370 685 76870, E-mail: valentas.gruzauskas@ktu.lt.

**Kotryna Pačėsaitė** – B.sc, Kaunas University of technology, School of Economics and Business, field of scientific research: intelligent process automation, logistics, business analysis. Address: Gedimino str. 50-524, LT- 44239 Kaunas, Lithuania, Phone: +370 (675) 05 989, E-mail: kotryna.pacesaite@ktu.lt.



## TOURISM SERVICE SUPPLY CHAIN MANAGEMENT MODEL IN THE CONTEXT OF THE PANDEMIC

Rima Karsokienė<sup>1</sup>, Algirdas Giedraitis<sup>2</sup>

<sup>1</sup>Klaipėda University, <sup>2</sup>Klaipėda University and Lithuanian Business University of Applied Sciences

### Abstract

This paper explores inter-organizational collaboration in a tourism service supply chain management (TSSC) in times of pandemic. Its main focus is on TSSC successful management model within the chain, addressing the key components. Tourism service supply chain coordination management strategies have already been adopted by many large tourism service providers, such as hotels and airlines, tour operators, and travel agencies. Amongst the key benefits that businesses receive are: improved brand value, reputation, image and status. In the context of the current Covid-19 pandemic, special attention must be given to priorities such as cost reduction and operational efficiency. This new study selected to examine the TSSC management of bilateral relations in the context of economic disruption: relations with government, tour operators and competitors to achieve productive performance indicators such as customer satisfaction, profit and profit margin, flexibility, liquidity, reliability, productivity, transparency, sustainability, and risk resilience. Overall, the management of the tourism services supply chain (TSSC) during the pandemic became one of the most dominant topics in the tourism business environment. As circumstances change, consumer behavior and constraints imposed by public administrations, business organizations must respond and change their supply chain management strategy, which depends on the region, size and nature of the business. A properly functioning TSSC is the optimal balance between two opposite poles - efficiency and sensitivity, which represent customers' satisfactory level. This balance is dictated by the adopted TSSC performance governing strategy, which must specify the relevant requirements for the management of relations with the government, tour operators and competitors. This achieves the level of service dictated by the market, and provides a competitive advantage. Based on the analysis of the scientific literature and the available empirical data, it has been established that the problems of the tourism service supply chain lie in its mismanagement.

KEY WORDS : Management; organization; pandemic; strategy; supply chain; tourism services.

JEL: Z30; Z32; Z39.

### Introduction

In many countries tourism is one of the priority sectors, contributing 15–35% to gross national income (Hungary, Czech Republic, Austria, Sweden, Italy, France, Spain, Portugal) (Буценко and Кулакова 2017). The fragmented but closely interlinked nature of the components of the tourism industry forces tourism companies to engage with many industrial sectors - suppliers, distributors, competitors, governmental and private organizations - leading to the continuity of the tourism service supply chain (TSSC) (Chen, Federguen and Zheng 2001). The integral cooperation of these companies can be seen as a mobile, flexible and organized activity. However, intensive coordination poses a risk to the industry due to its high dependence on the supply chain.

Failure to plan for such events could disrupt the supply chain of tourism services, which could be detrimental to the operations and profitability of businesses and cause irreparable damage to organizations. Adams et al. (2014) indicated that collaboration as a supply chain resource is questioned due to concerns about cooperation technologies. Organizational strategy and behavior in supply chain collaboration is one of the main reasons for supply chain failure (Arvitrida, Robinson, Tako, and Robertson 2016).

Any shock to one part of the chain affects the other parts (Barua 2020; OECD 2020). And tourism services are highly sensitive sector and also vulnerable to any

risks, posed by external factors, be it a natural disaster, an economic crisis, an international conflict, terrorism or an outbreak of an epidemic (Baum and Hai 2020; Armaitienė and Bočkus 2016). Therefore, the rapid spread of the Covid-19 epidemic forced the World Health Organization (WHO) to declare the pandemic on the 11<sup>th</sup> of March, 2020, which caused the cross-border closures, the introduction of compulsory quarantine, which subsequently has led to a complete disruption of the economic activities of the TSSC. The impact of this pandemic on the travel and tourism sector is unprecedented. Airlines have had to drastically reduce operations and in some cases even shut down. It has been established that the number of international flights in 2020 decreased to 80% (Eurocontrol 2021). Most tour operators have also partially restricted or discontinued their activities since March to mid-May, 2020 (OECD 2020). For the hospitality industry, this meant extremely low employment rates, reduced tariffs and even mass closures. During the first wave of the epidemic in Europe, 76% of hotels were closed, and catering services in hotel establishments fell by as much as 95.1%. (UNWTO 2021). Following the Covid-19 pandemic, according to the data of the Lithuanian State Consumer Rights Protection Service, Lithuanian tour operators in suffered 9.5 million. Eur loss during the months of January – December, 2020, and their income fell by an average of 58%. Eur. (VVTAT 2021). The manifestation and spread of the pandemic has put enormous pressure on the tourism industry.

Significantly declining incomes have led to liquidity problems for the organizations (Benbouziane and Saidi 2020). They had to cover the costs of closing the premises, maintaining the disinfection of the working environment, retaining staff, etc., in order to prevent the spread of the virus. Government funding has been used, and companies have been partially or fully restructured (Ataguba 2020).

The pandemic has also caused the following disruptions in the tourism service supply chain: reciprocity, ticket switching, unstable airline flight schedules, different levels of pandemics in countries, the cruise ship industry that has stalled due to pandemic outbreaks. According to global statistics Statista, throughout the year of 2020, global hotel employment fell by 32% since the start of the Covid-19 pandemic, while the catering sector counts 90% lower income than in 2019 (Statista 2021).

The scientific literature states that in the 21st century, organizations compete in the market not with each other but with their supply chains (Szpilko 2017; Guo and He 2012; Christopher 2011). Therefore, special attention must be paid to the development of the flexibility and dynamics of the tourism service supply chain to make it easier for the organizations to adapt to the ever-changing market environment and customer expectations.

**Problem:** How to manage the tourism service supply chain during a pandemic to reduce the negative impact on businesses.

**Object:** Tourism service supply chain management.

**Goal:** After analyzing the problems of tourism service supply chain management in pandemic conditions, to develop a tourism service supply chain (TSSC) management model to deal with pandemic outbreaks.

**Objectives:**

- To reveal the problems of tourism service supply chain management during the pandemic;
- To analyze tourism supply chain management strategies;
- To develop effective tourism supply chain management model.

**Research methodology:** Relatively unstructured document analysis was applied. According to J. Daubariene (2018), it is based on the researcher's ability to delve into the content of documents, solving the tasks presented in the article and substantiating the conclusions. The main thoughts and ideas, regularities, logical connections and tendencies are revealed. The impact of the phenomenon, in this case the Covid-19 pandemic, on the tourism industry is being studied. It was chosen to examine the scientific and legal literature, reports of financial tour operators and to perform statistical data analysis. This is useful for researching a relatively small number of tasks in a narrow field of research. Based on foreign and Lithuanian scientific literature, mainly 2010–2021 and significantly less 2001–2010 articles and books were used. Literature accessed through the electronic resources of Klaipėda University Library: Scholar Google and virtual library data platforms, SFX, DOI systems, EBSCO scientific database. European Union

databases such as eur-lex.europa and ec.europa were also used. Statistical data obtained from SATISTA, Stat.gov, VTTAT, Eimin.lrv data portals were analyzed.

**Analysis of related literature to the relevance of the topic:** D. Dranove (2010) and M. Christopher (2007), examined tourism service supply chain performance problems, B. Kühne, X. Gellynck, and R. D. Weaver (2013); A. Mohaghar and R. Ghasemi (2011); E. Ambrose, D. ve Lynch, and D. Marshall (2010) examined the importance of tourism supply chain management for an organizations that take parts in TSSC.

The development of TSSC relationships is not a new area of research. Jiang, Ritchie, and Benckendorf (2017) and Zhang, Song, and Huang (2009) explored methods that need to be addressed in order to benefit from the TSSC in times of crisis. According to recent research on crisis management in the tourism industry, TSSC interrelationships and relationships could be a key aspect of recovery, reducing the negative impact on the economy (Baldwin and Di Mauro 2020; Barua 2020; Orchiston and Higham 2016). Given the nature and characteristics of the TSSC, these researchers examine the coordination of relations between partnerships, but the governance aspect of the relationship between the TSSCs is left out. According to a study performed by A.C.B Tse (2003), after events such as terrorist attacks or epidemic outbreaks, many hotels are directly trying to sell accommodation services. This strategy reduces dependence on tour operators, as well as reducing losses if they fail to meet their obligations. In such cases, tour operators need to assess possible operational changes and losses and the prospects for further cooperation. Science has little knowledge of how to manage relations with key stakeholders in order to address the risk of unprecedented epidemic outbreaks that have affected all EU Member States TSSCs in different ways.

In scientific literature, tourism services (products) are seen as components of different chain services resulting from complex interactions between stakeholders (Guo and He 2012; Zhang, et al 2009). This interaction is called the tourism supply chain: companies involved in the organization of leisure activities, from various components of tourism products and services, such as flights and accommodation, to the final distribution and marketing of a package of tourism services in a specific destination and involving both the private and public sectors. In order to fully meet the needs of consumers, a very large part of the role in business enterprises is played by the supply chain, its process management and its efficiency (Christopher 2007).

Typical tourism supply chain consists of suppliers, tour operators, competitors, partners, governments, and other organizations (Zhang, et al 2009; Kaukal, Werthner, & Hoepken 2000). Supply chains can be modified according to the needs of the supplier and the customer. It cannot be assumed that good services (products) will sell themselves or that today's success will move to tomorrow. Managers who are attentive to the realities of this market are constantly looking for a

competitive advantage in the tourism business. On this basis, organizations in the tourism business industry are constantly looking for new opportunities. Supply chains can serve this purpose.

But there is a growing awareness that a disaster affecting the supply chain is a disaster for all the organizations involved. Arvitrida et al. (2016) believe that companies' strategy and behavior in supply chain collaboration is one of the main reasons for supply chain failure. Even minor disruptions in traffic and transportation systems can also reduce efficiency (Calvert and Snelder 2018). Another problem is information sharing in supply chain management. This is still an evolving field (Marshall 2015).

In the past, events affecting the supply chain have often been ignored in business continuity planning for the tourism business. One of the signs of a growing awareness of the vulnerabilities of today's supply chains is to fully integrate the supply chain into all risky aspects of management, including business

### **The effectiveness of TSSC management**

Value to shareholders increases through active management of the tourism service supply chain. Given the goals of different organizations, effective relationship management in the supply chain is a key goal in achieving and maintaining the competitiveness of the entire supply chain and its individual parts (Christopher 2011; Tapper and Font 2004).

While contemporary theorists (Soratana, Landis, Jing, and Suto 2021; Mariani, Czakon, Buhalis, and Vitouladiti 2016) focus on service distribution strategies, much of the necessary attention should also be paid to supply chain intermediaries. These organizations need to make key decisions together to reach their markets and close deals. Therefore, the study of these relationships is very important to understand the strategies they use.

The effectiveness of tourism service supply chain management is reflected in the buyer-supplier relationship (Nunkoo and Ramkinsson 2011; Leenders, Fearson, Flynn, & Johnson 2002). The supply chain is as strong as its weakest link, as achievements depend on the targeted action of all actors in the chain. This requires managing the relationships between interconnected organizations to minimize overall logistics costs. The efficiency of tourism service supply chain management is increased by four components: customer satisfaction, financial, operational and sustainable development.

Therefore, the problems of managing the supply chain of tourism services during a pandemic are addressed through a transformation of strategies: relationships with the government and within the TSSC (Aritvida, et al 2016; Adams, et al 2014).

continuity. However, this can be changed. There are three main options for managing this risk:

1. Organizations cannot fully control the risk and are awaiting for help.

2. Only a functioning management plan would allow an organization to anticipate any risks that it may face in the future.

3. Maintain and develop an organization service business continuity program, covering all internal and external components of the supply chain, with the ability to prepare for risk management in response to stakeholder expectations in the event of a pandemic.

Altogether, tourism service supply chain management is a concept that helps service enterprise groups manage external factors, optimally manage internal resources, and help increase business profitability by reducing operating costs and losses (Ellis 2017; McKinsey and Company 2016).

### **Mandatory relationship specifics between TSSC components**

Relationships based on coordination and beneficial philosophy can improve organization's performance (Guo and He 2012). Coordination requires that each component (participant) in the supply chain act according to the impact of its actions on other members. Vertical integration is recognized as the most effective way to achieve such coordination (Wan and Sanders 2017; Ursino 2015). Organizations involved in the supply chain need to be carefully managed to ensure that goods and services effectively reach the target market. This shows a focus on consumer needs and the supplier, using their resources efficiently. They take responsibility for controlling these factors, including intermediaries, suppliers, and do not take into account the fact that the intermediary itself must also manage their two-way communication in the supply chain.

Much attention is paid to the management of decision-making by TSSC participants through various transactions, (Szpilko 2017; Zhang, Song, and Huang 2009; Tapper and Font 2004). The TSSC relationship is usually addressed by the service delivery vision of the selected two countries. A new contribution to science, business and national governments is to manage the relationships between key parts of the TSSC through government, tour operators and competitors, focusing not on providing services to get the final tourism product, but on overcoming economic disruption. At the same time, this study contributes to the perception of relationship hermeneutics in the TS supply chain. There is a need to examine key areas of coordination between TSSC agents in order to overcome the circumstances of economic upheavals, such as finance, labor, demand, supply and regulation. This provides a more in-depth look at technology deployment and leadership, while giving more opportunities in areas such as resource-based approaches and strategic management.

## **The importance of the government role in TSSC management**

The role of government in promoting the international demand for tourism is of significant importance (Lord and Saad 2020; Nunkoo and Ramkissoon 2011). Recent researches recognize that government intervention is critical to the growth of the tourism industry, both politically and economically. In the early post-pandemic period, it is necessary to ensure the liquidity of companies, i.e. to help them recover and avoid operational collapse (Cohen et al. 2020). Since 2020 mid-March, most European governments announced business support programs to reduce funding and liquidity constraints on tourism businesses. The main purpose of the support packages is to provide companies with concessional funds to cover the costs related to the production cycle, in particular working capital: wages, supplier payments, goods, etc. (Correa-Martinez, et al 2020; Mertens, Rubio and Thiemann 2020). Coordination of financial and fiscal policies is needed to ensure liquidity efficiently and effectively. Measures used include tax deferral or adjustment (Kopczuk 2020; Cohen, et al 2021), temporary layoffs or downtime (Chris, Hirt, Hudson, Northcote, & Smith 2020), various subsidies to employers (Lord and Saad 2020). Tourism is a highly sensitive industry to environmental change, so working with governments is crucial to surviving a pandemic crisis. The activities of TSSC members are determined by tourism demand (Zhang, et al 2009) and are directly influenced by economic conditions (Kim, Lee, & Mjelde 2017).

However, outbreaks of an epidemic can encourage tourists to avoid the area if it is associated with a risk to their health or disruption of the medical system (Lee, Song, Bendle, Kim, & Han 2012). Accordingly, the decline in tourism due to the Covid-19 crisis would be linked not only to economic conditions but also to health problems. Demand management includes forecasting, marketing, and sales planning (Zhang, et al 2009). Research highlighting the role of governments in promoting international tourism demand has focused mainly on marketing activities such as destination advertising (Chinazzi, Davis and Ajeli 2020; Tosun 2002;) and government-sponsored tourism priority areas (Kim, Lee and Mjelde 2018). Given the current situation of tourism, with the opening of the EU's borders and the anticipation of the fourth wave of the pandemic in the autumn, attempts can be made to further develop international tourism in cooperation with governments. Countries such as Estonia, Latvia and Lithuania or the Nordic region have already created so-called "travel bubbles" or "air bridges" (OECD 2020). The East-West Economic Corridor between the Andaman Sea and the South China Sea is another example of cross-border government cooperation, including simplification of entry and exit procedures, road improvements and travel promotion campaigns to these areas (EP 2020). These types of economic corridors are global and regional value chains that provide a link between economic operators according to a defined geography. They link the supply

and demand sides of markets, stimulate economic growth, reduce poverty and reap the benefits of globalization. Accordingly, they thrive as part of an economic interaction network (Costaguta 2020; Correa-Martinez, et al 2020).

## **Tour-operator viability in TSSC management**

Many famous hotel chains are owned by tour operators. They focus on the distribution of their services and increasing their visibility in the markets (Armaitienė and Bertužytė 2014; Karamustafa 2000). Conflicts between tour operators and hotels often stem from different commercial and strategic interests. Hotels aim to increase their revenue and achieve a return on investment by balancing the number of customers with room prices, thanks to accommodation agreements with tour operators. On the other hand, the competitiveness of tour operators is based on price reductions and profit margins paid to hotel companies (Tapper and Font 2004; Buhalis 2000). Thus, tour operators can influence hotels to pursue their individual goals or interests.

Fundamental market changes, internet penetration and technological developments caused by Covid-19 are forcing tour operators to restructure (Karsokiene and Dromantiene 2021). In the face of many new challenges, assessing the drivers of changes in the travel agency business market can be a key element in enabling successful agencies to stay in business (Ellis 2017). Successful TSSC management depend on the government's flexibility and willingness to find consumer- and business-friendly solutions that do not conflict with health security requirements (Guo and He 2012). A smooth and timely restructuring process allows companies in temporary difficulties to reshape their operations by changing the company's strategy, abandoning unprofitable forms of activity and focusing on the most efficient ones. The difficulties are successfully overcome by those companies that preventively monitor and evaluate key performance indicators - if the indicators are not satisfactory, they take all possible measures to improve performance (Ataguba 2020; Barua 2020). Those measures are as follows: investments in employees and innovations, correctly formed customer expectations, cost optimization, maximum use of public funds, flexible sales conditions, continuous cooperation and improvement with service providers, return of deposits from partners, focus on future sales, caring for existing customers, expanding supply to safe areas, introducing a digital vaccine passport, and comprehensive flexibility (Mertens, Rubio and Thiemann 2020).

## **Relationship management within the TSSC components**

Managing relationships with competitors within the TSSC is an important subject of the matter. Competitive strategies affect other companies' business strategies, such as the distribution of products and services. The establishment of associations is

increasingly seen as a critical aspect to achieving the competitive advantage of accommodation establishments (Pechlaner and Volgger 2012). Horizontal cooperation between competitors is also called collaboration (Gnyawali and Madhavan 2001). Such collaboration typically exists between firms providing homogeneous services at the same level of the supply chain (Pomponi, Fratocchi, & Tafuri 2015). Value and mutual benefits between different accommodation providers are created when the sharing of resources neutralizes the weaknesses of the individual company. Effective collaboration exists when there are common interests (Wang and Krakover 2008). To achieve this, competitors should take into account the impact of their actions on other agents (Szpilko 2017). Trust-based mutual benefits provide a sustainable competitive advantage. Trust means that short-term benefits are not sought, even if there are incentives to do so (Yu 2019). As mentioned earlier, tourism demand at the destination is a common goal of all TSSC members. According to the Organization for Economic Co-operation and Development, the main goal to maintain destination demand during a pandemic is to maintain services for visitors when they arrive (OECD 2020). Cooperation in tourist destinations is a key decisive factor in gaining a competitive advantage (Szpilko 2017). Typically, organizations work with competitors to eliminate environmental threats associated with industrial development (Chathoth and Olsen 2003). From a TSSC perspective, collaboration is particularly useful in increasing bargaining power at the industrial level (Tether 2002; Chathoth and Olsen 2003). To achieve this, sector-specific regulatory issues as well as the importance of individual sectors in the TSSC must be further examined.

**Proposed TSSC management model for succesful cooperation in times of pandemic**

Research analyzing the impact of Covid-19 on the TSSC and identifying the most effective means of collaboration will aid governments and organizational leaders reduce the negative chain effects that may arise in the future during various pandemics. The results of literature analysis will assist in understanding the consequences of this phenomenon and provide recommendations for future tourism management. In line with the above analyzed strategies, building collaborative relationships between different TSSC agents - government, tour operators and competitors - is the basis for overcoming crises in the tourism industry.

Therefore, it is important to stress that the whole world has been trying for more than a year to deal with the human and economic challenges posed by the Covid-19 pandemic, affecting the economies of all countries in the world. The changes have not escaped the tourism industry either, which makes a significant contribution to the process of economic development. In response to the "pandemic" environment, tourism businesses, which focus on supply chains for tourism services, are forced to change management strategies. Effective management of the tourism service supply chain will lead to the development of innovative tourism services. Therefore, the changing environment due to the pandemic requires the development of an appropriate model for the management of the supply chain of tourism services, which would allow the implementation of pandemic resilience in the tourism services sector. The proposed TSSC management model for successful cooperation in times of pandemics is as follows:

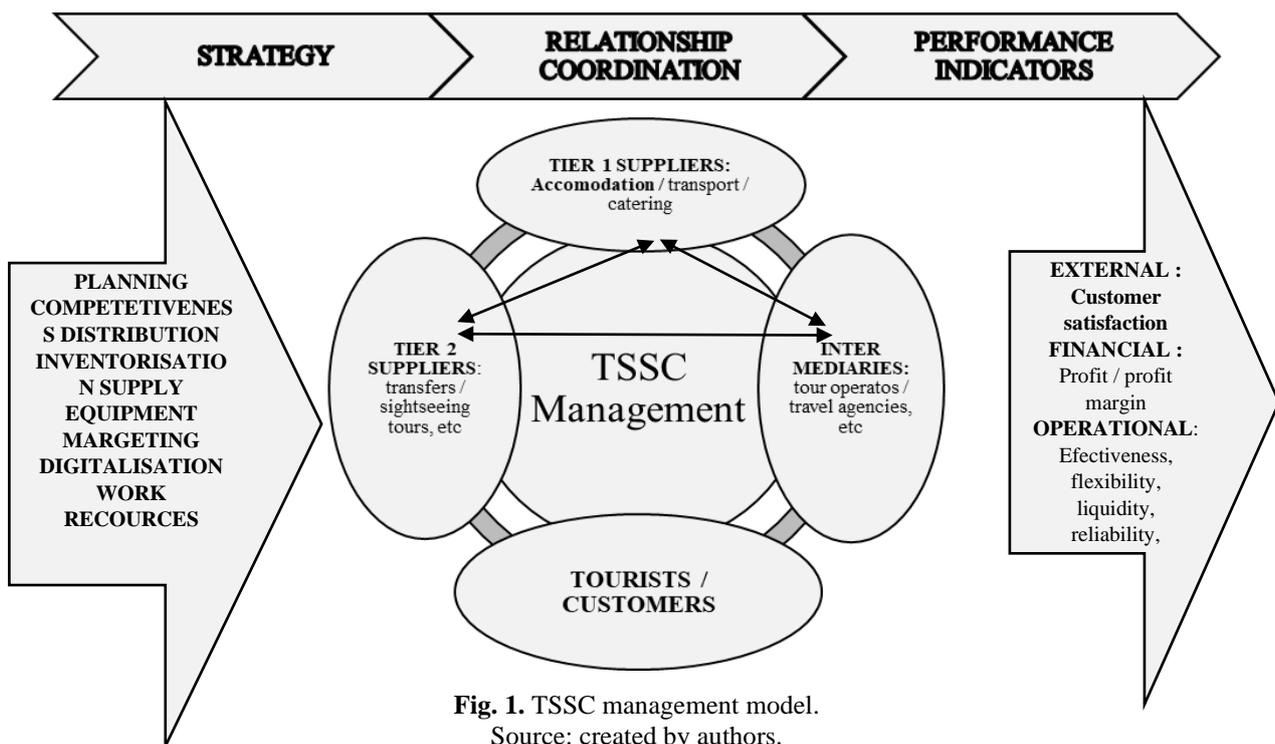


Fig. 1. TSSC management model.  
Source: created by authors.

A TSSC is a complex system (Fig. 1). There are four main parts in a generic TSSC, three compulsory and one service user. Three main parts are tourism service providers or first-tier suppliers (e.g., accommodation or passenger transport), input providers or second-tier suppliers (e.g., food and beverage suppliers) and the intermediaries - tour operators or travel agencies. The fourth party of TSSC are the consumers. Tourists can purchase combined tourism products directly from tour operators or via travel agencies. However, tourists also have an option to arrange their trips themselves by separately purchasing tourism products such as airline tickets and hotel rooms. Therefore, supply chain management performance in the tourism industry is measured through both financial indicators and the non-financial ones. So besides profit, costs, market share, etc. the performance indicators have also to be reached in terms of customer satisfaction, efficient internal processes, degree of innovation, employee satisfaction and other indicators related to movement of tourists. A successful tourism chain management strategy can be identified upon analysing the contribution of each participant on

## Conclusions

In conclusion, the analysis of the entire tourism service supply chain management requires the observation of relationships with suppliers, but also the study of customer satisfaction to offer a touristic product adapted to the market trends. The literature overview shows an intense focus on sourcing activities and on establishing strategic partnerships, in order to benefit from a competitive advantage. But very few have researched the downstream tourism service supply chain management, especially demand management. Once tourism activity is fully reactivated, the results of the study reveal that the recovery of supply chains will depend on coordination agreements with the government to stimulate demand. While demand management includes forecasting, marketing and sales planning, several issues indicate that arrangements must be made in the area of marketing, more specifically in the development of government-supported tourism. The above results are a starting point for future research on tourism service supply chain management in order to better understand the importance of reducing the whole systems' deficiencies in times of pandemic.

Tourism service supply chain coordination management strategies have already been adopted by many large tourism service providers, such as hotels and airlines, tour operators, and travel agencies. Safe tourism corridors in the form of common standards and health protocols would make travel safe and ensure the proper functioning of TSSCs and therefore the survival of the industry. Another insight into successful coordination strategy is the importance of time and coordination in the planning of key partnerships to

the chain, while a model of TSSC can be defined only upon a complete evaluation. There are several reasons for considering tourism chains as the unit of performance analysis. First, the tourism chain can be characterized based on the tourism companies and attractions within a certain location, as the tourism chain is unique considering the interactions between its elements. To maintain and manage such uniqueness and characteristics properly, each tourism chain may need a different approach for analysis. When analysing the tourism service supply chain, the following elements must be considered: its structure (strategies, concepts, distribution channels, competitive advantages etc.), market relations (e.g. between the accommodation, transportation services, food units and tour operators or travel agencies) and chain performance measurement (tourist satisfaction). Considering and well managing this two way relationship amongst the key parts of the TSSC, financial performance, operational performance and sustainable development of tourism is achieved.

avoid delays that can have multiplier proportions in the sector. Operating with tour operators is the most cost-effective way for the hospitality industry to distribute accommodation services. According to key researches, for this reason many hotel chains depend almost entirely on these agents to extend its sales and marketing efforts. Having good relationships based on trust, commitment and coordination within the chain components is crucial leading to successful management strategy.

To conclude this paper, it is important to stress that the whole world has been trying for more than a year to deal with the human and economic challenges posed by the Covid-19 pandemic. Effective management of the tourism service supply chain should lead to the development of innovative tourism services. Therefore, the changing environment due to the pandemic requires an appropriate model for the management of the supply chain of tourism services, which enables the implementation of pandemic resilience in the tourism services sector. Effective TSSC management model is a key aspect of this research. According to the results, a potential way to evolve to a coordination relationships can be moving towards a direct sales model, combined with the tour operators. Finally, in order to overcome the effects of economic disruption caused by epidemic outbreaks, competitors should collaborate in those areas where there is no rivalry, like destination promotion or to influence an industry favorable regulatory framework from a sector level. In line with the decision-making process, the creation of close relationships between different parties, such as, government, tour operators and competitors, are key to achieve successful management and overcome crises in the tourism industry.

## References

- Adams, F. G., Robert G. R., Chad W. A., Tyler R. M. ir Colin B. G. (2014). *Supply Chain Collaboration, Integration, and Relational Technology: How Complex Operant Resources Increase Performance Outcomes*. Journal of Business Logistics 35(4): 299–317.
- Ambrose, E., Lynch, ve D. ir Marshall, D. (2010). *Buyer supplier perspectives on supply chain relationships*. International Journal of Operations & Production Management, Vol. 30(12), p. 1269–1290.
- Armaitienė, A. ir Bertužytė, R. (2014). *Tourism policy in Lithuania: management of permanent transition*. European tourism planning and organisation systems. The EU member states. Ed. by C. Coasta, E. Panyik, D. Buhalis, p. 131–147.
- Armaitienė, A. ir Bockus, D. (2016). *Kelionių agentūru verslo rinkos kaitos veiksniai Lietuvoje*. Tiltai, 1, 39–58, doi : <http://dx.doi.org/10.15181/tbb.v73i1.1264> [žiūrėta 2021m. liepos 16 d.].
- Arvitrida, N. I., Robinson, S., Tako, A. A., ir Robertson D. A. (2016). *An AgentBased Model of Supply Chain Collaboration: Investigating Manufacturer Loyalty*. Proceedings of the Operational Research Society Simulation Workshop 2016, SW 2016: 35–44.
- Ataguba, J. E. (2020). *COVID-19 Pandemic, a War to be Won: Understanding its Economic Implications for Africa*. Applied Health Economics and Health policy Journal, Springer Link.
- Baldwin, R. ir Di Mauro, B. W. (2020). *Economics in the time of Covid-19*. Centre for Economic Policy Research. London. ISBN: 978-1-912179-28-2
- Barua, S., PhD. (2020). *Understanding Coronanomics: The economic implications of the coronavirus (COVID-19) pandemic*. Manuscript. Prieiga internete : <https://ssrn.com/abstract=3566477> [žiūrėta 2021m. liepos 19d.].
- Baum, T. ir Hai, N.T.T. (2020). *Hospitality, tourism, human rights and the impact of COVID19*. International Journal of Contemporary Hospitality Management, 32(7), pp. 2397–2407. Prieiga internete : <https://doi.org/10.1108/IJCHM-03-2020-0242> [žiūrėta 2021m. liepos 16 d.].
- Benbouziane, M. ir Saidi, T. (2020). *The universal impact of the health crises on the international tourism: the COVID-19 pandemic as a case*. Business Excellence and Management, Faculty of Management, Academy of Economic Studies, Bucharest, Romania, vol. 10(5), p. 98–111. Prieiga internete : [http://beman.ase.ro/special\\_issue\\_1/8.pdf](http://beman.ase.ro/special_issue_1/8.pdf) [žiūrėta 2021m. sausio 7 d.].
- Буценко И. Н., Кулакова Д.С. (2017). *Международный туристический рынок: динамика развития и основные участники*. Экономические исследования и разработки. № 1. С. 98–105.
- Buhalis, D. (2000). *Relationships in the distribution channel of tourism: conflicts between hoteliers and tour operators in the Mediterranean region*. International Journal of Hospitality and Tourism Administration , Vol.1 (1), p.113–139.
- Buhalis, D. ir Laws, E. (2001). *Tourism Distribution Channels: Practices, Issues and Transformations*. Cengage Learning EMEA, Hampshire.
- Calvert, Simeon C., and Maaikje Snelder. 2018. *A Methodology for Road Traffic Resilience Analysis and Review of Related Concepts*. Transportmetrica A: Transport Science 14(1-2): 130–54.
- Chathoth, P.K. ir Olsen, M.D. (2003). *Strategic alliances: a hospitality industry perspective*. International Hospitality Management, Vol. 22 (4), p. 419–434.
- Chen, F., Federgruen, A. ir Zheng, Y.S. (2001). *Coordination mechanisms for a distribution system with one supplier and multiple retailers*. Management Science. Vol.47 (5), p.693–708.
- Chinazzi, M., Davis, J. T. ir Ajelli, M. (2020). *The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak*. Science 368, p.395–400.
- Chris, B., Hirt, M., Hudson, S., Northcote N. ir Smith, S. (2020). *The great acceleration*. McKinsey & Company. Prieiga internete : <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-great-acceleration?cid=otheremlaltmipmck&hlkid=33f92356dad34cd3a14c8e964310e224&hctky=1543015&hdpid=d9cf6b8a-1d54-4d03-8b7b-be32198560be> [žiūrėta 2021m. liepos 15 d.].
- Christopher, M. (2011). *Logistics & Supply Chain Management*. Pearson education limited, United Kingdom.
- Cohen, J., Hardy, D., Kelly, M., Arnfield, S. ir Honey, J. (2021). *Beyond Covid-19*. KPMG publisher, Miles Partnership American study. ISBN : 978-92-95107-42-7
- Correa-Martínez, C. L., Kampmeier, S., Kämpers, P., Schwierzeck, V., Hennies, M., Hafezi, W., ... ir Mellmann, A. (2020). *A pandemic in times of global tourism: superspreading and exportation of COVID-19 cases from a ski area in Austria*. American Society of Microbiology. Journal of clinical microbiology. doi : 10.1128/JCM.00588-20
- Costaguta, A. (2020). *The coronavirus outbreak: the unprecedented shock to aviation*. News and features by ICAO. Prieiga internete : <https://www.unitingaviation.com/news/economic-development/the-coronavirus-outbreak-the-unprecedented-shock-to-aviation/> [žiūrėta 2021m. liepos 18 d.].
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed-Method Approaches*. Sage Publications, University of Michigan, 3rd edition. Prieiga internete : <https://doi.org/10.1177/1558689808330883> [žiūrėta 2021m. liepos 18 d.].
- Daubarienė, J. (2018). *Literatūros analizė studijų darbuose*. Kauno kolegija, ISBN 978-9955-27-550-3.
- Dranove, D. (2010). *Quality disclosure and certification : theory and practice*. Journal of economic literature, 48:4, p. 935 – 963.
- Ellis, S. (2017). *Sales and Marketing report 2017 : The Progress Report*. Consumer Goods Technology Jr., June 2<sup>nd</sup>, 2017.
- European Commission, (EC, 2020). *Travel During the Coronavirus Pandemic, Safely Resuming Travel: Re-open EU – New Web Platform to Help Travelers and Tourists*. Prieiga internete : [https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/travel-during-coronavirus-pandemic\\_en](https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/travel-during-coronavirus-pandemic_en). [žiūrėta: 2021m. liepos 16d.].
- European Parliament, (EP, 2020). *Covid-19: EU Support for the Tourism Industry*. Prieiga internete: [https://www.europarl.europa.eu/news/en/headlines/society/20200429STO7\\_8175/covid-19-eu-support-for-the-tourism-industry](https://www.europarl.europa.eu/news/en/headlines/society/20200429STO7_8175/covid-19-eu-support-for-the-tourism-industry). [žiūrėta: 2021m. liepos 16d.].
- Eurocontrol (2021). *Comprehensive assesment of Covid-19's impact on European air traffic*. Supporting European Aviation. Prieiga internete : <https://www.eurocontrol.int/publication/eurocontrol->

- [comprehensive-assessment-covid-19s-impact-european-air-traffic](#) [žiūrėta 2021 m. kovo 10 d].
- Gnyawali, D.R. ir Madhavan, R. (2001). *Cooperative networks and competitive dynamics: a structural embeddedness perspective*. *Academical Management Rev.* Vol. 26, p.431–445.
- Guo, X. ir He, L. (2012). *Tourism supply-chain coordination: the cooperation between tourism hotel and tour operator*. *Tourism Economics*, Vol.18 (6), p.1361–1376.
- Jiang, Y., Ritchie, B.W. ir Benckendorff, P.(2019). *Bibliometric visualisation: an application in tourism crisis and disaster management research*. *Curr. Issues Tour.* 22 (16), p.1925–1957.
- Karamustafa, K. (2000). *Marketing-channel relationships: turkeys resort purveyors' interactions with international tour operators*. *Cornell Hotel Restaur. Adm. Q.* 41(4),p.21–31.
- Karsokienė, R. ir Dromantienė, L. (2021). *Lietuvos kelionių organizatorių restruktūrizacijos prielaidos ir principai COVID-19 sukeltos krizės kontekste*. *Regional formations and development studies. Journal of social science*, No. 2 (34), 2001.
- Kaukal, M., Werthner, H. ir Hoepken, W. (2000). *An approach to enable interoperability in electronic tourism markets*. *ECIS 2000 Proceedings* 121. <https://aisel.aisnet.org/ecis2000/121>.
- Kim, J., Lee, C.K. ir Mjelde, J.W. (2018). *Impact of economic policy on international tourism demand: the case of Abenomics*. *Current Issues Tourism*, Vol. 21 (16), p.1912–1929.
- Kopczuk, W. (2020). *Some Thoughts on Economics and Policy at the Time of the Pandemics*. Department of Economics and SIPA, Columbia University, New York.
- Kühne, B., Gellynck, X. ir Weaver, R.D. (2013). *The influence of relationship quality on the innovation capacity in traditional food chains*. *Supply Chain Management: An International Journal* 18 (1): 52-65. <https://doi.org/10.1108/13598541311293177>.
- Lee, C.K., Song, H.J., Bendle, L.J., Kim, M.J. ir Han, H. (2012). *The impact of nonpharmaceutical interventions for 2009 H1N1 influenza on travel intentions: a model of goal-directed behavior*. *Tourism Management*, Vol. 33 (1), p.89–99.
- Leenders, M.R., Fearson, H.E., Flynn, A.E. ir Johnson, P.F. (2002). *Purchasing and Supply Management*. McGraw-Hill/Irwin, New York.
- Lord, P. ir Saad, L. (2020). *Tackling the COVID-19 Pandemic*. <https://doi.org/10.1016/j.armed.2020.04.012>.
- Mariani, M. M., Czakon, W., Buhalis, D. ir Vitouladi, O. (2016). *Tourism Management, Marketing and Development*. Palgrave MacMillan Publishings, London.
- McKinsey and Company (2016). *Customer experience: Creating value through transforming customer journeys*. *Modern Supply Chain Management. Handbook for innovation focused business leaders*. Oracle.
- Mertens, D., Rubio, E. ir Thiemann, M. (2020). *COVID-19 and the Mobilisation of Public Development Banks in The EU*. *India Policy Forum*, p. 1–9.
- Mohaghar, A. ir Ghasemi, R. (2011). *A conceptual model of supply chain relations quality and supply chain performance bu structural equation modeling : A case study in the Iranian automotive industry*. *European Journal of Social Science*, Vol 21, Nr 3.
- Nunkoo, R. ir Ramkissoon, H. (2011). *Developing a community support model for tourism*. *Annual Tourism Res.* , Vol. 38 (3), p.964–988.
- Orchiston, C. ir Higham, J.E.S. (2016). *Knowledge management and tourism recovery (de) marketing: the Christchurch earthquakes 2010–2011*. *Current Issues Tourism* 19(1),p.64–84.
- Organisation for Economic Co-operations and Development (OECD, 2020). *Tourism Policy Responses to the Coronavirus (COVID-19)*. Prieiga internete : <https://www.oecd.org/coronavirus/policy-responses/tourism-policy-responses-to-the-coronavirus-covid-19-6466aa20/#endnotea0z14>. [žiūrėta 2021 m. liepos 21 d.].
- Pechlaner, H. ir Volgger, M. (2012). *How to promote cooperation in the hospitality industry: generating practitioner-relevant knowledge using the GABEK qualitative research strategy*. *International Journal Contemporary Hospitality Management*, Vol 24 (6), p. 925–945.
- Pomponi, P., Fratocchi, L., ir Tafuri, S.R. (2015). *Trust development and horizontal collaboration in logistics: a theory based evolutionary framework*. *Supply Chain. Management International Journal*, Vol 20 (1), p. 83–97.
- Song, H. (2011). *Tourism Supply Chain Management*. Routledge publishings, London.
- Soratana, K., Landis, A.E., Jing, F. ir Suto, H. (2021). *Supply Chain Management of Tourism Towards Sustainability*. Springer publishings, Switzerland. ISBN978-3-030-58225-8 (eBook).
- Statista. (2021). *S. Lock. Hotel industry worldwide, March 15, 2021*. Prieiga internete : <https://www.statista.com/topics/1102/hotels/> [žiūrėta 2021 rugpjūčio 15 d].
- Szpilko, D. (2017). *Tourism supply chain—overview of selected literature*. *Procedia Eng.* 182, p. 687–693.
- Tapper, R. ir Font, X.(2004). *Tourism Supply Chains*. Report of a Desk Research Project for The Travel Foundation, Leeds Metropolitan University, Leeds.
- Tether, B.S. (2002). *Who co-operates for innovation, and why: an empirical analysis*. *Res. Policy* 31 (6), p. 947–967.
- Tosun, C. (2002). *Host perceptions of impacts: a comparative tourism study*. *Annual Tourism Res.* 29 (1), p.231–253.
- Tse, A. C. B. (2003). *Disintermediation of travel agents in the hotel industry*. *Int. J. Hosp. Manag.* 22 (4), 453–460.
- United Nations World Tourism Organisation (UNWTO). (2021). *2020: worst year in tourism history with 1 billion fewer international arrivals*. Prieiga internete : <https://www.unwto.org/news/2020-worst-year-in-tourism-history-with-1-billion-fewer-international-arrivals> [žiūrėta 2021 m. kovo 2 d].
- Ursino, G. (2015). *Supply chain control: a theory of vertical integration*. Working paper, Nr. 27. Doi: <http://hdl.handle.net/10419/170624>
- Valstybinė Vartotojų Teisių Apsaugos Tarnyba (VVTAT). (2021). *Licencijuotų turizmo paslaugų teikėjų sąrašai*. Prieiga internete : <https://www.vvtat.lt/vartojimo-paslaugos/turizmo-paslaugos/turizmo-paslaugu-teikejai/128> [žiūrėta 2021 m. liepos 9 d].
- Wang, Y. ir Krakover, S. (2008). *Destination marketing: competition, cooperation or cooptation?* *International Journal. Contemporary Hospitality Management*. Vol. 20, p.126–141.
- Yu, P.L. (2019). *Interfirm coopetition, trust, and opportunism: a mediated moderation model*. *Revision Management Science*. 13 (5), p.1069–1092.
- Zhang, X., Song, H. ir Huang, G.Q. (2009). *Tourism supply chain management: a new research agenda*. *Tourism Management* 30 (3), p.345–358.

