

**Varazdin Development and Entrepreneurship Agency and University North**  
in cooperation with:  
**Faculty of Management University of Warsaw**  
**Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat**  
**Polytechnic of Medimurje in Cakovec**



## **Economic and Social Development**

77th International Scientific Conference on Economic and Social Development

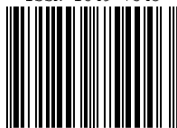
### **Book of Abstracts**

Editors:

**Mustapha Machrafi, Tomislav Galovic, Zvonko Merkas**



ISSN 1849-7543



9 771849 754003 >

27 January, 2022

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**Mustapha Machrafi, Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco**  
**Tomislav Galovic, University of Rijeka, Croatia**  
**Zvonko Merkas, Libertas International University, Croatia**

## **Economic and Social Development**

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**Title** ■ Economic and Social Development (Book of Abstracts), 77th International Scientific Conference on Economic and Social Development

**Editors** ■ Mustapha Machrafi, Tomislav Galovic, Zvonko Merkas

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**Publishing Editors** ■ Spomenko Kesina, Mario Vrazic, Domagoj Cingula

**Publisher** ■ Design ■ Print ■ Varazdin Development and Entrepreneurship Agency, Varazdin, Croatia / University North, Koprivnica, Croatia / Faculty of Management University of Warsaw, Warsaw, Poland / Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco / Polytechnic of Medimurje in Cakovec, Cakovec, Croatia

**Printing** ■ Online Edition

**ISSN 1849-7543**

The Book is open access and double-blind peer reviewed.

Our past Books are indexed and abstracted by ProQuest, EconBIZ, CPCI (Web of Science) and EconLit databases and available for download in a PDF format from the Economic and Social Development Conference website: <http://www.esd-conference.com>

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## ASSESSING FACTORS WHICH INFLUENCE INDIVIDUAL BEHAVIOUR TO ADOPT FAMILY TAKAFUL

**Samar Rahi**

*Hailey College of Banking & Finance,  
University of the Punjab, Lahore, Pakistan  
Samar.rahi@puhcbf.edu.pk*

**Zohaib Tahir**

*Hailey College of Banking & Finance,  
University of the Punjab, Lahore, Pakistan*

### **ABSTRACT**

*The Takaful industry is flourishing worldwide therefore the growth of Takaful in Pakistan is stagnant. Therefore, this research examines factors which influence citizen's behaviour to adopt family Takaful. The family Takaful or Islamic life insurance is determined through relative advantage, media Influence, resource facilitating condition, self-efficacy, word of mouth, attitude, subjective norm and perceived behavioural control. The research model comprises Decomposed theory of planned behaviour (DTPB) to investigate citizen's behaviour towards adoption of family Takaful. It is expected that attitude, subjective norm and perceived behavioural control significantly impact family Takaful. Data of this study will be collected through non-probability sampling approach. Overall, the quantitative research approach is employed. This study is significant as it develop an amalgamated model which included multiple factors to investigate citizen's adoption behaviour towards family Takaful. For inferential analysis Smart-PLS software will be used.*

**Keywords:** *Relative Advantage, Media Influence, Resource Facilitating Condition, Self Efficacy, Word of Mouth, Decomposed Theory of Planned Behaviour*

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## **CREATIVE VARIABLES THAT INFLUENCE THE ENTREPRENEURIAL DECISION**

