



ABSTRACT BOOK

19th Prof. Vladas Gronskas International Scientific Conference

29th of November 2024 Kaunas, Lithuania





19th Prof. Vladas Gronskas International Scientific Conference

Abstract Book

29th of November, 2024



Scientific Committee

Prof. Dr Remigijus Čiegis, Vilnius University, Lithuania Prof. Dr Veselin Draskovic, University of Montenegro, Montenegro Prof. Dr Edmundas Jasinskas, Vilnius University, Lithuania Prof. Dr Dalia Krikščiūnienė, Vilnius University, Lithuania Prof. Dr Zorica Bogdanović, University of Belgrade, Serbia Prof. Dr Asta Mikalauskienė, Vilnius University, Lithuania Prof. Dr Vesna Bosilj Vukšić, University of Zagreb, Croatia Ph.D. Dalia Suša Vugec, University of Zagreb, Croatia Prof. Dr Kristina Rudžionienė, Vilnius University, Lithuania Assoc. prof. Ewelina Idziak, Kazimierz Wielki University, Poland Prof. Dr Dalia Štreimikienė, Vilnius University, Lithuania Ph.D. Mine Afacan Findikli, UBI Business School, Belgium Prof. Dr Rūta Čiutienė, Kaunas University of Technology, Lithuania Assoc. Prof. Dr Ilona Kiaušienė, Vilnius University, Lithuania Assoc. Prof. Dr Rasa Pušinaitė - Gelgotė, Vilnius University, Lithuania Assoc. Prof. Dr Ingrida Šarkiūnaitė, Vilnius University, Lithuania Assoc. Prof. Dr Rumiana Zlateva, Konstantin Preslavsky University of Shumen, Bulgaria Assoc. Prof. Dr Giedrius Romeika, Vilnius University, Lithuania Assist. Prof. Dr Indrė Ščiukauskė, Vilnius University, Lithuania Lect. Dr Beatrice Leustean, University POLITEHNICA of Bucharest, Romania Ph.D., Ing. Leonard Walletzký, Masaryk University, Czech Republic Asist. Prof. Dr Rasa Bartkutė, Vilnius University, Lithuania

Organizing Committee

Project Manager:

Assoc. Prof. Dr Ingrida Šarkiūnaitė, Vilnius University, Lithuania Director of the Institute of Social Sciences and Applied Informatics – Assist. Prof. Dr Indrė Ščiukauskė, Vilnius University, Lithuania Prof. Dr Dalia Krikščiūnienė, Vilnius University, Lithuania Assoc. Prof. Dr Ilona Kiaušienė, Vilnius University, Lithuania

Doctoral students:

Viltė Lubytė, Gabija Stanislovaitytė, Daiva Masaitytė, Jūratė Budrienė, Neringa Grigarienė-Vaitiekūnaitė, Vaida Mardosaitė, Vilnius University, Lithuania

IT manager:

Juozas Stočkus, Vilnius University, Lithuania

Public Relations:

Rima Kubiliūtė, Monika Būblaitytė, Inga Vaitkevičiūtė, Domantė Vaišvylaitė, Jorė Bendinskaitė, Vilnius University, Lithuania

Editor:

Prof. Dr Dalia Krikščiūnienė, Assoc. Prof. Dr Ingrida Šarkiūnaitė

eISSN 2669-0233 https://doi.org/10.15388/VGISC.2024.II

© Authors, 2024 © Vilnius University, 2024.

This is an Open Access article distributed under the terms of the Creative Commons Attribution Licence, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

CONTENT

PROGRAMME		7
ABSTRACTS		11
Erkan Ağaslan, Hasan Türe	The Relationship Between Energy Consumption, CO ₂ Emissions, Economic Growth, and Macroeconomic Openness	12
Laura Atmanavičiūtė, Saulius Masteika	Towards Understanding the Application Areas of Zero Knowledge Proof: A Comprehensive Analysis	12
Neringa Grigarienė	A New Co-operative Activity Model on the Development of New Design Products in Creative Hubs	13
Diyana Yordanova	Encourage of Sustainable Business – Approaches for Increasing of the Scale and Impact Over the Natural Tourism in Shumen Municipality	13
Darius Karaša, Stasys Girdzijauskas	Prerequisites for the Formation of the Theory of Financial Saturation: The Return of Marginalism	14
Imants Krezins	Business Incubators: Challenges with Admission Criteria	14
Lilija Kublickienė	The Social Impact of the Cultural and Creative Industries and the Challenges of its Measurement	15
Sima Kučinskaitė, Virginija Jurėnienė	The Process of Empowering the Artist into the Art Market	15
Aistė Kukytė	Does Team Viability Enhance Career Satisfaction and Decrease Quiet Quitting in Knowledge Workers Teams?	16
Viltė Lubytė	The Influence of Digital Advertising on Financial Service Purchase Intentions: The Role of Consumer Emotions and Trust	16
Vaida Mardosaitė	The Impact of Digital Innovative Services on Consumer Behavior in the Convergence of Retail	17
Daiva Masaitytė	Improvisation as Innovation in Creative Industries Project Management	17
Raminta Počepavičiūtė, Ilona Kiaušienė	Impact of Digital Technologies on the Labour Market	18
Yehor Poliarskyi	Employees Cybersecurity Challenges: Phishing Threats and Prevention	18
Rugilė Sabonytė	Art and Culture Patronage in Lithuania: How It Affects Culture, Business, and Society	19
Ineta Simonaitė	Citizen Science for Sustainable Resilience and Green Innovation	19
Olga Snarskė	Optimization Through Advanced Process Management in Logistics	20
Gabija Stanislovaitytė	Exploring Biomass as a Carbon Sink in the Baltic States with Socio-Economic Impacts and Forest Restoration Insights	20
Ugnė Sungailė, Asta Stankevičienė	Exploring How Green Human Resource Management Practices Influence Employee Green Behavior	21

Gintarė Židonė	Synergy Between National Funding System and University Budgeting: A Literature Review on Higher Education Effectiveness	21
POSTERS		
Evelina Abramavičiūtė, Miglė Šuminaitė,	The Impact of Fur Color on a Dog's Time in a Shelter	23
Eglė Andriuškaitė, Karolina Jasaitė	The Influence of Personal Advice Sharing on Consumers' Healthy Lifestyle Choices	25
Jonas Andriuškevičius, Karolis Vaiginis	Research of Factors Influencing Dog Adoption Processes and Shelter Stay Duration	27
Greta Bedalytė, Vaiva Ramanauskaitė, Ugnė Šimonėlytė, Ernestas Žiogas	The Selection of Credit Services	29
Stela Bobelytė, Deimantė Stasionytė	Does a Dog's Color Affect Your Decision?	31
Greta Budrytė, Rokas Babinskas	Visitor Behavior Insights: Identifying and Solving Barriers to Engagement	33
Amelija Cirtautaitė, Vaiva Gumuliauskaitė	Online Content on the Effects of Food	35
Eglė Gasparaitytė, Ugnė Jakubauskaitė	Movie Recommendations – a Blog for Cinephiles and Newcomers to Cinema	37
Ignė Litvaitytė, Simona Šiugždaitė	Model for Predicting Dog Stay Time at "Penkta Koja" Animal Shelter	39
Aistė Mačiulaitytė, Gertrūda Simanavičiūtė	Influence of Behavioral and Physical Traits on Shelter Stay Duration for Dogs	41
Lukas Malinauskas, Mantas Kornelijus Vanagas	Analysis of Puppy Adoption Speed from "Penkta Koja" Shelter Based on Different Criteria	43
Erika Monstavičiūtė, Alina Šimukonytė, Ignas Lapienis, Titas Repšys	Factors Affecting the Reputation of UAB "Kauno Vandenys"	45
Justas Paškauskas, Mykolas Simanaitis, Tomas Achramavičius, Tadas Gatautis	"Vinted" Customer Satisfaction with the Company Worker Communication and Problem Resolution	47
Deimantė Pažėraitė, Aušrinė Štreimikė, Ieva Trilikauskaitė	Analyzing User Engagement and Digital Optimization in a Travel Blog	49
Viktorija Potechina, Goda Ramoškaitė	What Form of Promotion is the Most Effective in Driving Traffic to Your Site?	51

Inga Radzewicz, Martyna Žulpaitė	The Likelihood of Dog Adoption Depending on Shelter Stay Duration: Statistical Analysis and Strategic Solutions	53
Rusnė Rutkauskaitė, Ieva Gaučiatė	The Influence of Visual Elements on the Duration of the Blog User Engagement	55
Auksė Šukytė, Agnė Stepulaitytė	User Activity Before and After Email Campaign	57
Aušrinė Vainauskaitė, Karolis Vagusevičius	The Influence of Age and Color on the Time Puppies Spend in Shelters: Application of Machine Learning Methods in Data Analysis	59
Eva Zakaraitė, Kamilė Povilaitytė, Viltė Daubaraitė, Eglė Paulauskaitė	Development of Crop Insurance Services by "Vereinigte Hagel Lithuania"	61

PROGRAMME



Kaunas Faculty

19th Prof. Vladas Gronskas International Scientific Conference

29th of November, 2024, Kaunas, Lithuania

CONFERENCE PROGRAMME

	REGISTRATION		
00 20 10 00	(Vilnius University Kaunas Faculty, Entrance Hall in Building 2, 1 st floor		
09:30-10:00	Address: Muitinės Str. 8, LT-44280, Kaunas),		
	COFFEE (2 nd floor, Room: 5)		
10:00-10:30	10:00- 10:30 OPENING OF THE CONFERENCE (<i>Room: Prof. V. Gronsko a.</i>) Dean of Vilnius University Kaunas Faculty, Assoc. Prof. Dr Giedrius Romeika, Assoc. Prof. Dr Ingrida Šarkiūnaitė, Prof. Dr Remigijus Čiegis		
10:30–11:35	KEYNOTE SPEAKERS' PRESENTATIONS (Room: Prof. V. Gronsko a.)		
	10:30–10:50 Prof. Vlado Dimovski – Distinguished expert in management and organizational theory at the University of Ljubljana, Faculty of Economics (Slovenia)		
	"Authentic Leadership: Bridging Theory and Practice"		
	10:50–11:10 Stepas Telešius – Co-founder, shareholder and board member of ACME Grupe and Chairman of the Board of "Vesta Consulting", a sustainable business consultancy (Lithuania) "Sustainability in Business, What Are the Most Common Mistakes?"		
	11:10–11:30 Ph. D Edgaras Abromavičius – Head of esports and games of the Lithuanian Football Federation, working on projects together with UEFA, FIFA and other international organizations (Lithuania)		
	"International Expansion of a Sport Organization Through Innovation: The Case of E-sports"		
11:35-12:30	COFFEE BREAK (<i>Room: V a., 2nd floor</i>) and POSTERS SESSION (<i>near Prof. V. Gronskas a. 2nd floor and 1st floor</i>)		
12:30-14:30	PARALLEL SESSIONS IN SECTIONS (A, B, C)		
14:30-15:30	LUNCH BREAK (Room: 10 a. / Žalčio menė, downstairs)		
15:30-16:00	AWARDS FOR THE BEST PRESENTATION FROM EACH SECTION AND CLOSING OF THE CONFERENCE (Room: Prof. V. Gronsko a.)		