Wan, X. ir Sanders, N. R. (2017). *The negative impact of product variety : forecast bias, inventory levels and the role of vertical integration*. International journal of production economics, Elsevier, Vol 186.

---

**RECEIVED: 6 July, 2021**

**ACCEPTED: 13 September, 2021**

---

**Rima Karsokiene**, Master of social sciences, University of Klaipeda. Field of scientific research : tourism supply chain management, innovations, artificial intelligence, lifelong learning.  
Email : Karsokiene.rima@gmail.com

**Algirdas Giedraitis**. Doctoral degree in Social sciences, Klaipėda University, associated professor of the Management Department. Research Interests: production management, personnel management.  
Email: algirdas.giedraitis@gmail.com





## **AN EXAMINATION OF THE SAFETY AND PROFITABILITY OF EU AND US BANKS SINCE BASEL III**

**Angelė Lileikienė<sup>1</sup>, Pat Obi<sup>2</sup>, Asta Valackienė<sup>3</sup>**

*Lithuania Business University of Applied Sciences<sup>1,3</sup>, Purdue University Northwest<sup>2</sup>*

### **Abstract**

This paper investigates the performance of European and U.S. banks since Basel III. Key findings in the literature as well as multi-year bank performance data are summarized. With a focus on the regulatory requirements on capital adequacy and liquidity and how they affect profitability, we find evidence of improving safety standards across the board. Banking regulation addresses two critical aspects of risk management: capital adequacy and liquidity. Liquidity risk stems from the likelihood that a depository financial institution may not have sufficient funds to meet its recurring payment obligations. To that end, the key reason for bank regulation on liquidity is to address concerns over the safety and stability of banks and the payments system. Capital adequacy deals with the minimum capital capable of absorbing any unforeseen losses from credit, market, and operational risks to which banks are exposed. The goal of capital adequacy is to keep total bank capital sufficiently high so that the chance of bank failure is prevented when financial losses mount. Capital adequacy ratio (CAR) takes into account a bank's ability to pay its liabilities and respond fully to the risk of any such financial losses. A bank with strong CAR has more than sufficient capital to absorb these losses and therefore less likely to become insolvent. Banks in the EU lead their US counterparts in terms of safety but lag in terms of profitability. There is evidence that the strive toward higher capital and liquidity standards comes with the price of reduced profitability. Notwithstanding, most studies agree that while the new standards impose additional costs, they are necessary for ensuring the stability and sustainability of the financial system.

**KEY WORDS:** Basel III; Capital adequacy; Liquidity coverage; Risk-weighted asset; Profitability.

**JEL:** G21, F3, F65

### **Introduction**

The commercial banking sector is arguably the most heavily regulated business in the financial services industry. A robust system of banking regulation is necessary to ensure that no one financial institution has such a concentrated amount of risk as could jeopardize the safety and soundness of the financial system. To that end, bank regulation is, in general, designed to address specific ways to ensure stable performance. The renewed focus on prudential supervision in recent years is purposed to increase the resiliency of commercial banks and thereby, the entire financial market system.

Banking regulation addresses two critical aspects of risk management: capital adequacy and liquidity. Capital adequacy deals with the minimum capital capable of absorbing any unforeseen losses from credit, market, and operational risks to which banks are exposed. The goal of capital adequacy is to keep total bank capital sufficiently high so that the chance of bank failure is prevented when financial losses mount. Capital adequacy ratio (CAR) takes into account a bank's ability to pay its liabilities and respond fully to the risk of any such financial losses. A bank with strong CAR has more than sufficient capital to absorb these losses and therefore less likely to become insolvent.

Liquidity risk stems from the likelihood that a depository financial institution may not have sufficient funds to meet its recurring payment obligations. To that end, the key reason for bank regulation on liquidity is to address concerns over the safety and stability of banks

and the payments system. As Schrieder et al. (2011) put it, there is a natural link between solvency and liquidity in that the two tend to reinforce each other especially in times of crisis. A clear example was the European debt crisis in the spring of 2010 when concerns about bank solvency led to a liquidity crisis, with many banks struggling to access interbank funding. Two years earlier, widespread toxic loans on U.S. bank balance sheets led to a liquidity crisis and credit crunch – the main reason the Federal Reserve initiated the so-called *quantitative easing*.

From the supply side, deposit insurance is designed to guard against bank runs. However, this assurance alone is insufficient to ensure that banks maintain a healthy level of cash flow for their normal operations. Overall, regulation on capital adequacy and liquidity is designed to ensure that banks maintain sufficient investor capital given the amount of risk that arises from banking business and, as a retail lender of last resort, stand ready to intervene to ease temporary illiquidity as well as assure safety of customer deposits.

## Recent Literature on Capital Adequacy and Liquidity

Many authors like Abdul - Rahman and Ayorinde (2013), Hagendorff, Nietto and Wall (2013), Pana, Park and Query (2007), Berger, Kick and Schaeck (2010), Kemal (2011) define the sustainability of the financial system through the regulatory framework of the banking sector and commercial banks. indicators such as liquidity and ensuring capital adequacy ratios.

Since the end of the 2008-2009 financial crisis, the significance of regulatory capital and liquidity has gained increased attention among policy makers and scholars. The literature is replete with studies seeking to assess the efficacy of Basel III in terms of its overall impact on bank performance. The specific aim in many of these studies is to determine if the tougher standards in Basel III are serving their intended purpose, which is to enhance financial stability. Earlier studies that examine this issue include Berger and Bouwma (2009), Hagendorff and Nieto (2013), Shmieder et al. (2011), and Jokipii et al. (2011). More recent studies include Chandrasegaran (2020), Ankenbrand and Dao (2018), Obi and Sil (2015), Fratianni and Pattison (2015), and Ambrasas (2014), Lileikienė and Likus (2012), Kovalčik and Lileikienė (2015) and other.

Berger and Bouwma (2009) find mixed results in their investigation about the relationship between bank liquidity and bank value. While the relationship is found to be positive for large banks, it is negative for the small institutions. Recently, Bouwma (2018) gives a historical overview of bank liquidity creation in the U.S. from the early 1800s to Basel III and the Dodd-Frank Act of 2010 and find that large banks created most of the liquidity in the banking system.

Across the Atlantic, Hagendorff and Nieto (2013) examine the impact of European bank mergers on changes in liquidity and bank performance of both the acquirer and the target. An important finding is that in cases where there is strict domestic oversight, both the acquirer and target performed better than in cases where supervision is lax. They also find that strong regulation coupled with a tough deposit insurance system produced a positive post-merger changes in liquidity and overall performance. In a related study, Shmieder et al. (2011) use a cash flow-based model that integrates liquidity stress test with solvency testing. They find that three critical factors that negatively affect bank performance are bank run, maturity transformation, and solvency risks.

The issue addressed by Jokipii et al., (2011) is how short-term capital buffers relate to portfolio risk adjustments. Their analysis points to a bi-directional positive relationship. That is, banks are encouraged to take on more risks as their capital cushion rises, and vice versa. Their empirical analysis utilizes a panel dataset of U.S. banks from 1986 to the start of the financial crisis in 2008.

Both Boissay and Collard (2016) and Schanz et al. (2018) show that the tougher Basel III standards have a direct effect on the broader economy. The latter study shows that optimal capital ratio lies somewhere between

10 percent and 15 percent of risk-weighted assets. Boissay and Collard (2016) find that strict enforcement of the new rules promotes a more efficient and productive allocation of credit to its best use. However, Schanz et al. (2018) find that the higher capital requirement imposes higher operating costs on banks. These costs are passed on to customers in the form of higher borrowing costs which have a negative impact on investment and growth. Obi and Sil (2015) draw a similar conclusion when the so-called *stressed value-at-risk*, introduced in the 2009 revision of market risk capital is factored into the CAR calculation. They find that this additional risk estimator often leads to the unintended consequence of excessive and costly capital charge. Notwithstanding, Schanz et al. (2018) conclude that the higher costs are relatively low when compared to the huge economic benefits of enhanced prudential supervision.

While a higher capital ratio increases risk protection, it also has the potential to reduce profitability. Herrala (2012) points out that the two stakeholders in a bank – shareholders and depositors – have asymmetric expectation. Shareholders seek higher yielding investments while depositors prefer safety. Herrala's approach is contested by Jokipii and Milne (2009) who argue that regulation of capital reduces risk and actually improves performance. However, in a bid to maximize profit, banks sometimes take inordinate risks which weakens their capital base.

Some negative outcomes of capital adequacy after the Basel III integration in the Eurozone are also discussed by Pana et al. (2009), and Oppliger and Martin (2009). These include reduced profitability, lower return on investment, constant inspections by supervisory authorities, increased fees for customers, and diversion of financial resources to IT upgrade. These issues are also identified by Fratianni and Pattison (2015) and Bullow and Klemperer (2013). While touting the merits of Basel III by its ability to enhance safety, these studies find significant weaknesses regarding the inability of banks to earn a fair return. Asymmetries in the ways that the standards are implemented in different countries were also identified by Fratianni and Pattison (2015) and Mawutor (2014) as a key reason for performance differences in different countries. It is obvious that the Basel amendment introduced in 2017 seeks to minimize the risk-weighting variations that account for many of these performance differences.

According to Lileikienė and Kovalčik (2014), the norm regulating the activities of commercial banks as a liquidity risk, in the context of Basel III, allows minimizing systemic risk. Systemic risk in the banking system is understood as a chain reaction of a lack of liquidity by one financial market participant throughout the financial sector. In their research, the authors draw attention to the interaction between liquidity risk and concentration in the banking sector, noting stronger systemic risk.

A growing number of studies have also examined the regulatory benefits of the new banking rules in the developing economies. For example, Chandrasegaran (2020) investigate the specific impact of Basel III capital adequacy on bank profitability in Sri Lanka. Key

findings include a positive relationship between CAR and non-interest income. However, Tier 1 capital ratio had a negative relationship with non-interest income. Importantly, this study did not show a direct linkage between CAR and either interest income or liquidity. Similar findings of a positive linkage between CAR and performance have also been identified for other developing economies. Examples include Ankenbrand and Dao (2018) in the case of Vietnam, Bogale (2021) for Ethiopia, Hafez (2015) for Egypt, Al-khalaf (2014) for Saudi Arabia, and Aymen (2013) for Tunisia. A study on the determinants of capital adequacy in Nigeria by Sanyaolu (2020) showed that return on assets and loan to total assets are positively related to CAR. However, nonperforming loans and asset size have a negative effect. This study also finds evidence of a linkage between macroeconomic factors and CAR.

**Research and Methodology. The Concept of Capital Adequacy**

Commercial banks face a wide range of financial risks, the most significant of which is *credit risk*. Additionally, banks are exposed to the risk of financial losses from their trading and off-balance sheet activities. These risks, which are classified as *market risk* were formally identified in the 1996 amendment to Basel I. Basel II adds a provision for *operational risk*, which includes risk of financial losses from failure in the bank’s internal procedures as well as external hazards such as theft, fire, and natural disasters. The first pillar of the Basel Accords provides for minimum capital to reflect risk-weighted assets with respect to losses from these three sources of risks. Banks also face a host of other risks in the general conduct of business referred to as *business risk*. The capital adequacy ratio of a commercial bank serves as a buffer to cover unforeseen losses from these risks.

Capital Adequacy Ratio (CAR) is the key metric used to determine a bank’s ability to withstand financial shock. A bank with a good CAR has sufficient capital to absorb potential losses and therefore, is less likely to require a government bailout in cases of emergency. After the financial crisis in 2008, the Bank of International Settlements (BIS) began setting stricter CAR standards to protect depositors and minimize the risk of another financial crisis.

Pursuant to the central mission of the BIS, establishing a global standard for the prudential supervision of banks is the key responsibility of the Basel Committee on Banking Supervision (BCBS). While capital adequacy remains central in the Committee’s charge, Basel III, which was published in 2010, also includes liquidity as well as leverage requirements as part of a bank’s overall risk management regime. The stipulations in Basel III are considered a substantial strengthening of previous capital requirements. The revised standards were in response to observed deficiencies in banking practice that were partly to blame for the 2008 global financial crisis.

The revised provisions in Basel III raised minimum capital by increasing Tier 1 capital ratio from 4% to 6% of which Core Tier 1 capital ratio increased from 2% to 4.5%. Additionally, Basel III introduced “Mandatory Capital Conservation Buffer” which further raised Core Tier 1 ratio to 7% and the combined ratio for Tier 1 and Tier 2 to 10.5%. These new stipulations constitute a sharp increase from the Basel II level of 8%. Basel III also provides for a discretionary “Countercyclical Capital Buffer” capable of increasing minimum capital by an additional 2.5%. The ratio rises to an even higher level for globally focused commercial banks considered to be systemically important. The following table (Table 1) shows the maximum dividend payout ratio for the fully phased in Capital Conservation Buffer for U.S. banks which took effect in January 2019.

**Table 1.** Capital Conservation Buffer for U.S. Banks

Capital Conservation Buffer (% of RWA)	Maximum Payout Ratio (% of Eligible Retained Income)
Greater than 2.5%	No payout limitation
Less than or equal to 2.5% and greater than 1.875%	60%
Less than or equal to 1.875% and greater than 1.25%	40%
Less than or equal to 1.25% and greater than 0.625%	20%
Less than or equal to 0.625%	0%

Source: U.S. Federal Deposit Insurance Corporation (<https://www.fdic.gov/regulations/safety/manual/section2-1.pdf>)

Common equity Tier 1 capital ratio is the ratio of Tier 1 common equity to risk-weighted assets. In calculating CAR, risk weighting ensures that each asset is adjusted by its degree of risk. Since Core Tier 1 capital is common equity of which retained earnings are a major

part, a low net interest income may not add much to the numerator of Tier 1 capital adequacy ratio, shown in Equation 1. Thus, for the same level of risk-weighted assets, regulatory capital ratio may end up lower than would be the case if earnings were higher.

$$\text{Capital adequacy ratio: CAR} = \frac{\text{Tier 1 Capital} + \text{Tier 2 Capital}}{\text{Credit RWA} + \text{Market RWA} + \text{Operational RWA}} \quad (1)$$

As stated by the U.S. Federal Deposit Insurance Corporation, bank capital performs several important functions. It absorbs losses, promotes public confidence, helps restrict excessive asset growth, and provides protection to depositors and the deposit insurance fund. Undoubtedly, Tier 1 capital is the core capital of any bank. This type of capital absorbs losses without requiring a bank to cease its operations. Tier 2 capital includes subordinated debt, and it is used to absorb losses in the event of a liquidation. For these reasons, some refer to Tier 1 capital as *going concern capital* and Tier 2 as *gone concern capital* (Risk Management Manual of Examination Policies, Federal Deposit Insurance Corporation

([https://www.fdic.gov/regulations/safety/manual/section\\_2-1.pdf](https://www.fdic.gov/regulations/safety/manual/section_2-1.pdf)) Retrieved on May 31, 2021.).

Table 2 shows an example of CAR calculation for a hypothetical bank with \$10 million in Tier 1 capital and \$8 million in Tier 2 capital for total capital of \$18 million. Suppose this bank made a loan of \$30 million to Firm X with risk weighting of 25%. It also issued a loan of \$95 million to Firm Z with risk weighting of 55%. This bank’s total risk-weighted assets (RWA) equal \$59.75 million (\$30 million x 0.25 + \$95 million x 0.55). The resulting total CAR is 30.13% (\$18 million/\$59.75 million) and Tier 1 capital ratio is 16.74% (\$10 million/\$59.75 million). From this outcome, we determine that this bank has more than met the minimum capital adequacy ratios under Basel III.

**Table 2.** Capital Adequacy Ratio Calculation for a Hypothetical Bank

Tier 1 capital	\$10,000,000		
Tier 2 capital	\$8,000,000		
Total	\$18,000,000		
<b>Asset</b>		<b>Risk Weight</b>	<b>RWA</b>
Loan to Firm X	\$30,000,000	25.00%	\$7,500,000
Loan to Firm Z	\$95,000,000	55.00%	\$52,250,000
Total RWA			\$59,750,000
Total capital adequacy ratio (CAR)			30.13%
Tier 1 capital ratio			16.74%

Capital ratios express a bank’s capital as a percentage of its risk-weighted assets (RWAs). Tier 1 capital is the most significant since it is based on common equity capital. In 2020, Morgan Stanley had the highest common equity tier 1 capital ratio in the United States. This bank is the fifth largest by market capitalization. Its Tier 1 capital ratio of 19.44%, which was above the

required level of 4.5%. The largest bank in the U.S., JPMorgan Chase, had a Tier 1 capital ratio of 15.05%.

In the European Union, Royal Bank of Scotland had the largest Tier 1 capital ratio of 18.5%. Capital requirements for European banks were raised after Basel III and phased in on the 1st of January 2015. Tier 1 capital ratios of selected US and EU banks as of the 4th quarter 2020 is presented in Table 3.

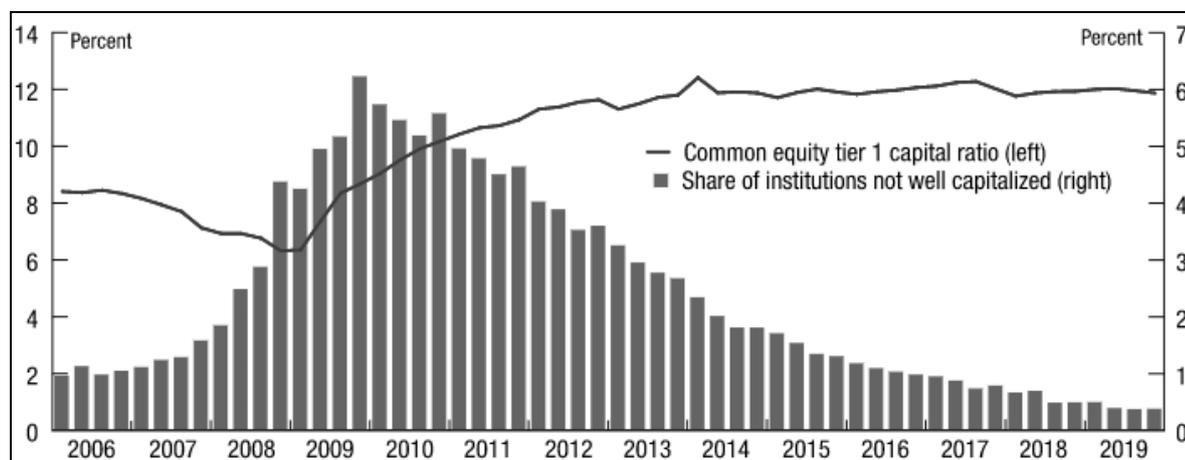
**Table 3.** US and EU Banks with Highest Tier 1 Capital Ratios as of 2020

	<b>United States</b>		<b>European Union</b>	
	<b>Bank</b>	<b>Tier 1 Ratio</b>	<b>Bank</b>	<b>Tier 1 Ratio</b>
1	Morgan Stanley	19.44%	Royal Bank of Scotland	18.50%
2	HSBC North America	17.08%	Credit Agricole Group	17.20%
3	TD Group	17.03%	Lloyds Banking Group	16.20%
4	Goldman Sachs	16.73%	Groupe BPCE	16.00%
5	BNY Mellon	16.06%	Unicredit S.P.A.	16.96%
6	Capital One Financial	15.30%	HSBC Holdings	15.90%
7	JP Morgan Chase	15.05%	ING Group	15.50%
8	American Express	14.66%	Barclays PLC	15.10%
9	State Street Corp	14.39%	Intesa Sanpaolo	14.00%
10	Citigroup	13.70%	UBS AG	13.80%
11	Bank of America	13.52%	Deutsche Bank	13.60%
12	Wells Fargo	13.25%	Societe Generale	13.40%

Source: Statistica, Largest US and EU Banks in 2020, by CET1 Ratio, Published by F. Norrestad, May 27, 2021

Tier 1 capital ratio for U.S. banks hit an all-time low during the 2008-2009 financial crisis. Since then, banks have become much better capitalized with ratios rising up to 12 percent. As Figure 1 shows, this has caused the share of under-capitalized banks to fall sharply to less

than 0.5 percent. Because of this strong capital position, the banking industry was able to weather through the COVID-19 recession and was better positioned to support continued lending.



**Figure 1.** Bank Capital Data for US Banks  
Source: Federal Reserve, Call Report and FR Y-9C

Multi-year safety data for European banks are presented in Table 4. European banks have continued building a solid capital position and strengthening their balance sheets throughout 2019. The recapitalisation effort that European banks have made following the

2008 financial crisis makes the European banking sector more resilient and robust. In recent years, Core Tier 1 capital ratio was at 14.3%, the highest level it had ever been and more than double the same ratio in December 2011.

**Table 4.** Bank Capital Data for EU Banks

	Jun 2011	Dec 2011	Jun 2012	Dec 2012	Jun 2013	Jun 2014	Jun 2015	Jun 2016	Jun 2017	Jun 2018	Jun 2019
Core Tier 1	5.3%	7.0%	7.8%	8.3%	9.0%	11.4%	11.8%	12.8%	13.8%	14.3%	14.3%
LCR	71%	76%	N/A	113%	110%	116%	128%	135%	143%	147%	147%
NSFR	89%	93%	95%	96%	N/A	103%	105%	108%	112%	114%	113%
LR (min=3%)	2.8%	3.0%	3.1%	3.0%	3.1%	4.0%	4.4%	4.7%	5.0%	5.2%	5.1%

Source: European Banking Federation, Banking Sector Performance

Core Tier 1 = Common equity tier 1 capital ratio; LCR = Liquidity coverage ratio; NSFR = Net stable funding ratio; LR = Leverage ratio.

Although a global agreement on banking supervision was reached in Basel III, implementation lay in the hands of national and regional regulators. Asymmetry in the implementation of national regulation and supervision has given rise to concerns that were subsequently addressed in what some refer to as Basel IV. In December 2017, the Basel Committee published its reforms to Basel III, the main objective being to reduce the wide variability in the risk weighting used to calculate risk-weighted assets and capital ratios. In recent years, the banking sector has also been subjected to widespread discretionary regulation by governments especially in times of crisis. This was evident during the 2008-2009 financial crisis and the European debt crisis in 2010-2011. Unprecedented fiscal initiatives were taken to bail out insolvent banks, arrange bank mergers, and in some cases even, maintain a significant public stake in some banks. These additional regulations augment established regulatory measures designed to guard against systemic failure.

#### Banking Regulation in the US and EU

While the Basel Committee on Banking Supervision lays out standards to harmonize bank regulation globally, countries and regions are ultimately responsible for designing and implementing their own regulatory regime. In the United States, nationally chartered banks are supervised by the Federal Reserve Board, Federal Deposit Insurance Corporation (FDIC), and Office of the Comptroller of the Currency (OCC). Additionally, state-chartered banks are subject to state regulatory authorities.

In the European Union, banking supervision is governed by the Single Supervisory Mechanism (SSM), which is the common system of banking supervision in the Eurozone. The mechanism consists of the European Central Bank (ECB) and the national supervisory authorities of the participating countries. In addition to the central goal to ensure the stability of the European banking system, bank supervision in the EU is aimed at

increasing financial integration and ensuring consistent supervision across all E.U. banks. (European Central Bank Banking Supervision: Single Supervisory Mechanism

(<https://www.bankingsupervision.europa.eu/about/thesem/html/index.en.html>) retrieved on May 22, 2021.)

The ECB has the principal authority to directly supervise all the national banks in the European Monetary Union deemed to be “significant” in that they hold more than 80 percent of bank assets in the member states. All euro area countries participate automatically in European banking supervision. To that end, the ECB conducts supervisory reviews and on-site inspections, grant or withdraw banking licences, assess bank acquisitions and disposals, ensure compliance with E.U. prudential rules and importantly, set capital requirements to forestall financial losses.

Worldwide, bank supervision is conducted by designated state regulators, at the top of which is the country’s central bank. Notable central banks include the Federal Reserve, European Central Bank, Bank of Japan, and Bank of England. In all, bank supervision is designed to ensure that banks comply with established regulatory standards in order to avoid the types of financial losses that could lead to systemic failure and a collapse of the financial system.

## Results and discussion. The Liquidity-Profitability Paradox

Basel III also includes provisions for leverage ratio and two liquidity ratios. The latter are Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR). Liquidity ratios are designed to ensure that banks maintain sufficient liquid assets given their expected cash outflows. This requirement is introduced in Basel III to address the liquidity problem caused by the maturity mismatch of bank assets and liabilities. That is, the financing of long-term investments (bank loans) with short-term funds (customer deposits).

Liquidity Coverage Ratio (LCR), defined in Equation 2, provides information as to whether a bank has the capacity to survive a 30-day period of liquidity disruptions. Prior to the 2007-2008 financial crisis, bank regulation did not include explicit liquidity requirements. This ratio imposes a minimum requirement on the amount of unencumbered high-quality liquid assets (HQLA) that would prevent cash flow disruptions. It requires the amount of HQLA be at least as large as the net outflow of funds under the 30-day stress period. Off-balance sheet positions such as undrawn committed credit lines are included in the denominator as an outflow rate times the undrawn amount on the credit lines.

$$\text{Liquidity Coverage Ratio: LCR} = \frac{\text{High quality liquid assets}}{\text{Net cash outflows in a 30-day period}} \geq 100\% \quad (2)$$

Net Stable Funding Ratio (NSFR) in Equation 3 focuses on liquidity management over a 1-year period. Like LCR, the minimum NSFR that banks must maintain under Basel III standards is 100%. This ratio helps determine if a bank has sufficient long-term, stable funding sources to cover long-term interest-bearing assets. Stable funding sources consist of customer

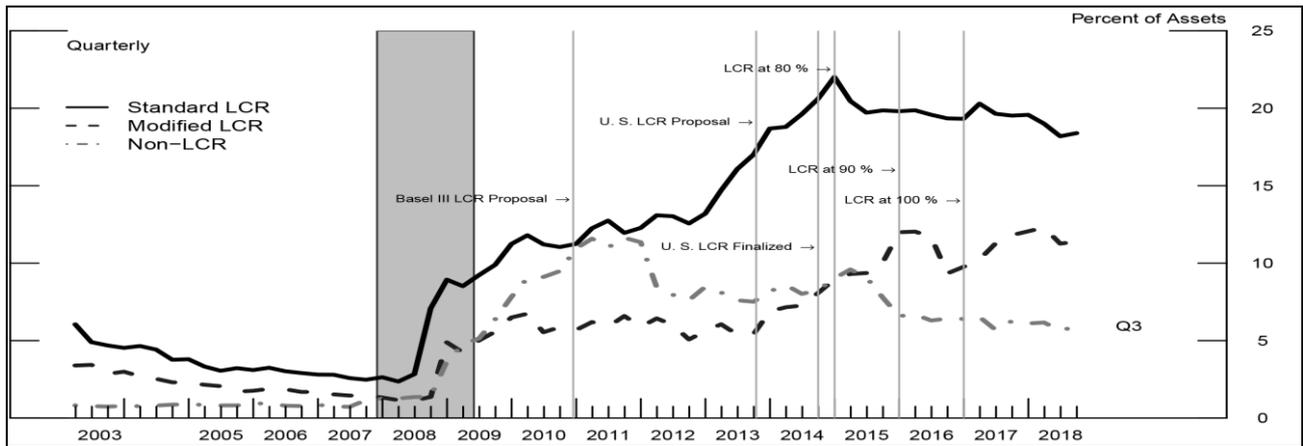
deposits, long-term debt, and common equity. The numerator includes Tier 1 and Tier 2 capital in addition to customer deposits. Each item is multiplied by a factor reflecting its level of stability. The denominator includes all assets and off-balance sheet items, all of which are also multiplied by a factor to reflect the level of permanence of the funding required.

$$\text{Net Stable Funding Ratio: NSFR} = \frac{\text{Amount of stable funding}}{\text{Required amount of stable funding}} \geq 100\% \quad (3)$$

Banks in the European Union preceded the U.S. in fully integrating the new liquidity standards in 2016. Full compliance in the U.S. came into effect a year later. The liquidity risk exposure which can hamper a bank’s ability to fulfil its payment obligations was evident in the United States when the mortgage crisis erupted in 2007. Widespread toxic loans on bank balance sheet meant that many loans – most of which were subprime – went into default. It also meant that interest on these bad loans

were not received, leading to reduced net interest income. All of this made it difficult for banks to be able to create new loans as well as fully meet withdrawal requests.

Since the end of the 2008-2009 financial crisis, banks in the U.S. and Europe have greatly improved their liquidity positions. For US banks, this is evident by the remarkable increase in the level of high quality liquid asset (HQLA) as shown in Figure 2.



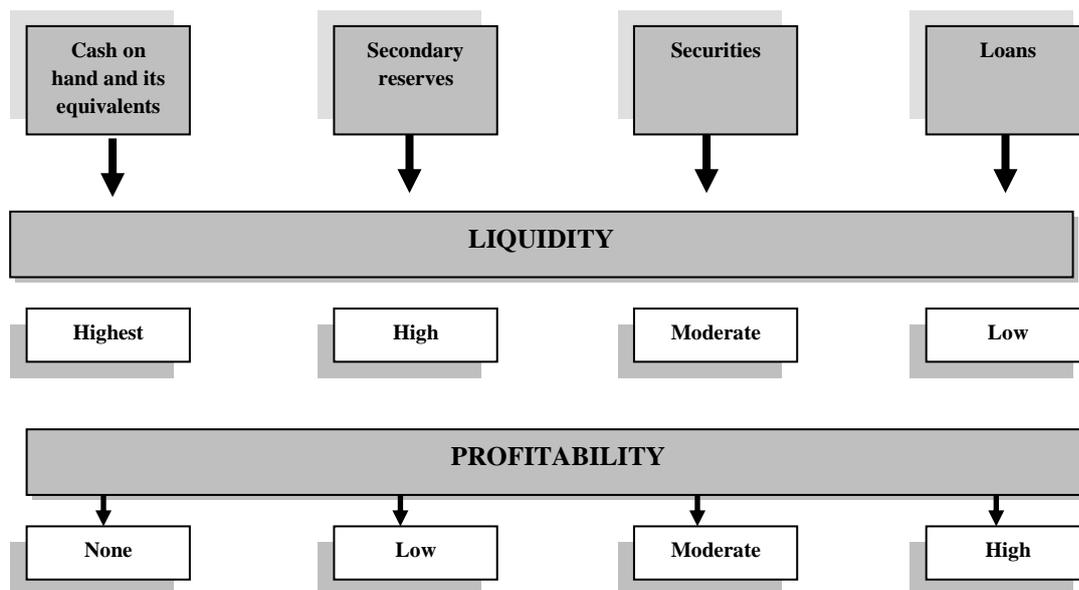
**Fig. 2.** High Quality Liquid Assets-to-Total Assets Ratio for US Banks

Standard LCR banks are those with total consolidated assets above \$250 billion. Modified LCR banks are all bank holding companies with assets between \$50 and \$250 billion. Non-LCR banks are banks with total assets below \$50 billion. The shaded area is the period of the 2008-2009 recession. Vertical lines are different stages of the LCR implementation. Source: Federal Reserve, “The Liquidity Coverage Ratio and Corporate Liquidity Management.”

One important way that banks can boost cash flows and improve liquidity is to issue mostly high quality and short-term loans, both of which are low risk. Such loans guarantee strong liquidity and therefore increases the numerator of LCR. However, the low return on such loans means that banks would have to contend with reduced profit margins. Two studies that examine the relationship among liquidity, profitability, and bank safety are Taraila (2001) and Vadova (2011). Both studies find evidence of a negative relationship between liquidity and profitability. According to Liang (2012) and Lileikienė and Likus (2011), to maintain the required liquidity level, banks forego profitability by holding a disproportionate amount of low-yielding short-term loans. The implication therefore is that strict compliance with the new liquidity requirement

potentially leads to two conflicting outcomes: improved liquidity but reduced profitability.