**Cristina Blanco**

*Universidad de Alcalá, Spain*

**Esther Pagan-Castano**

*ESIC Business & Marketing School, ESIC University, Spain*

**Jose Fernando Gallego-Nichols**

*ESIC Business & Marketing School, Spain*

**Agustin Carrilero-Castillo**

*ESIC Business & Marketing School, Spain*

### **ABSTRACT**

*Creativity, one of the most sophisticated and valued concepts, is considered a soft skill inherent to the entrepreneurial ecosystem. Although it is difficult to measure due to its conceptualization (Xu et al., 2019), researchers approach it from different perspectives. Thus, it is considered a component of individual cognitive processing based on the ability to generate new and valuable ideas by combining and recombining existing information and knowledge (Xiu'e, and Kun, 2018). Creative thinking involves ordinary cognitive processes; therefore, everyone can develop their creativity (Simonton, 2000). However, if the surrounding environment is not conducive to creative expression, this ability may be reduced over time (Lin, 2011). Consequently, context influence creativity, thus being a driving or hindering factor the degree of creativity and the frequency of creative acts among individuals vary (Guilford, 1967). Thus, entrepreneurship constitutes a determinant contextual element in the analysis. Torrance (1969) defined and consolidated different elements that have been universally adopted in the evaluation of creativity: elaboration, fluency, flexibility and originality. This research focuses on the awareness of the four elements above among individuals within organization, as proposed by Torrance (1974)*

*in his research Thinking Creative Test. Thus, a Fussy Set Qualitative Comparative Analysis is proposed with the aim of analysing the relationship between these four variables of creativity and the individual's decision to start a new business. To this end, a survey of business leaders will be carried out. The aim of this analysis is to show the correlation between the creativity variables that have been universally assumed in the evaluation of creativity and to propose a new line of research in the field of entrepreneurship.*

**Keywords:** *Creativity, Education, Entrepreneurship, Soft Skills*

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## **ANALYSIS OF CURRENT SUBNATIONAL TERRITORIAL AND ADMINISTRATIVE ORGANISATION OF EU MEMBER STATES**

**Davor Zmegac**

*Libertas International University  
Trg J. F. Kennedy 6b, Zagreb, Croatia  
dzmegac@libertas.hr*

### **ABSTRACT**

*The subnational organisational level of government is a dynamic system which is subject to constant minor or major systematic changes. Despite numerous similarities, the internal subnational organisation of each EU Member State also has certain specific characteristics, which together make the operational optimisation of system management more complex. The diversity of subnational organisation of European states results from several factors, primarily from: (a) the form of government; (b) historic and administrative legacies and circumstances; (c) specific geographic or national features of individual parts of the territory within a state union, and (d) dominant political and economic standpoint in relation to the subnational organisation within an individual state. The paper first discusses historical*



*development of systems of subnational organisation of government, and further examines and analyses the three aspects of recent formal system organisation, namely (i) the type and number of organisational levels, (ii) specific forms of formal organisation of each EU Member State, and (iii) the fragmentation of the basic organisational form i.e. 1st level units. Based on the latest available and analysed data, the current subnational level of EU Member States comprises 86,027 1st level units, 1,072 2nd level units and 245 3rd level units. The average number of inhabitants per one subnational 1st level unit is 5,184 inhabitants, median per number of inhabitants is 4,667, the average number of subnational 1st level units per 100,000 inhabitants is 15.9, while the average surface area of one subnational level unit is 46.5 km<sup>2</sup>.*

**Keywords:** *Organisation, Regional economy, Subnational units*

\*\*\*\*\*

## **MANAGEMENT OF THE INNOVATION ECOSYSTEM DEVELOPMENT**

**Venelin Terziev**

*Georgi Rakovski Military Academy, Sofia, Bulgaria  
Kaneff University Hospital, Rousse, Bulgaria  
vkterziev@gmail.com*

**Vladimir Klimuk**

*Baranavichy State University, Baranavichy, Republic of Belarus  
klimuk-vv@yandex.ru*

### **ABSTRACT**

*This work contains an overview of national and foreign authors working in the field of innovation ecosystems management. It presents components of the model of innovation ecosystem management, a set of compulsory elements of the model, the basic principles and functional components of the model.*

**Keywords:** *Innovation ecosystem, Management model, Ecosystem approach*

# **APPLICATION OF A RISK-BASED APPROACH IN ORGANIZATION OF INTERNAL CONTROL IN RISK MANAGEMENT SYSTEM OF MORTGAGE CREDIT LENDING**

**Svetlana Litvinova**

*Russian Presidential Academy of  
National Economy and Public Administration,  
Rostov-on-Don, Russia  
sv-lit@mail.ru*

**Oksana Karepina**

*Rostov State University of Economics, Rostov-on-Don, Russia  
karepindima@mail.ru*