PROGRAMME

PARALLEL SESSIONS

SECTION A

Development of Business, Innovation and Entrepreneurship (1)

(Room: 7 a.) **Moderators:** Assoc. Prof. Dr Ilona Kiaušienė, Prof. Dr Dalia Krikščiūnienė Aistė Kukytė (Vilnius University, Lithuania) 12:30 Does Team Viability Enhance Career Satisfaction and Decrease Quiet Quitting in Knowledge Workers Teams? Imants Krezins (University of Latvia, Latvia) 12:45 Business Incubators: Challenges with Admission Criteria Ugnė Sungailė, Asta Stankevičienė (Vilnius University, Lithuania) 13:00 Exploring How Green Human Resource Management Practices Influence Employee Green Behavior Olga Snarskė (Mykolas Romeris University, Lithuania) 13:15 Optimization Through Advanced Process Management in Logistics Viltė Lubytė (Vilnius University, Lithuania) 13:30 The Influence of Digital Advertising on Financial Service Purchase Intentions: The Role of Consumer Emotions and Trust Yehor Poliarskyi (Vilnius University, Lithuania) 13:45 Employees Cybersecurity Challenges: Phishing Threats and Prevention Vaida Mardosaitė (Vilnius University, Lithuania) 14:00 The Impact of Digital Innovative Services on Consumer Behavior in the Convergence of Retail (Online)

PROGRAMME

SECTION B Development of Business, Innovation and Entrepreneurship (2) (Room: VeGa a.)

Moderators: Prof. Dr Virginija Jurėnienė, Dr Antanas Ūsas	
12:30	Rugilė Sabonytė (Vilnius University, Lithuania) Art and Culture Patronage in Lithuania: How It Affects Culture, Business, and Society
12:45	Daiva Masaitytė (Vilnius University, Lithuania) Improvisation as Innovation in Creative Industries Project Management
13:00	Raminta Počepavičiūtė, Ilona Kiaušienė (Vilnius University, Lithuania) Impact of Digital Technologies on the Labour Market
13:15	Lilija Kublickienė (Lithuanian Centre for Social Sciences, Lithuania) The Social Impact of the Cultural and Creative Industries and the Challenges of its Measurement (Online)
13:30	Sima Kučinskaitė, Virginija Jurėnienė (Vilnius University, Lithuania) The Process of Empowering the Artist into the Art Market (Online)
13:45	Neringa Grigarienė (Vilnius University, Lithuania) A New Co-operative Activity Model on the Development of New Design Products in Creative Hubs

PROGRAMME

SECTION C

Development of Business, Innovation and Sustainable Development (Room: Prof. V. Gronsko a.)

Moderators: Prof. Dr Remigijus Čiegis, Prof. Dr Asta Mikalauskienė	
12:30	Erkan Ağaslan, Hasan Türe (Kütahya Dumlupınar University, Anakara Haci Bayram Veli University, Turkey) The Relationship Between Energy Consumption, CO ₂ Emissions, Economic Growth, and Macroeconomic Openness
12:45	Laura Atmanavičiūtė, Saulius Masteika (Vilnius University, Lithuania) Towards Understanding the Application Areas of Zero Knowledge Proof: A Comprehensive Analysis
13:00	Darius Karaša, Stasys Girdzijauskas (Lithuanian energy institute, Lithuania) Prerequisites for the Formation of the Theory of Financial Saturation: The Return of Marginalism
13:15	Gabija Stanislovaitytė (Vilnius University, Lithuania) Exploring Biomass as a Carbon Sink in the Baltic States with Socio-Economic Impacts and Forest Restoration Insights
13:30	Ineta Simonaitė (Kaunas University of Technology, Lithuania) Citizen Science for Sustainable Resilience and Green Innovation (Online)
13:45	Diyana Yordanova (Konstantin Preslavski University of Shumen, Bulgaria) Encourage of Sustainable Business – Approaches for Increasing of the Scale and Impact Over the Natural Tourism in Shumen Municipality (Online)
14:00	Gintarė Židonė (Kaunas University of Technology, Lithuania) Synergy Between National Funding System and University Budgeting: A Literature Review on Higher Education Effectiveness (Online)



19th Prof. Vladas Gronskas International Scientific Conference

> **29th of November 2024** Kaunas, Lithuania

ERKAN AĞASLAN, HASAN TÜRE

Kütahya Dumlupinar University, Ankara Haci Bayram Veli University,

Turkey

erkan.agaslan@dpu.edu.tr

THE RELATIONSHIP BETWEEN ENERGY CONSUMPTION, CO₂ EMISSIONS, ECONOMIC GROWTH, AND MACROECONOMIC OPENNESS

This study examines the relationship between energy consumption, CO₂ emissions, economic growth and macroeconomic openness in European Union (EU) countries. Using annual data from EU Member States, it aims to understand how energy consumption affects CO₂ emissions in the context of economic growth and trade openness. Given global priorities on sustainability and climate change, analysing these factors within the EU is particularly relevant. The EU has been at the forefront of implementing policies to reduce greenhouse gas emissions, promote renewable energy and support sustainable economic growth. This research will therefore provide insights into the effectiveness of these policies and examine how trade and investment flows interact with environmental and economic variables. The results will contribute to the environmental economics literature and provide policy recommendations for balancing economic growth, environmental sustainability and trade openness in the EU.

Key words: energy consumption, CO₂ emissions, economic growth, sustainability, panel data

LAURA ATMANAVIČIŪTĖ, SAULIUS MASTEIKA

Vilnius University, Lithuania

laura.atmanaviciute@knf.vu.lt

TOWARDS UNDERSTANDING THE APPLICATION AREAS OF ZERO KNOWLEDGE PROOF: A COMPREHENSIVE ANALYSIS

As privacy and security concerns increase, Zero Knowledge Proof (ZKP) technology offers a promising solution for secure digital verification. ZKP addresses key privacy and security challenges across individual, business, and public sectors by enabling data protection without revealing sensitive information. The aim of this study is to analyze ZKP's application areas by reviewing current literature and case studies, examining its strengths, limitations, and potential risks. Findings highlight the capability of ZKP to enhance privacy, security, and verification processes across various fields, including blockchain technology, identity authentication, secure data sharing, and digital voting systems. The paper provides a balanced perspective on ZKP's benefits and challenges, including computational complexity and scalability issues. By suggesting practical use cases, this work aims to contribute to a deeper understanding of how ZKP technology can support innovation across various industries while addressing critical privacy and security needs.

Key words: zero knowledge proof, ZKP, blockchain, data privacy

NERINGA GRIGARIENĖ

Vilnius University, Lithuania

neringa.grigariene@knf.stud.vu.lt

A NEW CO-OPERATIVE ACTIVITY MODEL ON THE DEVELOPMENT OF NEW DESIGN PRODUCTS IN CREATIVE HUBS

Creative hubs represent novel business models in creative industries aimed at developing new products. Today, design is recognized as a strategic tool for addressing social, cultural, economic, and environmental issues through creativity and design thinking, which enhance organizational efficiency and creativity. This approach fosters a customer-focused perspective and enables the creation of innovative solutions tailored to customer needs. Aim of the paper is to analyse a new co-operative activity model on the development of new design products in creative hubs. This paper explores the crucial role of collaboration in creative hubs, analysing collaboration activities as co-operation best practices, and providing insights into how they bring together developmers, project managers and implementers to breakthrough design innovations in new product development, following the 3Cs of the co-operative activities aimed at fostering the development of new design products in creative hubs. Research problem: what constitutes the framework for novel co-operative activities aimed at fostering the development of new design products in creative hubs?

Key words: creative hubs, co-operation, creative Industries, design products

DIYANA YORDANOVA

Konstantin Preslavsky University of Shumen, Bulgaria

diq.nikolova@gmail.com

ENCOURAGE OF SUSTAINABLE BUSINESS – APPROACHES FOR INCREAING OF THE SCALE AND IMPACT OVER THE NATURAL TOURISM IN SHUMEN MUNICIPALITY

Humanity has proven that man and his concerns are above the daily tasks of the natural cycle. People need concrete, oil and steel instead of walking on the grass, birdsong and natural medicine. As the technological world advances, people increasingly need tranquility and living in sync with nature. There, near Shumen, in the village of Marash, nature created a thermal spring with healthy indicators for balneotherapy of joint diseases, inhalations and drinking balneotherapy. The purpose of the presentation is to build a concept for sustainable and coherent with the natural environment tourism. There will be presented some ideas for building a thermal complex with more natural materials, local food and service. Making a connection with the beautiful environment in the natural park "Shumen plateau", local producers of lavandula, vegetables, fruits and meat. How to turn the view from a usual landscape to a recognizable place for health and sustainability.

Key words: sustainable business, nature tourism, circular economy, new opportunity, mineral water

ABSTRACTS

DARIUS KARAŠA, STASYS GIRDZIJAUSKAS

Lithuanian Energy Institute, Lithuania

darius.karasa@lei.lt

PREREQUISITES FOR THE FORMATION OF THE THEORY OF FINANCIAL SATURATION: THE RETURN OF MARGINALISM

The prerequisites for the formation of the theory of financial saturation are revealed through marginalism economic theory (19th century). The development of economic theory came to an abrupt halt as the marginalism revolution got under way, splitting up into separate theories. This is associated with the uneven development of individual disciplines and the complicated application of mathematics to economic theory. The aim of the presentation is to reveal the theory of financial saturation development: the marginalism approach and application to saturation interest conversions, the construction of a new market equilibrium model. Analysis explores the potential for transforming saturation percentages into functional forms representing supply, demand, and utility. Transformation allows for the reinterpretation of the classical law of value, offering a pathway to constructing an innovative model of economic equilibrium. New model offers insights into the causes of bubbles and inflation, business cycle regulation, and actualization of mixed economic system.

Key words: marginalism, financial saturation, market equilibrium model, bifurcation

IMANTS KREZINS

University of Latvia, Latvia imants.krezins@students.lu.lv

BUSINESS INCUBATORS: CHALLENGES WITH ADMISSION CRITERIA

This paper examines the challenges business incubators (BIs) face in setting admission criteria and measuring success. BIs focusing on entrepreneurial education use broad criteria to attract diverse entrepreneurs, while those targeting new venture creation apply strict criteria to select high-potential startups. These differing approaches affect program design and complicate success evaluation. Furthermore, admission criteria influence selection by categorizing applicants into those who will succeed without BI support, those who need the BI to succeed, and those who won't succeed even with support. By favoring the first group, BIs increase the chances of success but neglect those who would benefit most. The varied approaches in BI philosophy, combined with incubatee selection, create internal goal misalignments that might negatively influence the success of BIs and create challenges in measuring their effectiveness.

Key words: *admission criteria, business incubators, entrepreneurial education, new venture creation, success measurement*

LILIJA KUBLICKIENĖ

Lithuanian Centre for Social Sciences, Lithuania

lilija.kublickiene@gmail.com

THE SOCIAL IMPACT OF THE CULTURAL AND CREATIVE INDUSTRIES AND THE CHALLENGES OF ITS MEASUREMENT

It is widely recognised that CCIs are vital engines of economic growth, but CCIs are unique beyond their economic impact, they also have significant social impacts – from health and well-being to social inclusion and the promotion of social capital. However, the lack of research and methodological tools to assess the social impact of CCIs still leaves the sector undervalued.

The aim of the presentation is to discuss the challenges related to measuring the social impact of CCIs.

The qualitative research with CCIs experts allowed to identify the key problem areas of CCI social impact measurement, such as:

- uncertainty/different interpretation of the concept of social impact (and impact in general);
- diversity of CCIs sub-sectors and the possibilities of reflecting their social impact specifics;
- relevance of monetised vs content-based measurement of social impact;
- empirical measurement issues: long-term measurement period, difficulty in isolating the impact of the CCI, etc.