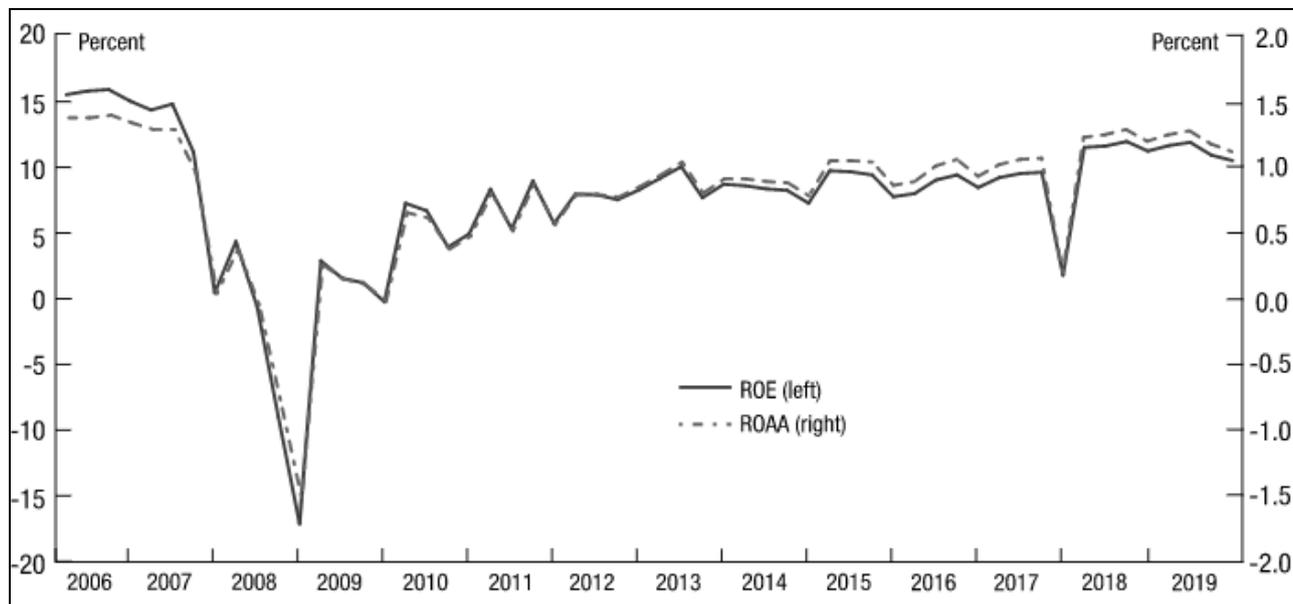
As illustrated in Figure 3, the least profitable assets are often the most liquid. These are assets that can be readily converted to cash without loss of value. As Lileikienė (2004) explains, these assets have zero return and contribute very little to profitability. At the other end are long-term loans and investment securities, assets which although are most profitable are also least liquid. Because traditional banking involves the creation of loans out of customer deposits, the challenge to determine an optimal cash balance capable of meeting the daily liquidity needs while maintaining a profitable loan portfolio, is critical in a successful asset-liability management.



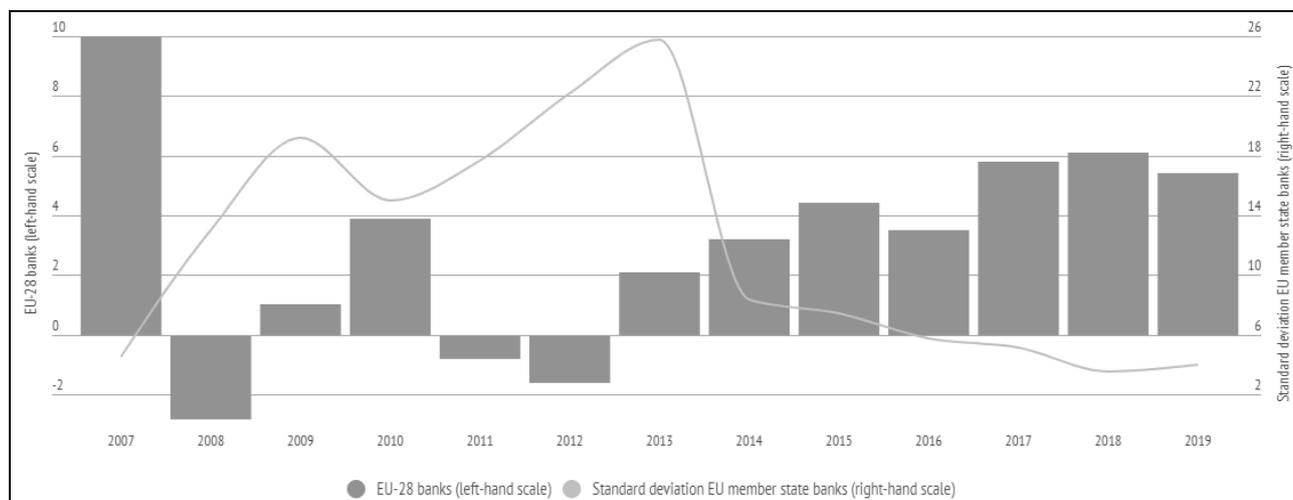
**Fig. 3.** Asset Type versus Liquidity and Profitability

It is noteworthy that while liquidity and capital positions of American and European banks have greatly improved in recent years, the same cannot be said of profitability. Although ROE has remained generally

positive since the end of the financial crisis, it plateaued to around 10 percent for U.S. banks and is generally below 6 percent for European banks. Recent trends are presented in Figures 4 and 5.



**Fig. 4.** Return on Equity of U.S. Banks  
 Note: ROE = Net income/average equity capital; ROAA = Net income/quarterly average assets.  
 Source: Federal Reserve System, Call Report and FR Y-9C.



**Fig. 5.** Return on Equity of European Banks  
 Source: European Banking Federation, “Facts and Figures, Banking in Europe 2020: Banking Sector Performance”

As can be seen, while capital and liquidity ratios have significantly improved with time, profitability has not been as robust. Low profitability has real consequences as recent studies have shown. It restricts the extent to which banks can fund growth from retained earnings and makes issuing new capital more costly. It also accelerates the point at which banks have to use existing capital rather than earnings to absorb losses. Finally, it raises questions about the viability and sustainability of the affected financial institutions.

**Conclusions**

This paper examined the performance of US and EU banks since Basel III. Performance was conducted with regard to multi-year changes in capital adequacy, liquidity, and profitability. Most authors agree that the sustainability of commercial banking depends on a strict compliance with the new Basel III liquidity and capital standards. Yet, strict adherence to the new standards appears to have a negative impact on profitability. Notwithstanding, the consensus in the literature is that strong a capital and liquidity position is necessary to mitigate the risk of a systemic crisis like what happened in 2008-2009. Systemic crisis arises when the collapse of

one bank affects the financial conditions of others, thereby jeopardizing the safety and soundness of the global financial system.

Capital Adequacy Ratio (CAR) is the key measure of bank safety and considers a bank's ability to pay liabilities and absorb unexpected losses from credit, market, and operational risks. A bank with a strong CAR is less likely to become insolvent and lose depositors' funds. After the financial crisis in 2008-2009, the Bank of International Settlements (BIS) began setting stricter CAR requirements to protect depositors. Additionally, it instituted liquidity standards to ensure that banks maintain sufficient high quality liquid assets to back up their cash outflows.

In the United States, average CAR steadily increased following the 2008-2009 financial crisis. In recent years, this ratio has risen above 12 percent with the share of undercapitalized banks falling to less than 0.5 percent even through the peak of the COVID-19 pandemic in 2020-2021. For countries in the European Monetary Union, one of the initial challenges was reconciling the disparate national regulatory standards with those established by the European Central Bank. Under the Single Supervisory Mechanism (SSM), Tier I capital has risen remarkably to almost 16 percent by the end of 2020. The recapitalisation effort that European banks made following the 2008 financial crisis has undoubtedly made the European banking sector much more resilient and robust. Similarly, for both regions, liquidity coverage ratios have risen steadily to levels well above 100 percent. Unfortunately, while safety standards have improved across the board, bank profitability has not fared as well. The situation is more dire in the EU where return on equity is only one half the level in the US.

Overall, it appears that adherence to tougher safety standards comes with the price of reduced profitability. Evidence in recent literature and bank operating performance seems to support this view. Striking an optimal balance between capital adequacy and liquidity on one hand and profitability on the other is necessary if the safety and sustainability of the banking system is to be assured.

## References

- Ankenbrand, T. and Dao, B. (2018). "Capital Adequacy & Banking Risk – An empirical study on Vietnamese Banks." [https://www.researchgate.net/publication/272506174\\_Capital\\_Adequacy\\_Banking\\_Risk\\_-\\_An\\_empirical\\_study\\_on\\_Vietnamese\\_Banks](https://www.researchgate.net/publication/272506174_Capital_Adequacy_Banking_Risk_-_An_empirical_study_on_Vietnamese_Banks)
- Aymen, B.M. (2013). "Impact of capital on financial performance of banks: The case of Tunisia," *Banks and Bank Systems* 8(4):47-54
- Agiwal, S. (2011). *Regulatory and Economic Capital. Measurement and Management*, No. 11 (18), p. 2 -18.
- Basel Committee on Banking Supervision (2013). *Regulatory Consistency Assessment Programme (RCAP) Analysis of risk-weighted assets for credit risk in the banking book*. ISBN 92-9131-938-4, p. 14 – 22.
- Basel Committee on Banking Supervision (2013). *Basel III: the liquidity coverage ratio and liquidity risk monitoring tools*. No. January, p. 19 – 39.
- Berger, A.N. and Bouwman, C. (2009). "Bank Liquidity Creation," *Review of Financial Studies*, Vol. 22, No. 9, 3779-3837.
- Bogale, A.T. (2021). "Effect of bank specific and macroeconomic determinants on capital adequacy ratio a study on Ethiopian private commercial banks," DOI: 10.15413/jbem.2020.0152, *Journal of Business and Economic Management* 9(2): 047-057. DOI: 10.15413/jbem.2020.0152
- Boissay, F. and Collard, F. (2016). "Macroeconomics of bank capital and liquidity regulations" BIS Working Papers No 596 (<https://www.bis.org/publ/work596.pdf>), retrieved on May 20, 2021.
- Bouwman, C. (2018). "Creation and Regulation of Bank Liquidity," (October 7, 2018). Available at SSRN: <https://ssrn.com/abstract=3266406> or <http://dx.doi.org/10.2139/ssrn.3266406>
- Bullock, J., Klemperer, B. (2013). *Market-Based Bank Capital Regulation*, p. 2 – 21. [žiūrėta 2017-12-27]. Prieiga per internetą: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.396.6260&rep=rep1&type=pdf>
- Chandrasegaran, L. (2020). "Capital Adequacy Requirements and Profitability: An Empirical Study on Banking Industry in Sri Lanka," *Economics and Business Quarterly Reviews*, Vol.3 No.2, pp. 589-601. Doi: 10.31014/aior.1992.03.02.223.
- Dilip, N., Narain, A., Ghosh, S., and Sahoo, S. (2000). "Capital adequacy requirements and the behaviour of commercial banks in India: An analytical and empirical study", [https://www.researchgate.net/publication/237333876\\_Capital\\_adequacy\\_requirements\\_and\\_the\\_behaviour\\_of\\_commercial\\_banks\\_in\\_India\\_An\\_analytical\\_and\\_empirical\\_study](https://www.researchgate.net/publication/237333876_Capital_adequacy_requirements_and_the_behaviour_of_commercial_banks_in_India_An_analytical_and_empirical_study)
- Elliot, D. (2010). *Quantifying the Effects on Lending of Increased Capital Requirements*. Briefing Paper, No. 7, p. 2 -23.
- Elliot, D. J. (2010). *A primer on bank capital*. p. 3 – 6. [žiūrėta 2018-11-17]. Prieiga per internetą: [http://www.brookings.edu/~media/research/files/papers/2010/1/29%20capital%20elliott/0129\\_capital\\_primer\\_elliott.pdf](http://www.brookings.edu/~media/research/files/papers/2010/1/29%20capital%20elliott/0129_capital_primer_elliott.pdf)
- European Banking Federation, "Facts and Figures Banking in Europe 2020: Banking Sector Performance" [www.ebf.eu/facts-and-figures/banking-sector-performance/#:~:text=The%20ROE%20of%20European%20banks,down%20from%206.1%25%20in%202018.&text=The%20difference%20between%20the%20highest,%20D90.2%25%20in%20Slovenia](http://www.ebf.eu/facts-and-figures/banking-sector-performance/#:~:text=The%20ROE%20of%20European%20banks,down%20from%206.1%25%20in%202018.&text=The%20difference%20between%20the%20highest,%20D90.2%25%20in%20Slovenia)
- European Commission (2014). *Kapitalo reikalavimo direktyvos*. [žiūrėta 2017-12-12]. Prieiga per internetą: [http://ec.europa.eu/internal\\_market/bank/regcapital/legislation\\_in\\_force\\_en.htm](http://ec.europa.eu/internal_market/bank/regcapital/legislation_in_force_en.htm)
- Farag, M., Harland, D. (2013). *Bank capital and liquidity*. Park Communicated Limited, No. 53 (3), p. 201 – 213. [žiūrėta 2018-03-16]. Prieiga per internetą: <http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2013/qb130302.pdf>
- Fratianne, M. and Pattison, J. (2015). "Basel III in Reality," *Journal of Economic Integration*, 30(1): 1-28 (<https://www.jstor.org/stable/43264528>).
- Hagendorff, J. and Nieto, M. (2013). "The Safety and Soundness Effects of Bank M&A in the EU: Does Prudential Regulation Have any Impact?" *European Financial Management*, Vol. 9999, No. 9999, pp. 1–29. doi: 10.1111/j.1468-036X.2013.12022.x
- Hafez, H. (2015). "Determinants of the Capital Adequacy Ratio: An Empirical Study on Egyptian Banks," *Corporate Ownership and Control* 13(1):806-813.

- Herrala, R. (2012). Limits of borrowing. p. 3 – 12. [žiūrėta 2017-12-21]. Prieiga per internetą: [http://tel.archives-ouvertes.fr/docs/00/78/00/86/PDF/Herrala\\_risto\\_2012\\_E D221.pdf](http://tel.archives-ouvertes.fr/docs/00/78/00/86/PDF/Herrala_risto_2012_E D221.pdf)
- Jokipii, T., Milne, A. (2011). "Bank Capital Buffer and Risk Adjustment Decisions," *Journal of Financial Stability*, 7(3):165-178
- Liang, J. M. (2012). The impact of the Basel III capital & liquidity requirements: Balance Sheet Optimization. [žiūrėta 2018-09-24]. Prieiga per internetą: [https://www.few.vu.nl/en/Images/stageverslag-liang\\_tcm39-238705.pdf](https://www.few.vu.nl/en/Images/stageverslag-liang_tcm39-238705.pdf)
- Lindquist, K. G. (2012). Bank's buffer capital: how important is risk? p. 2 – 8. [žiūrėta 2018-04-13]. Prieiga per internetą: <http://www.bis.org/bcbs/events/wkshop0303/p07lindq.pdf>
- Lileikienė, A., Kovalčik A. (2012). Commercial banking prudential requirements analysis. *Journal of Management* 2014, No 1(24) ISSM 1648-7974. p. 77-91
- Lileikienė, A., Likus, A. (2011). Analysis of Change Effect in the Market Interest Rate on Net Interest Income of Commercial Banks. *Engineering Economics*, No. 22 (3), p. 241 – 243.
- Mawutor, J.K. (2014). "Analysis of Basel III and Risk Management in Banking, *European Journal of Business Management*, Vol.6, No.6, 2014, Available at SSRN: <https://ssrn.com/abstract=2155987> or <http://dx.doi.org/10.2139/ssrn.2155987>
- Miller, R. L., VanHoose, D. D. (2000). *Современные деньги и банковские дела*. Москва.
- Obi, Pat and Shomir Sil (2015). "A Conceptual Framework for Examining the Impact of Basel 2.5 on Market Risk Capital," *Journal of Finance Issues*, 14(1): 12-23.
- Pana, E., Park, J., Query, T. (2009). The impact of mergers on liquidity creation. *Journal of Risk Management in Financial Institutions*. No., July, p. 2-23.
- Polat, A. and Al-khalaf, H. (2014). "What Determines Capital Adequacy in the Banking System of Kingdom of Saudi Arabia? A Panel Data Analysis on Tadawul Banks," *Journal of Applied Finance & Banking*, vol. 4, no. 5, 2014, 27-43.
- Priyank, S. (2007). An Assignment on Assets – Liabilities Management proprietary in Banks. Retrieved April 11. [žiūrėta 2018-04-23]. Prieiga per internetą: <http://www.scribd.com/doc/13822454/ASSET-LIABILITIES-Mnagement-in-banks>
- Sanyaolu, W.A. (2020). "Determinants of Capital Adequacy of Nigerian Banks," *Market Forces College of Management Sciences*, Vol 15, No. 1-15.
- Schanz, J.; Aikman, D.; Collazos, P.; Farag, M.; Gregory, D.; and Kapadia, S. (2018). "The long-term economic impact of higher capital levels," *BIS Papers No 60*, (<https://www.bis.org/publ/bppdf/bispap60j.pdf>) Retrieved on May 20, 2021
- Shakirov, F., Goussanou, C., Wiggins, A., Geelkens, J. (2012). Bank capital adequacy rules: rationale and consequences. p. 13 – 17. <<http://www.parisschoolofeconomics.com/benassy-quereagnes/Enseignement/Poleco2013-presentation12-capitaladequacy.pdf>>
- Shmieder, C., Hesse, H., Neudorfer, B., Pühr, C., Schmitz, S. W. (2011). Next generation: System-wide liquidity stress testing. *IMF Working Paper*, No. January, p. 5 – 13.
- Vadova, P. (2011). Determinants of commercial banks' liquidity in the Czech Republic. *Recent Researches in Applied and Computational Mathematics*, p. 92.
- Walter, S. (2010). Basel III: Stronger Banks and a More Resilient Financial System. p. 3 – 20. [žiūrėta 2015-03-09]. Prieiga per internetą: <<http://www.bis.org/speeches/sp110406.pdf>>

---

RECEIVED: 7 July, 2021

ACCEPTED: 13 September, 2021

---

**Angelė Lileikienė** is professor, doctor of social sciences. Research field – "Financial system sustainability problems". The author has written and published more than 80 articles on the subject, made presentations at national and international conferences. The author is a member of the editorial boards of research journals or the editor-in-chief of the journal "European Science". Address: Turgaus Street, 21. Klaipėda, LT-91249. E-mail: [angele.lileikiene@ltvk.lt](mailto:angele.lileikiene@ltvk.lt)

**Pat Obi** is an endowed Professor of Finance at Purdue University Northwest. He received his Ph.D. in Finance with a minor in Econometrics from the University of Mississippi. With professional engagements in several countries, he is the author of numerous scholarly articles and two finance books. His research uses a variety of panel data and time series models to examine interrelationships among financial and economic variables. Obi sits on the editorial boards of three academic journals. Address: 2200 169th Street, Hammond, IN 46323, USA. [obi@purdue.edu](mailto:obi@purdue.edu).

**Asta Valackienė** is professor at Lithuania Business University of Applied Sciences of Vilnius Branch. Research interests: Methodology of Science and Research; Change Management; Responsible Research and Innovation. A Member of Management Committee of COST ACTION 17127 Programme. National representative from Lithuania. A Member of UNESCO Unitwin Network Baltic and Black Seas Circle Consortium in Education Research (BBCC) Association. Author of Research studies, Books, Handbooks. Has published over 80 scientific papers indexed in the international data bases with co-authors and single-authored. Address: Žirmūnų Str. 70, LT-09124, Vilnius. Phone: +37068694121. E-mail: [asta.valackiene@gmail.com](mailto:asta.valackiene@gmail.com)



## LEADERSHIP THROUGH EMPOWERMENT OF HUMAN RESOURCES DURING THE PANDEMICS

Jurgita Martinkienė, Asta Valackienė, Modestas Vaikšnoras

*Lithuania Business University of Applied Sciences*

### Abstract

The world has never before experienced such a dramatic impact on human capital; and the consequences of the COVID-19 on economic, social and political indicators – although still not fully known and difficult to forecast, but according to many authors and international organisations will certainly be dramatic (Tawil, 2020; UNESCO, 2020). The COVID-19 pandemic has created a particularly challenging environment for human resource management (HRM) – with managers having to quickly venture into the “unknown unknowns” as they strive to help their workforce adapt to and cope with radical changes occurring in the work and social environment. According to D. Gudelis (2020) the COVID-19 pandemics that has spread all over the world since the beginning of 2020 has posed a grand challenge to the governments of all countries around the world, including Lithuania – they were forced to make decisions on the measures that would help to slow the spread of the virus as well as to take actions to alleviate the negative effects of the enforced restrictions on the economy and people. In Lithuania, having declared a state-level emergency situation on 26 February, 2020, the governance of the pandemics was based on the Law on Civil Protection of the Republic of Lithuania and the State Emergency Situation Management Plan approved in 2010. After a couple of weeks, the decision on announcement of a national quarantine on the entire territory of the Republic of Lithuania was made on the grounds of the Law on the Prevention and Control of Communicable Diseases in Humans of the Republic of Lithuania. In the light of the above, the article analyses the leadership through empowerment of human resources and underpins the effectiveness of management. The initial theoretical framework provides the rationale for the concept of leadership during the pandemics; it also includes an analysis of the dimensions and typology of the concept of empowerment and COVID-19: management, policy, remote work and management processes. The article focuses both on the changes in leader’s management styles and decision-making options in the organization where leadership through empowerment of employees during the pandemics plays an important role. Quantitative research on leadership through empowerment in organizations during the pandemics was conducted. The research findings have shown that leaders were fairly well prepared for management of human resources during the pandemics as well as disclosed the trends that the leaders in organizations provide their employees with a possibility to perform challenging work tasks, to make decisions autonomously, to develop their competences, they share information and apply incentive measures that during the challenging times are relevant for workforce. The research has revealed that little attention has been paid to career development opportunities in organizations when working in remote mode. Practical implication of the research findings allows maintaining that the COVID-19 pandemics will have profound social, psychological, physical and technical implications for human resources as they attempt to adjust to their drastically altered work environments. Some of these challenges, undoubtedly, have never been experienced before, i.e., they are unique, and therefore, will require new methods of analysis and new theoretical constructs, however, some other issues employees are currently facing resemble their usual daily work experience.

KEY WORDS: human resources; leadership; empowerment; pandemics; COVID-19.

JEL: 015; M54

### Introduction

The world has never before experienced such a dramatic impact on human capital; and the consequences of the COVID-19 on economic, social and political indicators – although still not fully known and difficult to forecast, but according to many authors and international organisations will certainly be dramatic (Tawil, 2020; UNESCO, 2020). Therefore, ability of the leader and an employee to understand each other and to successfully work together as a team as well as to be able to work remotely is crucial for every successful organization. Today, in an exceptional period of the pandemics that has affected all the world, the role of leadership in companies and organizations has become increasingly important. Recently, a new managerial competence – empowerment has become increasingly emphasised and analysed, i.e., the leader’s actions in respect of employee in order to ensure successful implementation of organizational goals.

According to R. Jeyakumar, at al. (2020) some of the most relevant problems around the world require an understanding and acceptance of science by the general public, which includes understanding and responding

accordingly to a pandemic such as the recent COVID-19 novel coronavirus.

Coronavirus (COVID-19) infection is a viral respiratory disease caused by acute respiratory syndrome coronavirus 2, SARS-CoV-2 and is transmitted via airborne particles and droplets or by direct contact with infected people. Since its first outbreak in the Wuhan province in China in December, 2019, the infection had spread around the world and after the number of cases exceeded 118000 on 11 of March, the World Health Organization (herein further – the WHO) announced the COVID-19 pandemics that has affected over 110 countries all over the world (Mitkutė et al., 2020, p. 176-184).

The article formulates the problem: how leadership manifests itself through empowerment of human resources during pandemics? COVID-19 pandemics provides a unique opportunity to analyse both the changes in the leader’s role, management style and in the decision-taking options.

The research methods included a systematic analysis of research literature, an anonymous written survey conducted to disclose the importance of leadership in empowerment of human resources during the pandemics.

Research instrument (questionnaire) comprises 7 closed-ended questions; statistical methods were applied to analyse the data: a statistical data analysis was performed using the descriptive statistics method, calculating the mean arithmetical scores, of the respondents' opinions, percentage, standard deviation. To process the data, SPSS 21 (Statistical Package for Social Sciences) software package was used.

### Management concept during the pandemics

To successfully implement the aims and objectives of organization it shall be led by the leader, who possesses relevant competences, which were critically needed for empowerment of employees during the pandemics.

According to Carnevale et al., (2020) today's organizations have to remain alert and adaptive to unforeseen events, such as external crises, which create increased uncertainty among their workforce and pose immediate threats to the organizations' performance and viability. However, with the recent COVID-19 pandemics, organizations suddenly have to navigate the unprecedented and thereby find new solutions to challenges arising across many areas of their operations.

Organizations are faced with increasing uncertainty as they navigate today's "grand challenges", or highly significant problems not typically confined to national, economic or societal borders (Eisenhardt, Graebner & Soneshin, 2016; Ferraro, Etzion & Gehman, 2015). Today's grand challenges are wide-ranging, comprising multiple complicated issues, such as climate change, severe economic downturns and political instability (George, Howard-Grenville, Joshi & Tihanyi, 2016). In our interrelated world these serious issues may pose a direct threat to viability and survival of organizations, urging them to continue to respond and adjust by respectively organizing and managing their workforce. But with the recent outbreak of COVID-19 ("Coronavirus (COVID-19)", 2020), organizations face a grand challenge of unparalleled proportions, one that forces them to dive into and directly manage unprecedented territory as they alter their workforce in technical, physical and socio-psychological ways not seen before (Carnevale et al., 2020 p. 183-187).

According to Carnevale et al. (2020), the COVID-19 pandemic has created a particularly challenging environment for human resource management (HRM) – with managers having to quickly venture into the "unknown unknowns" as they strive to help their workforce adapt to and cope with radical changes occurring in the work and social environment. In this case, leadership through empowerment of human resources during the pandemic plays a significant role. For example, employees who formerly spent all or most of their time working inside their organization's physical boundaries now have to quickly adjust to remote work environments. Even those who might be well adjusted to remote working conditions are now faced with their own unique challenges due to an inability to seek alternative workspaces (e.g., cafés, libraries, coworking-spaces) outside of the home itself. This has likely further limited the segmentation between work and private spheres leading to greater difficulties in "unplugging" from work

demands (Chawla, MacGowan, Gabriel & Podsakoff, 2020). Aside from the increased inability to separate work and private life, the closure of schools and child-care services has increased parental demands for employees, further blurring the lines between work and family spheres. While these work-family interconnections seem particularly demanding for employees with children, single and childless workers are not immune to the negative consequences of such altered working conditions, as they may be at greatest risk of loneliness, a felt lack of purpose, and associated negative effects on well-being (Achor, Kellerman, Reece & Robichaux, 2018). Valackienė et al. (2021) analysed the safety of employees through implementation of changes in the organization during the pandemics and presented new theoretical paradigms as well as made an empirical assessment of opportunities for employee involvement.

According to Carnevale et al., (2020), looking across disciplines might offer further solutions on how organizations can adapt their human resource practices in such a way that can alleviate the above referred problems and enhance ability of employees to thrive during such dynamic and uncertain times. In particular, the field of entrepreneurship, which focuses on the discovery, evaluation, and exploitation of opportunities occurring in inherently ambiguous and dynamic environments, is likely to offer some valuable insights.

The COVID-19 pandemics is likely having profound social, psychological, physical and technical implications for employees as they attempt to adjust to their drastically altered work environments. Although some of these challenges are, undoubtedly, unique and therefore, new methods and theories will be required to address them, however, some of the issues employees are currently facing resemble entrepreneurs' daily work experience. After all, entrepreneurs are often confronted with demanding work conditions including high levels of uncertainty and responsibility (McMullen & Shepherd, 2006), a need to flexibly and continuously adjust to new situations (Rauch et al., 2018) and a strong interrelatedness of the work and family spheres (Aldrich & Cliff, 2003; Jennings & McDougald, 2007) (Carnevale et al., 2020 p. 183-187).

### Concept and typology of empowerment

Analysis of research publications (Spencer, 1993; Mintzberg, 2004; Rajadhaksha, 2005; Bakanauskienė, 2006; Gupta, 2006; Golemant ir kt. 2007; Baležentis, 2008; Boyatzis, 2008; Pacevičius, 2008; Anwar, 2015; Jokubauskienė, 2015; Petrulevičius, 2016; Martinkienė, Vaikšnoras, 2019), allows noticing that on the background of new changes in organizations and in the human resource management process, use of a term of managerial competence – *empowerment* has become increasingly common. For the first time the term „to empower” was used by a British writer Herbert L'Estrange. In fiction it meant “to authorise”. In social sciences this concept is used in particularly broad sense and across various disciplines: sociology, economics, educology, management, political sciences, gender studies, minority studies (Hur, 2006). Each of the above subjects interprets the term „empowerment” in its own way. In everyday language, the term „to empower” is

often used as a synonym of the sayings “to authorise” or „to confer responsibility“ (Tvarijonavičius, 2014).

According to M. Tvarijonavičius (2015), the terms “empowerment”, “empowered” have already found their place in the vocabulary of managers and consultants of Lithuanian organizations. The problem is that people imply a lot of different things under the term “empowerment”. Sometimes empowerment is used to describe actions aimed at encouraging the employees to assume more responsibility; in some other cases, empowerment is used as a synonym of “authorisation”, while sometimes – as a synonym of „motivation“. Having read a lot of publications, communicated with the USA and European researchers, worked with managers and human resource specialists, it may be maintained that empowerment may be defined in a lot of very different ways (Tvarijonavičius, 2015). According to M. Tvarijonavičius (2015), empowerment is presented from a dyadic approach. The first component is the state of employee – state of *psychological empowerment*. The second one means various tools of empowerment to enhance this state (empowering management, empowering character of work, empowering organizational environment). The concept of empowerment is often identified with employee motivation or their promotion; however empowerment is a much broader concept than motivation.

Analysis of the concept of empowerment explicitly shows that human resources in the organization are empowered by the leader; empowerment depends on management style, character of impact on employees and style of behaviour. Employee empowerment in the organization should be a continuous process depending on the management traits and qualities of the leader and through various tools provided by the leader to employees: required information, various trainings, employee promotion and motivation would develop an empowered employee, who is able to address various encountered problems much more promptly in a self-directed way, to offer various problem solving methods and to strive for the aims and objectives set by the organization. Human resources empowerment may be understood as a dyadic phenomenon: as a management practice aimed at increasing autonomy and responsibility of employees, and as a proactive individual attitude to the job. Empowered persons find meaningfulness in the work they perform, feel competent to perform their role, are able to make decisions facilitating the achievement of the set goals, think that they may have real impact on achievement of the organizational objectives (Boudrias et al., 2009 p. 625-638). According to Peterson et al. (2005), empowerment is a social-action process, whereby people acquire more control, efficacy and social justice.

*Empowering leader behaviour – leader’s actions enhancing employee empowerment: enhancing the meaningfulness of work perceived by an employee, encouraging participation in decision making, allowing employees to act autonomously, expressing confidence in employees and their capability to perform a job* (Ahearne et al., 2005) (Tvarijonavičius, 2014).

Empowering leader behaviour manifests itself through four major dimensions, i.e., enhancing the meaningfulness of work of the organization’s human

resources, fostering participation in decision making, the leader’s confidence in high performance of employees and provision of autonomy to employees.

**Table 1.** Dimensions of leader’s empowering behaviour

Leader’s behaviour	
<i>Enhancing the meaningfulness of work</i>	How much the leader helps an employee to understand how the objectives, performance and performance results of the latter correlate with the organization’s aims, performance and results; how much the leader helps an employee in other ways to see higher meaningfulness at work.
<i>Fostering participation in decision making</i>	How much the leader makes decisions together with his/her subordinates.
<i>Expressing confidence in high performance</i>	How much the leader is assured that his subordinates will be capable to meet the requirements of job tasks. How much the leader, by his own behaviour, demonstrates confidence and trust in high performance of subordinates.
<i>Providing autonomy from bureaucratic constraints</i>	How much the leader allows employees to act autonomously, in their own way, without restricting them by bureaucratic constraints.

Source: Valiulė, V., Vaikšnoras, M. 2018

Referring to the characteristics of the leader’s empowering behaviour, empowerment may be defined through the following dimensions: delegation, accountability for outcomes, encouragement of employee self-directed decision making, information sharing by the leader with employees, employee skill development and coaching for innovative performance.

**Table 2.** Characteristics of leader’s empowering behaviour

Leader’s behaviour	
<i>Delegation</i>	The leader’s behaviour, whereby he/she delegates authority to his/her subordinates.
<i>Accountability for outcomes</i>	Responsibility for outcomes of the actions delegated by the leader to subordinates.
<i>Self-directed decision making</i>	The leader’s behaviour encouraging the employees to make decisions independently from the leader, on their own initiative and within their competence.
<i>Information sharing</i>	Sharing experience or other information by the leader with employees, which allows them to perform according to the organization’s standards.
<i>Skill development</i>	The leader’s actions promoting employee development. It means that development required for the employees is ensured through facilitation of the development process rather than through orders or control
<i>Coaching for innovative performance</i>	The leader’s behaviour, which encourages reasonable risk taking by subordinates, their new ideas and ensures feedback on their performance, when mistakes and failures of subordinates are treated as opportunities to learn.

Source: prepared by the authors, according to M. Tvarijonavičius, 2014

Analysis of the characteristics and dimensions of leader’s empowering behaviour and their comparison with traditional and modern management styles allows maintaining that no characteristics and dimensions of employee empowering behaviour have been observed in the autocratic and bureaucratic management styles; while

in the charismatic, cooperative and liberal management styles they have been noticeable (Vaikšnoras, 2018).

**COVID-19: governance and management processes, remote work**

According to D. Gudelis (2020), the COVID-19 pandemics that has spread all over the world since the beginning of 2020 has become a grand challenge to the governments of all countries around the world, including Lithuania – they were forced to make decisions on the measures that would help to slow the spread of the virus as well as to take actions to alleviate the negative effects of the enforced restrictions on the economy and people. In Lithuania, having declared a state-level emergency situation on 26 February, 2020, governance of the pandemics was based on the Law on Civil Protection of the Republic of Lithuania and the State Emergency Situation Management Plan approved in 2010. After a couple of weeks, the decision on announcement of a national quarantine on the entire territory of the Republic of Lithuania was made on the grounds of the Law on the Prevention and Control of Communicable Diseases in Humans of the Republic of Lithuania.

In response to the dynamic pandemic situation, the key government authorities responsible for the COVID-19 management in Lithuania (the Government, the Head of the National Emergency Operations, etc.) were making decisions on the enforcement of various measures required to contain the pandemics. Although most of the measures were taken without any pre-planning, since April 2020 preparation of planning documents has been started – the Action Plan for Economic Stimulus, the COVID-19 Management Strategy, Lithuania's Plan for the DNA of the Future Economy were approved. Although the most decisions on the COVID-19 pandemics management were necessary, timely and appropriate, the process of the pandemics governance during this period has also attracted a lot of criticism (Gudelis, 2020; Mitkutė ir kt., 2020).

**Table 3.** Types of policy instruments and examples of their application in the policy of Lithuania’s response to the COVID-19

	Material	Procedural
Organizational	hospitalization of sick persons; personal testing (tests, rapid tests); purchase of reagents; purchase of rapid tests; purchase of personal protection equipment (masks, disinfection liquid); purchase of ICU ventilators; transportation of sick persons and those in mandatory isolation; equipping and operation of the premises for mandatory isolation; equipping of hospitals;	Formation of the COVID-19 Management Committee, Emergency Situation Management Commissions and Operations Centres (on the national level and in municipalities); Formation of decision support groups and approval of their composition; Granting of authority to various relevant bodies;

Regulatory	Restrictions on travel, event delivery, service provision, etc.; Requirements for mandatory isolation;	-
Financial	loans (loans to providers of catering and hospitality services, loans to travel agencies, loans to cover accounts payable ASAP, loans to businesses most affected by the COVID-19, crowdfunding loans); guarantees (guarantees for performance of obligations of travel agencies and tour operators, loan portfolio guarantees; compensations (for interests, rental payments, idle-time allowances); subsidies (of marketplace charge, to micro-companies); allowances (unemployment, for pensioners, etc.); deferral of income tax returns; deferrals of tax payment; deferrals of fine payment;	Mobilisation of support from the public, businesses, NGOs (management of networks);
Informational	Informing the public about the use of personal protection equipment and physical distancing requirements; gathering, analysis and publication of statistical data on COVID-19;	Development of algorithms on how authorities have to exchange information, how municipalities have to provide information to the public;

Source: prepared by the authors, according to D. Gudelis, 2020

Remote work can become one of the key solutions when striving to find a balance between optimization of business costs, increase of competitive advantage and employee satisfaction. Although remote work is not a novelty in the labour market, it’s recommended to introduce this work arrangement in a company after a thorough preparation; however early spring of 2020 became the time of challenges for many companies, which until that had not even thought about introducing the remote work arrangement or preparation for it. After companies have in urgency shifted to remote working, the process often revealed the need for guidelines for improvement of remote work in a company (Aničas et al., 2020, p. 296-300).

According to Balsys, A. Aničas, I., Labanauskaitė, D. (2020), *Remote work* term can be understood as a working arrangement where job functions are performed outside the company’s office with the aid of modern digital technologies instead of being physically present at the office location. Remote working arrangements are used all over the world not only by business companies, but by national and regional governmental authorities, other public sector enterprises as well. Therefore, performance-oriented culture in remote working is of crucial importance, since it becomes a key factor in

increasing the effectiveness of remote work and furthering innovations in the public administration.

In order to successfully implement remote work programmes, the leaders, managers and other specialists in companies and organisations should provide consistent and comprehensive support to remote workers; for example, they can prepare relevant legal and organizational guidelines, implement various IT tools facilitating the collaboration and virtual communication with remotely working staff. It's absolutely necessary to promote communication between on-site and remote workers, as the latter might feel isolated due to lack of communication with colleagues. To that effect, various technologies, additional sessions of virtual communication, etc. may be used (Balsys, Aničas, Labauskaitė, 2020, p. 296-300).