**Venelin Terziev**

*Georgi Rakovski Military Academy, Sofia, Bulgaria  
Kanef University Hospital, Rousse, Bulgaria  
vkterziev@gmail.com*

**Olga Andreeva**

*Rostov State University of Economics, Rostov-on-Don, Russia  
olvandr@ya.ru*

## **ABSTRACT**

*The need of organization and the importance of internal control in a credit institution, which would guarantee high level of reliability corresponding to the nature and scale of operations carried out, is enshrined in Russian legislation. The key aspect of internal control in a credit institution is application of a risk-based approach and this article considers the possibility of applying a risk-based approach in organization of internal control in risk management system of mortgage credit lending. The risk-based approach in internal control helps assess possible risks in achieving the strategic and tactical objectives of control institutions and develop proposals for their adjustments. The research studies the possibility and potential positive outcome of*

*applying the risk-based approach on all stages of the internal control in risk management system of mortgage credit lending.*

**Keywords:** *Internal control, Management, Stages of the control event, Monitoring, Risk-based approach, Efficiency, Mortgage credit lending*

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## **THE INFLUENCE OF NEW METHODS OF MEDIA MESSAGE ANALYSIS ON BROADER SOCIAL AND CULTURAL UNDERSTANDING OF THE STATUS OF DIGITAL MEDIA**

**Iva Rosanda Zigo**

*University North, Croatia  
irosandazigo@unin.hr*

**Marina Biti**

*Faculty of Humanities and Social Sciences,  
University of Rijeka, Croatia  
marinabiti@gmail.com*

**Romana Zlatar-Vulic**

*University North, Croatia  
rozlatarvulic@unin.hr*

### **ABSTRACT**

*The development of information and communication technologies reveals their transformative effects on all areas and in all aspects of human practices. Transformative processes that accompany the development of artificial intelligence have been especially impactful in the past decade and a half. The social circumstances of the Coronavirus pandemic added a new dimension to such processes, as the world has become more aware of the need to introduce new technologies into the areas of the economy, education, culture, and art. Digital technology has also a strong*

*impact on media development and functioning and enables the emergence of new genres while causing the old ones to transform. Thanks to all this, it affects the formation of media messages, also affecting the processes of perception and interpretation of messages. This paper assumes a critical approach to the notion of media, i.e., media messages while assuming two perspectives considered crucial for the understanding of the working of media in general. On one side, the fact that their steadiness is software-dependent impacts the understanding and interpretation of media messages. Therefore, this paper will observe recent theoretical framings relevant to the understanding of new media, while emphasizing the possibilities of new methodological approaches to media message analysis, and on the understanding of messages in general. These processes are mutually dependent, and possibilities of understanding and interpreting media messages can be said to have a direct influence on the interpretation of new media trends, and vice versa. We are proposing a research protocol to test the so-called method of media visualization that was gradually introduced by Lev Manovich via a series of articles published during 2008, to be rounded and presented integrally in his book Cultural Analytics, published in 2020. Grounding our approach in the fact that the new media are computer-based, and the message dissemination is software-based, we will approach the message analysis in much the same way, by using media visualization software (primarily ImagePlot). This method will, hence, embrace the fundamental characteristics of the new media, such as omnipresence, large data sets, recipient orientation, and visuality, and use all these principles to process our research data. The material which we are using will be the advertisements issued by a Swedish furniture company between 2012 and 2021 and published on social platform YouTube. The results of our research will, of course, point to strategic orientations in advertising practices by this firm. However, and more importantly: following the main goal of our research, they will point to the possibilities of application of new, technologically based methods and their relevance to the understanding of new media.*

*The results show that the use of big data sets and their digital processing open new perspectives applicable not only to the understanding of new media and media messages but also to the understanding of the broader social and cultural context within which they are created and interpreted.*

**Keywords:** *new media, media message, media visualization, information and communication technologies, IKEA*

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## **INNOVATION IN FOOD SERVICE – EFFICIENCY AND PERFORMANCE CHALLENGES**