Key words: cultural and creative industries (CCIs), social impact, measurement

SIMA KUČINSKAITĖ, VIRGINIJA JURĖNIENĖ

Vilnius University, Lithuania

kucinskaitesima@gmail.com

THE PROCESS OF EMPOWERING THE ARTIST INTO THE ART MARKET

The accessibility and purchase of artwork these days open up more opportunities for artists to exhibit, sell their work on a larger scale and gain recognition. However, simultaneously, there is high competition between all participants in the art market. The creator, not knowing how to start, faces challenges and obstacles to become a well-known art representative. In this case, artists can be helped by art galleries, which give creators the opportunity to show their creations and provide other support. In that instance, the gallery plays a role in empowering the artist to participate in the art market. Thus, the purpose of this study is to explore the process of empowering an artist to participate in the art market. It is important to understand how this process works and helps artist career, so the presentation includes the results of research on artists and galleries, model, the empowerment process and emerging problems.

Key words: empowering process, gallery, artist, empowerment, art market

AISTĖ KUKYTĖ

Vilnius University, Lithuania

aiste.kukyte@evaf.stud.vu.lt

DOES TEAM VIABILITY ENHANCE CAREER SATISFACTION AND DECREASE QUIET QUITTING IN KNOWLEDGE WORKERS TEAMS?

One of the most pressing challenges for organizations today is employee retention, as high turnover negatively impacts team performance, dynamics, and increases organizational costs. Low engagement often signals "quiet quitting," where employees limit themselves to assigned duties and avoid extra tasks (Formica & Sfodera, 2022), and later quit the organization. High team viability – members' satisfaction, cohesion, and capability for the future – can reduce quiet-quitting behaviors. Team viability also can increase career satisfaction, which represents personal fulfillment and perceived career success, thus reducing quiet-quitting behaviors. The purpose of the presentation is to present quantitative study results on the relationships among team viability, career satisfaction, and quiet quitting in knowledge workers teams. Using data from various team members representing different sectors, and analyzing how age, gender, team size, and tenure influence these dynamic, offering insights for managing quiet-quitting risks.

Key words: team viability, career satisfaction, quiet quitting, knowledge workers teams

VILTĖ LUBYTĖ Vilnius University, Lithuania vlvlubyte@gmail.com

THE INFLUENCE OF DIGITAL ADVERTISING ON FINANCIAL SERVICE PURCHASE INTENTIONS: THE ROLE OF CONSUMER EMOTIONS AND TRUST

The influence of digital advertising on financial service purchase intentions, mediated by consumer emotions and trust, is crucial in today's digital landscape. Intense online competition requires financial service providers to understand digital advertising, emotions and trust impact on consumer intentions. The purpose of this study is to introduce this conceptual model, illustrating how digital advertising, viewed through message and source characteristics, impacts purchase intentions via consumer emotions and trust. Drawing on the RAIA model, the study conceptualizes the consumer intention journey in the digital space, acknowledging the evolving information adoption landscape. The model differentiates between fear and greed as instantaneous emotional responses to advertising, rather than inherent consumer traits. Furthermore, it distinguishes mistrust as a separate construct from low trust, highlighting its significant impact on purchase intentions. The findings offer practical implications for marketers, researchers, and financial institutions seeking to develop effective digital advertising strategies grounded in the RAIA framework.

Key words: digital advertising, financial services, greed, fear, trust

ABSTRACTS

VAIDA MARDOSAITĖ

Vilnius University, Lithuania

vaida.mardosaite@gmail.com

THE IMPACT OF DIGITAL INNOVATIVE SERVICES ON CONSUMER BEHAVIOR IN THE CONVERGENCE OF RETAIL

In recent years, global changes have transformed business models and consumer behavior. Convergence, which refers to the merging of the physical and virtual worlds, has encouraged retailers to adapt to new business models and place greater emphasis on the implementation of digital technologies. However, retailers are more likely to implement not the technologies themselves, which can be complex, but rather the digital innovative services that arise from these technologies. This raises questions about what digital innovative services retailers are adopting and how they affect consumer behavior. First, a systematic literature review was conducted using the PRISMA method, classifying digital technologies and identifying the digital innovative services that retailers introduced during the pandemic. A qualitative study is then planned to systematize the digital innovative services implemented in retail convergence, and the results will be used to conduct a quantitative study to understand how digital innovative services influence consumer behavior.

Key words: digital technologies, digital innovative services, retail, convergence

DAIVA MASAITYTĖ

Vilnius University, Lithuania daiva.masaityte@knf.stud.vu.lt

IMPROVISATION AS INNOVATION IN CREATIVE INDUSTRIES PROJECT MANAGEMENT

The main topic is the link between improvisation and innovation in creative industries projects. The presentation highlights that improvisation, as the ability to react spontaneously and creatively to situations, is an important driver of innovation. The report stresses that innovation is crucial for the success of an organization. New ideas and solutions help to increase efficiency, improve performance and remain competitive. Projects are the perfect environment for new ideas to be born and implemented. Improvisation, as the ability to react spontaneously and generate new ideas, is closely linked to innovation. This presentation aims to show the link between improvisation and innovation. The report stresses that successful projects require creativity, flexibility and adaptability to changing conditions. To foster innovation, organizations need to create an enabling environment that values creativity and encourages the generation of new ideas. The study is based on a comparative method of scientific analysis and synthesis.

Key words: improvisation, innovation, creative industries, project management

ABSTRACTS

RAMINTA POČEPAVIČIŪTĖ, ILONA KIAUŠIENĖ

Vilnius University, Lithuania

raminta.pocepaviciute@knf.stud.vu.lt

IMPACT OF DIGITAL TECHNOLOGIES ON THE LABOUR MARKET

Innovations such as blockchain, artificial intelligence, and the Internet of Things are having an increasing impact on different sectors of the economy. These changes are creating new jobs while at the same time changing the nature of work, demanding new skills, and reducing the demand for traditional jobs. The aim of the research is to identify the impact of digital technologies on the labour market. The results show that the implications of digital technologies for the labour market and employment of workers are analysed from different perspectives. The rapid development of digital technologies promotes innovation, leading to faster job creation in the labour market. On the other hand, technological processes lead to a reduction in the number of jobs, which will increase unemployment. There are also those who believe that society will not notice major changes in the labour market because technological progress will create as many jobs as it will eliminate.

Key words: digital technologies, labour market, employment, trends

YEHOR POLIARSKY

Vilnius University, Lithuania

yehor.poliarskyi@knf.stud.vu.lt

EMPLOYEES CYBERSECURITY CHALLENGES: PHISHING THREATS AND PREVENTION

Cyber incidents caused by human factors have recently become a highly relevant topic, as the number of cyberattacks, particularly phishing, continues to grow. Employees, as the first line of defense, play a crucial role in safeguarding the company's digital assets by identifying and preventing cyber incidents. Successful cyberattacks can lead to significant financial losses, reputational damage, and business disruptions. The purpose of this presentation is to showcase the results of a study conducted in Lithuania, which examines employees' use of preventive e-measures and their vulnerabilities to cyber threats, including the latest phishing cases. The study reveals that significant portion of individuals possess only a moderate understanding of cyber threats and exhibit vulnerabilities in their online security practices, limited awareness of AI threats and gaps in trainings. Based on these findings, the report provides recommendations for tailored education programs, emphasizing the importance of fostering a cybersecurity culture within organizations.

Key words: cybersecurity, phishing, threats

ABSTRACTS

RUGILĖ SABONYTĖ

Vilnius University, Lithuania

sabonyte.rugile@gmail.com

ART AND CULTURE PATRONAGE IN LITHUANIA: HOW IT AFFECTS CULTURE, BUSINESS, AND SOCIETY

The presentation examines the importance of art and cultural patronage in Lithuania, exploring its impact on culture, business, and society. It emphasizes how cultural support initiatives play a vital role in shaping Lithuania's cultural landscape and strengthening connections between the arts, the economy, and community development. Key points include the distinct motivations of cultural patrons – driven by civic duty and cultural enrichment rather than commercial gain – and the benefits for various stakeholders. For businesses, patronage enhances brand image and cultural capital; for society, it promotes accessibility and civic identity; and for the arts, it fosters innovation and heritage preservation. The presentation includes recommendations to increase financial support through strategic alignment with social values, educational initiatives, and the promotion of international projects.

Key words: art, culture, patronage

INETA SIMONAITĖ

Kaunas University of Technology, Lithuania

ineta.simonaite@ktu.lt

CITIZEN SCIENCE FOR SUSTAINABLE RESILIENCE AND GREEN INNOVATION

Sustainability is one of the most important topics to societies worldwide, "Mitigating and adapting to the impacts of the climate change is one of humanity's biggest challenges in the coming decades" (Kumar et al., 2023). Citizen science might attract a diverse range of individuals to participate in projects with a common goal. Bringing citizens, scientists and policymakers together there is a chance to achieve great changes. The presentation aims to inform and encourage people to engage in climate resilience, sustainable development, and green innovation citizen science projects' initiatives. During the presentation we will talk about the examples of communities that collect data on resources like water and air quality, temperature shifts, biodiversity. Also, we will examine what motivates citizens to engage in such projects.

Key words: citizen science, sustainability, environment, citizen engagement

OLGA SNARSKĖ

Mykolas Romeris University, Lithuania

olgasnarske@gmail.com

OPTIMIZATION THROUGH ADVANCED PROCESS MANAGEMENT IN LOGISTICS

In the context of increasing complexity in global supply chains, effective process management has become a crucial determinant of operational efficiency in large-scale logistics companies. This study aims to assess the impact of an advanced process management system, introduced in 2022 within one of the largest logistics enterprises, with the objective of optimizing internal communication and streamlining operations. Utilizing a rigorous analytical framework, the research demonstrates significant improvements in information flow, transparency, and organizational clarity. The system has shown notable efficacy in key areas, including the implementation of quality and environmental policies, the optimization of core operational processes, and the enhancement of management documentation. The findings suggest that advanced process management contributes substantially to the achievement of higher operational efficiency and process optimization. Furthermore, this study offers practical recommendations that may guide similar organizations in improving their logistical performance through systematic process management innovations.

Key words: process management, operational efficiency, process management system (PMS)

GABIJA STANISLOVAITYTĖ

Vilnius University, Lithuania gabija.stanislovaityte@knf.vu.lt

EXPLORING BIOMASS AS A CARBON SINK IN THE BALTIC STATES WITH SOCIO-ECONOMIC IMPACTS AND FOREST RESTORATION INSIGHTS

This paper discusses the role of biomass as a carbon sink for the three Baltic States: Lithuania, Latvia, and Estonia. Its ecological effect, socioeconomic impacts, and interaction with forest restoration processes are assessed. This paper aims to assess the contribution of biomass to carbon sequestration, socio-economic development, and ecological sustainability of the region. Through quantitative data, case studies, and comparative analysis, this research underlines the necessary contribution that biomass will make toward regional and EU carbon neutrality objectives. It looks into the carbon sequestration and renewable energy that agriculture residues, forest biomass, and innovative processes, such as industrial land reclamation, have contributed to. The policy frameworks that also review opportunities for improvement in sustainability and economic outcomes include the EU Renewable Energy Directive and national strategies. Recommendations underline policy harmonization, encouragement of public-private partnerships, and spreading technological innovations as ways to ensure protection of ecological and economic long-term interests. The findings give actionable insights to policymakers, researchers, and industry players for optimum utilization of biomass in addressing climate change.

Key words: biomass, carbon sequestration, forest restoration, Baltic states, renewable energy

ABSTRACTS

UGNĖ SUNGAILĖ, ASTA STANKEVIČIENĖ

Kaunas University of Technology, Lithuania

ugne.sungaile@evaf.vu.lt

EXPLORING HOW GREEN HUMAN RESOURCE MANAGEMENT PRACTICES INFLUENCE EMPLOYEE GREEN BEHAVIOR

The growing global emphasis on environmental sustainability has positioned green human resource management (GHRM) practices as essential for fostering employee green behavior within organizations. This study explores the impact of GHRM practices on employee green behavior, examining how strategic HR practices, including green recruitment, training, performance appraisal, and reward systems, can shape employee behavior at work. Empirical researches reveal that organizations that actively implement GHRM practices witness a significant increase in employees' green commitment, eco-conscious actions, and sustainable decision-making. This presentation provides valuable insights for academics exploring the impact of GHRM and for practitioners seeking practical strategies to implement GHRM practices within organizations.