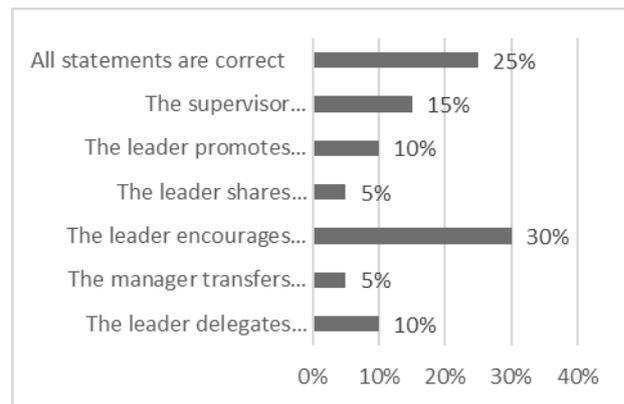
With the beginning of the COVID-19 quarantine in Lithuania, companies hastily "sent" their employees to work from home and had no enough time to prepare themselves nor their employees for the new challenges. During this period the remote work has become an advantage for all employees who were able to perform their job functions from home, thereby avoiding idle time or even worse – losing of a job (Šimanskienė, Ruginė, Župerkienė et al. 2020, p. 296-300).

Data security is another important issue to be addressed: protocols of access to confidential information to certain groups of employees, protocols for data backup have to be established; a single policy on acceptable IT use and the terms of use of the employer's information, available communication means and software have to be prepared. Such a policy has to be introduced to the staff – it's not enough just to have it, it needs to be applied in order to prevent problems in future. The change in the situation due to remote working may require reviewing the processes in an organization and looking for new prospects in the process management (Research study, 2020, p. 296-300).

The conducted analysis of the typology of empowerment explicitly shows that human resources in the organization during the pandemics are empowered by the leader and this process depends on various management styles and qualities of the leader. Empowerment is a process initiated by the leader; it starts with understanding of the objectives, comprises of certain activities and ends with successful performance results in the organization. Empowerment of human resources in the organization should be a continuous process, which – depending on the management styles and qualities of the leader and through various tools provided by the leader to employees (human resources of the organization), i.e. through provided resources, required information, various trainings, autonomy provided for employees in decision-making and responsibility for their decision, fostering of employee innovativeness, employee promotion and motivation, develops an empowered employee, who is able much more promptly to address various encountered problems in a self-directed way, to offer various problem solving methods and to strive for the aims and objectives set by the organization.

## Results of the research on leadership through improvement of human resources in organisations during the pandemics

As an accurately and correctly defined research sample is very important for research, our research sample included 89 employees of 4 business and public organizations with 95% confidence level and 5% acceptable sampling error. Validity of the respondents' response to the questionnaire survey – 85%. The research covered the Western Lithuania region. The research instrument comprises 7 closed-ended questions indicating the interaction between empowering leadership and employee involvement. In accordance with research ethics, the respondents were assured of anonymity and confidentiality of the gathered information. To in-depth analyse the formulated problem and to make a statistical assessment of the obtained results, a Likert scale (also called a rating scale) was used to validate the questions – it's probably the most common method for data grouping. This scale is particularly suitable for measuring the attitudes, beliefs and opinions of the respondents where all answers are strictly ranked in ascending or descending order. Women accounted for 83%, men - 17 % of the respondents; 55 % of them had a master's degree.



**Fig. 1** Respondents' perception of the concept, "leadership through empowerment"

Respondents noted that leadership through empowerment manifests itself when the leader encourages employees to make decisions independently – more than 30% of the respondents agreed to this statement. Fig.1 shows that other respondents (about 22%) agree to the provided statements that empowerment can be recognized when the leader delegates authority to his subordinates; it's very important for the respondents that the leader encourages the process of employee development (10%), when empowerment is ensured through relevant facilitation of the employee development process rather than through the function of control; also, when the leader encourages reasonable risk taking by subordinates, their new ideas, welcomes feedback from them; when mistakes and failures are admitted and treated as opportunities to learn (15%).

**Table 4.** Respondents' views on how they felt empowered during the pandemic

Criteria	Mean	Std. Deviation
Make decisions independently	2,85	1,461
Take personal responsibility	3,75	1,552
Feel the commitment	3,95	1,468
Feel the meaning of work	3,90	1,483
Feel having power	2,75	1,552
Feel competent to do specific job tasks	3,55	1,669
Feel willing and able to do the job	3,90	1,483
Strengthen your professional skills	3,90	1,586
Perform challenging work	3,80	1,473
Have access to all necessary information	3,55	1,468
Get the support and advice from other employees	3,70	1,593
Feel the inner motivation	3,70	1,625
Implement their own ideas	3,50	1,638
Feel the enthusiasm while working	3,45	1,572
Feel the meaningfulness of work	3,60	1,635
Be autonomous (independent)	2,80	1,642

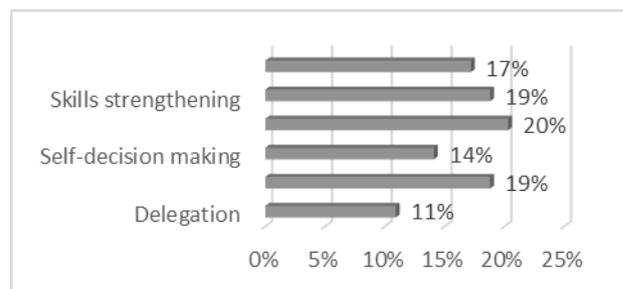
The researchers attempted to analyse how employees felt during the pandemics while engaging into various activities. The respondents noted that they had more opportunities to take personal responsibility ( $\bar{x} = 3,75; s = 1,552$ ), always were able to feel the meaningfulness of work ( $\bar{x} = 3,90; s = 1,483$ ), had competences to perform specific work tasks ( $\bar{x} = 3,55; s = 1,669$ ), to strengthen their professional skills ( $\bar{x} = 3,90; s = 1,586$ ), quite well coped with the challenge to get timely access to required information ( $\bar{x} = 3,55; s = 1,468$ ) to have the inner motivation ( $\bar{x} = 3,70; s = 1,625$ ); they less often could make decisions independently than when working on-site ( $\bar{x} = 2,85; s = 1,461$ ). However, the research findings have disclosed that the respondents felt bad about having no power to implement ideas ( $\bar{x} = 3,50; s = 1,638$ ), since there was a lack of enthusiasm for work, employees didn't feel sufficient support from the leader ( $\bar{x} = 3,45; s = 1,572$ ) because of disturbed communication with the leader when working remotely.

**Table 5.** Respondents' opinions whether empowerment as an incentive measure was applied by the leader of their organization during the pandemic

Criteria	Mean	Std. Deviation
Plan their working time	4,55	,605
Take personal responsibility	4,40	,821
Feel the commitment	4,55	,605
Feel the meaningfulness of work	4,30	,801
Feel empowered	3,35	1,424
Feel competent to do the job	4,25	,967
Feel willing and able to do the job	4,15	,988
Strengthen their skills	4,35	,933
Perform challenging work	4,55	,686
Have access to all necessary information	4,20	,951
Feel the support and advice from other employees	4,20	1,005
Make decisions independently	3,55	1,395
Implement their own ideas	3,90	1,119
Have career opportunities	3,50	1,235

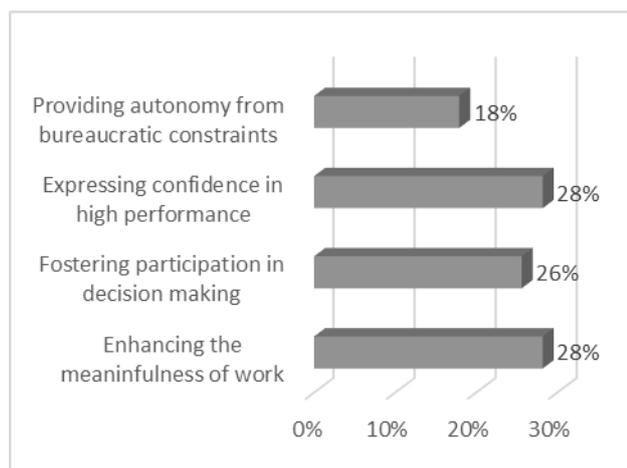
Analysis of the respondents' empowerment status in the analysed organization, i.e., whether the leader, in employees' opinion, applied empowerment as an incentive measure during the pandemics, showed that the

leaders of the organizations fairly well applied the following tools of empowerment: most notable one, in the respondents' opinion, was the possibility to plan one's own worktime during the pandemics, since the work was being performed from home, and the respondents saw that as one of the remarkable incentive measures ( $\bar{x} = 4,55; s = 0,605$ ); also, they felt that they could develop commitment to perform the planned work tasks ( $\bar{x} = 4,55; s = 0,605$ ), perform challenging work (and the scope of new work tasks had considerably increased during the pandemics) ( $\bar{x} = 4,55; s = 0,686$ ); could feel the meaningfulness of work ( $\bar{x} = 4,30; s = 0,801$ ) so that employees are not frustrated when working remotely; the respondents noted that they were able to strengthen their skills ( $\bar{x} = 4,35; s = 0,933$ ); the answers distributed equally between the following two statements: the possibility to get access to necessary information, i.e. that the leader shares the required information, does not keep employees guessing, unaware as to the situation; that the employees get support, advice from co-workers ( $\bar{x} = 4,20; s = 1,005$ ). Minority of the respondents expressed the view that self-directed decision-making was not an incentive measure as well as the concerns that little attention was paid to career development during the pandemics ( $\bar{x} = 3,50; s = 1,235$ ).



**Fig. 2** The characteristics of empowering behaviour applied by the leader in the respondents' organization during the pandemic

The respondents noted that the characteristics of empowering behaviour (Fig. 2) applied by the leader during the pandemics are commendable, since the leaders were successfully sharing information (20%), it was mentioned that an employee himself/herself has to be able to take responsibility for the outcomes of his/her actions; the possibility to strengthen skills and to foster innovativeness was also pointed out (19%), however, the leaders avoided delegation of functions to their subordinates in the organizations during the pandemic (11%).



**Fig. 3** The dimensions of empowering behaviour applied by the leader in the respondents' organization during the pandemic

The respondents noted that the dimensions of empowering behaviour applied by the leader during the pandemics were commendable, since the leaders were successfully enhancing the meaningfulness of work perceived by the employees, encouraged the staff to take part in decision-making (26%), provided the employees with autonomy and encouraged confidence in high performance (28%).

## Conclusions

To summarize the insights, it can be maintained that the global spread of the COVID-19 pandemics has posed a grand challenge both to organizations and their leaders. Today's organizations have to remain alert and adaptive to various unforeseen events, and the leaders of organisations have to pay special attention to the leadership through empowerment of human resources.

Analysis of research literature allowed to substantiate that *Empowerment* is a process initiated by the leader; it starts with understanding of the objectives, comprises of certain activities and ends with successful performance results in the organization.

Empiric analysis of the characteristics and dimensions of leader's empowering behaviour and their comparison with traditional and modern management styles allows maintaining that no characteristics and dimensions of employee empowering behaviour have been observed in the autocratic and bureaucratic management styles; while in the charismatic, cooperative and liberal management styles they have been noticeable.

The period of the COVID-19 pandemics has proved that remote work has become one of the key solutions for organisations in order to successfully continue their business. Also, shifting to remote work resulted in various challenges to be tackled by leaders of organisations. To successfully implement the remote work programmes, leaders had to consistently provide support to remote workers and to empower them to make decisions.

The research results have shown that leadership through empowerment of human resources is understood as the leader's behaviour whereby he/she: delegates authority to his/her subordinates; delegates responsibility

for outcomes of their actions; encourages the employees to make decisions independently from the leader, on their own initiative and within their competence; shares experience or other information with employees, which allows them to perform according to the organization's standards; encourage reasonable risk taking by subordinates, their new ideas and ensures feedback on their performance, where mistakes and failures are treated as opportunities to learn.

The respondents stated that they felt fairly well while working remotely during the pandemics, because they could plan their own worktime; also, could take personal responsibility, strengthen and develop their skills and competences, felt support and got advice from their colleagues, the leader empowered the workforce to address new, job-related challenges; information-sharing process was going rather smoothly. The employees saw little shortcomings – for them, the remote working did not cause much stress, or feeling of monotony; perhaps, one of the points to some extent noted by the respondents was that there were no career development opportunities during the pandemics.

## References

- Achor, S., Kellerman, G. R., Reece, A., & Robichaux, A. (2018). America's loneliest workers, according to research. *Harvard Bus Rev.* March, 19.
- Ahearne, M., Mathieu, J., Rapp, A. (2005). To Empower or Not to Empower Your Sales Force? Examination of the Influence of Leadership Empowerment Behavior on Customer Satisfaction and Performance. *Journal of Applied Psychology*, Vol. 90-5, p. 945–955. DOI: 10.1037/0021-9010.90.5.945.
- Aldrich, H. E., & Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. *Journal of Business Venturing*, 18(5), Pages 573–596.
- Aničas, I., Balsys, A., Labanauskaitė, D., Melnikova, J., Mudeikis, J., Nikolajeno, J., Ruginė, H., Strakšienė, G., Šaltytė – Vaisiausė, L., Šimanskienė, L., Šneiderienė, A., Viederytė, R., Župerkienė, E. (2020). Su COVID-19 susijusių ekonominės veiklos apribojimų ir valstybės intervencinių priemonių poveikio Klaipėdos regiono įmonėms efektyvumo vertinimas. *Klaipėdos universiteto Socialinių ir humanitarinių mokslų fakulteto Ekonomikos katedra, mokslo studija, Klaipėda, 2020 m. gruodžio 31 d.* Parengta įgyvendinant Lietuvos mokslo tarybos projektą „Su COVID-19 susijusių ekonominės veiklos apribojimų ir valstybės intervencinių priemonių poveikio Klaipėdos regiono įmonėms efektyvumo vertinimas“ (Nr. P-COV-20-51), p. 296-300.
- Anwar, S., Haider, N., Iqbal, N. (2015). Effect of Leadership Style on Employee Performance. *Arabian Journal of Business and Management Review*. Volume 5, Issue 5. DOI:10.4172/2223-5833.1000146 2015
- Bakanauskienė, I., Bartnikaitė, E. (2006). Managerial Competence: The Attitude of Lithuanian Managers. *Problems and Perspectives in Management*. Volume 4, Issue 2, 2006
- Baležentis, A. (2008). *Inovatyvių mokymo formų ir metodų taikymo galimybės žmogiškųjų išteklių vadyboje*. Viešojo politika ir administravimas. Nr. 26, p. 97-104.
- Boyatzis, R. E. (1982). *The Competent Manager*. New York, NY: Wiley.
- Boyatzis, R. E. (2001). *Stimulating Self-Directed Learning through a Managerial Assessment and*

- Development Course. *Competence in the Learning Society*. New York, p. 303-332.
- Boyatzis, R. E. (2008). A 20-year view of trying to develop emotional, social and cognitive intelligence competencies in graduate management education. *Journal of Management Development*. Vol. 27, No.1. p. 92-108.
- Boyatzis, R. E. (2008). Competencies in the 21st century. *Journal of Management Development*. Vol. 27, No. 1, p. 5-12.
- Boyatzis, R.E., Goleman, D. (2007). Emotional and Social Competency Inventory. *Hay Group Transforming Learning*.
- Boudrias, J. S., Gaudreau, P., Savoie, A., Morin A. J. S. (2009) Employee empowerment From managerial practices to employees' behavioral empowerment. *Leadership & Organization Development Journal* Vol. 30 No. 7, p. 625-638.
- Carnevale, J. B., Hatak, I. (2020) Employee Adjustment and Well-Being in the Era of COVID-19: Implications for Human Resource Management. *Article in Journal of Business Research*. Volume 116, August, Pages 183-187. DOI: 10.1016/j.jbusres.2020.05.037.
- Chawla, N., MacGowan, R. L., Gabriel, A. S., & Podsakoff, N. P. (2020). Unplugging or staying connected? Examining the nature, antecedents, and consequences of profiles of daily recovery experiences. *Journal of Applied Psychology*, 105(1), Pages 19.
- Cambal, M., Caganova, D., Sujanova, J. (2012). The Industrial Enterprise Performance Increase through the Competency Model Application. *Proceedings of the European Conference on Intellectual Capital*, p. 118-126.
- Darškuvienė, V., Kaupelytė, D., Petkevičiūtė, N. (2008). Vadybinės kompetencijos nustatymo galimybės mokymo procese // *Organizacijų vadyba: sisteminiai tyrimai*: 2008.45, p. 17-28.
- Eisenhardt, K., Graebner, M., & Sonenshein, S. (2016). Grand challenges and inductive methods: Rigor without rigor mortis. *Academy of Management Journal*, 59, Pages 1113–1123.
- Francis, D., Woodcock, M. (1982). The new unblocked manager—a practical guide to self-development. Wildwood House, p. 300. Goleman, D., Boyatzis, R., McKee, A. (2002). *Primal Leadership: Realizing the Power of Emotional Intelligence*. Boston: Harvard Business School Press.
- Ferraro, F., Etzion, D., & Gehman, J. (2015). Tackling grand challenges pragmatically: Robust action revisited. *Organization Studies*, 36(3), Pages 363-390.
- George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal*, 59(6), Pages 1880-1895.
- Gudelis, D. (2020) Atsako į COVID-19 pandemiją politikos valdymas: politikos įrankių tipai ir valdymo procesai. Lietuvos teisė 2020 : esminiai pokyčiai: COVID-19 pandemijos sprendimai: teisiniai, valdymo ir ekonominiai aspektai. *Vilnius : Mykolo Romerio universitetas*. 2020, d. 1, p. 147-159. ISSN: 2669-137X ; eISSN: 2669-1388 ; DOI: 10.13165/LT-20-02-12
- Gupta, A. D., Kurian, S. (2006). Empowerment at work, the dyadic approach, Vision – *The Journal of Business Perspective*, Vol. 10- 1, p. 24–48. DOI: 10.1177/097226290601000103.
- Hur, M. H. (2006). Empowerment in terms of theoretical perspectives: Exploring a typology of the process and components across disciplines, *Journal of Community Psychology*, Vo. 34-5, p. 523–540. ISBN 978-0-470-85593-5.
- Jennings, J. E., & McDougald, M. S. (2007). Work-family interface experiences and coping strategies: Implications for entrepreneurship research and practice. *Academy of Management Review*, 32(3), Pages 747–760.
- Jokubauskienė, E., Zabielskė-Lazauskaitė, J. (2015). Darbuotojų psichologinis įgalinimas ir jo dimensijos: teorija ir praktika. *Organizacijų vadyba: sisteminiai tyrimai*. Nr. 74, p. 67-83. ISSN 1392-1142.
- Klinavičiūtė, I., Puodžiūnaitė, M. (2020) Skonio ir uoslės sutrikimas sergant COVID – 19. *Medicinos mokslai*. Kėdainiai: VšĮ "Lietuvos sveikatos mokslinių tyrimų centras". Vol. 8, no. 19, November 30, p. 50-61. ISSN: 2345-0592.
- Martinkienė, J., Vaikšnoras, M. (2019) Importance of Managerial Competencies and Management in Empowerment. *Vadyba/Journal of Management*, Vol. 34, No. 1, Pages 59-66. ISSN 1648-7974.
- McQueen, A., & Klein, W. M. (2006). Experimental manipulations of self-affirmation: A systematic review. *Self and Identity*, 5(4), Pages 289-354.
- Mintzberg, H. (2004). *Managers Not MBA's*. Prentice Hall, Financial Times, Pearson Education. *New Yourk: John Wiley&Sons, Inc.*
- Mitkutė, G., Guzevičius, M., Krasauskaitė, U. (2020) COVID-19: literatūros apžvalga. *Medicinos mokslai*. Kėdainiai : VšĮ "Lietuvos sveikatos mokslinių tyrimų centras". 2020, vol. 8, no. 15, April 30, p. 176-184. ISSN: 2345-0592.
- Pacevičius, J., Kekytė, J. (2008). Vadovų vadybiniai gebėjimai: galimybių ir apribojimų analizė. *Ekonomika ir vadyba: aktualijos ir perspektyvos*. Nr. 4 (13), p. 321-330.
- Petrulis, A. (2016). Teorinės vadovavimo požymių įžvalgos. *Regional Formation and Development Studies*, No. 1 (18), p. 123-135. ISSN 2351-6542
- Peterson, N. A., Lowe, J. B., Aquilino, M. L., & Schneider, J. E. (2005). Linking social cohesion and gender to intrapersonal and interactional empowerment: *Support and new implications for theory*. *Journal of Community Psychology* Vol. 33, No. 2, p. 233-244.
- Rajadhaksha, U. (2005). Managerial Competence: Do Technical Capabilities Matter? *The Journal for Decision Makers*, vol. 30, no. 2.
- Rauch, A., Fink, M., & Hatak, I. (2018). Stress processes: An essential ingredient in the entrepreneurial process. *Academy of Management Perspectives*, 32(3), Pages 340-357.
- Spencer, L.M., Spencer, S.M. (1993). *Competence at Work: Models for Superior Performance*.
- Valackiene, A.; Meidute-Kavaliauskiene, I.; Činčikaitė R. (2021). Ensuring Employee Job Security When Implementing Changes in the Company: A Case Study of Lithuanian Industry. Sustainability, 13, 8383. <https://doi.org/10.3390/su13158383>
- Valiulė, V. Vaikšnoras, M. (2018). Vadovų vaidmuo įgalinant žmoniškiausius išteklius. *Regional Formation and Development Studies*. Vol. 25, No.2, p. 91-105.
- Vijay, V., Sreya, R., Anandakrishnan, S., Jeyakumar, R. N. (2020). Millennial's intention to wear face masks in public during COVID-19 pandemic. *Vadyba / Journal of Management* 2020, 2 (36), pages 43-48. ISSN 1648-7974.
- Tawil, S. (2020). Six months into a crisis: Reflections on international efforts to harness technology to maintain the continuity of learning. *UNESCO*. <https://unesdoc.unesco.org/ark:/48223/pf0000374561>
- Tvarijonavičius M. (2014). Psichologinis darbuotojų įgalinimas: jo prielaidos ir vaidmuo organizacijoje. *Daktaro disertacija*. Socialiniai mokslai, psichologija (06 S) Vilnius.
- Tvarijonavičius, M. (2015). Kaip įgalinti Lietuvos vadovų praktiniai pavyzdžiai tyrimų įžvalgos patarimai. *Vilnius. Vaga*.
- Tvarijonavičius, M., Bagdžiūnienė, D. (2014). Vadovo įgalinančio elgesio ir struktūrinio įgalinimo reikšmė darbuotojų psichologiniam įgalinimui. *International Journal of Psychology: A Biopsychosocial Approach*, No. 14, p. 113–138.

RECEIVED: 15 July, 2021

ACCEPTED: 13 September, 2021

---

**Jurgita Martinkienė.** Doctoral degree in Social sciences, Director of Lithuania Business University of Applied Sciences. Research Interests: application of managerial competencies in business companies. Turgaus Street 21, Klaipėda, tel. 8-46 311099, jurgita.martinkiene@ltvk.lt

**Asta Valackienė** is professor at Lithuania Business University of Applied Sciences of Vilnius Branch. Research interests: Methodology of Science and Research; Change Management; Responsible Research and Innovation. A Member of Management Committee of COST ACTION 17127 Programme. National representative from Lithuania. A Member of UNESCO Unitwin Network Baltic and Black Seas Circle Consortium in Education Research (BBCC) Association. Author of Research studies, Books, Handbooks. Has published over 80 scientific papers indexed in the international data bases with co-authors and single-authored. Address: Str. 70, LT-09124, Vilnius. Phone: +37068694121. E-mail: asta.valackiene@gmail.com

**Modestas Vaikšnoras.** Lithuania Business University of Applied Sciences Head of Strategic Development and Communication Department Modestas Vaišnoras modestas.vaiksnoras@gmail.com. Research Interests: Social Sciences.





## RESPONSIBILITY OF FUTURE LAW ENFORCEMENT OFFICERS: RESULTS OF EXPERT INTERVIEWS

Egidijus Nedzinskas<sup>1</sup>, Jozef Zat'ko<sup>2</sup>, Renata Šliažienė<sup>3</sup>

<sup>1</sup>Lithuania Business University of Applied Sciences, <sup>2</sup>European Institute of Further Education, <sup>3</sup>Lithuania Business University of Applied Sciences

### Abstract

The work of law enforcement officers and their role in today's society is in the great interest. It is extremely important to make sure the high level of the responsibility of these professionals. The education of an individual's responsibility begins long before he or she chooses his or her profession. The following main factors of general education can be distinguished: family, school and self education. The role of higher education institution is also extremely important in order to prepare a future law enforcement officer who would be well aware of the roles of his or her activities, be able to perform them professionally, would have mastered inner social responsibility and external legal liability. The aim of the article is to investigate the responsibility of the Law study programme students – future law enforcement officers. In order to achieve this goal, the analysis of the scientific literature of the responsibility of law enforcement officers was performed, as well as the insights of experts on the legal liability and social responsibility of future law enforcement officers were explored empirically using the in-depth interviews. According to the results of scientific literature analysis, the general interview questions were formulated in order to get the in-depth insights of the experts about the responsibility of Law study programme students – future law enforcement officers. The 5 experts teaching at one of the Lithuanian higher education institution in the Law study programme were selected for the in-depth interviews matching at least one of the following criteria: 1) lecturers with a scientific degree and at least 10 years of administrative – managerial and scientific – pedagogical work experience; 2) lecturers with at least 15 years of practical work and scientific-pedagogical work experience. It was found that the main educational factors developing future professionals' legal liability and social responsibility are family, school, church, state institutions, educational institutions. The legal liability and social responsibility of students, future law enforcement officers, in higher education institution is developed through the study process, study subjects, social welfare, mutual statutory relationship and events. A legally liable student is a member of society who complies with the laws, obligations, whose behaviour and expectations do not violate the principle of unity of rights and duties. A socially responsible student is a member of the society who clearly understands the expectations of the society for the activities of a law enforcement officer and is ready to satisfy them with his or her work. Students who are characterized by legal liability are also characterized by social responsibility, as legal liability is not possible without social responsibility. Students who are characterized by social responsibility also have legal liability, because first of all, an individual develops social responsibility and from it a legal liability develops.

KEY WORDS: Law study programme; Law enforcement officer; Legal liability; Social responsibility; Expert interview.

JEL: K1; K19.

### Introduction

The work of a law enforcement officer is a very important profession for maintaining the proper social functioning of an individual, but it is necessary to understand that these professionals provide different types of social assistance that can be compared according to their roles, activities, competencies, goals, objects, responsibilities, and values. Regardless of ever-changing economic, social or political conditions, a law enforcement officer must remain competent, professional and responsible, constantly improving his or her theoretical, practical and professional skills and knowledge.

Lægreid & Rykkja (2021) emphasize the responsibility of law enforcement officers to a democratic society and inter-institutional cooperation. Cristofoli et al. (2021), argue that cooperation between law enforcement officers must be not only lawful but also responsible. The authors conclude that legitimacy and responsibility coexist together in some cases.

With regard to the responsibility of law enforcement officers generally, it should be emphasized that the peculiarities of their activities determine a specific concept of responsibility. Law enforcement officers have additional social responsibilities compared to employees

of other institutions, but they are not released from liability by the law. It is important for a law enforcement officer to have moral and spiritual values as well as to perform a duty. This is in line with the views expressed by the scientist Perry (2008) that high demands are placed on the officer and this depends on their willingness to serve in the interests of the individual, society and the state. This justifies the relevance of the social responsibility and legal liability of a law enforcement officer.

Campas (2020), conducting a qualitative study with experienced law enforcement officers, highlights the need to improve curricula and strategies in training officer responsibility. Meanwhile & Cahen (2021) raises the issue of irresponsible behaviour by law enforcement officers, highlighting the issue of educating future law enforcement officials that it would be trained responsible officials, who would behave ethically. Normore et al. (2015) indicate that more than just law enforcement is expected from officers. They must also be leaders in society and good role models. Chen (2016) states that officers with higher education perform their roles much better than their non-educated counterparts. Thus, the role of the High School in training responsibility is particularly important.

**The aim of the article** is to investigate the responsibility of the Law study programme students – future law enforcement officers.

**Tasks of the research:**

- to perform an analysis of the scientific literature of the responsibility of law enforcement officers;
- to explore empirically the insights of experts on the legal liability and social responsibility of future law enforcement officers.

There were applied the following **research methods:** analysis of scientific literature, in-depth expert interviews.

**Theoretical background**

Every law enforcement officer, performing his or her duties, constantly experiences an internal tension of responsibility for his or her taken actions. The peculiarity of professional responsibility is that there is not enough good intentions and will, still there are required knowledge, education and ability to follow professional requirements. Consequently, a law enforcement officer who is not aware of his or her professional responsibility cannot successfully perform his or her professional duty (Janušauskaitė, 2012).

According to Nedzinskas, Nedzinskienė & Šliažienė (2020), the activities of a law enforcement officer are based on establishing a balance between satisfying the client's interests and the administration of justice, therefore, there are applied not only general but also special standards of conduct to the actions of these professionals, thus, the professional responsibility of a law enforcement officer may arise not only in the event of a breach of the specific standards laid down in the legislation governing the activities of a law enforcement officer, but also in the rules of professional ethics. Legal obligations are not oriented to the determined result, and the application of professional responsibility by law enforcement officers will depend on whether every effort has been made to achieve a particular result.

A law enforcement officer must be able to feel responsible for the results of his or her work, be guided by a sense of justice, and be able to make legally sound decisions. In law enforcement institutions there must work individuals with high moral who feel responsibility for the "special goals" of the country. The responsibility of a law enforcement officer, as an element of the legal status of the subject, is a legal guarantee that he or she will perform his or her tasks, functions and duties properly and in a timely manner. A law enforcement officer, performing his or her duties, constantly experiences an internal tension of responsibility for his or her taken actions.

**Social responsibility of law enforcement officers.** Othman, Omar, Azam, et al., (2014) emphasize the honesty of law enforcement officials and adherence to codes of ethics when talking about the responsibility of law enforcement officials, especially in the social field. Bakria, Saidb & Karimb (2015) point out that law enforcement officers, by acting unethically, dishonestly, irresponsibly, and abusing their powers, cause significant harm to public authorities.

Analysing discipline in the context of social responsibility, Misiūnas (2010) points out that disciplinary statutes and codes set requirements for law enforcement officers not only during the service, but also during their free time, it obliges not to discredit the service, to constantly protect its prestige. Consequently, the concepts of universal and special discipline differ conceptually. Moral responsibility arises from violating some requirements of behaviour: traditions and decency requirements, i.e. what is commonly called morality.

Nedzinskienė & Nedzinskas (2018) state that although the concept of social responsibility of a law enforcement officer includes various types of responsibility, moral responsibility plays a particularly important role, as it determines the social responsibility component of law enforcement and expresses a positive attitude of law enforcement officer and law enforcement institutions towards their responsibility to duties and obligations.

Social responsibility functions alongside legal liability. However, social responsibility always exists, it is inner, conscious, experienced as a moral feeling. Meanwhile, legal liability manifests itself as an external sanction applied after committing a crime.

**Legal liability of law enforcement officers.**

The legislation regulating the application of liability to civil servants establish the possibility of application not only of official but also of disciplinary liability. The regulation and application of official liability may be potentially relevant for every civil servant, as it is an integral part of the civil servant's status, the application of which has negative consequences (restrictions or prohibitions), which changes the legal status of the civil servant. Therefore, consistent regulation of this liability allows to avoid mistakes and create a professional environment of civil service (Kuncevičius & Kosmačaitė, 2012).

According to Misiūnas (2010), a law enforcement officer must first of all have a sense of responsibility for all actions that he or she may violate the law in the performance of his or her duties. This sense of responsibility should help to define the limits of the officer's activities: a law enforcement officer may perform only such actions which are permitted by law, he or she is not entitled to go beyond the limits set by law. Paľsis (2014) points out that it is likely that a law enforcement officer who demonstrates his or her legal liability and concern for community issues will gain its trust, which is one of the most important challenges in the position of a law enforcement officer.

In Lithuania, legal liability measures are primarily aimed at protecting and strengthening the existing public life order. In addition, legal liability also has an educational function. Its purpose is to re-educate offenders, i. e. to remove from them consciousness (psychology) negative, unsuitable for society, i. e. encouraging to perform illegal actions, features of thinking and to establish in their consciousness the need for appropriate (legal) behaviour for the society. Legal liability is based on the following basic principles: universality, legality, reasonableness, fairness, or proportionality, expediency, inevitability of liability, and efficiency. It is clear that only the consistent adherence to

and targeted application of these guiding principles determines the level of professionalism of a particular law enforcement officer (Guogis, 2006).

Legal liability is always a newly created obligation, the occurrence of which is caused by the non-performance of the obligations due. Legal liability is understood as the compliance (non-compliance) of an individual's behaviour with the requirements of the system of legal norms, and thus as a measure of an individual's legal liability.

**Education of responsibility**

The question arises reasonably as how to prepare a future law enforcement officer who would be well aware of the roles of his or her activities, be able to perform them professionally, would have mastered inner social responsibility and external legal liability. The formation of an individual's responsibility begins long before he or she chooses his or her profession. The following main factors of general education can be distinguished: family, school and self education. These factors help to develop an individual's character traits, values, such as creativity, duty, and responsibility.

Jeziarska - Wiejak (2014) points out that the processes of socialization of a growing person take place in the family and at school. In these the most important to a child (adolescent) institutions there are formed main values, and through them there are developed social responsibility and legal liability. Orte, Ballester et al. (2015), studying families raising adolescents, found that the formation of adolescents' world-views and values depends on the family typology. According to Menasco (2015), the child's integration / involvement in society and the assimilation of the norms adopted in it depend on the strength of the relationship of a child and his parents. Risen, Tripses & Risen (2015) point out that a child's values formed in the family have influence on his or her responsibilities.

According to McDonald, Miller & Sandler (2015), successful adolescent education is ensured by maintaining parent-school relationships. The closer the parents cooperate with the school, the more successful are the students' learning outcomes and skills development as well as the formation of personal values. Duke (2015) points out that in developed countries, children / adolescents spend most of their time at school. It is one of the first organizations a child faces in his or her life. The school has rules that children must follow, thus training their integration into society. Children who do not comply with the rules are punished and they are encouraged for good behaviour. This is how children's responsibility is trained.

In the modern educational process the relevance of self-education is increasingly emphasized. Sohn (2015) notes that self-education and the right lifestyle, on which it depends the conscious formation of a worldview, are important for the achievement of education for adolescents. According to López, Pérez et al. (2015), self-education of personal qualities and pursuit of further education influence the adolescent choice of a study programme.

With the right choice of profession and studies in higher education institution, a new stage begins, in which the student's independent attitude to values and responsibilities and decision-making develops and continues to form. Alfakhri et al. (2020) highlighted the topic about training of students' responsibility in higher education institutions. Galvão et al. (2019) investigated the factors influencing students' attitudes towards social responsibility in the context of higher education that may contribute to the formation of social responsibility in these individuals. According to them, higher education institutions, whose main mission is to educate and train people, have a duty to educate ethical, responsible and sustainable behaviour.

Higher education institution becomes the second institution for a student after school, where the formation of his or her personality character and values, adherence to his or her basic principles, which develops legal liability as a category and a feature of social responsibility, in this ever-changing social environment.

**Methodology**

The analysis of the scientific literature provided preconditions for the formulation of questions, the answers to which would provide a deeper analysis of the scientific problem of this article. According to Francis et al. (2010), expert interviews are appropriate for this purpose, as the researcher talks to experts to gain deeper insights into the phenomenon under study. Data from experts are obtained through in-depth interviews. One of the distinguishing features of in-depth interviews is questioning (Mack et al., 2005). It is important to note that in-depth interview questions should be narrative-generating questions (open-ended, non-directive questions). They should not limit the respondent's narrative, but rather to stimulate it. The questions are asked flexibly, not necessarily in sequence, but according to the situation of the conversation. There are possible clarification questions. Thus, carrying out the qualitative research there was sought to answer the general questions in Table 1.

**Table 1.** In-depth interview general questions for experts

Questions
Q 1. What are the reasons and how do they influence the formation of legal liability and social responsibility of the future law enforcement officer?
Q 2. What is a legally liable student?
Q 3. What is a socially accountable student?
Q 4. Do students become more legally and / or socially responsible over the years?
Q 5. Are students with legal liability also characterized by social responsibility?
Q 6. Are students with social responsibility also characterized by legal liability?

To achieve this purpose, there were selected 5 experts teaching at one of the Lithuanian higher education institution in the Law study programme. The following criteria for the selection of respondents were established for the in-depth expert interview:

- 1) lecturers with a scientific degree and at least 10 years of administrative – managerial and scientific – pedagogical work experience

or

- 2) lecturers with at least 15 years of practical work and scientific-pedagogical work experience.

Based on these criteria, there were selected five experts for the in-depth interview. Table 2 shows the reasons for the selection of experts.

**Table 2.** Reasons for selection of experts

Expert	Reasons for selection of an expert
First Expert	The associate professor with 20 years of pedagogical work experience, constantly deepening into the study process, participating in the development and updating of study programmes and subjects.
Second Expert	The associate professor with 10 years of managerial experience and participating in the development of study programmes and their subjects, representing the committee and responsible for the development, approval, renewal and implementation of study programmes and subjects. Constantly communicating and cooperating with the social partners.
Third Expert	The associate professor, who has worked for 10 years and has managerial experience in the administrative field, dealing with the development, renewal or implementation and approval of study programmes, subjects, and other relevant issues.
Fourth Expert	The lecturer with 20 years of pedagogical work experience in creating, updating and implementing the Law study programme and its subjects. He had previously worked in state power and law enforcement structures for about five years. He continuously raises his qualifications in law enforcement structures, participates in conferences, courses and seminars at the international and national levels. He represents the higher education institution, conducting courses and seminars for various state institutions fighting against crime.
Fifth Expert	The lecturer of a higher education institution with 10 years of practical work in various law enforcement institutions or their divisions, including 14 years of managerial experience in various divisions of law enforcement institutions, as well as 12 years of pedagogical work experience in a higher education institution, Law study programme, who contributed to development and implementation of other higher education institution programmes, as well as the renewal and implementation of the Law study programme, the development of individual subjects and practice programmes, and the teaching of subjects.