**Luka Perman**

*ETEN d.o.o.*

*Nova cesta 12e, 51410 Opatija, Croatia*

*luka@eten.hr*

**Jihoon Ryu Lojpur**

*Student at College of Management and Design Aspira*

*Mike Tripala 6, 21000 Split, Croatia*

*Jihoon.ryu.lojpur@aspira.hr*

### **ABSTRACT**

*This paper aims to give prospective to innovation processes in food service with accent on efficiency and performance challenges. After considering meaning of innovation in business such as restaurants, especially in modern world where there are many recognized awards in branch which make the difference and many business owners want that rank of achievement, there is a question about efficiency and performance challenges, more oriented towards sustainable business. In food service sustainability means a lot, not only towards foods used in food preparation, but also in longevity of business and achievement of brand credibility. Findings give prospective that business owners*

*have to create such business models which has combine market differentiation with cost leadership and it provides different way of thinking about food service, since these topics attract little research as such.*

**Keywords:** *Efficiency, Food service, Innovations, Michelin star, Performance*

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**PERSONALITY AS A PREDICTOR OF  
STUDENTS' HEURISTIC AND HERDING  
BIASES IN DETERMINING THEIR  
PREDISPOSITIONS FOR LONG-TERM  
INVESTMENT DECISIONS**

**Marija Vukovic**

*University of Split, Faculty of Economics, Business and Tourism  
Cvite Fiskovića 5, Split, Croatia  
marija.vukovic@efst.hr*

**ABSTRACT**

*Making the right investment decision has always been of crucial importance for any investor, since it results in better investment performance and, consequently, a higher level of satisfaction and long-term benefits. In this research, the focus is on students of business economics graduate studies in Croatia, who are expected to have fundamental knowledge of finance and stock investments, as potential investors in financial markets. It has previously been assumed that investment decisions are made in a rational way, taking only the risk and return of an investment into account. However, recent studies have shown that various psychological and behavioural factors influence this decision making process. Therefore, even though students of business economics are supposed to be more rational, it is often not true and their decisions are irrational to some extent.*

*There are many different behavioural factors which can influence these decisions. This paper focuses on heuristics and herding, as some of the most frequently recognized biases which influence investment decisions. However, these behavioural biases themselves can be affected by an individual's personality characteristics, which consist of two dimensions: stability and plasticity. This research aims at identifying multiple causal relationships between students' personality characteristics, behavioural biases and predispositions for long-term investment decisions. Data was collected through an online questionnaire among 223 students of graduate studies from Faculty of Economics, Business and Tourism in Split, Croatia. Partial least squares structural equation modelling results show that plasticity positively affects overconfidence heuristic, while stability positively affects representativeness heuristic. Stability also has a negative impact on herding, while availability heuristic is not influenced by personality characteristics. Additionally, overconfidence and representativeness positively affect students' predispositions for long-term investment decisions, while availability and herding affect those predispositions negatively.*

**Keywords:** behavioural finance, herding, heuristics, investment decisions, personality

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# THE INFLUENCE OF COVID-19 PANDEMIC ON SUSTAINABLE STOCK INDICES - THE MARKOV SWITCHING APPROACH

**Piotr Pluciennik**

*Adam Mickiewicz University in Poznan, Poland*  
*pplucien@amu.edu.pl*

**Bogna Janik**

*WSB University in Poznan, Poland*  
*bogna.janik@wsb.poznan.pl*

## **ABSTRACT**

*This study analyses the dynamics of sustainable stock indices (SSIs) and their conventional peers during the COVID-19 health crisis by examining the FTSE4Good Index Series for the United Kingdom and the European Union as well as corresponding conventional indices. Conditional volatility was obtained from the Markov Switching ARCH-type model with two regimes. The first regime is identified as normal market conditions whereas the second one with pandemic conditions, which allows to recognize the period when the pandemic affected the market. The results reported herein, based on the applied model, do not indicate considerable differences in the dynamics of sustainable stock indices (SSIs) and their conventional peers during the COVID-19 health crisis. This analysis was based on daily log returns between January 1, 2018 and December 31, 2020.*