Key words: *human resource management, green human resource management practices, employee green behavior, sustainability*

GINTARĖ ŽIDONĖ

Kaunas University of Technology, Lithuania

gintare.zidone@gmail.com

SYNERGY BETWEEN NATIONAL FUNDING SYSTEM AND UNIVERSITY BUDGETING: A LITERATURE REVIEW ON HIGHER EDUCATION EFFECTIVENESS

This presentation examines the synergy between national funding systems and university budgeting and how this impacts on the effectiveness of higher education. In a rapidly evolving global economy, universities play a critical role in driving innovation and development, yet they are often caught between public sector expectations and private sector efficiency models. The aim of this presentation is to analyse the complex relationship between funding sources and university budgeting models, and how this synergy impacts the overall effectiveness of education systems. Key topics include the influence of state funding on university performance metrics, the challenges of balancing national macro-level priorities with micro-level efficiency requirements, and the potential for a theoretical model that aligns institutional and national objectives. By examining current literature, this presentation aims to provide insights into optimising the allocation of resources in higher education to support strategic goals and drive sector-wide improvements.

Key words: *national funding systems, university budgeting, higher education effectiveness, university efficiency*



19th Prof. Vladas Gronskas International Scientific Conference

29th of November 2024 Kaunas, Lithuania

THE IMPACT OF FUR COLOR ON A DOG'S TIME IN A SHELTER

Evelina Abramavičiūtė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: evelina.abramaviciute@knf.stud.vu.lt

Miglė Šuminaitė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: migle.suminaite@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

The aim of the study was to analyse how puppy characteristics such as colour, size, age and appearance affect the length of stay in the dog's shelter. We applied machine learning methods to identify which factors are most influential in determining whether puppies stay longer or shorter in the shelter. The study used classification and clustering methods to reveal these relationships. The establishment suggests that age has the biggest impact, but our study indicated that appearance (colour pattern) and size have the biggest impact. Clustering methods revealed different groups of puppies according to their gender, colour and age. The results show that the appearance of puppies can have a significant impact on their adoption rate, and these insights can help shelters to better plan resources and target strategies. In the future, it would be appropriate to extend the study to include additional behavioural characteristics of the puppy.

Key words: puppy adoption, length of stay, classification, clustering, machine learning

THE IMPACT OF FUR COLOR ON A DOG'S TIME IN A SHELTER

Team: Evelina Abramavičiūtė, Miglė Šuminaitė Vilnius University, Kaunas Faculty, Lithuania Marketing Technology III course, Lithuania Supervisor: prof. Dr. Dalia Krikščiūnienė

Problem

The length of time dogs stay in shelters depends on their characteristics, such as colour, size, age or appearance. Longer stays require more resources, making it more difficult to run the shelter.

Relevance

Every shelter is trying to adopt animals more efficiently and reduce their length of stay. Understanding which puppy traits affect their length of stay can help plan resources, improve promotional strategies and increase adoption rates.

Novelty

The study integrates classification and clustering methods. The data are used to present the most accurate models and to analyse the most important variables, the importance of which has not been sufficiently analysed in the context of shelters so far.

Objective

Use STATISTICA to determine whether a puppy's characteristics, in particular its colour, have an impact on length of stay in the shelter.

Solutions and research methods

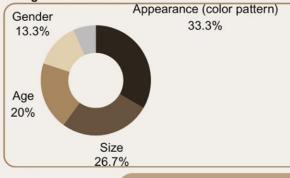
The study was carried out using STATISTICA. Methods used:

- Classification: five models were developed to assess the puppy's characteristics (gender, colour, appearance, size and age).
- Clustering: 3-5 clusters were created, highlighting the characteristics of different groups such as colour, gender and age.

Results

Classification: Appearance and size are the **most important predictors** of a puppy's length of stay in a shelter. Although colour is a significant factor, it is not a direct predictor of duration.

Clustering: Distinct groups of puppies were identified according to colour, gender and age. For example, a cluster of young, black and white females shows a shorter length of stay, while **older, black and brown males often spend longer** in the shelter.



Recommendations

More focus on advertising campaigns targeting the less popular types of puppies: older and darker coloured dogs.

Use classification and clustering techniques regularly to monitor trends and update strategies.

Sources: STATISTICA software documentation Data from "Penkta koja" shelter

evelina.abramaviciute@knf.stud.vu.lt

migle.suminaite@knf.stud.vu.lt

THE INFLUENCE OF PERSONAL ADVICE SHARING ON CONSUMERS' HEALTHY LIFESTYLE CHOICES

Eglė Andriuškaitė

Marketing and Sales Management Master Study Programme, Vilnius University, Kaunas Faculty E-mail: egle.andriuskaite@knf.stud.vu.lt

Karolina Jasaitė

Marketing and Sales Management Master Study Programme, Vilnius University, Kaunas Faculty E-mail: karolina.jasaite@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

This research investigates how sharing personal advice on healthy lifestyle topics can help consumers choose such a lifestyle and find like-minded people. Information on the internet can often be confusing; therefore, we created a blog based on personal advice and what works – from practical exercises in the gym to recipes and relaxation techniques. Our task was to determine which content and information presentation (textual, visual, etc.) is most relevant for the target audience. For this purpose, the "Google Analytics" program was used, which showed that currently, the most appropriate topic for our audience is the balance between sports and sleep and advice about sports clubs. After clarifying the most pertinent aspects and possible keywords, the "Google ads" platform can be helpful to achieve the intended KPI's in the future.

Key words: healthy lifestyle, content, Google ads, Google analytics, advice

SPORTO DNR 🔊

Sports dnr - Sport is already encoded in you, you just have to find it!

Description

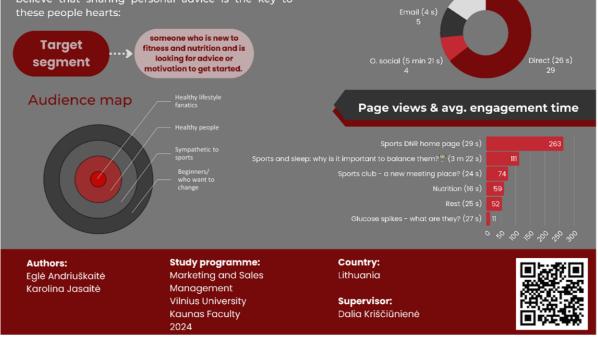
During the course, we have created a blog for anyone interested in sport, healthy living and improving their physical and emotional well-being. It includes posts about training, nutrition and the latest trends in sport.

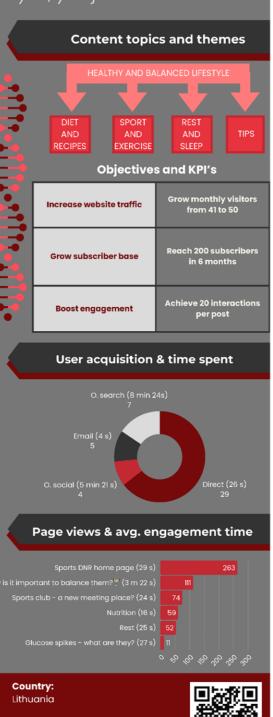
Technical part

The blog is powered by the robust Blogger platform, which ensures that every reader can easily access the content from any device – phone, tablet or computer. Data and graphical elements are processed and taken from the Google Analytics platform.

Why this topic?

We are personally involved in sport and healthy eating, so our advice comes from personal experience. We are trying to tackle the problem that people often end up damaging their health by not reading the latest news on sport and nutrition and not fully absorbing the information. And by not paying attention, they sometimes overlook extremely useful tips that can make a big difference not only to their performance but also to their motivation. We believe that sharing personal advice is the key to these people hearts:





Kauno fakultetas

RESEARCH OF FACTORS INFLUENCING DOG ADOPTION PROCESSES AND SHELTER STAY DURATION

Jonas Andriuškevičius

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: jonas.andriuskevicius@knf.stud.vu.lt

Karolis Vaiginis

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: karolis.vaiginis@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

The research analyzed over 100 records from the dog shelter "Penkta koja" using Excel and Power BI to identify factors affecting shelter stay duration and adoption speed. The average stay duration was 135.6 days, with dogs averaging 33.0 months old. Correlation analysis revealed that age (r=-0.45) negatively correlates with shelter stay duration, while size (r=0.42) shows a positive correlation. Multiple linear regression revealed that each additional month of age decreased stay duration by 0.54 days, while larger sizes increased it by 13.32 days. Intake month influenced duration, with a coefficient of -14.11 days. Logistic regression showed that 20.6% of dogs were adopted within 30 days, with age and size as the strongest predictors.

Recommendations include focusing adoption campaigns on older and larger dogs and adjusting staffing and resources during summer and just before Christmas time.

Key words: dog shelters, adoption, correlation analysis, seasonal trends, shelter efficiency

Research of Factors Influencing Dog Adoption Processes and Shelter Stay Duration

Jonas Andriuškevičius, Karolis Vaiginis

Problem

Dogs in shelters experience varying lengths of stay, creating challenges for efficient resource allocation and adoption campaigns.

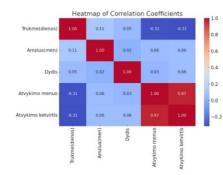
Research Methods

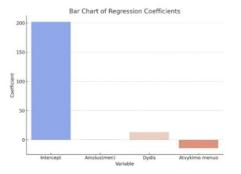
Excel and PowerBI for data cleaning and descriptive statistics: scatter plots, heatmaps, and regression analyses.

Aim

To identify factors that most influence shelter stay duration and adoption speed. Provide a data-driven framework for decision-making in dog shelters.

Key Results





Scatter Plot with Regression Line: Age negatively correlates with shelter stay duration (younger dogs are adopted faster). Bar Chart of Coefficients: Size and intake month significantly influence the duration. Residual Plot: Model fit evaluation showed minimal bias. Logistic regression identified "adopted quickly" predictors, with age and size as primary factors.

Recommendations

Focus on larger and older dogs to balance adoption trends. Allocate more resources during peak intake periods (e.g., summer). Include behavioral and health metrics for more nuanced predictive models.

Additional Details

Shelter Data Analysis -"Penkta koja"

jonas.andriuskevicius@knf.stud.vu.lt karolis.vaiginis@knf.stud.vu.lt

THE SELECTION OF CREDIT SERVICES

Greta Bedalytė

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: greta.bedalyte@knf.stud.vu.lt

Vaiva Ramanauskaitė

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail:vaiva.ramanauskaite@knf.stud.vu.lt

Ugnė Šimonėlytė

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: ugne.simonelyte@knf.stud.vu.lt

Ernestas Žiogas

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: ernestas.ziogas@knf.stud.vu.lt

Supervisor: Assoc. Prof. Dr Ilona Kiaušienė

Credit unions play an important role in financial markets, especially at the regional level. Their priority is not only profit-seeking but also ensuring the financial well-being of the community by expanding access to financial services for citizens who have limited access to commercial banks. However, to remain competitive and attract new members, credit unions must constantly monitor changing customer needs and accordingly improve their operations. The aim of the study is to investigate the factors contributing to the lower popularity of credit unions among consumers. Research questions: 1) Do consumers have sufficient knowledge about the services provided by credit unions and their advantages? 2) What are the main factors that influence consumers' choice between credit unions and commercial banks? 3) What would encourage people to choose credit union services? The study seeks to understand how consumers select credit service institutions and what factors would encourage them to choose credit union services. The research methods include a review and summary of scientific literature and a survey. The popularity of credit union services is analyzed in comparison to commercial banks. The study results indicate that clients are more likely to choose the more popular commercial banks due to the simplicity and convenience of their services.