In order to preserve the confidentiality of the experts, they were **randomly** coded: **E1, E2, E3, E4** and **E5**.

All selected experts teach the subjects of the Law study programme and participated in the implementation processes of this programme, therefore they meet the objectives of in-depth research.

**Validity of research instruments** . The reliability and comprehensibility of a qualitative research is based on the fact that the researcher can discover the answers to the main questions of the research, and the answers of the respondents are repeated, which shows that they are talking about the same thing.

## Results

The results of experts' interviews allowed to investigate more in deep the responsibility of future law enforcement officers. The main findings are presented below.

**Q 1. What are the reasons and how do they influence the formation of legal liability and social responsibility of the future law enforcement officer?**

The opinions of the experts who participated in the in-depth interview differed. Some experts pointed out that the reasons that shape students' legal liability and social responsibility are educational factors (family, school, church and other state institutions), general norms established in society, values and student motivation. **The Expert E1:** *these responsibilities are developed through separate social institutions: family, school, church, state institutions, educational institutions, and efficiency of law enforcement system. The student's responsibility is formed depending on the values established in the society. The efficiency of the higher education system also has a significant impact.* **The Expert E3:** *if a student has a strong motivation to achieve a goal, if his or her*

*activities are strong-willed, aimed at achieving his or her goal, this subject will be improved through itself (he / she educates voluntarily). Without motivation, there can not be any consideration about these responsibilities. It does not matter to him or her what education institution to graduate and where he or she will work. He or she knows his or her parents will take care of it. If he or she is well motivated, he or she will strive for it, it is general social affairs, how he or she can exist, how he or she can express himself or herself, how he or she can realize himself or herself, so that those around him or her would not suffer, and this can be done only complying with the norms recognized in society.*

Other experts state that the reasons that shape students' legal liability and social responsibility are the study process (study subjects and methods, desire to learn, communicate, knowledge, abilities and skills). **The Expert E4:** *this is achieved through the mastery of study subjects.* **The Expert E5:** *desire to learn, seek knowledge, independence, ability to communicate with colleagues and work in a team develops an interesting and creative personality. <...> an educated individual and not necessarily in higher education institutions and not necessarily a student, you may also become responsible while learning remotely or individually. If a student has entered a higher education institution, got acquainted with the study procedure and agrees to the requirements and signs a contract, he or she always considers himself or herself as a part of the academic community and will always improve himself or herself.*

The categories and subcategories of the opinions expressed by the interviewed experts on the formation of students' legal liability and social responsibility are presented in Table 3.

**Table 3.** Categories and subcategories of the reasons that determine the formation of student responsibility

Seq. No.	Categories	Subcategories
1.	Impact of environment	<ul style="list-style-type: none"> <li>Educational factors: family, school, church, state institutions, educational institutions</li> <li>Efficiency of the law enforcement system</li> <li>Efficiency of the higher education system</li> <li>Values established in society</li> </ul>
2.	Student motivation	<ul style="list-style-type: none"> <li>Mastering of study modules</li> <li>Willingness to learn and improve</li> <li>Pursuit of knowledge</li> <li>Self-independence</li> <li>Ability to communicate with colleagues</li> <li>Teamwork</li> </ul>

Summarizing the experts' thoughts on the reasons that form students' legal liability and social responsibility, it can be stated that these are educational factors – family, school, church, state institutions, educational institutions, as well as the efficiency of law enforcement system, established values, efficiency of higher education system, requirements of moral behaviour, common norms acceptable in society, value system, student motivation and study process, the desire to constantly learn and improve, pursuit of knowledge, self-independence, ability to communicate with colleagues and work in a team.

**Q 2. What is a legally liable student ?**

The experts' answers were distributed without deviating from the philosophy of legal theory that students first and foremost adhere to the principle of unity of laws, obligations, rights and duties. **The Expert E1:** A legally liable student is one whose activities, behaviour and expectations do not violate the principle of unity of subjective rights and duties. **The Expert E3:** This is the one who comply with the legal norms. **The Expert E5:** The student is first and foremost a person and a member of society. Responsibility is defined as a moral obligation to be accountable for the consequences of one's choices. The legal liability of members of the society who have reached the relevant age is defined by the rules of law. When a young person enters a higher education institution (becomes a student), there apply rules defining the study procedure, and they must be followed. The question of liability is the individual choice of each person to act accordingly <...>. Sufficiently responsible young people study in higher education institutions. They are legally liable, only socially they are very vulnerable.

**Q 3. What is a socially accountable student?**

Describing the socially accountable student, the experts emphasized the duty of responsibility to society and the conduct in accordance with the norms of life recognized in society and the condemnation of society under certain conditions of justice or guilt. **The Expert E1:** A socially accountable student is the one who, when choosing a law enforcement profession (entering this programme), has a clear understanding of the society expectations for the activities of a law enforcement officer and is ready to meet them with his or her work. <...> whose value orientations meet the expectations of society for his or her profession. **The Expert E3:** it is the one who lives according to the norms of life and communication established in the society, does not disappoint the parents, does not disappoint the teachers, does not disappoint with his or her presence in the society. He or she does not damage anything, does not do bad things, so that there is no loss to the state, it does not necessarily have to be a criminal act, but also that there would not be indifference, littering, that is, what costs to the state. If he or she does not do this, he or she is socially accountable because he or she is accountable to society. **The Expert E4:** This includes not only the desire to acquire the knowledge and skills needed in the teaching process, but also the student's social activity in organizing and engaging in students' social activities. **The Expert E5:** <...> the readiness to be held accountable for one's behaviour and actions, the ability to perform one's duty and to assume sanctions of the society under certain conditions of justice or guilt.

The shown up categories and subcategories of a legally liable and socially accountable student are presented in Table 4.

**Table 4.** Categories and subcategories of the expert statements about a legally liable and socially accountable student

Seq. No.	Categories	Subcategories
1.	Legally liable student	<ul style="list-style-type: none"> <li>Behaviour and expectations do not violate the principle of unity of subjective rights and duties</li> <li>Compliance with the legal norms</li> <li>Willingness to acquire the necessary knowledge and skills in the work of law enforcement institutions in the training process</li> <li>Mandatory compliance with the relevant set of rules</li> <li>Individual choice of responsible behaviour</li> <li>Legal liability</li> </ul>
2.	Socially accountable student	<ul style="list-style-type: none"> <li>Perception of society expectations from the activities of a law enforcement officer and readiness to meet them through his or her work</li> <li>Compliance with value orientations that meet society's expectations for his or her profession</li> <li>Living according to the norms of life and communication established in the society;</li> <li>Responsibility towards society</li> <li>Social activity in organizing and engaging in social activities</li> <li>Readiness to be held accountable for the one's behaviour and actions</li> <li>Ability to perform a duty</li> </ul>

Summarising, it can be stated that a legally liable student is a member of society who complies with the laws (legal norms, rules), obligations, whose behaviour and expectations do not violate the principle of unity of rights and responsibilities and wants to acquire the necessary legal knowledge and skills required in the work in law enforcement institutions. Meanwhile, a socially accountable student is a member of the society who clearly understands the expectations of the society for the activities of a law enforcement officer and is ready to satisfy them with his or her work. It is a student whose value orientations meet the expectations of society for his or her profession. Such a student lives according to the norms of life and communication established in the society, he or she is socially active in organizing and participating in the students' social activities, ready to be responsible for his or her behaviour and actions, able to perform his or her duties and assume sanctions of the society under certain conditions of justice or guilt.

**Q 4. Do students become more legally and / or socially responsible over the years?**

After the analysis of the expert insights into how students become more *legally liable* and *socially accountable* over the years there has been determined that most experts believe that students become more *legally liable* and *socially accountable* over the years. **The Expert E3:** *Yes, in principle, they need to become more legally liable and socially accountable, because otherwise, how they will integrate into society, how they will live, how they will communicate, and how they will behave as members of society. If he or she acquires a profession, then he or she will work at a job that is relatively legal by its nature. That is, if he or she does not take legal liability, then he or she will not adapt. So how can he or she feel responsibility for other people? This is*

*the simplest perception. I think that's changing because those things need to get stronger. The Expert E5: A legally liable or socially responsible individual is a process that differently requires effort from each individual. Everyone must improve, strive to always be civic, to be sensitive, honest, and moral. In higher education institutions, there should be felt the result of what has been developed by the family, the school, where it would always be encouraged, by creating appropriate conditions, for an individual to realize / unfold and improve / create oneself. Students must persevere in the pursuit of knowledge. They must take responsibility and receive appropriate sanctions for breaking the rules. Of course, over the years, the student becomes more responsible.*

Informants say that, over time, students are at least aware of these categories, i. e. *the essence of legal liability and social responsibility* and their influence. **The Expert E2:** *At least they begin to understand what the essence of these categories is and how they determine relationship in society.*

One informant notes that students' *legal liability* and *social responsibility* should decrease over time. **The Expert E1:** *considering the growth of the need satisfaction for self-interest, it is considered that legal liability and social responsibility should decrease. This responsibility is directly proportional to the remuneration offered by the state for the work performed, i. e. to the extent that the officer is able to meet his or her physiological and security needs.*

The categories and subcategories of variability of becoming students more legally liable and socially accountable emerged after the interviews with experts are presented in Table 5.

**Table 5.** Categories and subcategories of variability of becoming students more legally liable and socially accountable

Seq. No.	Categories	Subcategories
1.	Increase of becoming students more legally liable and socially accountable	<ul style="list-style-type: none"> <li>• Integration into society</li> <li>• Becoming a member of society</li> <li>• Adaptation to his or her chosen profession</li> <li>• Perception of legal liability and social responsibility</li> <li>• Becoming more legally liable and socially accountable</li> <li>• Continuous improvement</li> <li>• The pursuit of the result of the higher education institution</li> <li>• Persistent pursuit of knowledge</li> <li>• Realization / unfolding as well as improvement and creativity</li> </ul>
2.	Consistency of becoming students more legally liable and socially accountable	<ul style="list-style-type: none"> <li>• Perception of the essence of legal liability and social responsibility and their influence</li> <li>• Perception of the essence of legal liability and social responsibility and the influence of these categories on relationship of the society</li> </ul>
3.	Decrease of becoming students more legally liable and socially accountable	<ul style="list-style-type: none"> <li>• Strengthening the need to satisfy the personal interest</li> <li>• Decrease in legal liability and social responsibility</li> <li>• Direct proportionality to the remuneration offered by the state for the work performed</li> <li>• Meeting the physiological and security needs of the officer</li> </ul>

After performing the analysis of the results of the interview research, it can be stated that the experts provide conflicting assessments, and this issue remains the subject to debate.

**Q 5. Are students with legal liability also characterized by social responsibility?**

The experts believe that students with legal liability are also characterized by social responsibility. **The Expert E3:** *Unambiguously, those subjects are*

*intertwined because they belong to one discipline, the profile of those study programmes is related to law. There must be symbiosis everywhere, they must complement each other. The more legal liability is developed, the stronger social responsibility will be. Or an individual may develop the opposite variant, that is, he or she may be socially educated from an early age, he or she is responsible for everything, for a brother, for a sister, for a toy, and for money. According to the study*

programme or subject taught to him or her, there will automatically be formed social responsibility.

**Q 6. Are students with social responsibility also characterized by legal liability?**

All experts unanimously expressed the view that students with social responsibility also have legal liability. **The Expert E1:** I would think that the probability that a socially accountable individual will be more and legally liable is higher, because in this case,

legal liability derives from his internal social provisions. Therefore, social responsibility should be trained first. **The Expert E3:** Yes, because they can not exist without each other. These are the social sciences. The basis is the social sciences, which is why everything is together here.

After summarizing the experts' statements, the following categories and subcategories emerge (see Table 6).

**Table 6.** Categories and subcategories of the relationship between student legal liability and social responsibility

Seq. No.	Categories	Subcategories
1.	Students are characterized by legal liability and social responsibility	<ul style="list-style-type: none"> <li>• Unambiguity</li> <li>• One field of science</li> <li>• Complementary</li> <li>• Greater development of legal liability strengthens the development of social responsibility</li> <li>• Educational factors shape legal liability and social responsibility</li> </ul>
2.	Students are characterized by social responsibility and legal liability	<ul style="list-style-type: none"> <li>• Priority is given to the development of social responsibility, and legal liability derives from his or her inner social provisions.</li> <li>• Developed social responsibility helps to develop legal liability</li> </ul>

Summarising, it can be concluded that students who are characterized by legal liability are also characterized by social responsibility, because legal liability is not possible without social responsibility. It can be said that students who are characterized by social responsibility also have legal liability, because first of all, an individual develops social responsibility and from it a legal liability develops.

not possible without social responsibility. Students who are characterized by social responsibility also have legal liability, because first of all, an individual develops social responsibility and from it a legal liability develops. The legal liability and social responsibility of students, future law enforcement officers, in higher education institution is developed through the study process, study subjects, social welfare, mutual statutory relationship and events.

**Conclusions**

The main factors developing future law enforcement officers' legal liability and social responsibility are educational factors – family, school, church, state institutions, educational institutions, and the efficiency of law enforcement system, established values, efficiency of higher education system, requirements of moral behaviour, common norms acceptable in society, value system, student motivation and study process, the desire to constantly learn and improve, pursuit of knowledge, self-independence, ability to communicate with colleagues and work in a team.

A legally liable student is a member of society who complies with the laws (legal norms, rules), obligations, whose behaviour and expectations do not violate the principle of unity of rights and duties. In the training process he or she wants to acquire the necessary legal knowledge and skills for the work in law enforcement institutions. Meanwhile, a socially reliable student is a member of the society who clearly understands the expectations of the society for the activities of a law enforcement officer and is ready to satisfy them with his or her work. It is a student whose value orientations meet the expectations of society for his or her profession. It is one who lives according to the norms of life and communication established in the society, he or she is socially active in organizing and getting involved in students' social activities. He or she is ready to be held accountable for his or her behaviour and actions, able to perform his or her duty and to assume sanctions of the society under certain conditions of justice or guilt. Students who are characterized by legal liability are also characterized by social responsibility, as legal liability is

**References**

Alfakhri, Y., Nurunnabi, M., Alfakhri, D.H., and Hossain. S.F.A. (2020). Corporate Social Responsibility in Saudi Arabia: Application of Carroll's Model. *Journal of Xi'an University of Architecture & Technology*. 12(VI), 1059-1072.

Bakria, H.H.M., Saidb, J., and Karimb, Z.A. (2015). Case Study on Integrity among Royal Malaysian Police (RMP): An Ethical Perspective. *Original Research Article Procedia Economics and Finance*, 28, 121-125. [https://doi.org/10.1016/S2212-5671\(15\)01090-4](https://doi.org/10.1016/S2212-5671(15)01090-4)

Cahen, G. (2021). In Pursuit of Police Ethics: An Analysis of Ethics Content in State-Mandated Basic Police Training Curricula. <https://doi.org/10.1080/10999922.2021.1933340>

Campas, S. (2020). Senior Ranking Police Officers, Perception of Evidence-Based Policing and Police Fatalities. [revised 2021-09-10], <https://www.proquest.com/openview/5387c48e95e3e9c2fdfb581e08cb70d9/1?pq-origsite=gscholar&cbl=44156>

Cristofoli, D., Douglas, S., Torfing, J., and Benedetta Trivellato, B. (2021). Having it all: can collaborative governance be both legitimate and accountable? <https://doi.org/10.1080/14719037.2021.1960736>

Chen, A.Z. (2016). Measuring police role orientations in China: An exploratory study. *International Journal of Law, Crime and Justice*, 44, 43-67. <https://doi.org/10.1016/j.ijlcj.2015.05.001>

Duke, D.D. (2015). Organizing education: schools, school districts, and the study of organizational history. *Journal of Educational Administration*, 53(5), 682-697. <https://doi.org/10.1108/JEA-08-2014-0097>

Francis, J.J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M.P., and Grimshaw, J.M. (2010). What is an adequate sample size? operationalising data saturation for theory-based interview studies. *Psychology and Health*, 25(10), 1229-1245. <https://doi.org/10.1080/08870440903194015>

- Galvão, A., Mendes, L., Marques, C., and Mascarenhas, C. (2019). Factors influencing students' corporate social responsibility orientation in higher education. *Journal of Cleaner Production* 215: 290–304. <https://doi.org/10.1016/j.jclepro.2019.01.059>
- Guogis, A. (2006). Kai kurie korporatyvinės socialinės atsakomybės ir socialinio teisingumo aspektai. *Viešojo politika ir administravimas*, 18, 73–77.
- Janušauskaitė, A. (2012). Atsakomybės ir profesinės kompetencijos svarba teisininko veikloje, (8). *Mokslinių straipsnių rinkinys. „Visuomenės saugumas ir viešojo tvarka“ 8 Scientific articles*, 119–129.
- Jeziarska-Wiejak, E. (2014). Family and Educational Institutions (Kindergarten and School) as the Areas of Experiencing Values. *Pedagogika*, 116(4), 59–70.
- Kuncevičius, G., and Kosmačaitė, V. (2014). Tarnybinės atsakomybės taikymo probleminiai aspektai. *Jurisprudencija*, 2014, Vol. 19, No. 4, p. 1439–1457.
- Lægred, P., and Rykkja, L.H. (2021). Accountability and inter-organizational collaboration within the state. <https://doi.org/10.1080/14719037.2021.1963822>
- López, L.H., Petra de Saá Pérez, P. de S., Rodríguez, J.L.B. and Almeida, D.G. (2015) Self-assessment of competences in management education. *International Journal of Educational Management*, 29(5), 627–644. <https://doi.org/10.1108/IJEM-10-2013-0154>
- Mack, N., Woodson, C., MacQueen, K.M., Guest, G., and Namey, E. (2005). *Qualitative Research Methods: A Data Collector's Field Guide*. FLI. [revised 2021-09-10], <http://web.mit.edu/richh/www/writings/doc-framework-decisions.pdf>
- McDonald, L., Miller, H., and Sandler, J. (2015). A social ecological, relationship-based strategy for parent involvement: Families And Schools Together (FAST). *Journal of Children's Services*, Vol. 10 No. 3, pp. 218–230. <https://doi.org/10.1108/JCS-07-2015-0025>
- Menasco, M.A. (2015). Delinquency, Gender, and Social Control within the Familial Context, in Sheila Royo Maxwell, Sampson Lee Blair (ed.) *Violence and Crime in the Family: Patterns, Causes, and Consequences (Contemporary Perspectives in Family Research, Volume 9)* Emerald Group Publishing Limited, 341–382. <https://doi.org/10.1108/S1530-35352015000009015>
- Misiūnas, E. (2010). *Policijos pareigūnų teisinis statusas*. Daktaro disertacija. Socialiniai mokslai, teisė (01 S). Vilnius: MRU. [revised 2021-09-10], <https://vb.mruni.eu/object/elaba:1758325/>
- Nedzinskas, E., Nedzinskienė, R., and Šliažienė, R. (2020). Professional Police Officers Behaviour in Critical Situations. *Society. Integration. Education. International Scientific Conference*. May 22th–23th, 2020. Rezekne Academy of Technologies. Rezekne. Latvia. Vol. 5, p. 233–242. <https://doi.org/10.17770/sie2020vol5.5005>
- Nedzinskienė, R., and Nedzinskas, E. (2018). Evaluation of Legal and Social Responsibility: the Case of Future Police Officers. *Society. Integration. Education. International Scientific Conference*. May 25th–26th, 2018. Rezekne Academy of Technologies. Rezekne. Latvia. <https://doi.org/10.17770/sie2018vol1.3328>
- Normore, A.H., Bone, D., Jones, J., and Spell, S. (2015). To Protect and Educate: Legal Mandates and Complex Leadership of School Resource (Police) Officers. *Advances in Educational Administration*, 24, 201–220. <https://doi.org/10.1108/S1479-366020150000024038>
- Othman, R., Omar, N., Azam, A., Shafik, I., Wan Ahmad Farouq, W.A., Rustam, N., and Aris, N.A. (2014). Influence of Job Satisfaction and Codes of Ethics on Integrity among Police Officers. *Original Research Article Procedia - Social and Behavioral Sciences*, 145, 266–276. <https://doi.org/10.1016/j.sbspro.2014.06.034>
- Orte, C., Ballester, L., March, M.X., Amer, J., Vives, M., and Pozo, R. (2015). The Strengthening Families Programme in Spain: a Long-term Evaluation. *Journal of Children's Services*, 10(2), 101–119. <https://doi.org/10.1108/JCS-03-2013-0010>
- Palšis, B. (2014). Bendruomenės pareigūno pareigybė: teisėtarkos ir socialinio darbo vaidmenų derinimas. *Socialinis darbas. Patirtis ir metodai*. Kaunas.
- Perry, J.E. (2008). Thinking Like A Professional. *Journal of Legal Education. Association of American Law School*, 58(2), 159–165.
- Risen, D.M., Tripses, J., and Risen, A. (2015), Role of School Leaders in Interdisciplinary Connections in Special Education, in Jeffrey P. Bakken, Festus E. Obiakor (ed.) *Interdisciplinary Connections to Special Education: Important Aspects to Consider (Advances in Special Education, Volume 30A)* Emerald Group Publishing Limited, 95–117. <https://doi.org/10.1108/S0270-40132015000030A011>
- Sohn, H. (2015). Education and Self-Awareness of Health: Toward a Better Understanding of Self-Rated Health, in Jennie Jacobs Kronenfeld (ed.) *Education, Social Factors, and Health Beliefs in Health and Health Care Services (Research in the Sociology of Health Care, Volume 33)* Emerald Group Publishing Limited, 85–103. <https://doi.org/10.1108/S0275-495920150000033004>

RECEIVED: 11 July, 2021

ACCEPTED: 13 September, 2021

**Egidijus Nedzinskas** is PhD of Social Sciences, Lithuania Business University of Applied Sciences. Associate Professor in the Department of Law, Scientific research areas in Law (01S) and Education (07S). He published 45 scientific articles. The scientific research has been carried out in the fields of study process optimisation, student educational traineeships, methods of applied studies, factors of selection of study programmes, legal liability and social responsibility, international compatibility of legislation, domestic violence, legal regulation of juvenile and migration processes. Tel. +37068666880. Email [egidijus.nedzinskas@ltvk.lt](mailto:egidijus.nedzinskas@ltvk.lt).

**Jozef Zat'ko** is JUDr., Ph.D., Dr.h.c. mult., Honor. Prof. mult., LL.M, MBA, President of European institute of further education (EIDV), Head of Pyrotechnics Association of Slovak Republic, Founder of Eastern European Development Agency (EEDA), Founder of Scientific journal „European Science – Európska Veda“, Slovak Republic, e-mail: [eeda@eeda.sk](mailto:eeda@eeda.sk) Cell.: +421 905 450 765 (WhatsApp, Viber).

**Renata Šliažienė** is Associate Professor of Law, a Head of Department of Law, Lithuania Business University of Applied Sciences, Scientific research areas in Law (01S). She published 5 scientific articles. Tel. +37065653964. Email [renata.sliaziene@ltvk.lt](mailto:renata.sliaziene@ltvk.lt)



## DESIGN THINKING: AN INNOVATIVE EDUCATIONAL METHOD IN ADVERTISING

Isabel Palomo-Domínguez

University of Seville

### Abstract

Design Thinking is one of the most recognised innovation methodologies today. Companies such as Apple, Amazon, Google, IBM, Uber, Deutsche Bank, Procter and Gamble or Nike turn to it to design their products, services, work processes and strategic plans.

This methodology runs along a path other than verbal and linear thinking. Moreover, its purpose is not to storage knowledge. Instead, design thinking proposes a more intuitive solution creation model that seeks functionality. It is based on innovation and originality, avoiding preconceived questions that would lead to conventional answers.

At the same time, it is a method that requires collaborative work and encourages the creation of multidisciplinary teams. It offers tools to the participants to manage a diversity of opinions and build a global solution enriched by their variety of perspectives. For this reason, design thinking also plays a vital role in forming and managing work teams and solving conflict situations.

Regarding the broad range of professional fields in which design thinking has application, the competitive advantage it offers to the organisations and its role in facilitating teamwork, this methodology can play an essential role in the training of future professionals. Hence, experts proposed to insert design thinking techniques into university study plans every day with more frequency.

This article incorporates the results of a teaching innovation project based on creating a Design Thinking Workshop as an educational tool applied in the subject of Advertising Strategy within the Communication Degree of a Spanish university centre.

Among the motivations that promoted the workshop, we highlighted the applicability of this method in the advertising process; furthermore, the need to strengthen students' competencies in the face of leadership and cooperation in teamwork. This workshop also means the opportunity to promote multidisciplinary workgroups with other specialities besides Advertising, such as Audiovisual Communication.

This workshop, proposed as a pilot project, intends to evaluate the capacity of design thinking as an applied method and its feasibility of implementation within the academic program. Likewise, to measure the perception that students and teachers themselves had of the method.

We launched a questionnaire to the students and held a discussion session with the teachers to measure this perception. The results showed an upbeat assessment of the method and its application to the educational field of advertising. Other relevant achievements were a greater motivation in students and their ability to work in a team.

Among the main conclusions, we highlight the suitability of this methodology in teaching advertising and its ability to improve students' skills for future incorporation into the professional field.

As ways to expand the study, for future research, we highlight the interest in measuring the perception generated by the application of this method in the teaching of advertising in companies where students do internships.

KEY WORDS: Design thinking; advertising; innovation; educational method; creativity; strategy.

JEL classification: M37, M53, O31.

### Introduction

The different design thinking techniques occupy a prominent place in many professional fields. Either as innovative methodologies for market research, which allow us to understand consumers better, design new products, the composition of more efficient work teams, in strategy generation and decision-making processes or define new business models.

More than a simple methodology, design thinking is an approach that seeks to solve problems collectively and collaboratively, from a perspective of maximum empathy with its stakeholders (Toledo *et al.* 2017).

This methodology comes from the disciplines of engineering and design. Although today it has proven to be versatile enough to generate solutions in many fields of science and the business world. In a way, the design and engineering practitioners have contributed the most to spreading this perspective in other sectors since it is an internalised method that they apply naturally in their work and daily lives (Grots & Creuznacher 2016).

We could say that working with the design thinking method is, *per se*, a process that stimulates creativity and generates learning, whatever the purpose for which we intend to apply it. This methodology itself generates knowledge and solutions. According to Stickdorn *et al.* (2018), the lack of closed techniques in design thinking enhances the competence of those who use this method since they have the chance to create new tools or complete and transform the existing ones. In this sense, design thinking also stimulates entrepreneurship and foster a transformation that creates value (Gloppen, 2009).

Authors such as Clark & Smith (2008), Groeger & Schweitzer (2014) and Snyder *et al.* (2018) relate the methodology of design thinking with the leadership capacity. They point to the fact that the use of these techniques stimulates the competence to make decisions and, in turn, serves to design balanced workgroups, where each member feels empowered by developing a role that he/she understands and that constitutes an essential piece for the functioning of the designed solution.

Miller (2017) wonders if design thinking, more than a method or philosophy, is a new liberal art. Instead, ‘the’ new liberal art. All this is in the context of a world where the most developed countries promote the liberal arts as a means to reinforce innovation and human capital, with an alleged enzymatic effect to impulse a more competitive global economy.

In a market as dynamic as that of Communication, design thinking acquires an especially significant relevance; since its professionals are required to know new methodologies that facilitate teamwork, improving the results of the projects and their development processes.

Specifically, in the case of Advertising, techniques are needed that provide an innovative approach and allow us to know the recipient we are addressing in greater depth. On the other hand, and without detriment to specialised knowledge, this labour sector demands highly versatile professionals capable of developing multidisciplinary and multimedia projects, being very important the mastery of diverse communication techniques.

From the perspective of the communication process (Rodrigo, 1995), advertising is characterised by having two issuers: on the one hand, the advertiser and on the other, the agency. When talking about design thinking, we can affirm that this method is present in both scenarios. One of the areas in which this methodology has the most significant impact is in the marketing departments of large companies, especially those seeking to promote change through innovation (Luchs et al., 2015; Reinecke, 2016).

Meanwhile, in advertising agencies, the application of design thinking techniques is practised daily as springs that activate the strategic and creative approach of the campaigns. Thus, tools such as ‘brainstorming’, ‘sketchnoting’ or ‘personas’, typically considered within the spectrum of design thinking (Panke, 2019), are frequently used in advertising agencies worldwide (García-Uceda 2011).

Furthermore, scientific research in Communication is another context where design thinking builds solutions. Not only as an object of study but also as the research method. For example, we quote Ngamvichaikit (2021), who developed a working model based on design thinking to solve a problematic situation. The author analyses the complex reality of digital advertising in pharmaceutical companies and focuses on the conflict situation that arises between the interests of advertisers, the respect for the rights of users and consumers, the possibilities offered by the new advertising media and the slow pace of legislation, which has not yet given response to situations related to digital media.

In short, given all the possibilities that design thinking presents in the professional development of the Communication and Advertising sectors, we consider the suitability of applying it in the academic field as an instrument for the training of university students in these disciplines. It seems logical and necessary to start preparing future professionals with the tools that will allow them to achieve a more competitive and advanced position in the market.

## Theoretical framework

### An approach to the design thinking methodology

This method began to develop in the past decade of 70 at Stanford University with a theoretical approach. It quickly burst onto the business scene and started to have a practical application in prestigious design consultancies such as IDEO (Romero & Duarte 2016).

The method provides a work scheme that facilitates the generation of innovative ideas. Its main characteristics include a non-linear way of thinking, its ability to integrate different disciplines, favour collaborative work and focus its attention on the human being (Brown 2009; Gonen 2019). In this sense, the Institute of Design at Stanford (2012:3) describes the correct application of the method from the following premises:

- “Human centred”: Design addresses people; people are the source of inspiration and the final jury on the quality of the design.
- “Show, don’t tell”: It is necessary to communicate in a visual, universal, powerful way, connected with emotions.
- “Radical collaboration”: It is impossible to do design thinking individually. Collaboration is synonymous with enrichment.
- “Mindful of process”: Those who put the method into practice must know its purpose and structure, becoming aware of the function that each step fulfils.
- “Culture of prototyping”: The prototype not only serves to validate the idea but is also part of the innovation process.
- “Bias towards action”: Thinking only works when it leads to action.

It is convenient to differentiate design thinking from what Johansson-Sköldberg *et al.* (2013) call the discourse of “designerly thinking”. This last concept refers to the academic study of the professional practice of designers. That is designerly thinking analyses the designers’ skills and abilities. It also reflects on their capacity for non-verbal thinking and generates a theoretical construct based on these issues.

However, design thinking goes beyond the strict scope of design, proposing a practical problem-solving method that is not only aimed at designers. In other words, design thinking involves transferring the mental operation of design to other professional fields, such as administration or management.

The method includes five phases (Romero & Duarte 2016; Pande *et al.* 2020). In a journey through them, we can see parallels with the advertising creation process (Tevi & Koslow 2018; Turnbull & Wheeler 2017).

Phase 1: Empathise. It is an obligatory first step that connects with the interests and needs of the recipient, public or audience for whom we intend to develop the design. Design thinking is very similar to the advertising strategy, which requires knowing the target to support the rest of the elements of the plan.

Phase 2: Define. It consists of defining and describing a work perspective based on the users’ needs and their insights. In advertising, insights generate an affective

bond between the brand and the public; they promote an emotional connection that appears to go beyond the purely commercial intentions of conventional advertising. They serve to build a bridge between the brand and the consumer, growing a deep and symbolic relationship. “An insight is that revelation or discovery about the ways of thinking, feeling or acting of the consumer fresh and not obvious, that allow to feed communication strategies, branding and innovation” (Quiñones 2013:34). Sometimes, the term insight is overused to designate any element that elicits the identification of the public. The experts consulted by Sebastián-Morillas *et al.* (2020:346) highlight the need to resort to authentic and powerful insights that are “a consensual, universal or revealing truth”.

Phase 3: Ideate. At this point, it is time to articulate the concept, turn it into an idea. Both for this method, as in advertising, the use of the brainstorming tool facilitates creative production. It releases mental blocking as a solution to fight against the stress that involves the obligation to generate an idea, leaving the mind free to suggest any element, image, concept or word that freshly comes to thought when addressing a specific topic (Putman & Paulus 2009).

Phase 4: Prototype. In this phase, the idea is embodied, made tangible so that others can understand it and understand the elements that constitute it. In addition, this phase serves to check if all the previous elements constitute a complete and functional whole. This step, continuing with the analogy with advertising, would be assimilated to elaborating the demo of a tv commercial from its storyboard.

Phase 5: Test. Finally, we can evaluate the performance achieved and capture user feedback. It is the moment to assess the achievements and apply the possible rectifications or improvements for future projects. In advertising, this phase occurs in the campaign pretest and posttest.

Other authors propose a more open description of the model, warning that the phase structure is not so closed (Johansson-Sköldberg *et al.* 2013; Puga *et al.* 2018). However, it is necessary to alternate divergent and convergent phases (Brown 2009; Cross 2011). Thus, in the empathising phase, new members are sought who offer new knowledge or needs; that is, the spectrum broadens (divergent phase). In the definition step, this information is summarised (convergent phase). Subsequently, the process is reopened in search of a variety of ideas (divergent phase). In the prototype, the project materialises in a body (convergent phase). As a closing, another opening step seeks to know the valuation of other users (divergent phase).

Given the versatility and flexibility that the design thinking methodology presents, the variety of techniques developed from this perspective is wide. The researcher Panke (2019) counted up to 47 different tools, including journey maps, role play, focus groups or mindmaps.

Two of the most popular design thinking techniques are empathy maps and LEGO® SERIOUS PLAY®, both developed in the workshop proposed in our research. Empathy maps seek to get into another person’s shoes to understand him/her better. This person can be a client, a consumer, a competitor, a co-worker. The method uses a

canvas with four quadrants in which the participants answer four questions about the analysed person: what he/she says, what he/she does, what he/she thinks, what he/she feels. The information to answer these questions comes from observing the subject and conducting interviews (Valentim *et al.* 2017).

LEGO® SERIOUS PLAY® “is a method that enables constructive reflection and dialogue processes. During a structured process, participants use LEGO bricks to create models that express their thoughts, reflections and ideas” (Lego 2010: 12). It includes four phases: during the first, the participants become familiar with the challenge they are pursuing; in the second, they begin to build by letting their hands express their ideas and thoughts; in the third, reflect and explain what they have built and justify the reasons; finally, they incorporate the knowledge acquired in the previous phases and through the feedback of the other participants. As of June 2010, LEGO® SERIOUS PLAY® is an open-source tool that can be used, shared and adapted by everyone who makes the proper attribution reference.

### Application and scope of the design thinking methodology

For innovative organisations that intend to lead a competitive change, the design thinking method provides a new approach to problems, which is a first step to achieving more original solutions. In addition, these solutions are more interesting when they incorporate the judgment of the consumers. Nevertheless, it is not easy to deal with all the different ideas by those who participate in the project and consumers’ opinions. It is necessary to find a technique that allows us to work with varied proposals, sometimes even contradictory and reconcile them in a global solution. One of the significant advantages that design thinking provides is offering a multitude of techniques that share a common methodological philosophy and offer instruments for participants to collaborate, debating, managing and building consensus based on diversity of knowledge and points of view (Liedtka 2018); what we have previously described as a process that evolves from divergent phases to convergent phases (Brown 2009, Cross 2011).

As already noted, the applications of this methodology are extraordinarily varied. It promotes differentiation in a highly competitive environment in the business field. It generates ideas and new products, new experiences for the user and strategic plans (Serrano & Blázquez 2016).

For example, a revealing case is in software engineering and the role of design thinking in improving interface design and user experiences. On this occasion, the method serves to value the subjectivity provided by different users and specify it in a solution efficiently, shortening the research time of developers (Márquez *et al.* 2021).

In the case of advertising agencies, design thinking generates a competitive advantage and encourages those agencies that put it into practice to anticipate the changing reactions of the public, launching surprising and better-received proposals. At the same time, design thinking becomes an essential tool for joint work between

the agency and the advertiser to define strategic elements such as the briefing or the communication plan. Furthermore, it facilitates taking information from the advertiser to the agency and the collaborative work between both parties (Qupt *et al.* 2019).

Considering that design thinking provides competitive value in the current labour market, it is logical to think about the need to make an effort to incorporate it into university study plans, as is frequently recommended in studies in business sciences and communication sciences (Arias-Flores 2019; Cevallos 2015; IDEO 2012; Lee & Benza, 2015; Panke 2019; Puga *et al.* 2018).

## Project description

### Workshop context

Under the title “Initiation Workshop to Design Thinking applied to Advertising Strategy”, the teaching innovation project was developed during April and May 2019 at the San Isidoro University Centre (attached to the Pablo de Olavide University, Seville, Spain).

It was addressed to students in Third Year Degree in Communication, specialising in Advertising and Public Relations, within the subject Advertising Strategy. Due to its interdisciplinary nature, the project also aimed to reinforce the students’ audiovisual skills.