**Keywords:** *COVID-19 Pandemic, GARCH models, Markov Switching Models, Sustainable Stock Indices*

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## USING TEXT MINING TO ANALYSE WEB ADDRESSES (URLS)

**Romana Sipoldova**

*University of Economics in Bratislava, Slovakia*  
*romana.sipoldova@euba.sk*

### **ABSTRACT**

*With the digital transformation of the whole world, textual information from a wide range of sources has exploded. There has also been an increase in data mining. Data mining is the process of finding patterns, correlations and anomalies within large data sets to predict outcomes. The most natural form of information storage is text. Text mining is a type of data analysis that aims to gain valuable insights from textual information. It allows machines to understand the human language. Text Mining can also be used in the marketing area, specifically for more precise targeting of an online advertising campaign to the target audience. In our paper, we use information about visitors of the news site, who can become potential subscribers to paid content. In addition to technical, geographical, and behavioral parameters, we have the web address – URL (Uniform Resource Locator) link of the article they visited. In addition to the domain, each URL contains the title of a specific article in its body. We can process this data using Text Mining analysis. Before we can use different Text Mining techniques, we need to start pre-processing the text, which includes text analysis, cleaning, and transforming the text data into a usable format. Our goal is to process information from URLs and then create clusters that group articles with similar content based on the article title. This is the so-called URL clustering. The created clusters are then used as input variables in the predictive models used to more accurately target the online advertising campaign to target audience.*

**Keywords:** *URL, Clustering, Text Mining*

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## **TALENT MANAGEMENT AND FINANCIAL PROFITABILITY: AN ESSENTIAL BINOMIAL IN THE CONTEMPORARY COMPANY**

**Klaus Ulrich**

*ESIC Business & Marketing School, Spain  
klausjurgen.ulrich@esic.edu*

**Maria Guijarro-Garcia**

*ESIC Business & Marketing School, Spain  
ESIC University, Spain  
maria.guijarro@esic.edu*

**Pilar Perez-Ruiz**

*ESIC Business & Marketing School, Spain  
pilar.perezruiz@esic.edu*

**Javier Hernandez-Gadea**

*ESIC Business & Marketing School, Spain  
javier.hernandez@esic.edu*

### **ABSTRACT**

*Talent Management has emerged in contemporary companies as a fundamental element to generate value. Having an adequate human resources policy that enhances employee capabilities is vital to generate satisfactory and productive work environments. The main objective of this paper is to analyze the impact of some of the main variables involved in talent management, and how they affect the financial profitability of the company. Specifically, we focus on analyzing the size of the workforce of companies that carry out talent management actions, the range of aspects taken into account in the evaluation of employee performance, and employee perceptions of the company's compensation and promotion policies. On the other hand, given that Covid19 has strongly impacted the human resources area of all companies, we have introduced in the analysis the measurement of how the pandemic has affected the way of working in the different*

*organizations studied in this article. The study has been carried out through a survey of the heads of the human resources departments of some of the largest companies in the region of Valencia, Spain. The analysis has been carried out through a fuzzy set qualitative comparative analysis approach, since it allows to capture the complexity of the relationships of the conditions in a human environment, obtaining equifinal solutions that lead to the expected result, the financial profitability. The main contribution of this study is to help business in making decisions in the area of Talent Management, in order to be able to continue generating profitability and value with their businesses.*

**Keywords:** *compensation and promotion, employee performance, fsQCA approach, Human Resources, Talent Management*

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## **DEVELOPMENT OF DESIGN THINKING EXPERTISE AMONG UNIVERSITY NORTH ECONOMY STUDENTS**

**Martina Baricevic**

*Department of Economics, University North, Croatia  
mabaricevic@unin.hr*

**Tomislav Bobic**

*Department of Economics, University North, Croatia  
tobobic@unin.hr*

**Matija Mandaric**

*Department of Economics, University North, Croatia  
mamandaric@unin.hr*

### **ABSTRACT**

*Nowadays, some of the learning models are outdated and the relationship between the lecturer and the student is changing. New generations are looking for more interaction, practical*