Key words: credit unions, commercial banks, needs, choice



DOES A DOG'S COLOR AFFECT YOUR DECISION?

Stela Bobelytė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: stela.bobelyte@knf.stud.vu.lt

Deimantė Stasionytė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: deimante.stasionte@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

This study explores whether a dog's color influences the duration of its stay in an animal shelter. An analysis was performed on data collected from a local shelter, focusing on the association rules to identify interdependencies between dog coat colors and the average length of stay. The findings indicate that certain colors, such as grey and black, are associated with significantly longer shelter stays, with average durations of 150–185 days, while others, like white and tan, tend to have much shorter stays, averaging around 90–120 days. In fact, white dogs have an average stay that is almost half of that of black and grey dogs. These differences may be due to subconscious biases or societal preferences that affect potential adopters' decisions. The results suggest that public perception of dog coat color plays a crucial role in adoption rates, potentially disadvantaging dogs with less popular colors. Addressing this bias through education and targeted adoption campaigns could help improve outcomes and reduce the length of stay for all dogs, regardless of their coat color.

Key words: dog color, shelter stay, adoption rates, animal behavior, association rules



VISITOR BEHAVIOR INSIGHTS: IDENTIFYING AND SOLVING BARRIERS TO ENGAGEMENT

Greta Budrytė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty greta.budryte@knf.stud.vu.lt

Rokas Babinskas

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty rokas.babinskas@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

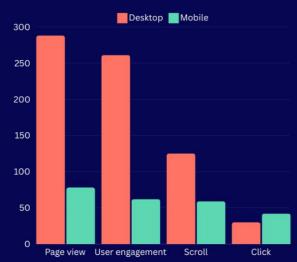
This study analyzes visitor behavior to identify engagement barriers, evaluate top-performing devices and browsers, and propose optimization recommendations. An analysis was conducted using Google Analytics data, focusing on device usage, browser preferences, and traffic sources. Findings revealed that desktop users had 290% higher engagement rates than mobile users. Chrome browser dominated in user numbers, while Safari and Opera demonstrated longer session durations. Organic search traffic emerged as the most engaging source.

Key words: Visitor Behavior, User Engagement, Digital Marketing, Google Analytics, Optimization

Visitor Behavior Insights: Identifying and Solving Barriers to Engagement

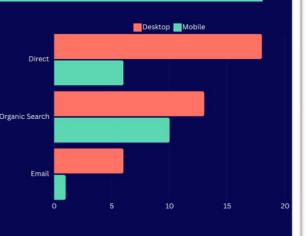
PROBLEM AND RELEVANCE

An analysis of blog visitors showed that Direct some devices and browsers hinder engagement. Identifying and addressing these user groups is vital to enhancing the organic Search experience and effectiveness of the blog.



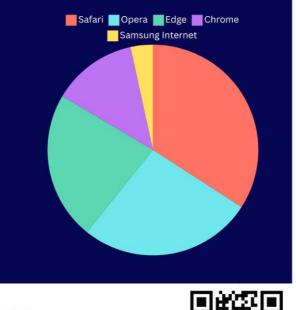
METHODS AND RESULTS

Google Analytics data was analyzed for device, browser, and traffic source engagement trends. **Devices.** Desktop users showed higher engagement than mobile users. **Browsers.** Chrome had the most users, but Safari and Opera stayed the longest. **Traffic.** Chrome and Opera users from organic searches had the longest sessions.



OBJECTIVE AND TASKS

The goal was to analyze visitor behavior to identify engagement barriers, pinpoint top-performing devices and browsers, and develop optimization recommendations.





AUTHORS: Kaunas 2ND-YEAR STUDENTS OF MARKETING TECHNOLOGY: Faculty GRETA BUDRYTĖ, ROKAS BABINSKAS SUPERVISOR: PROF. DR. DALIA KRIKŠČIŪNIENĖ



ONLINE CONTENT ON THE EFFECTS OF FOOD

Amelija Cirtautaitė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: amelija.cirtautaite@knf.stud.vu.lt

Vaiva Gumuliauskaitė

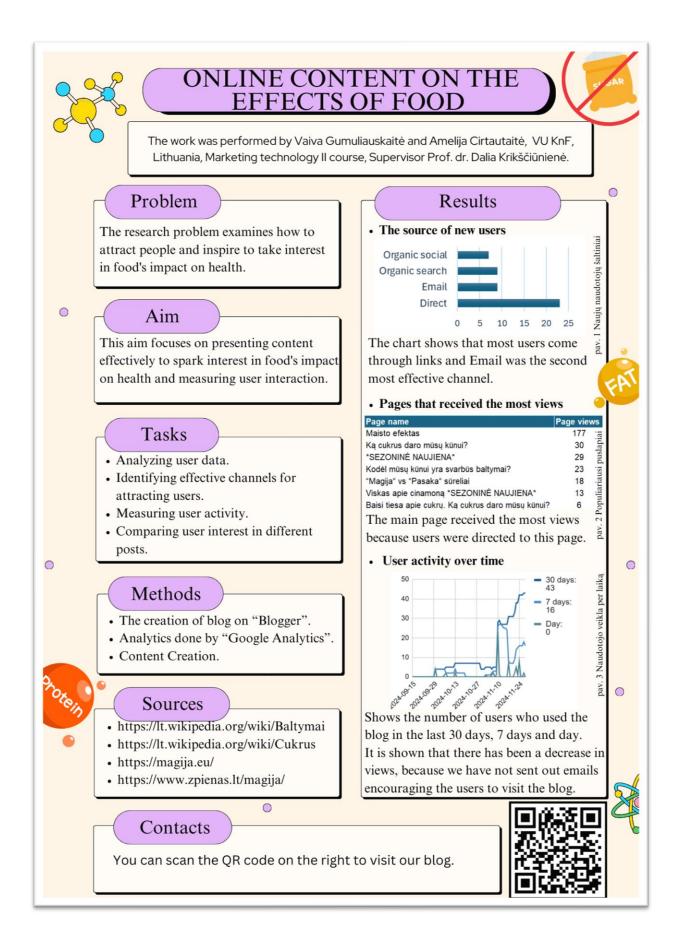
Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: vaiva.gumuliauskaite@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

The project aims to explore the attention and engagement of website users with health-related food information. The work aims to create a blog where we can conduct a comparative analysis of the influence of food on health based on the characteristics of different foods. The research problem addresses how to present content effectively to convince people to take an interest in the effects of food on their health. We have created a blog focused on the effects of food. To measure user engagement, we applied the Google Analytics tool for analyzing data such as the number of visits, the most popular posts and the keywords users searched for. The largest group of new users arrived via the direct channel, while email was the second most effective channel for attracting users through call-to-action strategies. The page with the most views was "What does sugar do to our body?". All readers accessed the blog through a web page with an average duration of one active user's engagement being 57 seconds.

Key words: Direct channel, Email, Call-to-action, Google Analytics, User Engagement

POSTERS



MOVIE RECOMMENDATIONS - A BLOG FOR CINEPHILES AND NEWCOMERS TO CINEMA

Eglė Gasparaitytė

Marketing And Sales Management Master Study Programme, Vilnius University, Kaunas Faculty E-mail: egle.gasparaityte@knf.stud.vu.lt

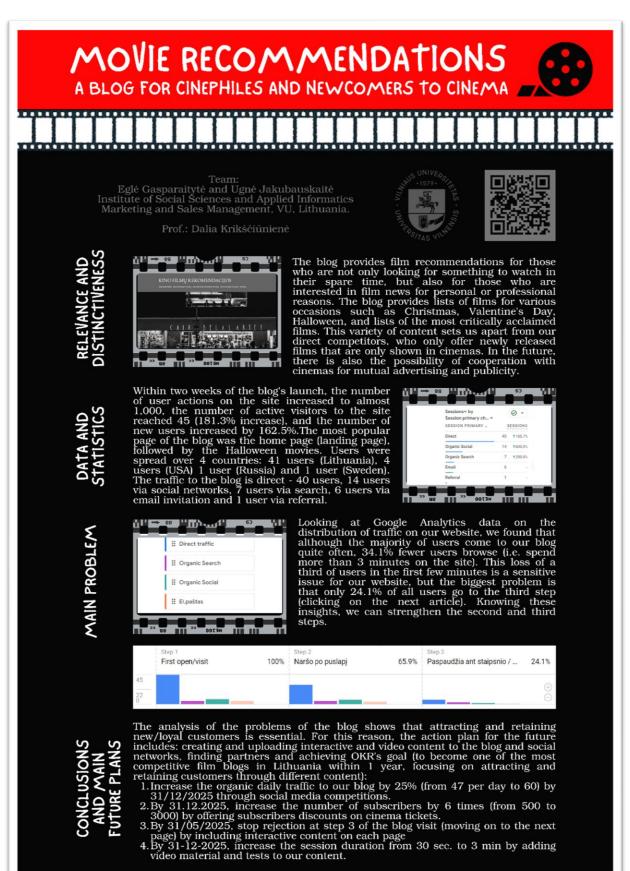
Ugnė Jakubauskaitė

Marketing And Sales Management Master Study Programme, Vilnius University, Kaunas Faculty E-mail: ugne.jakubauskaite@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

In order to investigate the interest of users we created a blog "Movie Recommendations" which provided cinema-related news and movie lists for different liking and occasions. During our exploratory research the biggest problem was identified such as the high customer dropout rate (almost 76%). By applying Google Analytics tool we explored that number of users coming to our blog was increasing almost 1,5 times every week (162,5%), 34,1% of users viewed only one page, and only 24,1% moved to the next article. To solve the problem we used the content marketing method – creating an audience map and two personas: people who don't know what to watch in their free time, and professionals creating similar content and looking for new ideas. The insights suggested that to reduce visitor dropout, it would be helpful to add more interactive elements (videos, polls, quizzes) to the blog's landing page.

Key words: cinema, movie recommendations, what to watch, cinema news



MODEL FOR PREDICTING DOG STAY TIME AT "PENKTA KOJA" ANIMAL SHELTER

Ignė Litvaitytė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: igne.litvaityte@knf.stud.vu.lt

Simona Šiugždaitė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: simona.siugzdaite@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

The "Penkta Koja" dog shelter faces challenges with prolonged stays for some dogs awaiting adoption. This study aims to develop a machine learning model to predict a dog's shelter stay duration based on available attributes such as gender, age, size, color, and arrival/departure quarters. Utilizing the XGBoost regression algorithm, the model processes categorical variables through OneHotEncoding and standardized numerical features. With hyperparameter tuning via GridSearchCV, the best configuration achieved an average absolute error (MAE) of 59.96 days and an R² of 0.18, indicating low prediction accuracy and room for improvement. For example, the model predicted a 99.11-day stay for a medium-sized, 2-month-old black dog. While initial results provide insights, integrating additional features like temperament or health status could enhance accuracy, offering a practical tool for the shelter to optimize care and adoption efforts.

Key words: dog shelter, machine learning, XGBoost regression, adoption prediction, data analysis

Kaunas Faculty of Vilnius University

KAUNAS, LIETUVA

KEY RESULTS

Performance Metrics:

R²: 0.18.

November 29th, 2024

MODEL FOR PREDICTING DOG STAY TIME AT "PENKTA KOJA" ANIMAL SHELTER

Simona Šiugždaitė and Ignė Litvaitytė

PROBLEM AND RELEVANCE

Problem: Long waiting times for dog adoption at shelters. Relevance: Predicting waiting times can help optimize shelter resources and adoption rates.



AIM

Develop a predictive model to estimate a dog's stay duration.