Before designing the workshop, we analysed the possible uses of the method concerning the specific contents of this subject. Among others, we identified the following ones:

- Work hand in hand with the advertiser, knowing his point of view, needs, motivations and interests.
- Identify the opportunities of new products before their audiences; design their differential advantage and positioning.
- Know in-depth consumers, their psychographic profile and interaction with brands.
- Evaluate the effect generated by advertising messages on consumers, the reason for such effects and, ultimately, measure the results of advertising campaigns.
- Develop innovative and efficient strategies, fully adapted to the target market.
- Achieve a global vision of the brand, specifying the messages and means to reach the target audience.

On the other hand, the workshop responded to a need identified in the students. The teachers noticed that the students had difficulties coping with collaborative work, mainly when composing work teams and distributing responsibilities. In this sense, the workshop was proposed as a reinforcement to help them acquire this competence.

In short, the project arose with the future intention of establishing interdisciplinary workgroups among students from the specialities in Advertising and Audiovisual Communication, intending that they develop collaborative tasks and generate arguments for discussion and analysis between different labour sectors.

## Didactic purposes of the workshop

- Teach an innovative and versatile methodology in the advertising field.
- Provide students with tools that promote strategic and creative thinking focused on teamwork.
- Train the students to jump into the professional field. This aspect implies reinforcing the students’ audiovisual skills to give them a greater degree of autonomy in the production of audiovisual pieces with different discursive strategies.

## Structure of the workshop

Sixteen students participated in the workshop, fifteen of them from the speciality of Advertising and Public Relations and one guest student from the speciality of Audiovisual Communication.

They worked distributed in three teams; each focused on creating a campaign for an advertiser from the actual marketplace. There was also an audiovisual coverage of the main session to make a video with the workshop’s conclusions.

The entire workshop included six work sessions distributed in the following phases:

- Preparation phase:

Session 1. Theoretical introduction to Design Thinking. After explaining the method, we practiced various design thinking techniques to define an advertiser’s objectives and know its target audience. Moreover, we provided the students with didactical material and references to delve into the design thinking method.

Session 2. Students received a short training reinforcement to refresh their audiovisual skills, already acquired in the previous subject of Audiovisual Technology.

- Development phase:

Session 3. Workshop. The three groups mentioned developed a session of LEGO® SERIOUS PLAY® to design the copy strategy of the advertiser for whom they had decided to work. The students themselves carried out an audiovisual coverage of the process that includes recording testimonies and explanations about the application of the method. Subsequently, students edited a summary video with the main conclusions.

- Results and evaluation phase:

Session 4. Viewing, assessment and debate. The class watched the videos and discussed the performance of the workshop, assessing the learning acquired and the strategic conclusions reached.

Session 5. Evaluation by the students. The students responded to a questionnaire to evaluate the developed workshop. The completion of it was voluntary and anonymous.

Session 6. Evaluation by the teaching staff. The teachers reviewed the entire process, analysed the students’ evaluations and shared their impressions about the workshop’s relevance as an innovative learning tool, raising criticisms and improvements for a possible future edition. They wrote the memory.

**Methodology**

**Research Objects**

- Investigate and assess the perception of students and teachers about the expediency of applying the design thinking method in the subject of Advertising Strategy.
- Examine the feasibility of applying this methodology in the academic program and its work schedule.
- Determine whether the design thinking workshop can be replicated or not in other subjects of the Degree.

**Evaluation techniques**

- Questionnaire to students. Participation is voluntary and anonymous. The questionnaire includes three closed-ended questions with a 5-point Likert scale; and three open-ended questions.
- Discussion session carried out with the lectures and subsequent memory writing.

**Results**

**Student’s evaluation**

Of the 16 students in the workshop, 15 participated in its evaluation.

In the first three questions, they were asked to give their assessment on a 5-point Likert scale, where 1 represents the minimum value, 5 corresponds to the maximum and 3 is the intermediate position.

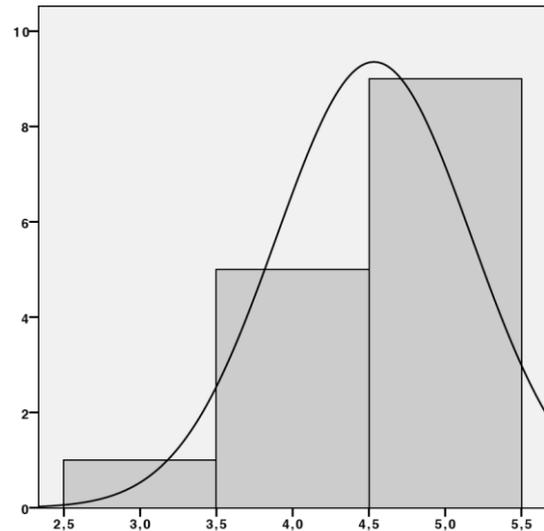
The interquartile range ( $k = q_3 - q_1$ ) measures the degree of consensus in the group response. According to Mateos-Ronco & Server (2011), on a 5-point Likert scale, the acceptable level of consensus occurs when the interquartile range is equal to, or less than 1 ( $k \leq 1$ ), and unanimity occurs when  $k = 0$ .

To the question 1 (Q1), “In your opinion, do you consider the workshop was well connected with the contents of the subject?” the answers obtained are shown in Table 1 and Fig. 1.

60% of the students affirmed that the design thinking workshop was “absolutely connected” with the subject’s contents (5 points). Likewise, the average valuation (mean) is 4.53. Regarding the distribution of the responses, we observe that this score represents the set of answers, considering that the interquartile range ( $k$ ) is 1.

**Table 1. Responses to Q1**

Responses					
Point	1	2	3	4	5
Freq.			1	5	9
%			6.7%	33.3%	60%
Distribution parameters					
Mean	Med.	Mode	q <sub>1</sub>	q <sub>2</sub>	k
4.53	5	5	4	5	1



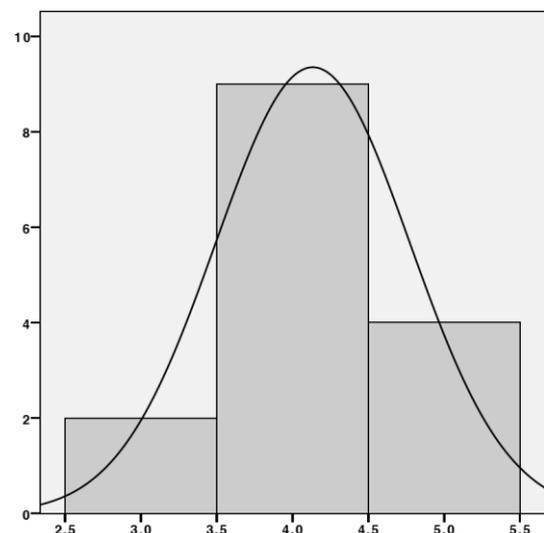
**Fig. 1. Distribution of the responses to Q1**

To the Q2, “In your opinion, was it useful to get a deeper understanding of the advertiser brand and define its copy strategy?” the answers obtained are shown in Table 2 and Fig. 2.

In this question, there was a unanimous response from the group ( $k = 0$ ), where the bell curve is slightly shifted to the right (negative asymmetry); that is, there are more responses above the mean (4.13).

**Table 2. Responses to Q2**

Responses					
Point	1	2	3	4	5
Freq.			2	9	4
%			13.3%	60%	26.7%
Distribution parameters					
Mean	Med.	Mode	q <sub>1</sub>	q <sub>2</sub>	k
4.13	4	4	4	4	0



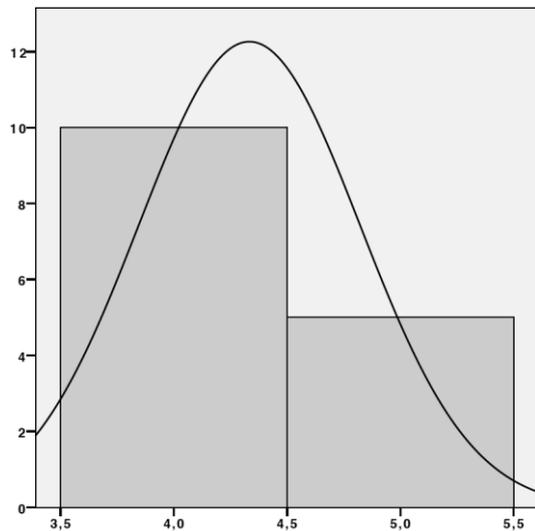
**Fig. 2. Distribution of the responses to Q2**

To the question, “In your opinion, was the design thinking workshop a profitable learning for the professional practice of advertising?” the answers obtained are shown in Table 3 and Fig. 3.

On this occasion, the average assessment of the group of students is 4.33. The mode and the median also coincide around the value 4. Again, we got a consistent group response, with a bell curve slightly displaced to the left (positive asymmetry), which shows more responses below the mean value.

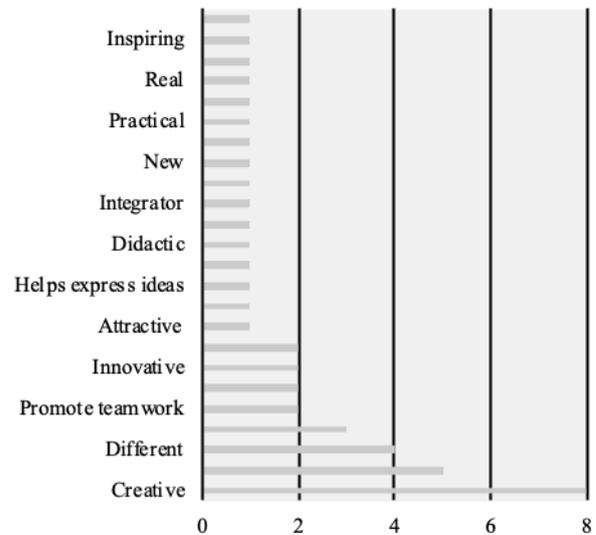
**Table 3.** Responses to Q3

Responses					
Point	1	2	3	4	5
Freq.				10	5
%				66.7%	33.3%
Distribution parameters					
Mean	Med.	Mode	q <sub>1</sub>	q <sub>2</sub>	k
4.33	4	4	4	5	1



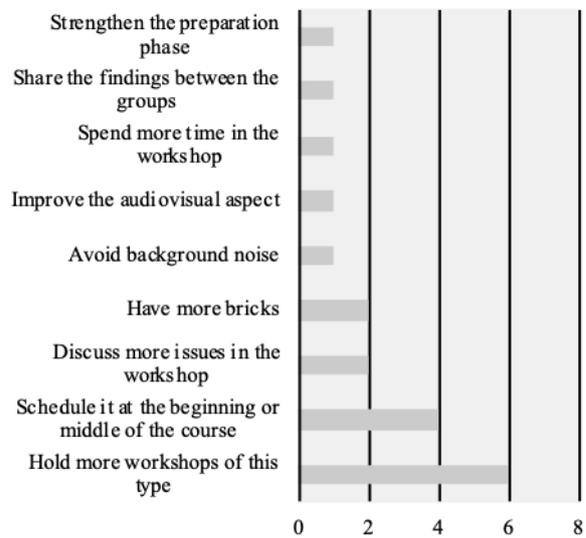
**Fig. 3.** Distribution of the responses to Q3

To the open-ended question, “Use three words to assess the design thinking workshop”, the answers obtained reveal an upbeat assessment on the method in which innovation and cooperative work are the main advantages founded (Fig. 4).



**Fig. 4.** Distribution of the responses to Q4

To the open question, “Concerning possible future editions of the workshop, what aspect would you propose to improve?” the students who responded supported the continuation of this method in following years and within other subjects (Fig. 5).



**Fig. 5.** Distribution of the responses to Q5

To the open question “Observations”, the students who answered provides the following comments:

“It is useful because it implies leaving the type of habitual practices, being entertaining and favouring the sharing of knowledge among colleagues”.

“It was a positive fact that a student from another speciality (Audiovisual Communication) also participated”.

“These types of workshop facilitate learning and bring the student closer to the professional market framework.”

“It helps the cohesion of the group”.

“It serves to know the advertiser from an unusual point of view”.

## Lecturer's evaluation

In general, the assessment of the lecturers involved is very positive. They constated the achievement of the workshop's didactical purposes and highlighted a significant level of motivation and satisfaction in the students.

With a view to possible future editions, the lecturer proposed the following improvements:

- Avoid developing the workshop at the end of the academic year, which may be more profitable at the beginning or in the middle.
- Explore other techniques within this methodological approach to applying other workshop versions in this or other subjects.
- Explore the possibility of opening the workshop to volunteer students of other specialities of the Communication Degree (Audiovisual Communication and Journalism).

## Subsequent workshops

After an upbeat assessment of the results obtained in the workshop, two new design thinking workshops took place in the following academic year (2019-2020).

One of the workshops in the context of the same subject, Advertising Strategy. In this case, it focussed on the study of the target audience. For this, the empathy map (a design thinking tool) complemented the advertising technique of the buyer persona. The hybridisation of both procedures was of particular interest.

The other workshop was developed on the subject of Corporate Communication. The students themselves had to choose which specific design thinking tool could be more suitable to manage a situation of internal communication crisis in an organisation.

## Discussion and conclusions

The evaluation of the workshop provided by students and lecturers allows us to respond to the research objectives. Likewise, the realisation in the following academic year of two new workshops inspired by the design thinking method has a probative value, as it demonstrates the perceived suitability, viability, and applicability in other subjects of the degree.

The workshop carried out has been innovative, exciting and motivating for the students, helping them work in groups and develop their strategic thinking. At the same time, it has served as a connection with the business reality of our time, characterised by being diverse, changing and where creativity and versatility are essential.

Among its strong points as a didactic tool, we can affirm that the workshop is related to the contents of the subject and, in general, to the work processes of advertising. Likewise, its application with academic purposes is viable due to the use of resources, time and teaching staff that it requires.

This type of workshop brings students closer to practical knowledge that will improve their skills when they enter the job market. In addition, as it is a technique that promotes creative thinking, it will strengthen the

students' capacities for adaptation and search for innovative solutions in advertising and other fields.

As a means of improvement in the face of possible editions, we suggest extending the evaluation of the method to active professionals in the advertising, audiovisual communication or journalism sector. We propose to conduct a new survey in the companies where the students carry out their internships in the final cycle of their degree.

In short, this real experience shows that the design thinking methodology is applicable and beneficial for teaching in the area of Communication, more specifically advertising. In addition, we offer information on the organisation of the workshop, its strengths, weaknesses and proposals for improvement. For these reasons, we understand that this research will be of interest to professionals in university education and companies that seek to improve the skills of their students and employees when working as a team and creating innovative solutions.

## References

- Arias-Flores, H., Jadán-Guerrero, J., & Gómez-Luna, L. (2019). Innovación educativa en el aula mediante Design Thinking y Game Thinking. *Hamut'ay*, 6(1), 82-95.
- Brown, T. (2009). *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. Harper Collins, New York.
- Cevallos, J. R. D. (2015). *Plan de negocio de Lecolective: cómo crear una agencia de diseño y publicidad*. Universidad de Comillas, Madrid.
- Clark, K., & Smith, R. (2008). Unleashing the power of design thinking. *Design Management Review*, 19(3), 8-15.
- Cross, N. (2011). *Design thinking: Understanding how designers think and work*. Oxford, Berg.
- García-Uceda, M. E. (2011). *Las claves de la publicidad*. ESIC Editorial, Madrid.
- Glen, R., Suci, C., & Baughn, C. (2014). The need for design thinking in business schools. *Academy of management learning & education*, 13(4), 653-667.
- Gonen, Esra (2019). Tim Brown, Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation. *Markets, Globalization & Development Review*, 4(2).
- Groeger, L., & Schweitzer, J. (2014, July). Transformational leadership, design thinking and the innovative organization. In *European Group for Organizational Studies Conference*, [revised 2021 09 15], <https://bit.ly/2XjY4KF>
- Grots, A., & Creuznacher, I. (2016). *Design Thinking: Process or Culture?* In Walter Brenner & Falk Uebernickel (ed.), *Design Thinking for Innovation*, 183-191. Springer, Cham.
- Gloppen, J. (2009). Perspectives on design leadership and design thinking and how they relate to European service industries. *Design Management Journal*, 4(1), 33-47.
- IDEO (2012). *Design Thinking for Educators* [revised 2021 09 10], <https://bit.ly/3CdtGQN>
- Institute of Design at Stanford (2012). *Mini guía: una introducción al Design Thinking* [revised 2021 09 11], <https://bit.ly/3EfjqtF>
- Johansson-Sköldberg, U., Woodilla, J., & Çetinkaya, M. (2013). Design thinking: past, present and possible futures. *Creativity and innovation management*, 22(2), 121-146.
- Lee, C., & Benza, R. (2015). Teaching Innovation Skills: Application of Design Thinking in a Graduate Marketing Course. *Business Education Innovation Journal*, 7(1), 43-50.

- Lego (2010). *Open-source: Introduction to LEGO® SERIOUS PLAY®* [revised 2021 09 10], <https://bit.ly/2XmxhNu>
- Lewrick, M., & Link, P. (2015). Design thinking tools: Early insights accelerate marketers' success. *Marketing Review St. Gallen*, 32(1), 40-51.
- Liedtka, J. (2018). *Why design thinking works*. *Harvard Business Review*, 96(5), 72-79.
- Luchs, M. G., Swan, S., & Griffin, A. (2015). *Design thinking: New product development essentials from the PDMA*. John Wiley & Sons, New Jersey.
- Márquez, B. L. V., Hanampa, L. A. I., & Portilla, M. G. M. (2021). Design Thinking aplicado al Diseño de Experiencia de Usuario. *Innovación y Software*, 2(1), 6-19.
- Mateos-Ronco, A. y Server, R. J. (2011). Drawing up the official adjustment rules for damage assessment in agricultural insurance: Results of a Delphi survey for fruit crops in Spain. *Technological Forecasting & Social Change*, 78(9), 1542-1556.
- Miller, P. N. (2017). Is "design thinking" the new liberal arts? In Peter Marber & Daniel Araya (ed.) *The evolution of liberal arts in the global age (167-173)*. Routledge, New York.
- Ngamvichaikit, A. (2021). Leveraging Design Thinking for Pharmaceutical Digital Marketing. *Asian Journal of Business Research*, 11(1), 120-140.
- Pande, M., & Bharathi, S. V. (2020). Theoretical foundations of design thinking—A constructivism learning approach to design thinking. *Thinking Skills and Creativity*, 36, 100637
- Panke, S. (2019). Design thinking in education: Perspectives, opportunities and challenges. *Open Education Studies*, 1(1), 281-306.
- Putman, V. L., & Paulus, P. B. (2009). Brainstorming, brainstorming rules and decision making. *The Journal of creative behavior*, 43(1), 29-40.
- Puga, B. F., Espilla, A. Z., Unzueta, O. B., & Osa, T. E. (2018). Creatividad y Design Thinking en los TFG de un Grado en Comunicación Audiovisual. *Comunicación: Revista Internacional de Comunicación Audiovisual, Publicidad y Estudios Culturales*, (16), 1-18.
- Quiñones, C. (2013). *Desnudando la mente del consumidor*. Paidós Empresa, Barcelona.
- Qutp, M. M., Donia, S. H. A., & El-Sayed, E. E. M. (2019). The strategy of design thinking and its role in enhancing the competitive advantage of advertising organizations. *International Journal of Innovation and Applied Studies*, 27(1), 146-164.
- Reinecke, S. (2016). What is it that Design Thinking and Marketing Management can learn from each other? In Walter Brenner & Falk Uebernickel (ed.), *Design Thinking for Innovation*, 151-162. Springer, Cham.
- Rodrigo, M. (1995). *Los modelos de la comunicación*. Tecnos, Madrid.
- Romero, D. F., & Duarte, J. M. S. (2016). La enseñanza aprendizaje de la comunicación digital a través del Design Thinking. In José Francisco Durán-Medina e Irene Durán Valero (coord.) *TIC actualizadas para una nueva docencia universitaria*, 211-218. McGrawHill Educación, Madrid.
- Sebastián-Morillas, A., Martín-Soladana, I., Clemente-Mediavilla, J. (2020). Importancia de los insights en el proceso estratégico y creativo de las campañas publicitarias. *Estudios del mensaje periodístico*, 26(1), 339-348.
- Serrano, M., & Blázquez, P. (2016). *Design thinking*. ESIC, Pozuelo de Alarcón (Madrid).
- Snyder, K., Ingelsson, P. and Bäckström, I. (2018). Using design thinking to support value-based leadership for sustainable quality development. *Business Process Management Journal*, 24(6), 1289-1301.
- Stickdorn, M., Hormess, M. E., Lawrence, A., & Schneider, J. (2018). *This is service design doing: applying service design thinking in the real world*. O'Reilly, Sebastopol.
- Tevi, A., & Koslow, S. (2018). How rhetoric theory informs the creative advertising development process: reconciling differences between advertising scholarship and practice. *Journal of Advertising Research*, 58(1), 111-128.
- Toledo, L. A., Garber, M. F., & Madeira, A. B. (2017). Consideraciones acerca del Design Thinking y Procesos. *Revista Gestão & Tecnologia*, 17(3), 312-332.
- Turnbull, S., & Wheeler, C. (2017). The advertising creative process: A study of UK agencies. *Journal of Marketing Communications*, 23(2), 176-194.
- Valentim, N. M. C., Silva, W., & Conte, T. (2017). The students' perspectives on applying design thinking for the design of mobile applications. In *Proceedings of the 39th International Conference on Software Engineering: Software Engineering and Education Track (77-86)*. IEEE Press, Buenos Aires.

RECEIVED: 12 July, 2021

ACCEPTED: 13 September, 2021

Isabel Palomo-Domínguez is a PhD researcher in the Research Group International Review On Communication and Marketing Mix, IROCAMM (University of Seville, Spain). From 2015 to 2020, she was a lecturer in San Isidoro University Center (attached to the University of Pablo de Olvaide, Seville). In 2020-2021 she made an internship at the Vilnius Tech University and defended her doctoral dissertation at the University of Seville, receiving *cum laude* mention. Her research direction is advertising, innovative formats of marketing communication and its legality. She is also a practitioner in the communication field, founder of PALABRA\_ (estudiopalabra.com), a creative studio for advertising. Email addresses: ipalomo1@us.es; isabel@estudiopalabra.com. Spanish phone: +34 629 231 531. Lithuanian phone: +370 665 71019.



## PECULIARITIES OF APPLICATION OF INTERIM MEASURES IN ARBITRATION

Vilija Šlajienė, Renata Šliažienė

*Lithuania Business University of Applied Sciences*

### Abstract

With the entry into force of the new version of the Law of Commercial Arbitration, various amendments have emerged which have advantages and may have disadvantages, one of the main changes - the expanded list of measures of protection. Arbitration is a peaceful way of resolution of disputes, but the Institute for Interim Measures needs to be used in order for the arbitral award to be made. This article discusses specifics of application of interim measures in arbitration. The application of interim measures by the arbitral tribunal may have adverse consequences for the defendant. Therefore, this article will also discuss the possible damages resulting from the application of interim measures in arbitration, indemnity and compensation institute. An analysis of the case law provides conclusions as to whether an intermediate search and a balance of interests are maintained. The findings will also be made or the arbitral tribunal will grant the interim measures without the determination of the state court. In order to discuss in detail the peculiarities of the application of interim measures in arbitration, not only the legal acts and case law of the Republic of Lithuania are reviewed, but also the case law of foreign courts on this issue is analyzed. Problems arising from application of interim measures in national and foreign arbitration courts were also discussed. The analysis of the scientific literature provided preconditions for the formulation of questions, the answers to which would provide a deeper analysis of the scientific problem of this article. According to the results of scientific literature analysis, the general interview questions were formulated in order to get the in-depth insights of the experts about peculiarities of application of interim measures in arbitration. The 5 experts Arbitration specialists perform work functions in the arbitral tribunal were selected and interviewed using the interview method. According to the survey, four out of five respondents consider that it is not necessary for the legislature, in order to address the issue that the arbitral tribunal does not have the possibility to apply coercive procedural measures in the absence of an interim injunction, to allow the claimant to apply for excessive coercive measures. in an arbitration case, in parallel to bring a civil action before a court of general jurisdiction, requesting the use of coercive procedural measures.

KEY WORDS: interim measures; arbitration; incurred due to the application of the interim relief in the arbitration.

JEL: K15

### Introduction

Arbitration is one of the alternative ways of resolution of a dispute, when natural or legal persons, according to their agreement, apply to a third person or persons chosen by their agreement to resolve a dispute between them (Kaminskiene, Sondaite, etc. 2019). This is a general concept of arbitration, but in Lithuania the Institute of Commercial Arbitration is also distinguished. Article 3 of the Law on Commercial Arbitration the concept of commercial arbitration is presented more precisely, i.e. a method of resolution of a commercial dispute, when natural or legal persons, on the basis of a general agreement, apply or undertake to apply to an arbitrator (arbitrators) appointed by their agreement or in accordance with the procedure established by the Law on Commercial Arbitration, who ) adopts an arbitral award binding on the parties to the dispute (2012, Nr. XI-2089).

Unlike courts, arbitration is more flexible - the parties can agree on the language and location, the person and number of arbitrators and the procedure for their appointment, and the law applicable to the settlement of disputes. State court proceedings in Lithuania take quite a long time, therefore the choice of commercial arbitration as an alternative method of dispute resolution may be more operative and economical (Grasis, Sliaziene, 2016). It can be argued that this reflects the current global trend to recognize the powers of arbitrators (it is considered that an entity examining the substance of a dispute can best resolve the issue of interim measures) and provide an

opportunity to enforce such measures (Mikelenas, Nekrosius, 2016).

Following the entry into force of the new Law on Commercial Arbitration, the legislature extended the list of protection measures for interim measures that an arbitral tribunal is entitled to apply without, in exceptional cases, without notification of the defendant (2012, No. XI-2089). The previous version of the law lacked clarity in the application of interim measures, in particular as regards the powers and competence of arbitration. There was also no clear procedure of application for dealing with requests for measures, what measures the arbitral tribunal is entitled to apply, how they are implemented. The parties may even by common agreement waive the possibility of application of interim protection measures (Jokubauskas, Kirkutis et al., 2020).

The main aim of the article is To analyze the changes in the legal regulation of commercial arbitration via application of interim measures.

Objectives of research

1. To submit the main amendments to the Law of Commercial Arbitration.
2. To identify problems in the application of interim measures in arbitration.

Methods of research: qualitative analysis of scientific literature and documents, statistical data analysis, method of comparative document analysis.

The main aim of the article is to analyze changes in the legal regulation of commercial arbitration while application of measures of interim protection.

## Theoretical background

July 1, 2017 amendments of the Law on Commercial Arbitration entered into force and highlighted the advantages of the arbitration process as an alternative way of resolution of commercial disputes. The main and substantial change took place in setting a time limit for appealing against the annulment of an arbitration award. Upon filing an appeal against the annulment of the arbitration award, the Lithuanian Court of Appeal has to examine such appeal not later than within 90 days from the date of acceptance of the appeal in court. Such a change in the law makes the arbitration process even faster, as until then there was no maximum time limit for a court to appeal against the annulment of an arbitration award, and an appeal against the arbitration award postponed the final settlement of the dispute to a time limit not defined by law.

Another novelty of the wording of the Law on Commercial Arbitration is the granting of the status of an enforceable document to the decisions of the arbitral tribunal regarding the application of interim protection measures. This means that due to a non-enforceable arbitral award, Vilnius Regional Court issues a writ of execution at the request of one of the parties. An enforcement order is not issued in exceptional cases, and a separate complaint may be filed against the decision of Vilnius Regional Court to refuse to issue an enforcement order (2012, Nr. 76-3932, consolidated version 01-07-2017).

The Law on Commercial Arbitration provides an opportunity for the parties to apply to Vilnius Regional Court for the application of interim measures “regardless of the state in which the place of arbitration is located or where separate arbitration proceedings are performed”. This means that even if the parties choose foreign jurisdiction as the seat of arbitration for one reason or another, they can successfully use the assistance of local courts guaranteed by the Commercial Arbitration Act to apply the interim measures provided for in the Code of Civil Procedure in the context of foreign arbitration. Article 26 of the Law on Commercial Arbitration establishes the possibility to apply to the Lithuanian Court of Appeal regarding the recognition and enforcement in Lithuania of foreign arbitral awards or rulings on the application of interim measures. The courts also consistently rule on the application of interim measures in accordance with the rules of jurisdiction and the extension of the list of interim measures. It should be noted that in case law, an application for interim measures does not have to be based on the rules of jurisdiction in civil proceedings). The issues of application of judicial interim measures in arbitration proceedings are regulated by special norms of Article 147 of the CPC. 1 d. and Article 2 of the Law on Commercial Arbitration. 2 d. and Art. 1 d. (Order of the Court of Appeal of Lithuania of 26 August 2021 in civil case No. e2-639-330 / 2021).

One of the innovations is the extension of the list of interim measures. The new wording of the Law on Commercial Arbitration gives the Arbitration Court the right to prohibit a party from participating in certain transactions or performing certain actions, or to oblige a

party to protect property related to arbitration, to provide a cash deposit, bank or insurance guarantee (2012, No. 76-3932, summary edition 2017-07-01). This innovation has both positive and negative aspects, such as. so far, the Commercial Arbitration Law does not give the arbitral tribunal the right to seize a property of the party; on the other hand, the parties to the arbitration proceedings are not limited to the list of interim measures laid down in Article 20 (2) of the Law on Commercial Arbitration. The Law on Commercial Arbitration provides the parties with an opportunity to apply to Vilnius Regional Court for the application of other interim protection measures provided in the Code of Civil Procedure.

It should be noted that the Act of Commercial Arbitration provides for ex parte preliminary rulings on the application of interim measures. The arbitral tribunal shall make a preliminary ruling in cases where notification to the other party of the application for interim measures is likely to prejudice substantially the purposes of those measures. Although this change is an advantage, the effectiveness of preliminary rulings remains questionable for the time being because, unlike rulings under Article 20 of the Act of Commercial Arbitration, preliminary rulings are not enforceable documents. Vilnius Regional Court may also grant interim measures ex parte if there is a legal and factual basis for doing so.

Thus, it can be stated that the innovations in the wording of the Law on Commercial Arbitration of 30/06/2012 - granting the status of an enforceable document to arbitral awards on interim measures, extension of the list of interim measures, regulation of ex parte preliminary rulings on interim measures, possibility to apply to the Court of Appeal of Lithuania regarding the recognition and enforcement of foreign arbitral awards or rulings on the application of interim measures in Lithuania are very significant in the application of interim measures in arbitration, as the powers of the arbitral tribunal have been sufficiently extended

## Methodology

The analysis of the scientific literature provided preconditions for the formulation of questions, the answers to which would provide a deeper analysis of the scientific problem of this article. According to Kardelis (2016), expert interviews are appropriate for this purpose, as the researcher talks to experts to gain deeper insights into the phenomenon under study. Data from experts are obtained through in-depth interviews. Based on the assessments of the interviewed specialists, the degree of agreement of their opinions with the research question and the objectivity of the experts' conclusions are determined, which is determined by the essential, real connections between analyzed topics. For the specialist interview procedure, the interview interview method was chosen according to the pre-prepared questions. There was a problem in selecting specialists using this method. The interviewees do not have equal competence, different experience, legal areas of activity, etc. When selecting specialists, the most important criteria were their legal work experience in arbitration courts, as well as possible links with the use of special knowledge in their work. A

total of 5 respondents were interviewed, whose activities have implicit links with the analyzed topic. The obtained answers are systematized, analyzed and interpreted, qualitative data analysis data are used. Thus, carrying out the qualitative research there was sought to answer the general questions in Table 1.

Fifth Expert	Lawyer, who has specializes in dispute resolution courts and arbitration, has valuable experience in international (cross border) civil and family, inheritance cases, expertise in recognition and enforcement of foreign courts and arbitration decisions in Lithuania and abroad, has arbitrated several arbitration disputes, is recommended by VKAT arbitrator.
--------------	--

**Table 1.** In-depth interview general questions for experts

Questions
Q 1. Do you agree with the prevailing view that an emergency arbitrator who has ruled on interim measures may not later be a member of the arbitral tribunal in the same case?
Q 2. Has the emergence of the institute of urgency arbitrator led to an even greater autonomy of arbitration in civil proceedings, concentrating all the issues to be resolved in an arbitration case in one institution?
Q 3. What is your view on the need to provide for the possibility of ex parte interim measures in arbitration in the Model Law and the Commercial Arbitration Law?
Q 4. Is the arbitral tribunal likely to become less attractive to the plaintiff than a court of general jurisdiction, which has the discretion to grant interim measures without notifying the defendant?
Q 5. What criteria should arbitration tribunals use to determine the extent and amount of damages incurred as a result of the application for interim measures?
Q 6. What is the main advantage of a state court as an alternative to an urgent arbitrator?

To achieve this purpose, there were selected 5 experts at one of the who works in arbitration courts. The following criteria for the selection of respondents were established for the in-depth expert interview:

- 1) judges, mediators who work in arbitration courts.
- 2) mediators with at least 5 years of practical work and arbitration courts work experience.

Based on these criteria, there were selected five experts for the in-depth interview. Table 2 shows the reasons for the selection of experts.

**Table 2.** Reasons for selection of experts

Expert	Reasons for selection of an expert
First Expert	The associate professor of the Faculty of Law of Vilnius University, Event and Improvement of the Code of Civil Procedure of the Republic of Lithuania, Member of the Department of Humanities and Social Sciences of the Lithuanian Academy of Sciences. Research interests - civil procedure, Roman law, notary.
Second Expert	The associate professor, who has worked for 10 years in international arbitration disputes, in particular, ones arising under bilateral and multilateral investment treaties and high-value commercial agreements, having served as a consultant or representative to company claimants and respondents as well as government claimants and respondents.
Third Expert	The associate professor, partnership at the Faculty of Law of Vilnius University, a legal scholar, a practice lawyer, an artificial lawyer of private companies, as well as an advisor to the Chairman of the Civil Cases Division of the Supreme Court of Lithuania.
Fourth Expert	Experienced Professor with a demonstrated history of working in the higher education industry. Skilled in Mediation, Alternative Dispute Resolution, Public Procurement, and Management. Strong education professional with a Doctor of Law focused in Law from Mykolo Romerio Universitetas.

All selected experts legal scientists, mediators or judges with large experience, therefore they meet the objectives of in-depth research. In order to preserve the confidentiality of the experts, they were randomly coded: Q1, Q2, Q3, Q4 and Q5.

The reliability and comprehensibility of a qualitative research is based on the fact that the researcher can discover the answers to the main questions of the research, and the answers of the respondents are repeated, which shows that they are talking about the same thing.

## Results

Article 20 (1) of the Law on Commercial Arbitration lays down the basic provisions for the application of interim measures.

Firstly, it can be unequivocally concluded in accordance with Paragraph 1 of Article 20 of the Law on Commercial Arbitration of the Republic of Lithuania “unless the parties have agreed otherwise” that a separate agreement of the parties on granting powers to the arbitral tribunal to grant interim measures is not necessary. In the event that the parties have entered into an arbitration agreement, the arbitration shall be deemed to be entitled to apply for interim measures or to secure evidence at the request of one of the parties. In accordance with the principle of autonomy of a party, this also means the right of the parties to agree that the arbitral tribunal does not have such powers. Furthermore, the right of arbitration to grant interim measures does not mean that the parties are not entitled to apply to the national courts for interim measures. Although the arbitration agreement prevents the parties from the application to the state courts for the settlement of the dispute, the right of the parties to apply to the court with a request for the application of interim measures or securing evidence remains (Mikelenas, Nekrosius, Zemlyte, 2016).

Secondly, it is obvious that according to the norm in Article 20 (1) of the Law on Commercial Arbitration of the Republic of Lithuania the arbitral tribunal does not have the right to apply interim measures ex officio and they can be applied only if one of the parties (usually the plaintiff) request. (Mikelenas, Nekrosius, Zemlyte, 2016).

Thirdly, interim measures are granted by an arbitral tribunal, so it is firstly necessary to form them. As the formation of the arbitral tribunal takes a long time, it may also be necessary to wait a long time for the arbitral tribunal to grant interim relief. On the other hand, the rules of the arbitration institution for arbitration, or special rules, provide the possibility of urgent application of interim measures by appointing an interim arbitrator before the formation of the arbitral tribunal (Annex No. 1 to the formation of an arbitral tribunal).

Thus, the application of interim measures, if the parties agree, is also possible before the formation of an arbitral tribunal in order to hear the dispute on the merits.

Discussing in detail the emergence of the institute of urgency arbitrator - it is related with the complicated application of interim measures before the formation of the arbitral tribunal and the promotion independence of the arbitration process (Bliuvaite, 2015).

The first time, the appointment of an urgent arbitrator (since 2006) is incorporated into the regulations of International Centre for Dispute Resolution (ICDR) (Regulations of International Centre for Dispute Resolutions (ICDR), 2006). Since 2012 The Institute of Urgency Arbitrator also appeared in the Regulation of Arbitration of the International Chamber of Commerce: "The decision on interim measures to be applied expeditiously shall be made by the Urgency Arbitrator and shall be binding on the parties, but the arbitral tribunal constituted subsequently shall have the right to amend or abolish them". The Regulations of Arbitration of the International Chamber of Commerce extended the possibilities for parties to decide on interim measures without recourse to a national court. (Chvalej, Pavan, Zukova, 2013). In 2013 In Lithuania, the Regulations of Arbitration Procedure of Vilnius Commercial Arbitration Court was supplemented with an annex on the procedure for application of interim measures before the formation of the arbitral tribunal (Annex No. 1 of Vilnius Court of Commercial Arbitration Regulation of Procedure of Arbitration "Procedure (procedure) of the application of interim measures before the formation of the arbitral tribunal."