*work, communication and they want to express their opinions. The main obstacle on the path to creativity and expression is the fear of how a particular lecturer will react. The course Disruptive Innovation and Design Thinking approached learning in a new and modern way, allowing us to gain the breadth and theoretical knowledge necessary to demonstrate the importance of the innovation process in all segments of study, and especially in the new challenges that digital economy brings every day. In this paper we touched on new ways and methods of learning using the Design Thinking process and we shared our innovations, reached by using said process. We introduced an idea for a Design Thinking workshop, a contactless asynchronous mailbox and a new model of giving feedback through a “feedback” application solution. The Design Thinking approach to problem solving encourages creativity and teaches students to focus on solutions rather than obstacles. It also allows to explore a multitude of alternatives, cooperate with different people and create a product that is customized to the needs of the user. Therefore, we believe that teaching classes as the Disruptive Innovation and Design Thinking in necessary and much needed for the education of tomorrows economy students.*

**Keywords:** *Creativity, Design Thinking, Economics, Education, Students*

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## **LINKS BETWEEN PHD INTERNATIONAL STUDENTS, INNOVATION AND GROWTH IN THE EU**

**Sinoi Elena-Alexandra**

*West University of Timișoara, Romania*  
*elena.sinoi@e-uvt.ro*

### **ABSTRACT**

*The globalised 21st century is driven by intense competition among nations regarding human capital accumulation and innovation development, as both aspects enable and support economic progress. The presence of educated and skilled migration (including PhD international students) positively influences knowledge creation and technology output generation, being an essential driver of economic and development growth. Moreover, innovation foster productivity, leading to greater production of goods and services, and finally, the entire economy of a state grows. Hence, governments are interested in developing institutions and policies' effectiveness to attract the skilled workforce and raise the overall productivity. It is, therefore, necessary to further study these vital aspects of sustainable development, which intermingle with each other. The purpose of this research is to assess the correlations between migrants, innovation and economic growth, using data for all 27 Member States of the European Union (EU) between 2014 and 2021. The data is provided by European Innovation Scoreboard (EIS) 2021 database. In order to accomplish this objective, we employed different panel data analysis methods, such as Generalized Linear Mixed Models (GLMM) and Difference and System Generalized Method of Moments (GMM) frameworks. The econometric results are robust and confirm that real GDP per capita is a function of human capital accumulation (both local and foreign), innovativeness activities and R&D investments. All independent variables mentioned above are positively associated with per capita economic growth and statistically significant at 1%, 5% and 10% levels, both in short and long terms.*

*Nevertheless, these effects appear to have a more significant impact in the long run compared to the short run.*

**Keywords:** *European countries, Growth, Innovation, PhD foreign students, R&D expenditures*

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## **SOCIAL MEDIA AS CRISIS COMMUNICATION PLATFORM IN HOTEL INDUSTRY**

**Zeljka Zavisic**

*Poslovno Veleučilište Zagreb  
Ulica grada Vukovara 68, Zagreb, Croatia  
zeljka.zavisic@pvzg.hr*

**Senka Zavisic**

*Veleučilište Lavoslav Ružička  
Županijska 50, Vukovar, Croatia  
senka.zavisic@vevu.hr*

**Davor Bernardic**

*Hrvatski Sabor  
Trg sv.Marka 6, Zagreb, Croatia  
davor.bernardic@gmail.com*

### **ABSTRACT**

*An extremely important form of business communication is crisis communication. The concept of social media crisis communication includes the exchange of information with the public during the crisis and taking measures to calm the intensity of the crisis towards certain target groups of the public through social platforms. The fact that events in online communities, especially on social networks, take place in real time, has given a completely new dimension to crisis management, and social networks have become an ideal channel for this type of communication. Since tourism is one of the most important*

*economic branches of the Republic of Croatia and family and small hotels have been among the most popular Croatian tourist products on the foreign tourist market in recent years, they were chosen as the category in which the research will be conducted. The aim of this paper is to determine exactly the manner and level of use of social networks as a crisis communication platform for the small and family hotels in the Republic of Croatia and to present importance of implementing social media crisis communication strategy.*

**Keywords:** *social networks, small hotels, crisis communication*

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