NOVELTY OF PROPOSED SOLUTION

Use of machine learning (XGBoost regression) to predict shelter duration based on characteristics like age, size, and intake quarter.

TASKS

- Collect and preprocess data.
- Optimize a machine learning model.
- Evaluate model accuracy and propose improvements.

RESEARCH METHODS

Model: XGBoost regression.

Data Preprocessing:

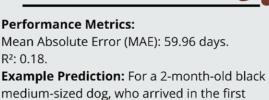
- · Categorical encoding with OneHotEncoder.
- Standardization of numerical variables.
- Log transformation for target variable.
- Hyperparameter Tuning: GridSearchCV with 54 combinations.

References:

Contacts:

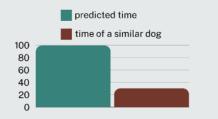
RECOMMENDATION

- Improve the model by incorporating additional data such as temperament and health condition.
- Increase dataset size for more robust predictions.



PREDICTED VS. ACTUAL TIME **IN SHELTER**

quarter, predicted stay duration is 99.11 days.



This chart compares the predicted shelter stay for a dog with the actual time spent by a similar dog.

INFLUENCE OF BEHAVIORAL AND PHYSICAL TRAITS ON SHELTER STAY DURATION FOR DOGS

Aistė Mačiulaitytė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: aiste.maciulaityte@knf.stud.vu.lt

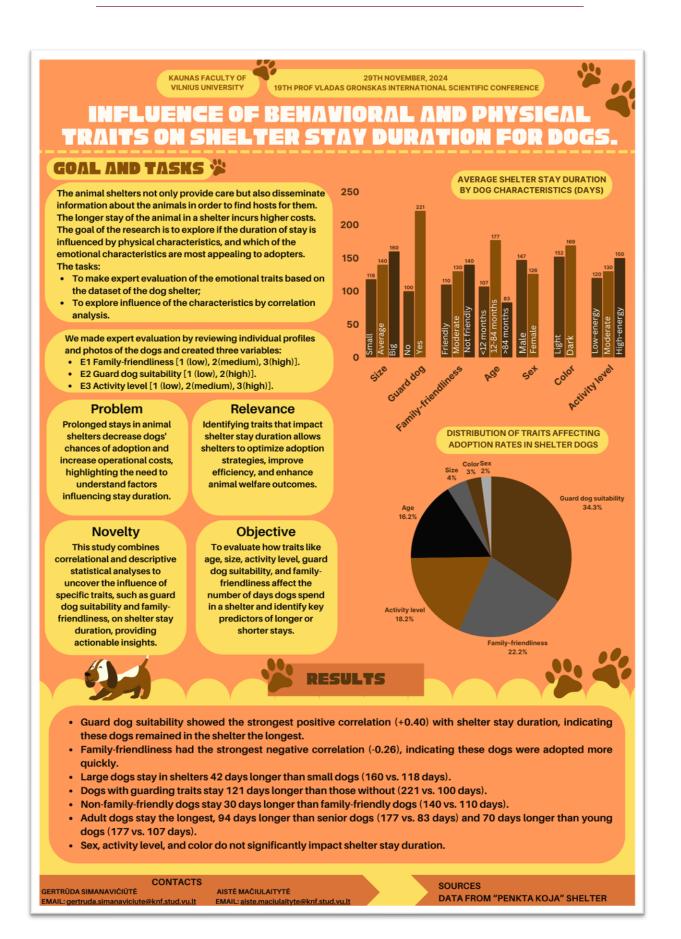
Gertrūda Simanavičiūtė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: gertruda.simanaviciute@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

The study investigates which traits influence the length of stay for dogs in the "Penkta Koja" shelter. The problem is significant, as longer stays reduce the likelihood of adoption and increase shelter costs. The aim was to assess how traits such as guard dog suitability, activity level, age, size, sex, color, and family-friendliness correlate with the number of days dogs spend in the shelter. A correlational analysis was conducted using real data on dog traits and their stay duration in the shelter. Results showed that dogs rated higher for guard dog suitability stayed the longest, with 0.40 positive correlation, while those rated as more family-friendly were adopted fastest, with -0.26 negative correlation. These insights can be used to improve shelter practices, enabling targeted marketing and campaigns to reduce the time dogs spend in shelters, enhancing their chances of adoption.

Key words: dog adoption, emotional characteristics, demographics, shelter animals, adoption rates



ANALYSIS OF PUPPY ADOPTION SPEED FROM "PENKTA KOJA" SHELTER BASED ON DIFFERENT CRITERIA

Lukas Malinauskas

Marketing Technologies Bachelor Studies, Vilnius University Kaunas Faculty E-mail:lukas.malinauskas@knf.stud.vu.lt

Matas Kornelijus Vanagas

Marketing Technologies Bachelor Studies, Vilnius University Kaunas Faculty E-mail: matas.vanagas@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

This study analyzed factors such as size, age, and color to identify trends influencing puppy adoption speed and propose strategies. Tools like pivot charts, linear regression, and Power BI were employed to evaluate adoption dynamics. This research is relevant for optimizing shelter operations by offering data-driven insights into adoption processes. It highlights opportunities to target specific groups and improve adoption rates. Results showed that small puppies had the shortest stays, with 10 classified as long-term stays, while large puppies had 14 and medium-sized puppies - had 25. Mature puppies with medium-colored fur experienced the longest stay, averaging about 250 days, whereas medium-colored senior puppies averaged about 50 days. Medium-sized puppies had 30 average-term stays, which is triple the amount of small puppies, indicating their unique challenges. Recommendations include intensifying promotions for medium-sized and senior puppies and leveraging peak adoption seasons like Christmas to enhance outcomes.

Key words: Adoption speed, shelter dogs, seasonality, size groups, data analysis

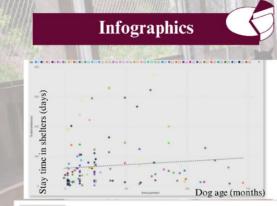
ANALYSIS OF PUPPY ADOPTION SPEED FROM "PENKTA KOJA" SHELTER BASED ON DIFFERENT CRITERIA

Lukas MALINAUSKAS, Matas Kornelijus VANAGAS

Marketing technologies bachelor study programme, Vilnius University Kaunas Faculty, Muitinės g. 8, Kaunas, 44280, Lithuania

Problem

What factors most significantly influence the speed of puppy adoption at the "Penkta Koja" shelter?



Count of Vardas







Amžiaus grupė • Spalvu grupes kategorija •

Methods and tools

Linear regression, pivot charts, powerBI

Relevance and objectives

This topic is significant for organizations because of its limited analytical tool experience and resources. From an organizational perspective, this study is valuable because shelters can use its findings to optimize their operations and increase adoption rates. The topics objectives are to classify puppies based on size, color, age, spent time and seasonality. Then, identify the primary factors influencing adoption speed. Lastly, provide recommendations for improving the operational of the shelter. Practically, the efficiency recommendations provided can be directly applied to advertising campaigns, seasonal planning, and increasing the adoption opportunities for individual puppies. This not only ensures more efficient use of available resources but also improves the quality of life for puppies by helping them find permanent homes more quickly.

Results 🕎

A weak positive linear association exists between dog age and shelter duration, with older dogs marginally outlasting younger ones. However, the trend's significance is undermined by substantial variance. The tendency between large and small dog duration categories is similar; however, medium-sized dogs exhibit a more moderate adoption duration, leaning towards average (30 cases) rather than extended periods (25 cases). During major holidays like Christmas, adoption rates surge, driven by a desire to share warmth and love. Female dogs, particularly, see a sharp increase in adoptions, peaking in January-potentially reflecting their shelter prevalence. Similar patterns emerge for large and medium male dogs and small to medium female dogs. Medium-colored adult dogs exhibit protracted sheltering, hinting at latent adopter biases. Puppies are adopted much faster regardless of color (avg. stay time <100 days), reflecting their higher demand. It is recommended to intensify advertising campaigns and organize adoption events during warmer seasons.

Contacts: <u>lukas.malinauskas@knf.stud.vu.lt</u> <u>matas.vanagas@knf.stud.vu.lt</u>

+ -

FACTORS AFFECTING THE REPUTATION OF UAB "KAUNO VANDENYS"

Erika Monstavičiūtė

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: erika.monstaviciute@knf.stud.vu.lt

Alina Šimukonytė

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: alina.simukonyte@knf.stud.vu.lt

Ignas Lapienis

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: ignas.lapienis@knf.stud.vu.lt

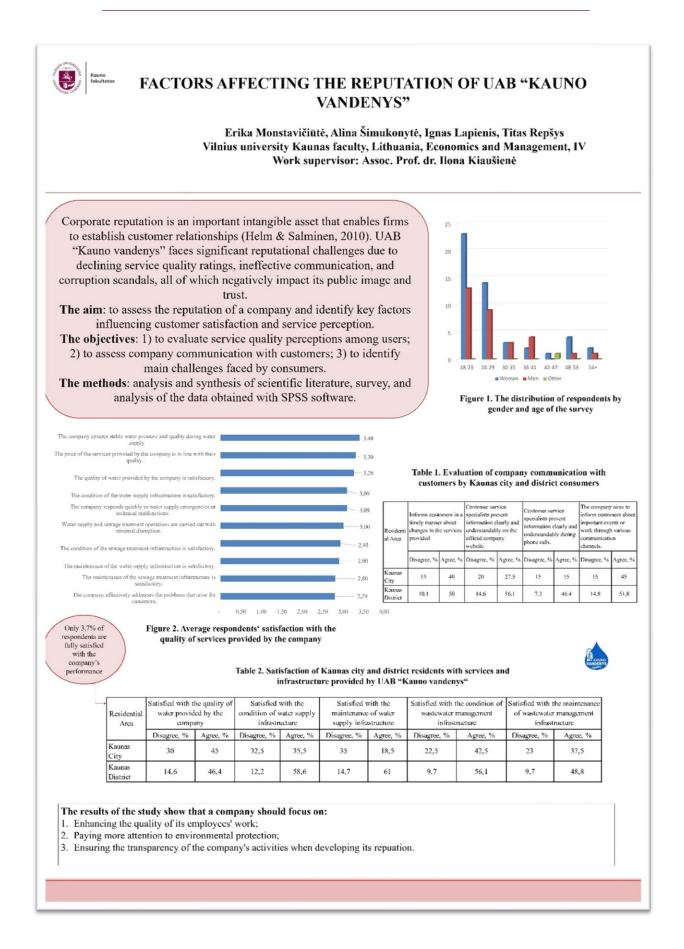
Titas Repšys

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: titas.repsys@knf.stud.vu.lt

Supervisor: Assoc. Prof. Dr Ilona Kiaušienė

Corporate reputation is an important intangible asset that enables firms to establish customer relationships (Helm & Salminen, 2010). UAB "Kauno vandenys" faces significant reputational challenges due to declining service quality ratings, ineffective communication, and corruption scandals, all of which negatively impact its public image and trust. The aim of this study is to assess the reputation of a company "Kauno vandenys" and identify key factors influencing customer satisfaction and service perception. The study objectives are: 1) to evaluate service quality perceptions among users; 2) to assess company communication with customers; 3) to identify main challenges faced by consumers The methods used in the study are: analysis and synthesis of scientific literature, survey, and analysis of the data obtained with SPSS software. Survey results will provide recommendations for the company to enhance its reputation, transparency, and customer service.