The provisions of this Annex are broadly in line with the procedure for the appointment of an urgent arbitrator established by the International Chamber of Commerce. The procedure of submission of applications for the appointment of an interim arbitrator, the competence of an interim arbitrator, the procedure for examining applications, the costs of the procedure and other issues are detailed. This extends the ability of parties to defend themselves against non-compliance and to deal with the issue of interim relief as a matter of urgency, as the general deadlines for appointment of interim arbitrator are 3 days from receipt of the request and 3 days from referral. On the other hand, the Lithuanian Law on Commercial Arbitration does not regulate the institute of urgent arbitrator at all and provides only the right of a party to apply to Vilnius Regional Court to procedure interim measures or to guarantee the provision of evidence before the commencement of arbitration proceedings or formation of an arbitration tribunal. However, the same law states that because of common agreement the parties of the dispute have the right to deviate from all the rules of that law, with the exception of mandatory rules, and the agreement of the parties of arbitration includes the application of any arbitration regulations included in that agreement. Thus, for example, the regulation of Vilnius Commercial Arbitration Court substantially expands the possibilities of a party of an arbitration agreement to apply for urgent interim measures, as the law provides possibility to apply to a state court, but does not preclude an urgent application for arbitration.

As regards institutional but ad hoc arbitration (ad hoc arbitration is arbitration where, by agreement of the parties, the dispute resolution proceedings are not

organized by a permanent arbitral tribunal), the issue of urgent interim measures remains debatable and should be included in the arbitration clause (Bliuvaite, M. 2015). The arbitration clause states that the urgent arbitrator should be appointed by the ad hoc arbitral tribunal. In practice, such a procedure, and in particular the enforcement of urgent arbitration awards, is still quite complicated and uncertain. For example, in 2010 The UNCITRAL Arbitration Rules, one of the most commonly used and applied to ad hoc arbitration proceedings (although they are also used for institutional arbitration and are followed by some arbitration bodies in the administration of disputes), do not regulate the urgency of arbitration and interim measures pending arbitration. Thus, while ad hoc arbitration may offer the possibility of appointment of an urgent arbitrator, the practical model for that implementation does not have adequate guidance yet.

The main problematic issue with the Institute for Urgent Arbitration is the enforcement of decisions. Up till now, the status of an urgent arbitrator compared to an arbitrator in an arbitral tribunal remains questionable, as the question arises whether an emergency arbitrator can in fact be considered as an arbitrator under national arbitration laws in which this institute has not been and is not established? (Kidane, L. 2017). If we consider that the urgency arbitrator can be treated in the same way as an arbitrator of an arbitral tribunal, then the legal force and enforcement of his decisions will be the same as that of an arbitral tribunal. Otherwise, the theoretical aspect of the issue of the definition of an urgent arbitrator is less important than the practical one, where state courts will not enforce decision of an emergency arbitrator because of the questionable powers of that arbitrator. Another important aspect that complicates enforcement is the temporary nature of the decision (Bliuvaite, 2015). Enforcement of decision of an urgent arbitrator is often complicated by its temporary nature - a provisional, unconfirmed procedural decision. The fact that the arbitral tribunal formed may reverse the decision of the urgent arbitrator makes it temporary not even in terms of the final decision of the case, but even in terms of another procedural decision.

Another problematic issue with regard to the Institute of Urgent Arbitrator is the procedure of appointment of an urgent arbitrator, which raises questions about the criteria for selecting an urgent arbitrator and the competence to examine an application for interim measures. An emergency arbitrator is normally appointed by the chairperson of the arbitral tribunal from a list of arbitrators of that authority. Also, the arbitral tribunal has the right to appoint as an emergency arbitrator a person who is not included in the list of arbitrators but who has the necessary knowledge and competence to do so. (Annex No. 1 to the Rules of Arbitration Procedure of Vilnius Commercial Arbitration Court "Procedure for Application of Interim Safeguards (Procedure) Prior to the Formation of the Arbitration Court", Article 1, paragraph 5 d).

According to the authors of the article, however, the status of an urgent arbitrator should be established in national arbitration laws by equating the status of an urgent arbitrator with an arbitrator of an arbitral tribunal,

so that the decisions and decisions of an urgent arbitrator have the same legal force and enforcement as an arbitral tribunal.

Unfortunately, national arbitral tribunals do not publish official statistics how often the parties of arbitral tribunals are granted with interim measures. Could it be assumed, because arbitration is settled faster than in national courts and therefore does not even require interim measures? Perhaps for this reason, the application of interim measures in arbitration cases is such and so rare?

As mentioned above, Paragraph 1 of Article 20 of the Law on Commercial Arbitration of the Republic of Lithuania clearly establishes the right of arbitrators to apply interim protection measures. It should be noted that the arbitral tribunal is deemed to be entitled to grant interim relief, although the jurisdiction of the arbitral tribunal to hear the dispute is in process of discussion. Such approach is entirely logical, since otherwise an objection of jurisdiction alone would be sufficient to prevent the arbitral tribunal from being applied. On the other hand, this does not mean that the arbitral tribunal does not consider the question of its jurisdiction at all while considering an application for interim measures. It is common practice for arbitrators to *prima facie* assess the merits of an objection of jurisdiction (if so stated or if one of the parties does not take part in the proceedings) and to refuse interim measures if it finds that there is no jurisdiction. The fact that arbitrators have such an obligation is also confirmed by Article 25 of the Law on Commercial Arbitration of the Republic of Lithuania, according to which Vilnius Regional Court may refuse to issue order of enforcement if the arbitral tribunal clearly exceeded its competence (Mikelenas, Nekrosius, 2016).

It is noted that an arbitral party may apply to Vilnius Regional Court for interim measures both before the commencement of the arbitration proceedings or before the conclusion of the arbitral tribunal and after the establishment of the arbitral tribunal (Article 27 (1) of the Law on Commercial Arbitration of the Republic of Lithuania, 1996, no. 39 - 961, consolidated version 01/07/2017). Vilnius Regional Court, having applied interim measures before filing a claim with the arbitral tribunal, determines the term within which the claim must be filed. This period may not exceed fourteen days. If the claim is to be submitted to foreign arbitration, the time limit may not exceed thirty days. If no action is brought within the time limit set by the court, the interim measures are revoked). It is noted that Vilnius Regional Court, assessing the claims and evidence submitted in accordance with Article 144 (1) of the Code of Civil Procedure *prima facie*, does not draw any conclusions regarding the validity of the arbitration agreement. According to the doctrine of competence - competence, this issue is left to be decided by the Arbitration Court (Order of the Lithuanian Court of Appeal of 26 April 2018 in case no. E2S-921-796 / 2018).

A party seeking interim measures pending the formation of the arbitral tribunal has to state the reasons justifying the urgency of the application of such measures in the request to the arbitral tribunal. (Annex No. 1 to the Rules of Arbitration Procedure of the Vilnius Commercial Arbitration Court "Procedure for

Application of Interim Safeguards (Procedure) Prior to the Formation of the Arbitration Court", Article 1, Paragraph 3). Extreme urgency is essentially the main criterion for the selection of applications, on the basis of which the interim arbitrator decides on the granting of interim measures. Although neither the Lithuanian Law on Commercial Arbitration nor the UNCITRAL Rules provide the right to apply interim measures without notifying the other party to the urgent arbitrator, it can be assumed that further extension of the special urgency element is likely to occur where *ex parte* application is already established after referral. In addition, the balance of interests of the parties remains doubtful, when due to special urgency measures of temporary protection are applied without issue of securing losses consideration. (Bliuvaitė, M. Urgency Arbitrator Institute, 2015). A party which has not been informed of the interim measures imposed on it may apply for damages after those measures have been imposed on it. However, it is not clear whether an urgent arbitrator whose term ceases as soon as an arbitral tribunal is formed should also address this issue. Otherwise, the arbitral tribunal, having taken over the right to impose, amend or revoke interim measures, should also take over the right to consider the losses arising from the provision of instruments used by the emergency arbitrator (Mikelenas, Nekrosius, Zemlyte, 2016).

Thus, to summarize the emergence of the institute of urgency arbitrator, it can be stated that the emergence of this institute has led to even greater independence of arbitration in civil proceedings, concentrating all issues to be resolved in an arbitration case in one institution.

Next, with regard to the grounds for interim measures in arbitration, an important provision is that the examination of the application for interim measures must be notified to the other party. As mentioned above, this provision is one of the essential differences between institutes of protection in institutes of court and arbitration, as the application of such measures is usually decided *ex parte* in court. In a study conducted by the authors of the article, three (out of four) arbitrators emphasized that, in this respect, the arbitral tribunal becomes less attractive to the parties to the dispute than the court of general jurisdiction. Since, as is clear from Article 20 (1) of the Commercial Arbitration Act, the general rule states that the examination of interim measures must be notified to the other party, giving latter the right to comment on the application, thus enabling that party to get prepared for future interim measures and possible actions in order to avoid their consequences (Mikelenas, V. et al. *Ibid.*, p. 99).

As an exceptional rule, the arbitral tribunal has the power to make preliminary rulings when the other party has not been informed of the acceptance of the request for a preliminary ruling. It goes without saying that the arbitral tribunal has the power to make preliminary rulings if the parties have agreed to this clause. The parties may also agree that the arbitral tribunal does not have such a right, and they may supplement or amend the rules laid down in the Commercial Arbitration Act regarding the conditions and procedure for making preliminary rulings. In summary, a party to a dispute which wishes interim measures to be granted *ex parte* and

this order to be enforced is obliged to apply to a national court because he cannot count on the assistance of an arbitral tribunal.

The fifth, the decision of the arbitral tribunal to grant interim measures is formalized by an order and not by a decision. Arbitration awards on interim measures are enforceable. An arbitral award is made instead of a decision, therefore the institute of annulment of an arbitration award does not apply to interim measures, such orders may be considered by a court of general jurisdiction only during the enforcement procedure and only on limited grounds provided for in Article 25 of the Commercial Arbitration Law (Mikelenas, V., Nekrosius, V., Zemlyte, E. 2016). Meanwhile, under Article 21 (7) of the Commercial Arbitration Law, a preliminary ruling is binding on the parties, but, unlike interim injunctions under Article 25 of the Commercial Arbitration Law, it is not an enforceable document. There is therefore no procedural possibility to compel the other party to comply with the preliminary ruling. That is why the Institute of Preliminary Rulings is one of the most controversial institutes of the UNCITRAL Model Law: although it allows interim measures to be granted without notifying the other party, it cannot compel such a party to comply with an obligation imposed by an arbitral tribunal. On the other hand, the meaning of preliminary rulings is not insignificant because they are binding on the parties. Thus, although a breach of or non-compliance with a preliminary ruling does not have procedural consequences, it can be regarded as an unlawful act of a party. Under other circumstances of civil liability, the defaulting party may be required to pay damages.

The essential principles of the application of interim measures in arbitration should be mentioned here: Article 20 of the Law on Commercial Arbitration. 3 d. it is provided that the party seeking interim measures must in particular prove that:

- (1) its claims are likely to be well founded; the determination of this probability shall not prejudice the right of the arbitral tribunal to render a different award or ruling at a later stage in the arbitral proceedings;
- 2) in case of the absence of such measures, the enforcement of the award of the arbitral tribunal may become substantially more difficult or impossible;
- (3) Interim measures are economical and proportionate to the aim pursued.

Lithuanian Court of Appeal in civil case no. e2-316-241 / 2017: “The case law of the Lithuanian Court of Appeal clarified that interim measures must be applied taking into account the factual circumstances of the case and in accordance with the principles of justice, economy and proportionality. The principle of economy requires the court to apply such and such interim measures seeking to ensure the enforcement of a future judgment, and the principle of justice obliges the court to maintain a balance of interests between the parties to the proceedings. The application of the principle of proportionality in deciding interim measures means that the court, when applying such measures, should assess the legitimate interests of both the plaintiff and the defendant and not give any of them unreasonable priority [...].” (Lithuanian Court of Appeal March 9, 2017 Order in Civil Case No. e2-316-241 / 2017). Thus, interim measures in arbitration are

applied on the basis of the basic principles of economy and proportionality. This means that, in the first instance, the party must, when applying for interim measures in arbitration, prove that the interim measures granted are economical and proportionate to the aim pursued. On the other hand, the arbitral tribunal must comply with these general principles before granting interim measures.

## Conclusions

With the entry into force of the new version of the Law on Commercial Arbitration, arbitral awards, appeals procedures and deadlines comply with the provisions of the UNCITRAL Model Law, but the Lithuanian Court of Appeal has the exclusive right to decide on annulment of arbitral awards. The new wording of the law defined the granting of the status of an enforceable document by arbitration court rulings on the application of interim measures, extension of the list of interim measures, regulation of ex parte preliminary rulings on the application of interim measures. Also, the possibility to apply to the Lithuanian Court of Appeal for recognition and enforcement of foreign arbitral awards or interim measures in Lithuania is very significant in the application of interim measures in arbitration, as the powers of the arbitral tribunal in the field of interim measures have been sufficiently extended and foreign arbitration has been developed. ensuring the rights of the parties in Lithuania.

The arbitral tribunal must, as a general rule, notify the other party of the examination of the application for interim measures, whereas in the meantime, the court will normally decide on the application of such measures ex parte. In this respect, the arbitral tribunal becomes less attractive to the plaintiff than the court of general jurisdiction. It is noted that applications for interim measures are not intended to settle the case, but only to enable a future arbitral award in favor of a party to be enforced. Even if several applications for interim measures were made in the courts of different States, such decisions (orders) of different courts on the (non) application of interim measures would not change the final outcome of the case, as the claims are decided by only one arbitral tribunal and the courts. there is no risk of incompatibility of decisions. An application for interim measures must not be based on the rules of jurisdiction in civil proceedings. It is noted that the issues of application of judicial interim measures in arbitration proceedings are regulated by a special norm of Article 147 of the CPC. 1 d. and Article 2 of the Law on Commercial Arbitration. 2 d. and Art. 1 d.

As the criteria are not regulated by national arbitration law, the scope and extent of the provisions on the determination of arbitral tribunals that may be applicable to interim measures should be taken into account, and negative incomes should be taken into account. the loss of income must be proved with reasonable certainty that the interim measures granted have led to a loss of the defendant's future income; the actions of the defendant himself, whose assets have been subject to procedural restraints, must be assessed - whether he acted actively to change the interim measures.

## Reference

- Bliuvaite, M. (2015). Skubos arbitro institutas. *Journal of Law*, 960, 112-125.
- Chvalej, V., Pavan, V. V., Žukova, G. (2013). Nauja Tarptautinių prekybos rūmų arbitražo reglamento redakcija. *Journal of Law*, 201-216.
- Daujotas, R. (2016). Arbitražo teisės teorija – teisinio realizmo perspektyva, *Journal of Law*, No. 1392-1274.
- Decision of the United States District Court of the Southern District of California Chinmax Medical Systems Inc v. Alere San Diego Inc.*, 2010, case number 10cv2467 WQH (NLS).
- European Convention of the Protection of Human Rights and Fundamental Freedoms*, 1995, Nr. 40- 987.
- Judgment of European Court of Human Rights in Tabbane v. Switzerland*, 2016, Nr. 41069/12.
- Judgment of European Court of Human Rights in Suda v. Czech Republic*, 2010, Nr. 1643/06.
- Jokubauskas, R., Kirkutis, M. ir kt. (2020). *Ginčų nagrinėjimas komerciniame arbitraže*. Vilnius: MRU.
- Kaminskienė, N., Sondaitė, J. ir kt. (2019). *Mediatoriaus vadovas. Metodinis leidinys*. Vilnius: MRU.
- Kidane, L. Won. (2017). *The Culture of international Arbitration*. Oxford University Press.
- Lietuvos Respublikos komercinio arbitražo įstatymas, 1996, Nr. 39-961, suvestinė redakcija 2017-07-01.
- Lietuvos Aukščiausiojo Teismo Civilinių bylų skyriaus teisėjų kolegijos 2013 m. birželio 28 d. nutartis civilinėje byloje UAB „Abipa Logistics“ v. Kutter, bylos Nr. 3K-7-181/2013.
- Lietuvos Aukščiausiojo Teismo Civilinių bylų skyriaus teisėjų kolegijos 2010 m. vasario 9 d. nutartis civilinėje byloje ECE European Group Limited et. al. v. AB Orlen Lietuva et. al., bylos Nr. 3K-3-64/2010.
- Lietuvos apeliacinio teismo 2021 m. rugpjūčio 26 d. nutartis civilinėje byloje Nr. e2-639-330/2021 byloje Atmos Zero Pte Ltd v. Viridian Armada AG “.
- Lietuvos apeliacinio teismo civilinių bylų skyriaus 2013 m. rugsėjo 16 d. nutartis civilinėje byloje Nr. 2-2139/2013 A. S., UAB „3 RILL“ v. KŪB „Litcapital I“).
- Lietuvos apeliacinio teismo 2018 m. balandžio 26 d. nutartis byloje Nr. e2S-921-796/2018 „Platano Eesti OU v DALRIADA”.
- Lietuvos apeliacinio teismo civilinių bylų skyriaus 2014 m. rugsėjo 29 d. nutartis civilinėje byloje Nr. 2T-84/2014 OŪ „Sativa Group“ v. UAB „Galinta ir partneriai“.
- Lietuvos apeliacinio teismo Civilinių bylų skyriaus teisėjų kolegijos 2017 m. kovo 2 d. nutartis civilinėje byloje AB „Orlen Lietuva“ v. AB „Lietuvos geležinkeliai“, bylos Nr. e2A-61-381/2017.
- Lietuvos apeliacinio teismo 2017 m. kovo 9 d. nutartis civilinėje byloje Nr. e2-316-241/2017 SIA „LDZ CARGO“ v. UAB „Logipolijos vagonai“.
- Lietuvos apeliacinio teismo 2013 m. rugpjūčio 1 d. nutartis civilinėje byloje Nr. 2-1900/2013.
- Lietuvos apeliacinio teismo 2016 m. lapkričio 30 d. Civilinių bylų skyriaus teisėjų kolegijos nutartis civilinėje byloje UAB „Latakko“ v. UAB „NTA namas“ ir G.Š., bylos Nr. e2T-86-381/2016.
- Lietuvos apeliacinio teismo 2016 m. lapkričio 10 d. nutartį civilinėje byloje Nr. e2-1451-381/2016 R. B. v. UAB „Group Europa Investment“.
- Lietuvos apeliacinio teismo civilinių bylų skyriaus 2014 m. balandžio 3 d. nutartis civilinėje byloje Nr. 2-674/2014.
- Mikelėnas, V., Nekrošius, V., Zemlytė, E. (2016). *Lietuvos Respublikos komercinio arbitražo įstatymo komentaras*. Vilnius: Registrų centras.
- Petkutė - Gurienė, J. (2017). Komercinis arbitražas ir teisingo bylos nagrinėjimo garantijos pagal Europos žmogaus teisių konvencijos 6 (1) straipsnį. *Jurisprudencija*, Nr. (2)-24.
- Sinkevičius, E., Norkus, R. (2013). Laikinių apsaugos priemonių taikymas nagrinėjant ginčus Lietuvos komerciniuose arbitražuose. *Journal of Law*, 1392-1274.
- Šliažienė, R., Grasis, J. (2016). Comparison of the legal environment of the business in the Republic of Latvia and the Republic of Lithuania. *Vadyba Journal of Management*. Nr. 2 (31).
- UNCITRAL pavyzdinis įstatymas dėl tarptautinio komercinio arbitražo. 1985, Nr. A/40/17, I priedas.
- Vilniaus apygardos teismo 2017 m. sausio 23 d. nutartis civilinėje byloje Nr. e2-3238-653/2017 UAB „Logistikos sprendimų centras“ v. UAB „Ipsun“.
- Vilniaus komercinio arbitražo teismo arbitražo procedūros reglamento priedas Nr. 1 „Laikinių apsaugos priemonių taikymo tvarka (procedūra) iki arbitražo teismo suformavimo.
- 1958 metų Niujorko konvencija dėl užsienio arbitražų sprendimų pripažinimo ir vykdymo*, 1995, Nr. 10-208.
- 2012 International Arbitration Survey: Current and Preferred Practices in the Arbitral Process*. 2012, Queen Mary University and White & Case, p. 2.

**RECEIVED: 14 July, 2021**

**ACCEPTED: 13 September, 2021**

---

**Vilija Slajiene**, Lecturer of Law, Lawyer of Lithuanian Business University of Applied Sciences, Research Areas of Law (01S). 1 scientific article has been published. Phone: +37046314320. El. E-mail teisininke@lrvk.lt

**Renata Sliaziene**, Head of Department of Law of Lithuanian Business University of Applied Sciences, Lecturer in the field of law, Law (01S) research areas. 4 scientific articles have been published. Tel: +37065653964, el. E-mail renata.sliaziene@lrvk.lt



## STUDENTS' ATTITUDE TOWARDS VOLUNTEERING IN SPORT

Asta Budreikaitė<sup>1</sup>, Vytė Kontautienė<sup>1,2</sup>, Raimonda Tamoševičienė<sup>2</sup>, Rasa Grigolienė<sup>1,2</sup>

<sup>1</sup>Klaipėda university, <sup>2</sup>Lithuania Business University of Applied Sciences

### Abstract

This article deals with the issue of volunteering in sport. Participating in sport volunteering is beneficial because it increases social integration, social participation, and social awareness. With the growing importance of volunteering for both the volunteer and society, sport volunteering is becoming a phenomenon that fosters and encourages volunteer initiative. In Lithuania, volunteering in sport is still developing, so it is important to research the motivation of volunteers and direct their energy to volunteering.

The aim of the research is to reveal the attitude of students involved in sports towards sport volunteering from the gender point of view. The research was conducted in 2018–2019. The sample of research subjects was formed on the basis of criteria selection – 163 students of higher education institutions (102 from Klaipėda University and 61 from Lithuania Business University of Applied Sciences) participated in the research. The survey (written) was conducted by submitting questionnaires to the respondents in paper or electronic version. The research instrument consisted of 22 closed-ended questions aimed at revealing the attitudes and views of respondents towards volunteering in sport by gender. The methods of mathematical-statistical analysis were applied to data processing; statistical differences were evaluated using Chi-square ( $\chi^2$ ) criterion.

Main findings and value of the paper: research participants distinguished quite different psychological reasons that lead to volunteering. For male students it is more important to be part of the team (26.6%) and to feel valued, recognized (18.7%), whereas female students emphasize personal development (18.7%) and gaining self-confidence by participating in voluntary activities (12.5%), ( $p < 0.001$ ). It was revealed that there was a statistically significant ( $p < 0.05$ ) difference between the attitudes of male and female students towards the benefits of volunteering for the volunteer himself / herself. Most respondents, both male and female, see the benefits of volunteering in two areas: a way to try themselves in new activities and the opportunity to meet interesting people, share and obtain new ideas. However, male students find volunteering in those areas more beneficial than female students. It has been revealed that male students are ready to spend more time volunteering in sport than females, so this activity is more relevant for them ( $p < 0.001$ ). More than a quarter (28.1%) of the male students from the research could volunteer up to 18 hours a week, while female students (23.4%) could devote up to 12 hours a week. Male research participants indicate the following opportunities: participation in sport activities (18.7%), acquisition of new skills (14.1%), while female participants emphasize better employment opportunities (17.2%), and acquisition of new skills (10.9%). A small percentage of females (3.1%) consider volunteering as an opportunity to participate in sport activities ( $p < 0.001$ ).

KEY WORDS: attitude; volunteering in sport; motives for volunteering.

JEL: M12, I2, I23.

### Introduction

The Law on Volunteering describes volunteering as a socially useful activity willingly carried out by a volunteer free of charge. Volunteering can be focused not only on the individual, but also on other goals, such as riverbank or forest management, assistance in sport competitions, and so on. (Malinauskas, 2010). Volunteers are actively involved in solving social, environmental problems, and other issues relevant to society (Kurapkaitienė & Sadauskas, 2013).

The issue of volunteering is still relevant because while volunteers and volunteer-involving organizations have adapted to a variety of changing circumstances, they are also likely to face many challenges in the future (Hoye, Cuskelly, Auld, Kappelides & Misener, 2019). It is therefore important to regularly measure and monitor the nature and extent of volunteer work.

In Europe, volunteering is a widespread civic engagement phenomenon. This can be illustrated by the fact that from 92 to 94 million adults (from 22% to 23% of the adult population) volunteer in the European Union (EU) (European Union, 2010). In Germany, for example, 2.8 million citizens participate in voluntary services in sport clubs (Wicker & Breuer, 2013). Approximately 10% of the population in Finland and 25% of the population in Holland volunteer in organizations related to sports (Groll, Koopmann, & Hansch, 2008).

Volunteering in Lithuania is taking up an increasing part of youth leisure. This phenomenon is gaining popularity and its benefits for young people are undeniable. This trend is revealed by the results of research conducted abroad (Aisbett & Hoye, 2015; Baxter, Kappelides, & Hoye, 2021; Hoye, Cuskelly, Auld, Kappelides & Misener, 2019; Schlesinger, & Nagel, 2016; Erturan-Ogut, 2014; Taylor, Panagouleas, & Nichols, 2012). Lithuanian scholars also analyse and research the importance of volunteering and the problems that hinder its development. Jonutyte (2007), in her work, presents volunteering in detail as an activity and as a phenomenon, Kurapkaitienė and Sadauskas (2013) revealed the links between volunteering and social work, Jezukevičiūtė and Skirmantienė (2015) analysed the importance of informally acquired competencies in the Lithuanian labour market. The spread of the volunteering phenomenon allows to supplement the resources of organizations, guarantees the transparency and openness of organizations hosting volunteers, and contributes to the development of public responsibility.

In scientific literature, volunteering is increasingly associated with the development of opportunities for young people to expand and improve their knowledge and skills (Jonutyte, 2007). In Lithuania, sport volunteering is still developing, so it is quite difficult to involve, attract and later retain volunteers, which is probably a more complicated process, as they need to be properly motivated and have their energy directed to

work. Also, to foster a sense of loyalty and develop a duty to work (Kerevičius, 2017). Other problems of volunteering are related to increasing requirements to special skills, lack of free time left after regular paid work, and growing disagreements about family responsibilities.

Despite a number of research on volunteering, its activities and the emerging trends, volunteering is still not given enough attention to make it attractive, promoting not only civic and social initiatives, but also personal self-expression and self-realization. In sport volunteering, a great deal of attention should be paid to the personal initiative of volunteers, its competence in planning and implementation, and the promotion of responsibility for the decisions made (Brabazon, Matisoff, & Ražaitis, 1999).

Scientific literature also distinguishes the benefits provided by sports volunteers, which interact with the problems inherent in volunteering: economy, competence and efficiency, motivation, large scope of sports activities and their exposure, retention of former athletes or sports professionals in sports, ensuring the relationship between sports organization and society, etc. So, this is what justifies the importance and benefits of sport volunteering not only for the volunteer himself / herself, but also for the organization and society.

It has been noticed that as the manifestation of various social problems increases in our society, the phenomenon of volunteering becomes especially vivid and important. The concept of volunteering varies depending on the goals and peculiarities of volunteering, but the main trends remain, emphasizing the main goals, grounds and guidelines of volunteering. With the growing importance of volunteering for both the volunteer and society, sport volunteering becomes a rather complex phenomenon, when the problems of sport volunteering interact with the fostering and promotion of volunteer initiative.

The aim of the research is to reveal the attitude of students involved in sports towards sport volunteering from the gender point of view.

## Research methodology

A questionnaire prepared by the authors of the article, which was based on the studied sources of scientific literature, was chosen for the implementation of the research. The research instrument consisted of 22 closed-ended questions aimed at elucidating the attitudes of respondents towards volunteering in sport by gender. The questionnaire consists of two parts – demographic and diagnostic questions, which allow revealing the motives of students' choice of volunteering, the meaning of volunteering, the experience of volunteering by distinguishing the areas of volunteering in sport.

The research was conducted in 2018–2019. The sample of respondents was based on a criteria selection – 163 students of higher education institutions (102 from Klaipėda University and 61 from Lithuania Business University of Applied Sciences) participated in the research.

The survey (written) was conducted by submitting questionnaires to the respondents in paper or electronic version, i. e. by sending the questionnaire to the

respondent by email. A total of 200 questionnaires were distributed, but due to objective reasons (incorrect completion, failure to return the questionnaire to the research organizer, etc.) 163 participants took part in the research. Students of Klaipėda University accounted for 62.57 percent (n = 102) of the respondents, Lithuania Business University of Applied Sciences students – 37.4% (n = 61).

The distribution of the respondents by gender shows that 56% (n=92) of male students and 44% (n=71) of female students participated in the research. The distribution of the respondents by age reveals that 60.9% of students who participated in the research were 18-25 years old, a smaller part (32.7) was made up of students aged 25-35, and 6.3% of students were older than 35 years.

The distribution of students according to the experience in volunteering shows that the largest – up to 5 years – experience in sport was mostly attributed to students aged 18-25 (37.5%), whereas older students accounted for 22.0%. 10.9% of younger (18-25 years) and 4.5% of older (25-35 years) students had volunteering experience in sport up to 3 years. 9.3% of all respondents in various age groups have volunteered for the period of up to 1 year. 14.1% of the researched students of various age groups had no volunteering experience in sport.

Methods of mathematical-statistical analysis were applied to data processing. Statistical differences were evaluated using Chi-square ( $\chi^2$ ) criterion. The difference is considered statistically significant when the confidence level is  $p < 0.05$ . Mathematical statistical analysis of data was performed using SPSS (Statistical Package for Social Sciences) 22.0 for Windows.

## Research results

During the research, it was important to reveal the subjects' attitudes and motives that encouraged them to participate in voluntary sports activities. The results are presented from a gender perspective. Fig. 1 presents the attitudes of the respondents (male and female students) towards participation in voluntary sports activities.

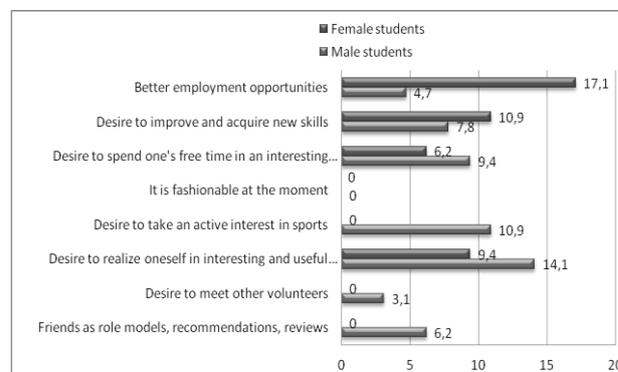


Fig. 1 Students' attitudes towards participation in voluntary sports activities by gender (%)

Relatively most (17.1%) of the female students who participated in the research expressed the attitude that they would be more actively involved in volunteering if it increased their employability, created opportunities to

develop and acquire new skills (10.9%), and enabled them to realize themselves in an interesting and at the same time a beneficial environment for others (9.4%).

A relatively large part (14.1%) of male respondents indicate that they would be more motivated to participate in voluntary sport activities by the following factors: opportunities to realize themselves in interesting and useful activities, desire to take an active interest in sports (10.9%), desire to spend one's free time in an interesting way (9.4%).

The aim was to find out the motives that led to participation in voluntary sport activities (Figure 2).

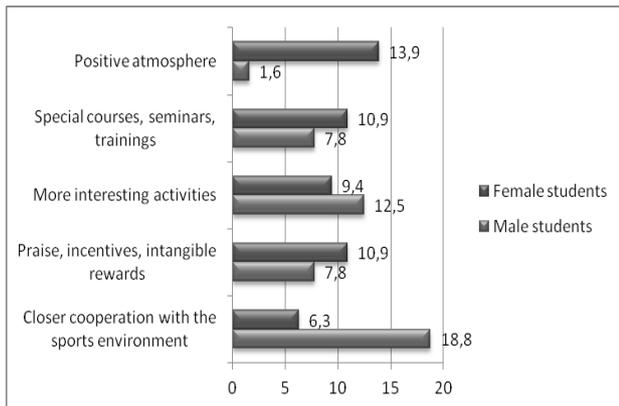


Fig. 2 Distribution of the most significant volunteering motives by gender (%)

The relatively largest number of male students who participated in the research (18.8%) indicate that the most significant motivating factors are closer cooperation with the sports environment, more interesting activities (12.5%), praise and incentives (7.8%), motivation to participate in special volunteer development courses (7.8%).

The female participants of the research distinguish other most significant motives of volunteering – positive atmosphere (13.9%), praise (10.9%), motive to participate in volunteer development courses (10.9%), as well as the importance of more interesting activities (9.4%). It can be observed that more male than female students focus on closer cooperation with the sports environment, whereas female participants of the research do not emphasize this motive of volunteering. Both groups of research participants – females and males – emphasize that volunteers would be even more motivated by more interesting activities, a better incentive system, special volunteer courses and other training.

Another question of the survey was aimed at finding out the psychological reasons of the respondents, which may lead to active volunteering (Figure 3).

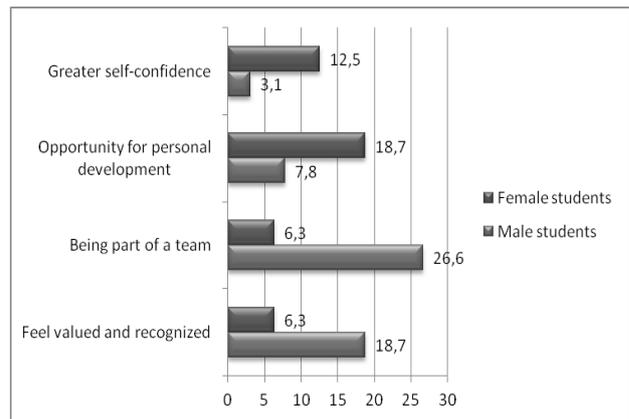


Fig. 3 Psychological reasons for choosing volunteering (%)

The relatively largest part (26.6%) of male students reveal that it is important for them to feel part of the team when volunteering, for 18.7% of male students it is important to feel valued and recognized. These psychological reasons are not so important for another group of respondents – female students, because they emphasize completely different reasons for volunteering – opportunities for personal development (18.7%) and the opportunity to gain more self-confidence (12.5%), ( $t=45.927$ ,  $df=3$ ,  $p=0.000$ ), ( $p<0.001$ ).

It can be stated that male students are more focused on the desire to be useful to the team, group, community, while female students pay more attention to personal development and gaining experience. This suggests that research participants indicate quite different psychological reasons for volunteering.

The aim of the research was to find out the respondents' attitudes about the factors that hinder volunteering (Figure 4).

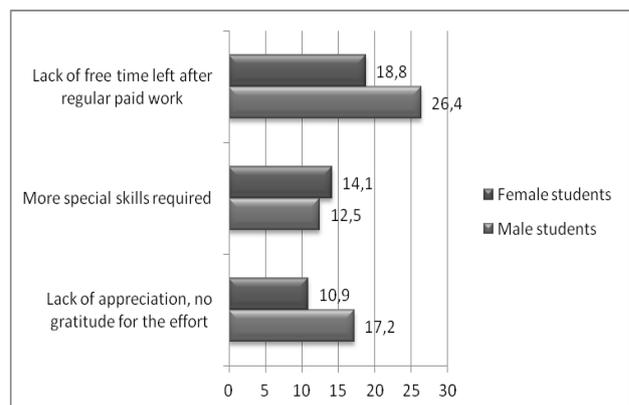
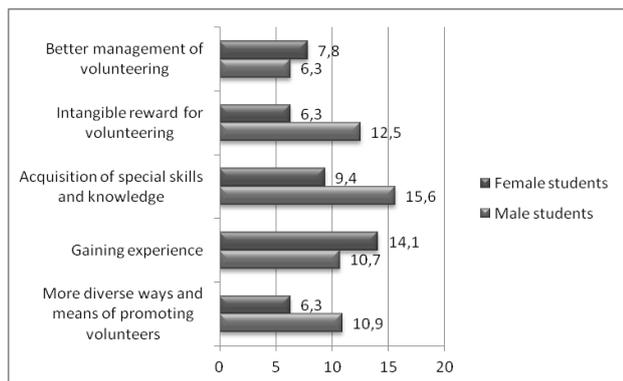


Fig. 4 Students' attitudes towards factors hindering volunteering (%)

The data show that a relatively large part of both male (26.4%) and female (18.8%) students indicated a lack of free time as the main factor hindering volunteering in sport ( $p > 0.05$ ). The distribution of responses shows that respondents (17.2% of male and 10.9% of female students) also lack a positive evaluation of volunteering activity. Some students mentioned the need for special knowledge and skills, the lack of which hinders volunteering in sport (12.5% of male students and 14.1% of female students).

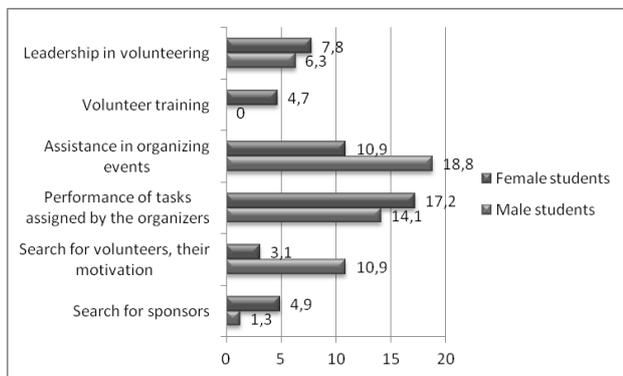
The research revealed the respondents' attitudes to the factors that encourage more active participation in volunteering. The study data are presented in Figure 5.