Key words: reputation, customer satisfaction, service quality, communication



"VINTED" CUSTOMER SATISFACTION WITH THE COMPANY WORKER COMMUNICATION AND PROBLEM RESOLUTION

Justas Paškauskas

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: justas.paskauskas@knf.stud.vu.lt

Mykolas Simanaitis

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: mykolas.simanaitis@knf.stud.vu.lt

Tomas Achramavičius

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: tomas.achramavicius@knf.stud.vu.lt

Tadas Gatautis

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: tadas.gatautis@knf.stud.vu.lt

Supervisor: Assoc. Prof. Dr Ilona Kiaušienė

In every company, the connection that employees convey to customers is important. Their manner, tone and politeness determine people's opinion and perception of the company. Of course, the same applies to the Vinted platform. There are endless variables when it comes to the second-hand market. There are countless things a buyer can be dissatisfied with - packaging, condition, smell, actual appearance, etc. Therefore, the platform must be constantly ready to deal with these problems as quickly as possible and convey the best possible image of the company, in order to have satisfied and returning customers. The aim of the study is to investigate customer satisfaction with Vinted's communication and problem solving. Objectives of the study - 1) To find out the customers' feedback on the company's communication. 3) To investigate how well the actual problem solving meets expectations. The research methods are a questionnaire survey and a synthesis. The results of the study show that Vinted's customers place the most value in speed of communication, and at the second place is the courtesy of employees.

Key words: customer, satisfaction, worker communication



ANALYZING USER ENGAGEMENT AND DIGITAL OPTIMIZATION IN A TRAVEL BLOG

Deimantė Pažėraitė

Marketing and Sales Management Master Study Programme, Vilnius University, Kaunas Faculty E-mail: deimante.pazeraite@knf.stud.vu.lt

Aušrinė Štreimikė

Marketing and Sales Management Master Study Programme, Vilnius University, Kaunas Faculty E-mail: ausrine.streimike@knf.stud.vu.lt

Ieva Trilikauskaitė

Marketing and Sales Management Master Study Programme, Vilnius University, Kaunas Faculty E-mail: ieva.trilikauskaitė@knf.stud.vu.lt

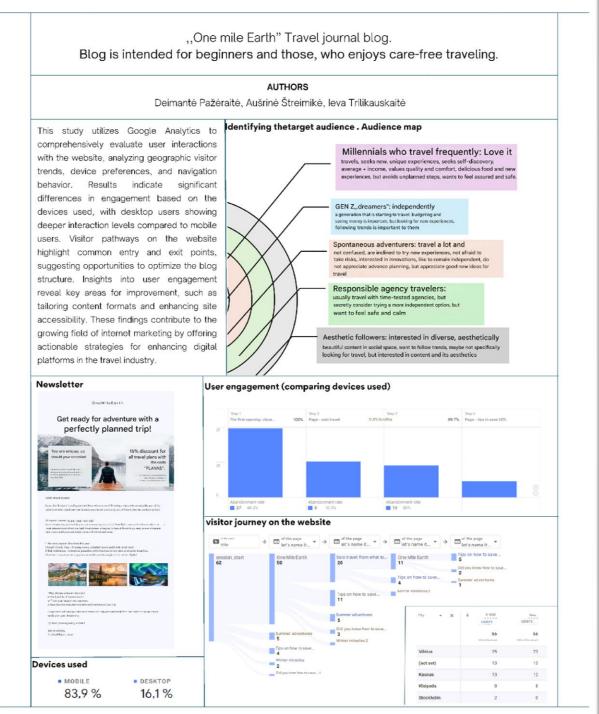
Supervisor: Prof. Dr Dalia Krikščiūnienė

The One Mile Earth travel blog was created as a resource for seasoned and aspiring travelers seeking inspiration and practical advice for their journeys. This study utilizes Google Analytics to comprehensively evaluate user interactions with the website, analyzing geographic visitor trends, device preferences, and navigation behavior. Results indicate significant differences in engagement based on the devices used, with desktop users showing deeper interaction levels than mobile users. Visitor pathways on the website highlight common entry and exit points, suggesting opportunities to optimize the blog structure. Insights into user engagement reveal key areas for improvement, such as tailoring content formats and enhancing site accessibility. These findings contribute to the growing internet marketing field by offering actionable strategies for enhancing digital platforms in the travel industry.

Key words: Travel blog, Google Analytics, user engagement, digital optimization, internet marketing



TRAVEL BLOG ANALYSIS



WHAT FORM OF PROMOTION IS THE MOST EFFECTIVE IN DRIVING TRAFFIC TO YOUR SITE?

Viktorija Potechina

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: Viktorija.Potechina@knf.stud.vu.lt

Goda Ramoškaitė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: Goda.Ramoskaite@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

This research addresses the question of which promotion tool drives the most traffic to your website. "Google Analytics" was chosen as a tool for website traffic data analytics of the "Nostalgic Recipes" blogger created by the authors. According to the research done by Husin & Rusa (2017) the average returning visitor ratio from referral traffic source reach the highest percentage of 25% compared to 17% from search traffic source and 19% from direct traffic source. Our research aimed to make a comparative evaluation of the findings of the research literature. The Google analytics results showed that referrals were the best source of traffic. Out of 327 users, 109 were from referrals. That estimates that approximately 33.3% of the visits were from users using referral links from other Blogger websites. A similar 33% of visits came from direct links, but it cannot fairly compete with the referrals because direct included more categories. Our research partly confirmed the previous research that referral link promotion works best for attracting the most users to a website.

Key words: User acquisition and behaviour, user traffic, promotion tools, data analysis

WHAT FORM OF PROMOTION IS THE MOST EFFECTIVE IN DRIVING TRAFFIC TO YOUR SITE?

Introduction

This research addresses the question of which promotion tool drives the most traffic to your website. These results would help people in the future manage their finances on which source is better to invest in, instead of running their own analysis and burning daylight with assets.

Article chosen for the study

SUNIVERSIA

lostalgiški receptai

Kaunas

Faculty

While researching this topic a similar study was found that achieved comparable results. The articles' information seemed to overlap gave grounds for the results accuracy. According to research done by Husin & Rusa "A study found that the average returning visitor ratio from referral traffic source has the highest percentage of 25% compared to 17% from search traffic source and 19% from direct traffic source. The results showed that different traffic sources have significantly different returning visitor ratio especially between referral traffic source and the direct referral and search referral sources. "(Husin & Ruza, 2017 p 8)

Conclusion:

To summarize during this research we discovered, that the best way to promote your website is using referral links, because referrals coming from a trusted source can make the user feel safer and build trust more efficiently. As (Husin & Ruza, 2017) we have determined a similar outcome for our research paper. The diagram shows substantial success of the referral links user traffic, coming in close second with direct traffic close third even though the classification of "direct" is composed of several sources (e.g visitors typing in the url, unknown sources, social media, offline docs ext.) so this comparison could be unfair.

In conclusion, referral link promotion works best for attracting the most users to a website, thus choosing this type of promotion will get the best results.

Creators: Viktorija Potechina | Marketing Technologies Contact information: Goda Ramoškaitė | Marketing Technologies Supervisor: Prof., Dr. Dalia Krikščiūnienė

goda.ramoskaite@knf.stud.vu.lt viktorija.potechina@knf.stud.vu.lt



Goda / Email Viktorija / Email draft.blogger.com/referral 0 20 40 60 80 100 120 Promotional tools:

In total 3 tools were used:

blogger.com/referral

google / organic

direct

- · Promotion via g-mail we sent out email promoting our website and its posts.
- · Referral Other blog pages had a link leading to our blog.
- · Direct there was a link that anyone could click on at anytime in an excel spreadsheet.

THE LIKELIHOOD OF DOG ADOPTION DEPENDING ON SHELTER STAY DURATION: STATISTICAL ANALYSIS AND STRATEGIC SOLUTIONS

Inga Radzewicz

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: inga.radzewicz@knf.stud.vu.lt

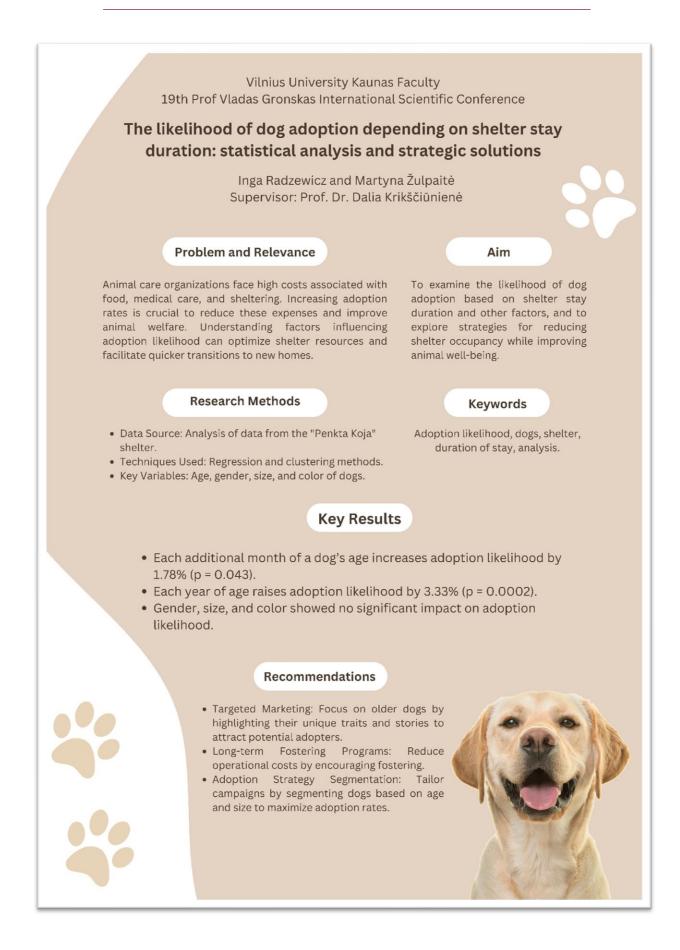
Martyna Žulpaitė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: martyna.zulpaite@evaf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

Animal care organizations face significant costs for food, medical care, and sheltering. Increasing adoption rate is essential to reduce these expenses and improve animal well-being. This study examines the likelihood of dog adoption based on their shelter stay duration and other factors such as age, gender, size, and color. The research aims to explore factors influencing enabling to reduce shelter occupancy, and improve animal well-being by facilitating the transition to new homes. Data from the "Penkta Koja" shelter was analyzed by using regression and clustering methods. Each additional month of dog age increases adoption likelihood by 1.78% (p = 0.043), and every year of age raises it by 3.33% (p = 0.0002). Gender, size, and color had no significant impact. Targeted marketing campaigns for older dogs, emphasizing their unique traits and stories, can strengthen the interest of potential adopters. Long-term fostering programs could reduce costs, while segmentation by size and age can enhance adoption strategies tailored to different groups.