**Fig. 5** Factors encouraging students to participate more actively in volunteering (%)

It can be stated that male research participants would be encouraged to become more involved in volunteering by acquiring special skills and knowledge (15.6%), intangible reward for volunteering (12.5%), more diverse ways and means of encouraging and motivating volunteers (10.9%). Gaining experience as an important factor is indicated by both male (10.7%) and female (14.1%) students, thus, this tendency is relevant for both groups of respondents ( $p > 0.05$ ).

The research was aimed at identifying areas of volunteering that were attractive to respondents in which they could contribute to the organization of sport events. The results of the research are represented in Figure 6.



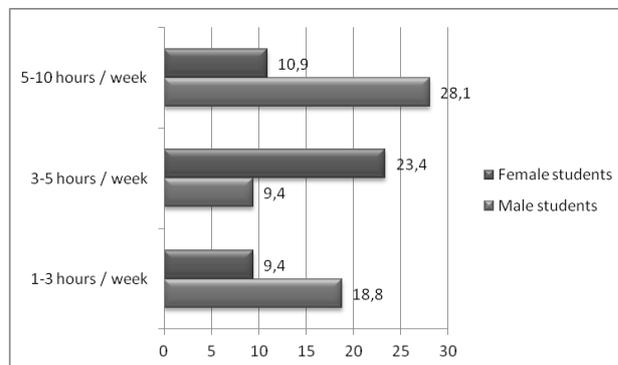
**Fig. 6** Distribution of students by attractive areas of volunteering (%)

The data obtained during the research reveals that 18.8% of the male students participating in the research would like to contribute to the organization of sport events, 14.1% – to perform the tasks assigned by the organizers, 10.9% – would like to look for new volunteers and motivate them.

The female participants of the research give priority to the performance of tasks assigned by the organizers (17.2%) and the opportunity to contribute to the organization of sport events (10.9%), they would like to be in charge of voluntary activities (7.8%), search for new volunteers and motivate them (10.9%), search for sponsors (4.9%).

In general, it was observed that the female students of the research focused on slightly more passive areas of volunteering, while the male students chose more active volunteering methods, but no statistically significant differences were found in terms of gender ( $p > 0.05$ ).

The research aimed to find out how much time respondents could devote to volunteering (Figure 7).

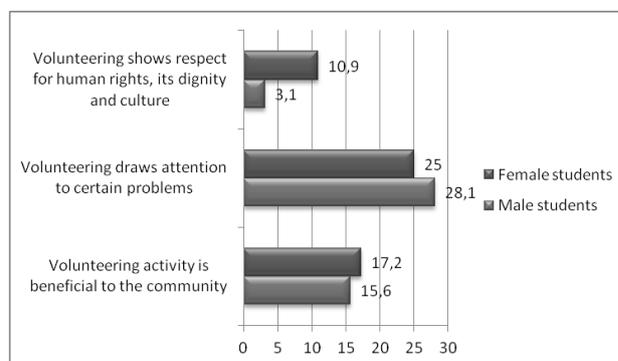


**Fig. 7** Distribution of time devoted to volunteering per week by gender (%)

The analysis of the data suggests that 28.1% of the male students from the research could volunteer between 5 and 10 hours per week. Also, a significant proportion of male respondents (18.8%) could devote about 1-3 hours a week to volunteering. This shows that male students are ready to spend more time on volunteering in sport than female students and this activity is more relevant for them ( $t=25.514$ ,  $df=2$ ,  $p=0.000$ ), ( $p < 0.001$ ).

The female students of the research (23.4%) indicated that they could devote 3-5 hours per week to volunteering, and from 5 to 10 hours per week could be performed by 10.9%. Summarizing the results of the research, it can be noticed that male research participants may devote more time to volunteering than female research participants. Such research results may be determined by the subjects' personal attitudes, interests and priorities.

It was also aimed at finding out the respondents' attitudes about the meaning of volunteering. The data presented in Fig. 8 reveals that the majority of male respondents perceive the meaning of volunteering by the fact that volunteering is beneficial to the community (15.6%).



**Fig. 8** Students' attitudes towards the meaning of volunteering (%)

The respondents of both genders see the meaning in volunteering as it draws attention to certain issues relevant to our society (28.1% of males and 25.0% of females).

Female students (53.1% overall) expressed more positive attitudes towards volunteering in sport than male students (46.8% overall). More female students (10.9%) than male students (3.1%) emphasized the connection between volunteering and human rights, its dignity and cultural values, ( $p > 0.05$ ).

It can be noticed that these attitudes towards volunteering in sport are similar between the two groups of respondents: both male and female students, as a significant factor is that volunteering is not only valued for personal benefit to the volunteer but emphasizes the pursuit to benefit others, to pay attention to the problems which are sensitive to the society and to solve them.

The aim of the research was to find out how students understand the main advantages and benefits of volunteering at various sport events. The research data are represented in Figures 9 and 10.

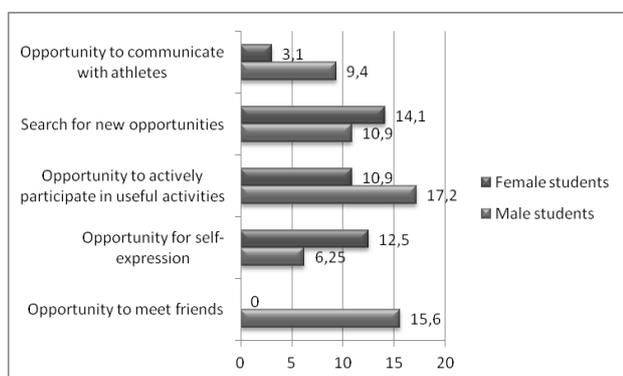


Fig. 9 Students' attitude towards the advantages of volunteering in sport (%)

Relative majority of male students in the research notice that volunteering at various sport events is important for them because of the opportunity to actively participate in useful activities (17.2%), meet friends (15.6%), communicate with athletes (9.4%), look for new opportunities (10.9%), realize oneself (6.25%). The female participants of the research evaluate volunteering in various sport events as an excellent form of self-expression (12.5%) and a way to search for new opportunities (14.1%), as well as highlight the importance of active participation in a useful environment for oneself and others (10.9%). In conclusion, male students associate volunteering at various sport events with leisure, good way of spending it, positive emotions, active participation in useful activities, whereas for female students the form of self-expression, the search for new opportunities are more important.

It was expedient to find out the opinion of the respondents as to why volunteering in various sport competitions can be beneficial for the volunteer himself / herself (Figure 10). The presented data disclosed that many respondents – both male and female students – understand the benefits of volunteering for the volunteer as a way to try themselves in new activities (21.8% of males, 14.1% of females), realization of young people's ideas and activity (28.1% of males and 17.2% of

females). These two emerging trends are relevant for both groups of the respondents, but there were significant statistical differences in terms of gender ( $t=10.715$ ,  $df=3$ ,  $p=0.013$ ), ( $p < 0.05$ ), as more male than female students see benefits for themselves in these areas of volunteering.

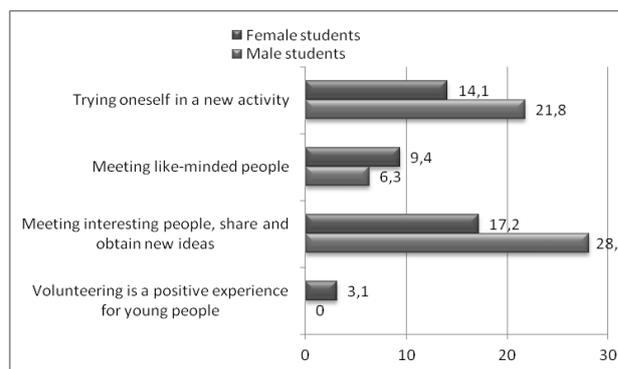


Fig. 10 Students' attitudes towards the benefits of volunteering for the volunteer himself / herself (%)

The female participants of the research also emphasize that volunteering at various sport events gives the volunteer the opportunity to meet like-minded people (9.4%) and to gain a positive experience (3.1%), which can be useful later in life. In conclusion, it can be stated that all research participants subjectively evaluate the benefits of volunteering as an opportunity for the realization of their ideas, dissemination of activity, self-expression.

The research was aimed at finding out the respondents' opinion about the opportunities provided by volunteering in sport (Figure 11).

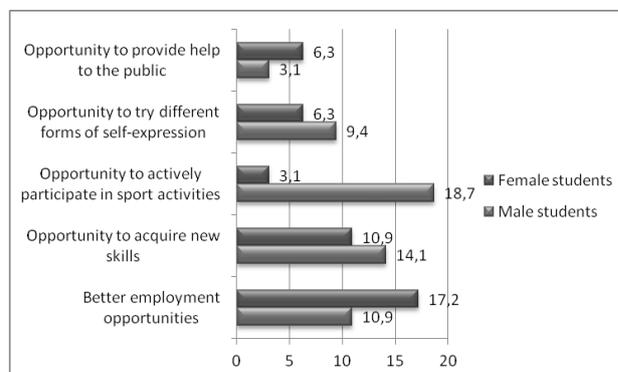


Fig. 11 Students' opinion about the opportunities provided by volunteering in sport (%)

It is observed that the research participants perceive different opportunities according to gender. When participating in voluntary related to sport, male participants see the following opportunities: to participate in sport activities (18.7%), to acquire new skills (14.1%), to get a job (10.9%), to try other forms of self-expression (9.4%). The female students of the research emphasize better employment opportunities (17.2%) and new skills (10.9%), ( $t=21.886$ ,  $df=4$ ,  $p=0.000$ ), ( $p < 0.001$ ). It is interesting to note that only a small proportion of female students (3.1%) see volunteering as an opportunity to participate in sport activities. Thus, they see volunteering in a broader context, i. e. not just in sports.

## Discussion

Volunteering motives are one of the most important reasons why students choose to volunteer in sport. An analysis of students' attitudes towards volunteering in sport and their motives in terms of gender revealed similarities and differences with research conducted by other researchers.

Kerevičius (2017) found that the most important motivating factors for volunteers in sport are future career opportunities in the field of sports, values, networking, making new acquaintances, desire to communicate and interest in sports, and the least important factor is external reward. A similar trend was observed in other studies conducted by Lithuanian sports organizations (Šimkus, Fominiene, & Ivanova, 2014). The analysis of the motives and attitudes of volunteering in our research shows that a number of similarities and differences have been identified: it is important for female respondents to increase their employability, develop and acquire new skills, whereas for male students it is important to have the opportunity to realize oneself, the desire to take an active interest in sports, to spend their free time in an interesting way. The motive for external reward was not identified in our research. Dromantaitė-Stancikienė and Gineitienė (2014) state that the young age of female respondents can explain why career-related motives are so important – they seek to find a job and establish themselves, to take better positions. In the research of volunteering conducted by Šimkus et al. (2014), achievements and careers were more important for men than for women.

The respondents of our research indicate that when deciding to participate in volunteering in sport, the desire to realize themselves in an interesting and at the same time beneficial environment for others is important to them – this reason is more important for males than for females. Laskienė and Anusauskaitė (2008) note that young people decide to volunteer in sport sector because it is interesting for most young people to try it. Thus, the reasons for volunteering in sport indicated by our research respondents are similar.

The research conducted by Kerevičius (2017) revealed that there is a link between motivation and satisfaction with volunteering. Motivated sport volunteers are more satisfied with their work. Females were found to be more satisfied with volunteering in sport than males. Urbikienė (2010) notes that young people are motivated by the activities they support and believe in, which not only perfectly reveals their personality, but also helps them to get internal satisfaction and motivate them to work even better.

The participants of our research state that sport is a great opportunity for young people to participate in volunteering. One of the most important motives for volunteering in sport is closer cooperation with the sports environment. Laskienė and Anusauskaitė (2008) note that there were statistically significant differences between males and females in the internal motivation that led them to become sport volunteers: most females thought that volunteering in the sports sector was an opportunity to acquire satisfying new skills, and males were more motivated by personal sports interests. Only a small part

of females see volunteering as an opportunity to participate in sports.

According to the data of our research, most of the male students indicate that the most significant motivating factors for volunteers are closer cooperation with the sports environment, more interesting activities, praises and incentives, special volunteer development courses. The female research participants single out other factors that promote volunteering – praises, special volunteer training courses, interesting activities, meaningfulness of participation, positive atmosphere. According to the research conducted by Brusokas and Mikalauskas (2019), students are motivated by the desire to continue their involvement in sports. Noordegraaf and Celebi (2015) revealed that sport as a phenomenon remains a more important motive for males because they are not inclined to form emotional connections with other volunteers during volunteering. Anusauskaitė (2007) states that the desire to be among athletes as an important motive to participate in volunteering in sport was expressed almost equally by both females and males. According to our research, this reason to become a volunteer is more common among male students.

By analysing the psychological reasons that determine the choice of volunteering, our research revealed that to feel valued, recognized is a particularly important psychological reason for male volunteer, whereas female volunteers find opportunities for personal development more important. Downward, Lumsdon and Ralston (2007) note that the benefits and status of volunteering, as well as recognized qualifications that allow younger volunteers to demonstrate the acquisition of valuable skills, can be useful in attracting new members. Rawle (2004) and Ellis (2002) emphasize the need for young volunteers to gain recognition, gain practical experience, plan, organize work, participate in matches, competitions, sports festivals, and other sporting events; they must be supported and endorsed. The analysis of Urbikienė's (2010) data showed that the following motives encourage young people to participate in voluntary activities the most: realization of their talents and the opportunity to help others. The students mentioned the least important motives: greater respect for friends and the opportunity to emphasize their uniqueness.

Another psychological reason for choosing volunteering is the desire to gain more self-confidence. Volunteering is a great way to learn more about each other and develop a sense of responsibility in organizing work in a team and a sense of self-confidence (Cravens, 2006). Our research revealed that the desire to gain greater self-confidence is a more important reason for females to volunteer.

Our research revealed that male and female research participants see different opportunities for volunteering: male students see greater opportunities to participate in sports, acquire new skills, try other forms of self-expression, while female students emphasize greater employability and new skills. Burgham and Downward (2005) note that the results of volunteering can be seen as a kind of discovery where relevant skills can be used.

Participating in sport volunteering makes sense because volunteering in sport increases social integration, social participation and social awareness. According to the research conducted by Brusokas and Mikalauskas (2019), volunteers indicate that their voluntary activities are significant for them. Our research attempted to reveal how students perceive the meaning of volunteering in sport. It has been found that volunteering is not only valued in terms of personal benefits to the volunteer himself / herself, and both genders see meaning in volunteering because it draws attention to certain issues relevant to our society. More male than female students emphasize the benefit of volunteering to the community.

Kerevičius (2017) states that the need for females to volunteer in sport is related to values. The results of our research show that more female than male students emphasized the connection between volunteering and human rights, its dignity and cultural values.

Erturan-Ogut (2014) notes that volunteers in sport besides a career, gain a variety of social and personal benefits. Participation in volunteering is a win-win situation. Youth volunteering projects could improve individual development, social integration, social participation and social awareness. Urbikienė (2010) notes that volunteering benefits the object and subject of activity: young people want and have the opportunity to help others by realising themselves and doing what is interesting and educating. Jankauskaitė (2011) presents volunteering as a way of trying to discover and test oneself in community activities, which leads to self-awareness and discovery.

For most of the male respondents of our research, it is important that volunteering provides an opportunity to feel part of the team. These psychological reasons are not so important for another group of respondents – female students, because they emphasize other reasons for volunteering – the opportunity for personal development and the opportunity for greater self-confidence. Gaining new experience through volunteering is important for respondents of both genders.

A significant number of the males in our research notice that volunteering at various sport events is important to them because of the opportunity to meet friends. The respondents attribute this to the benefits of volunteering. Brusokas and Mikalauskas (2019) found statistically significant relationships between the opportunity to find like-minded people, build friendships, and establish their social status. Cravens (2006) notes that many people like to volunteer in a team, which can be just a group of friends who like to spend their free time together. Volunteers who work in a team are friends with the people or organizations they help to, they also believe in their work and are committed to it. In the research conducted by Laskienė and Anusauskaitė (2008), members of the Sports Volunteer Union agreed that social (communication) element is more important for them in volunteering than physical activity. This is confirmed by Urbikienė's (2010) research that young people also tend to engage in activities that involve their peers. Bakken and Ulseth (2004) researched the possibilities of an integrative role in volunteering in sport and found that females experience new forms of friendships much more often than males, and they also

maintain these relationships for longer in their gathering places. Schlesinger and Nagel (2016) argue that identification with one's club, positive (collective) solidarity, and job satisfaction are important for volunteering. In addition to these factors, the context also plays an important role.

It is extremely important for young people to reveal their strengths, which areas they like and succeed in while doing what they are capable of. This can be most evident when a person acts in an area that is acceptable to him / her, supports his / her idea, and satisfies like-minded people (Urbikienė, 2010). The organization and services of volunteers can be attractive to volunteers when that matches their strengths and expectations, when volunteers are allowed to choose the type of activity that best meets their physical and emotional needs. Whether volunteering will continue mostly depends on the type of tasks and the resulting satisfaction (Chelladurai, 2005). The data from our research show that there are statistically significant differences by gender in choosing an area where students would like to volunteer: male students are more active and willing to help to organize events, while female students choose a more passive role and would like to perform tasks assigned by organizers.

The volunteer willingly devotes his or her time to solving other people's problems. The majority of both male and female students of the research indicated a lack of free time after work as a major factor hindering their participation in volunteering. This is confirmed by the research of other authors (Laskienė & Anusauskaitė, 2008; Taylor et al., 2012) where the relation between the lack of free time with the activity in volunteering has been established. The scientific literature (Laskienė & Anusauskaitė, 2008) indicates that the difference between the decision to become a volunteer and the time spent on this activity is very important. The volunteers from the Sports Union who participated in Anusauskaitė's (2007) research indicate that they volunteer in sports sector for an average of 1 to 3 hours per week. According to our research, male students could dedicate between 5 and 10 per week, and female students – half as much – up to 5 hours per week. Studies by other authors (Taylor et al., 2012) also confirm that the time spent volunteering in sport varies greatly depending on gender, age, and employment, but not on education and income.

The results of our research show that one of the barriers to volunteering in sport is too little incentive for volunteers. They indicate that they would like to receive praise or a wider range of incentives. However, the research of other authors (Schlesinger & Nagel, 2016) shows that specific incentives for volunteering do not have a significant impact on voluntary commitments.

Volunteering means using one's abilities and experience, acquiring new skills, changing social life (Bružienė, 2002). Professional skills in volunteering are reflected in the nature and practice of volunteering. Karasevičiūtė (2013) states that volunteering could be differentiated according to the profession or it could be one of the criteria when choosing a volunteer to perform a certain activity. Thus, institutions of different sectors are looking for a person who would be a professional in their field, able to combine his / her knowledge with practice, be responsible, creative and innovative.

Participants in our research also highlighted that they sometimes lack specialized knowledge and skills to volunteer in the field of sport. Thus, it can be argued that a person who has the opportunity to volunteer in a field related to his or her profession could develop his or her professional competencies and gain better employment opportunities. This is confirmed by previous research (Butkuvienė, 2005; Jonutyte, 2007; Šedienė, Rossbachas, & Valauskaitė, 2011), which presents participation in volunteering as an opportunity to acquire new knowledge and professional skills (teamwork, leadership) and use them for more successful establishment in the labour market.

The volunteer leader must have a thorough knowledge of both psychological and managerial features in order to communicate and collaborate properly. Volunteers will then, based on personal psychological motives, work successfully and enjoy even unpaid activities. Laskienė and Anusauskaitė (2008) state that a great deal of attention must be paid to the personal initiative of volunteers, the competence of planning and implementation, and the promotion of responsibility for the decisions made. Planning and coordination, organization and ability to organise are the most important factors for successful volunteering, and “if they stand and wait for instructions without knowing what to do, such activities are considered unproductive. The most effective workday for volunteers is also their happiest day” (Anusauskaitė, 2007, p. 52). This is confirmed by the research data we received, where students indicate that good volunteering management is important to them in order to encourage them to become even more active in volunteering.

Brusokas and Mikalauskas (2019) point out that the promotion of volunteering can manifest itself through motivation, support, training and events of volunteers. Tamutienė and Šimkus (2012) also state that in the stage of planning volunteering activities it is very important not only to understand the motives of volunteers and assess their needs, but also to assess risks, improve selection, and in the management stage – to organize volunteer training, support, monitoring, coordination and evaluation, in the empowerment stage – to improve the involvement of volunteers in the decision-making process. Recent research on volunteering in sport (Hoye et al., 2019) also highlights the importance of volunteer psychology and management in recruiting, supporting, and developing volunteers.

Comparing the research results of our and other authors (Brusokas & Mikalauskas, 2019; Kerevičius, 2017; Laskienė & Anusauskaitė, 2008; Noordegraaf & Celebi, 2015; Schlesinger & Nagel, 2016), it can be stated that students are quite positive about volunteering activities in sport. Respondents of both genders had sufficient volunteering experience to reveal specific respondents’ attitudes towards volunteering in sport. Factors that encourage or inhibit respondents’ participation in volunteering, as well as certain expectations of volunteers, have also emerged. Our research revealed that respondents identify the expectation of gaining more practical experience and special skills and knowledge, and emphasize the

importance of better volunteer management that would help them to become more active.

## Conclusions

The research participants singled out quite different psychological reasons that lead to volunteering. For male students it is more important to be part of the team (26.6%) and to feel valued, recognized (18.7%), whereas female students emphasized the importance of personal development (18.7%) and gaining self-confidence by participating in voluntary activities (12.5%), ( $p < 0.001$ ).

It was revealed that there was a statistically significant ( $p < 0.05$ ) difference between male and female students’ attitudes towards the benefits of volunteering for the volunteer himself / herself. Most respondents, both males and females, see the benefits of volunteering in two areas: a way to try themselves in new activities and the opportunity to meet interesting people, share and obtain new ideas. However, male students find volunteering in those areas more beneficial than female students.

It was revealed that male students are ready to spend more time volunteering in sport than female students, so this activity is more relevant for them ( $p < 0.001$ ). More than a quarter (28.1%) of males of the research could volunteer up to 18 hours a week, while females (23.4%) could devote up to 12 hours per week.

The male research participants see the following opportunities: participation in sport activities (18.7%), acquiring new skills (14.1%), while female students emphasize better employment opportunities (17.2%) and acquiring new skills (10.9%). A small proportion of females (3.1%) consider volunteering as an opportunity to participate in sport activities ( $p < 0.001$ ).

## References

- Aisbett, L., & Hoye, R. (2015). Human resource management practices to support sport event volunteers. *Asia Pacific Journal of Human Resources*, 53(3), 351-369. DOI 10.1111/1744-7941.12062
- Anusauskaitė D. (2007). *Savanorystės fenomeno sporto sektoriuje vadybiniai psichologiniai aspektai*. Magistro darbas.
- Bakken Ulseth, A. L. (2004). Social Integration in Modern Sport: Commercial Fitness Centres and Voluntary Sports Centres. *European Management Quarterly*, 4, 95-115.
- Baxter, H., Kappelides, P. & Hoye, R. (2021). Female volunteer community sport officials: a scoping review and research agenda. *European Sport Management Quarterly*. <https://doi.org/10.1080/16184742.2021.1877322>
- Brabazon, T., Matisoff, D., & Ražaitis, G. (1999). *How to be a good volunteer?* Vilnius: Volunteer Centre.
- Brusokas & Mikalauskas (2019). Promoting and Managing Volunteering in a Sports Organization: Assessing the Attitudes of Volunteers. *Applied Research in Lithuanian Colleges* (15), 72-84. <http://ojs.kaunokolegija.lt/index.php/mttlk/index>
- Bružienė, R. (2002). *Youth volunteering as a social educational phenomenon*. Klaipėda: KU publishing house.
- Burgham, M. & Downward, P. (2005). Why Volunteer, time to Volunteer? A case study from swimming. *Managing Leisure*, 10, 79–93. From Ebsco Publishing data base [interactive] [accessed 10-09-2021].

- Butkuvienė, E. (2005). Participation in voluntary activities: situation and perspectives in Lithuania after 1990. *Sociology. Thought and Action*, 2 (16), 86–99.
- Chelladurai, P. (2005). *Managing organizations for Sports & Physical Activity (a systems perspective)*. USA. Scottsdale, AZ: Holcomb Hathaway Publishers.
- Cravens, J. (2006) Involving International Online Volunteers: Factors for Success, Organizational Benefits, and New Views of Community. *The International Journal of Volunteer Administration*. Vol. XXIV (1), 15–23.
- Downward, P., Lumsdon, L., & Ralston, R. (2007). Gender differences in sport event volunteering: insights from Crew 2002 at the XVII Commonwealth Games. *Managing Leisure* 10, 219-236. From Ebsco Publishing data base [interactive]. [accessed 09-09-2021]. <https://www.tandfonline.com/doi/abs/10.1080/13606710500348086>
- Dromantaitė-Stancikienė, A. & Gineitienė, Z. (2010). The Situation of Women in Lithuania in Pursuit of a Career. *Studies in the Social Sciences*, 4(8), 69–88.
- Ellis, S. J. (2002). *Advice for Volunteers: Why Volunteer?* From ServiceLeader.org [interactive] [accessed 2007-02-03]. Online access: <<http://www.serviceleader.org/old/>>.
- Erturan-Ogut E. E. (2014). Youth Volunteering in Sport: A Case Study of The Benefits of —The European Voluntary Service for a Sport Organization. *Physical Culture and Sport. Studies and Research*. Vol. LXIV, 71- 85. Doi: 10.2478/pcssr-2014-0028
- European Commission Sport [interaktyvus]. Study on volunteering in the EU Volunteering in Sport – Lithuania (2009). [žiūrėta 2021-04-21]. Prieiga per internetą: [http://ec.europa.eu/sport/library/doc/f\\_studies/sport\\_fiche\\_lt.pdf](http://ec.europa.eu/sport/library/doc/f_studies/sport_fiche_lt.pdf)
- Groll, M., Koopmann, O. & Hansch, K. (2008). A status-report within the scope of the project —Sport in Europe – social, political, organizational, legal transparency in Europe, German Sports University Cologne, Institute for European Sports-development and Leisure Studies, September, Cologne.
- Hoye, R., Cuskelly, G., Auld, C., Kappelides, P. & Misener, K. (2019). *Volunteers and sport*. Routledge. <https://doi.org/10.4324/9780429292323>
- Jankauskaitė, A. (2011). *The present and new ideas of sports science*. Kaunas: Lithuanian Academy of Physical Education.
- Jezukevičiūtė, D. & Skirmantienė, J., (2015). The importance of competencies acquired during the year of volunteering in the labour market; Opinion of employers. *Social work. Experience and methods*. 15(1) <http://dx.doi.org/10.7220/2029-5820.15.1.4>
- Jonutytė, I. (2007). *Volunteering in the social education system: A monograph*. Klaipėda: KU publishing house.
- Karasevičiūtė, S. (2013). *Manifestation of professionalisation of adult volunteering in the context of lifelong learning*. Doctoral dissertation. Kaunas: Vytautas Magnus University.
- Kerevičius T. (2017). *The Influence of Volunteer Motivation on their Satisfaction with Volunteering in Sports Organization*. Master Thesis. Kaunas: Lithuanian Sports University.
- Kurapkaitienė N. & Sadauskas J. (2013). Volunteering in Social Work: Connections and Tensions. *Works of Young Scientists*, 2 (40), 83–88.
- Laskienė S. (2003). Management aspects of modern sports organization. *Education. Physical Education. Sports* 2 (47), 37–43.
- Laskienė, S. & Anusauskaitė, D. (2008). Peculiarities of the phenomenon of volunteering in the sports sector. *Sports Science*, 1(51), 17–24.
- Malinauskas, R. (2010). *Applied Sports Psychology*. Kaunas: Lithuanian Academy of Physical Education.
- Nausėdaitė, L. (2002). *Volunteering today in Europe and Lithuania*. Online access: <http://www.nisc.lt/downloadfile.php?id=3>.
- Noordegraaf M.A., & Celebi M. (2015). The challenges of volunteering during international sport organizations/events. *International Journal of Human Sciences* 12 (1), 1263-1279.
- Polukordienė, O.K. (2001). *Psychological crisis and its management*. Practical Guide. Vilnius: Heksagrama.
- Rawle, P. (2004). *Young Volunteers: Making a difference to sport in England. The Volunteer Pathway: recruiting, retaining, recognising, rewarding*. From Sport England [interactive] [accessed 04-11-2020]. Online access: [https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/1x30\\_overall\\_factsheet\\_aps9q2v2.pdf](https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/1x30_overall_factsheet_aps9q2v2.pdf)
- Schlesinger, T. & Nagel, S. (2016). Individual and contextual determinants of stable volunteering in sport clubs. *International Sociology of Sport Association*. <https://doi.org/10.1177/1012690216638544>
- Šedienė, P., Rossbach, C., & Valauskaitė, D. (2011) The research on the motivation of European service volunteers in an intercultural context. *Interdisciplinary discourse in the social sciences*, 3. Kaunas: Technology, 174–177.
- Šimkus, A., Fominiene, V. B., & Ivanova, E. (2014). *Management of Volunteers as Human Resources in Non-Governmental Organisations: Case of Sport Industry*. Transformation in Business & Economics, 13.
- Šinkūnienė, J. R. (2006). *Social work: professional activities, methods and clients*. Vilnius: Mykolas Romeris University Publishing Centre.
- Taylor, P. D., Panagouleas, T., & Nichols, G. (2012). Determinants of sports volunteering and sports volunteer time in England. *International Journal of Sport Policy*, 4(2):1-20. DOI: [10.1080/19406940.2012.656679](https://doi.org/10.1080/19406940.2012.656679)
- Tamutienė, I. Šimkus, A. (2012). Management of volunteering in Lithuania: the experience of non-governmental organizations. *Organizational Management: Systematic Research*. (64). <http://dx.doi.org/10.7220/MOSR.1392.1142.2012.64.7>
- Urbikienė, V. (2010). *Volunteering and its Influence on Youth Socialization (The Case of Vilnius College of Technology and Design)*. Master Thesis. Vilnius: Vilnius Pedagogical University.
- Wicker, P., & Breuer, C. (2013). *Understanding the Importance of Organizational Resources to Explain Organizational Problems: Evidence from Non-profit Sport Clubs in Germany*. *Voluntas*, 24, 461–484.

**RECEIVED: 8 July, 2021**

**ACCEPTED: 13 September, 2021**

---

**Asta Budreikaitė.** PhD in Social Sciences (07S), associate professor at Klaipeda University Faculty of Health Sciences of Sport, Recreation and Tourism Department. Area of scientific research are: sport management. Address: H. Manto str. 5, LT- 92221, Phone: +370 46 398539, E-mail: asta.budreikaite@gmail.com

**Vyte Kontautiene.** PhD in Social Sciences (07S), she is a associate professor at the Business Faculty of Klaipeda State University Of Applied Sciences. Area of scientific interests are sociology and social surveys, education, psychology of communication, human resource management. She has published articles and gave reports at national and international conferences (Russia, Latvia, Estonia, Poland, Italy, etc.). Address: Vilhelmo Berbomo str. 11-7, LT-92219, Klaipeda. Phone: +370 611 15 166. E-mail: vyte.kontautiene1@gmail.com

**Raimonda Tamoševičienė.** MSc in Management, associate professor at Lithuania Business University of Applied Sciences. Area of scientific research is business language, public communication, career planning, coaching. Address: Turgaus Street 21, Klaipėda, Lithuania. Phone +370 46 31 10 99. E-mail: raimonda.tamoseviciene@ltvk.lt.

**Rasa Grigolienė.** PhD in Physical Sciences (Mathematics), associate professor at Lithuania Business University of Applied Sciences and Klaipėda University. Area of scientific research is applied statistics and mathematical modeling; area of professional interest is systems of higher education, quality of studies in higher school. Publications: 28 scientific papers and 7 handbooks. Address: H. Manto Street 84, Klaipėda, Lithuania. Phone: +370 46 39 89 34. E-mail: rasa.grigoliene@ku.lt or rasa.grigoliene@ltvk.lt

## Requirements for the authors, who want to publish their articles

The founder of a scientific journal “Vadyba / Journal of Management” is Lithuania Business University of Applied Sciences. Since 2000, the journal publishes technology, social sciences and physic sciences-related articles. The main goal of the scientific journal articles and conducted research is to emphasize the problems and present possible solutions for the public and private organizations of the region. The articles can be both empirical and theoretical.

The submitted articles must be original, previously unpublished. It is prohibited to publish the articles of this journal in other publications.

### General requirements

- Articles submitted to the Editorial Board must be professionally edited, without spelling, punctuation and style errors. The articles must use scientific language.
- Articles shall be written in English.
- **The article shall be up to 10 pages long. The last page should take at least half a page, i.e. about 2/3 of the page.**
- The structure of the article must have a structure of a scientific article. It must contain the following:
  1. The **title** of the article. Article’s **author, institution**, which the author is representing. **E-mail** of the author of the article.
  2. **Abstract** with the main words in the language of the article. The Abstract should briefly cover the contents of the article; specify the aspect of how the problem will be analyzed. The text of the Abstract must be clear and concise. **The Abstract must contain at least 2000 characters.**
  3. **Keywords** – these are the words that express the most important features of the topic. Five or six keywords of the article must be included in the Lithuanian National M. Mazvydas library records of authoritative names and subjects. It is possible to check if the keyword is included in this list in the website of the library: [http://aleph.library.lt/F/UYSMKM4NY8C9H33SP6PV8F2585NQU59CEEBJVCYCA3HUQNQCR5-31681?func=find-b-0&local\\_base=LBT10](http://aleph.library.lt/F/UYSMKM4NY8C9H33SP6PV8F2585NQU59CEEBJVCYCA3HUQNQCR5-31681?func=find-b-0&local_base=LBT10), by specifying the “topic, subject (lit)” (in Lithuanian) and “topic, subject (eng)” (in English) in the search field.
  4. **Introduction**, which formulates the purpose of the scientific study, discusses the question of the study, its novelty and degree of research, specifies the object of the study, objectives and methods.
  5. **Analysis – article material**. The sub-sections of the article are *unnumbered*.
  6. **Conclusions**. *Unnumbered*.
  7. **References**. *Unnumbered*. References in the body of the article should be cited in parenthesis by indicating the surnames of the authors and year, e.g. (Cooper 1994), (Cleland J.; Kaufmann, G. 1998). If

an internet source does not have an author, the link is placed only in the main text in parenthesis. Letters “p” and “pp” are not written next to the pages.

8. Examples of referencing:

### Books

Valackienė, A. (2005). *Crisis Management and Decision-making*. Technology, Kaunas.  
Berger, P. L., Luckmann, Th. (1999). *The Social Construction of Reality*. Pradai, Vilnius.

### Journal articles

Boyle, T. (2003). Design principles for authoring dynamic, reusable learning objects. *Australian Journal of Educational Technology*, 19(1), 46–58.

### Book articles

Curthoys, A. (1997), History and identity, in W. Hudson and G. Balton (eds), *Creating Australia: Changing Australian history*, 25 - 84. Allen and Unwin, Australia.

### Web documents

Wiley, D. A. (2003). Learning objects: difficulties and opportunities. [Retrieved March 18, 2009], <[http://opencontent.org/docs/lo\\_do.pdf](http://opencontent.org/docs/lo_do.pdf)>.

### Statistical information and web resources

Lithuanian Emigration Statistics. (2009). Statistics Lithuania to the Government of the Republic of Lithuania. [Retrieved February 16, 2009], <<http://www.stat.gov.lt/lt/news/view/?id=6819&PHPSESSID=5b1f3c1064f99d8baf757cde1e135bc0>>.

9. **Summary with the keywords** is written in English. **The summary should include at least 3000 characters.**
10. Short CV of the authors, which consists of: name, surname of the authors. Degree. Work. Occupation. Research direction. Address. Telephone. Other information about the author. The author CV must include **up to 3000 characters**.

### Requirements for the outline and layout of the article

- The articles must be written in MS Word A4 pages.
- Document margins: top – 2 cm, bottom – 2 cm, left – 2 cm and right – 2 cm.
- Full text: in lowercase letters, aligned to both margins, size – 10 pt, font – Times New Roman, first line of the paragraph indented by 0.5 cm.
- Title of the article: in capital letters, left alignment, size – 14 pt., **Bold**.
- Author’s name, surname: in lowercase letters, left alignment, size – 12 pt., **Bold**.
- Institution name: in lowercase letters, left alignment, 10 pt., *Italic*.
- E-mail: lowercase letters, left alignment, 10 pt., *Italic*.
- Abstracts: text size – 8 pt, title – 10 pt, **Bold**. A full stop is not put after the last main word.

- Section names: lowercase letters, left alignment, size – 11 pt., **Bold**.
- Word *Literature* – 10 pt, literature list – 9 pt.
- **Figures** and **diagrams** must be clear, schemes – grouped into a single object.

**Tables** and **schemes** have to be numbered and titled.

1. Table titles are written above the table in the centre.
2. Figure names are written under the figure in the centre.

**The text will not be further edited.**

***NOTE. It is obligatory to use the prepared template for the article.***



Klaipėdos universiteto leidykla

**Vadyba 2021/2(37).** Mokslo tiriamieji darbai

Klaipėda, 2021

---

SL 1335. 2021 09 16. Apimtis 11,5 sąl. sp. l. Tiražas 50 egz.  
Spausdino spaustuvė „Druka“  
Mainų g. 5, Klaipėda 94101