Key words: adoption likelihood, dogs, shelter, duration of stay, analysis



THE INFLUENCE OF VISUAL ELEMENTS ON THE DURATION OF THE BLOG USER ENGAGEMENT

Rusnė Rutkauskaitė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: rusne.rutkauskaite@knf.stud.vu.lt

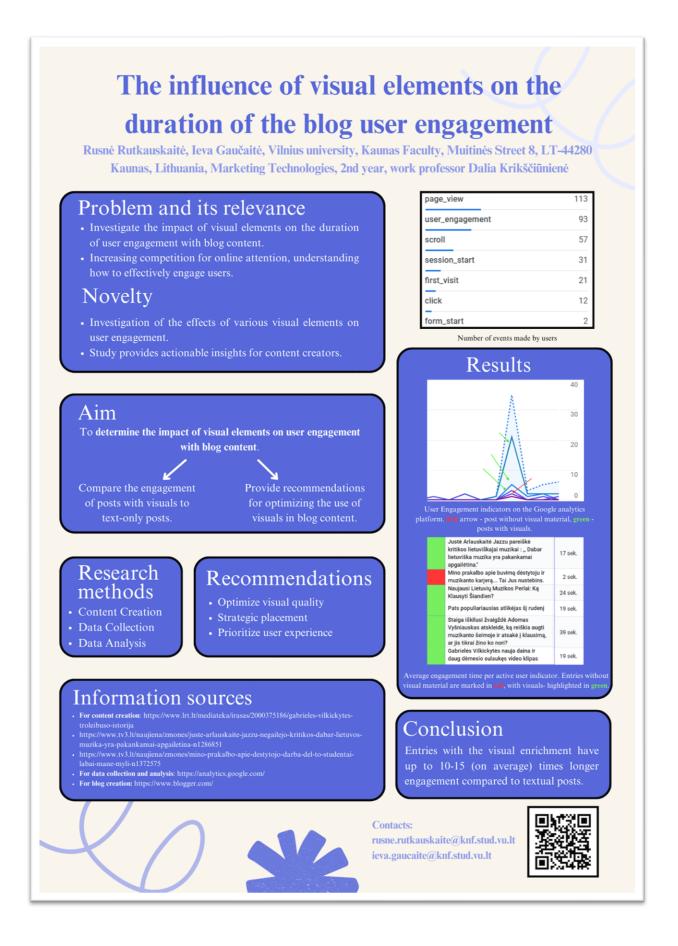
Ieva Gaučaitė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: ieva.gaucaite@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

The aim of the research was to explore if the use of visual content affects the duration of user engagement. We created different posts on the website using various visual aids: photos, videos uploaded with a link, video material that can be seen on the same screen, and giff-type visuals. Other parts of the posts had only text content. The blog was connected to the Google Analytics platform to study user traffic information. This function created the ability to see in detail the actions of site visitors not only in real time, but also in different periods. We've observed that the posts that contain visuals have a longer time for user engagement than the textual posts. The results aggregated in Google Analytics -> User engagement and retention -> Pages and screens -> Pages and screens: Page path and screen type confirmed the hypothesis that visual elements in the researched posts increase user engagement and affect its duration. Entries with visual enrichment have up to 10-15 (on average) times longer engagement than textual posts.

Key words: visual aids, user traffic, Google Analytics, user engagement



USER ACTIVITY BEFORE AND AFTER EMAIL CAMPAIGN

Auksė Šukytė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: aukse.sukyte@knf.stud.vu.lt

Agnė Stepulaitytė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty E-mail: agne.stepulaityte@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

The study aims to analyse how blog visitor activity changed before and after an email campaign. The goal was to see how effective the email campaign was at boosting user engagement and building long-term interest in the blog's content. One key issue that emerged was the temporary nature of the engagement – visitor numbers spiked after the email but quickly dropped back to previous levels. The email campaign's impact was tracked through Google Analytics. The results showed that while email campaigns can quickly boost user activity (up to 31 visitors in 30 days), keeping that momentum requires more effort. Future research is needed to explore how these strategies could deliver longer-lasting results.

Key words: *email campaign, marketing campaign issue, marketing strategies, user activity, user behaviour*

User activity before & after email campaign

Agnė Stepulaitytė, Auksė Šukytė

Vilnius University, Kaunas Faculty, Marketing Technologies. Lithuania Doc. dr. Dalia Krikščiūnienė US UNIVERS

Kauno fakultetas

This study was to analyze how blog visitor activity changed before and after an email campaign. The goal was to see how effective the email campaign was at boosting user engagement and building long-term interest in the blog's content. One key issue that emerged was the temporary nature of the engagement — visitor numbers spiked after the email but quickly dropped back to previous levels. The email campaign's impact was tracked through Google Analytics. The results showed that while email campaigns can quickly boost user activity (up to 35 visitors in 30 days), keeping that momentum requires more effort. Future research is needed to explore how these strategies could deliver longer-lasting results.



Before

Before the email campaign, the number of visitors was minimal, 1-2 visitors per day

Email

Email content: title related to the article, link to the blog, some text introducing the visitor to the blog content.

After

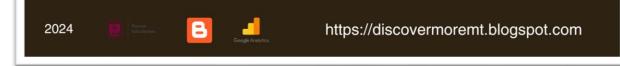
After the email campaign the number of visitors increased to 21, but the next day it dropped to 1-2 visitors per day, just like before, after the next email the number of visitors only increased to 10

Conclusions



Picture of statistics after the email campaign

Before the email campaign, the number of visitors was 1-2 per day, on the same day after the email, the number of visitors increased to 21, but the next day the number of visitors returned to 1-2 per day. So, email campaigns are only effective for a short time.



THE INFLUENCE OF AGE AND COLOR ON THE TIME PUPPIES SPEND IN SHELTERS: APPLICATION OF MACHINE LEARNING METHODS IN DATA ANALYSIS

Aušrinė Vainauskaitė

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty, E-mail: ausrine.vainauskaite@knf.stud.vu.lt

Karolis Vagusevičius

Marketing Technologies Bachelor Study Programme, Vilnius University, Kaunas Faculty, E-mail: karolis.vagusevicius@knf.stud.vu.lt

Supervisor: Prof. Dr Dalia Krikščiūnienė

This study aims to determine how puppies' age and coat color may influence their time spent in a shelter, using data from the "Penkta Koja" shelter database. Initially, data analysis, processing, and categorization were performed to prepare the dataset for further exploration. Machine learning methods were then employed to develop classification and clustering models to understand which factors most significantly affect the differences in shelter duration among puppies. Additionally, the study examined whether age and color could impact how long puppies remain in the shelter. The results showed that specific puppy characteristics significantly influence their time in the shelter. These insights can be used to optimize shelter operations and improve the care processes for the puppies.

Key words: shelter time, puppies' age, puppies' color, machine learning, data analysis

THE INFLUENCE OF AGE AND COLOR ON THE TIME PUPPIES SPEND IN SHELTERS: APPLICATION OF MACHINE LEARNING METHODS IN DATA ANALYSIS

PROBLEM

Determining how specific factors, such as age, size, and coat color, influence the duration of stay for dogs in animal shelters.

RELEVANCE

Reducing shelter stay duration improves resource allocation and increases adoption rates, benefiting both the shelter system and the animals.

NOVELTY

Applying machine learning methods, including supervised and unsupervised learning (neural networks and K-means clustering), to discover patterns in shelter dog data that may not be apparent through traditional statistical methods.

AIM

Apply predictive models and group analyses to identify characteristics that impact duration of stay in a shelter.

TASKS

- 1. Preprocess and clean the dataset for analysis.
- Implement a classification model using neural networks to predict stay duration categories (short, medium, long).
 Perform clustering (K-means) to uncover hidden patterns
- within the data. 4. Visualize findings through graphs and charts.

SOLUTIONS AND RESEARCH METHODS

Data Collection: Historical data of dog data including variables such as age, coat color, size, and duration of stay. Tools Used: Statistica 7 for neural network and clustering analysis.

IT tools:

1. Neural Networks (Multilayer Perceptron) for classification. 2. K-means clustering with different cluster configurations (3, 4, and 5 clusters).

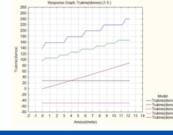
DATA PROCESSING

The dataset from the "Penkta Koja" shelter was utilized for statistical analysis, focusing on the hypothesis that age and coat color influence the duration of stay for dogs in the shelter. Data was categorized into relevant groups, such as age, coat color, and shelter stay duration. These categorizations enabled the application of statistical methods to extract meaningful insights. By preprocessing and structuring the data effectively, patterns and correlations could be analyzed more comprehensively.

Spalva	Amžius		Trukmé
Šviesi	Jaunas	iki 4,05 metų	Trumpa
Tamsi	Vidutinio amžiaus	nuo 4,05 iki 8,11 metų	VidTrukmė
Vidutinė	Senas	nuo 8,11	Ilga

RESULTS

Applying neural networks and K-means clustering revealed age-based patterns in shelter duration. Puppies up to 4.05 years stayed for 40–160 days, those aged 4.05–8.11 years averaged 160 days, and older puppies, over 8.11 years, exceeded 200 days. These insights can improve shelter operations and adoption strategies.



CONCLUSION

Age was confirmed to influence shelter stay duration.

SUPERVISOR

TEAM

Prof. Dr. Dalia Krikščiūnienė.

Marketing technologies bachelor study programme students, Vilnius university Kaunas Faculty Aušrinė Vainauskaitė, <u>ausrine vainauskaite@knf.stud.vu.lt</u>

Karolis Vagusevičius, karolis.vagusevicius@knf.stud.vu.lt

DEVELOPMENT OF CROP INSURANCE SERVICES BY "VEREINIGTE HAGEL LITHUANIA"

Eva Zakaraitė

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: eva.zakaraite@knf.stud.vu.lt

Kamilė Povilaitytė

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: kamile.povilaityte@knf.stud.vu.lt

Viltė Daubaraitė

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: vilte.daubaraite@knf.stud.vu.lt

Eglė Paulauskaitė

Economics and Management Bachelor Studies, Vilnius University Kaunas Faculty E-mail: egle.paulauskaite@knf.stud.vu.lt

Supervisor: Assoc. Prof. Dr Ilona Kiaušienė

In modern agriculture, considering climate change and the increasing frequency of extreme weather conditions, crop insurance is becoming increasingly important. "VEREINIGTE HAGEL Lithuania" aims to provide farmers with reliable insurance coverage that meets their needs. The objective of this study is to evaluate the opportunities and challenges for the development of crop insurance services by "VEREINIGTE HAGEL Lithuania." The research tasks are: 1) to analyze consumer perceptions of crop insurance and the services offered by "VEREINIGTE HAGEL"; 2) to identify the factors that influence the demand for crop insurance services. The study seeks to answer the question, "How do climate change and the integration of new technologies affect the demand for crop insurance services by "VEREINIGTE HAGEL Lithuania"?" The research methods include literature analysis, a questionnaire survey, and expert interviews. The study examines the trends in the popularity of crop insurance services in Lithuania and the opportunities to improve insurance products in response to changing consumer needs. The results indicate that the primary factor influencing the choice of crop insurance services is the customization of services to meet individual farmers' needs, while climate change significantly impacts the demand for these services.

Key words: crop insurance, consumer, climate change, service development



Krikščiūnienė, D. & Šarkiūnaitė I. (Eds.) "19th Prof. Vladas Gronskas International Scientific Conference: Abstract Book". – Vilnius: Vilniaus universiteto leidykla, 2024. – 64 p

eISSN 2669-0233 https://doi.org/10.15388/VGISC.2024.II

The "19th Prof. Vladas Gronskas International Scientific Conference" conference is an arena for cooperation and scholarly fellowship with young researchers and bachelor, master, and doctoral students from Lithuania and foreign countries. It is an arena for open discussion where young researchers can present and share their scientific insights. This conference encourages internationalization and closer cooperation between science and business. The conference keynote speakers – business representatives – provide participants with new insights and inspiration for further research. The main goal of this scientific gathering is to contribute to a reliable, safe, effective, and sustainable economy and business development.

Encouraging entrepreneurship is a crucial condition for economic growth, and this puts forward a new approach to business, creativity, value creation, and innovation. It is precisely in this context that business and science should interact.

E-mail: gronsko.konferencija@knf.vu.lt

This conference has received financial support from the Research Council of Lithuania (LMTLT), agreement No S-MOR-24-9.



The conference proceedings and abstract books are published in the diamond open-access journal Vilnius University Proceedings (indexed in BASE, CNKI, CORE, Dimensions, EBSCO, Google Scholar, JournalTOCs, ROAD,

Technical editor: Donatas Misiūnas

Vilnius University Press, Saulėtekio Av. 9, LT-10222 Vilnius info@leidykla.vu.lt, www.leidykla.vu.lt Knygos internete knygynas.vu.lt Mokslo periodikos žurnalai zurnalai.vu.lt

ScienceGate, ScienceOpen, Scilit, Sherpa Romeo).



knygynas.vu.lt zurnalai.vu.lt