

# **BOOK OF PROCEEDINGS**

**INTERNATIONAL  
CONFERENCE ON SOCIAL  
AND HEALTHCARE STUDIES**

# International Conference on Social and Healthcare Studies

## DAY 1:

ARTIFICIAL INTELLIGENCE AND CHALLENGES FOR MODERN SOCIETY: ECONOMIC, SOCIAL, LEGAL AND  
TECHNOLOGICAL PERSPECTIVE

## DAY 2:

HEALTH-CARE IN THE ERA OF ARTIFICIAL INTELLIGENCE

# Book of Proceedings

EDITORS:

**Valon Murati, Riaz Agahi, Avni H. Alidemaj, Filipos Ruxho**

*The conference aims to create a forum for scholars from different academic fields of economics, business, social science, IT and healthcare to exchange and present their research. The main objective is to further develop critical empirical research and theoretical work in regard to possibilities that will create and challenges that will pose to modern society the application of artificial intelligence.*

***December 5-6, 2023, Prishtina- Kosovo***

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## **EDITORS:**

Valon Murati, Riaz Agahi, Avni H. Alidemaj, Filipos Ruxho

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# GENERATIVE AI IN INTERNATIONAL MANAGEMENT EDUCATION FROM A CONSULTING PERSPECTIVE

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## Abstract

*This conference paper delves into the role of Generative AI in the realm of international management education, highlighting its transformative impact in both teaching and consulting spheres. The study explores the multifaceted challenges and opportunities that arise from the integration of AI technologies in academic environments. It emphasizes the need for well-thought-out strategic approaches that carefully balance the technology-driven aspects of education with learning-driven considerations. The paper is enriched with insights drawn from both consulting experiences and academic research. It pays particular attention to the paradoxical nature of Generative AI, scrutinizing its potential benefits and pitfalls in the context of management education and research. Moreover, it delves into the practical applications of this technology in international management scenarios. A key objective of the authors is to offer substantive guidance on how to employ Generative AI effectively and responsibly within higher education settings. This includes addressing the various uncertainties and dilemmas that this technology poses for both students and faculty members. The paper serves as a crucial resource for comprehending the dynamic interaction between human and machine learning in the field of management education, underscoring the complex interplay of these elements in shaping the future of academic learning and practical application.*

**Keywords:** *Generative AI, International Management Education, Technology Integration, Higher Education Challenges, AI in Academic Settings*

## INTRODUCTION

AI can be understood as “machines that perform tasks by imitating human intelligence using skills acquired through machine learning” (Bawack, Wamba, & Carillo, 2019, p. 4). For a current overview of AI definitions, see Kelly et al. (2023, pp. 13–23). McCarthy et al. (1955, p. 132) coined the term “artificial intelligence” (AI) for machines and processes that mimic human cognition and make decisions like humans. Following Bozkurt et al. (2023, p. 54) and McLuhan (1964), who assume that every technology is an extension of the human being (e.g. online networks are an extension of human neurons), AI is ultimately an extension of human intelligence.

As defined by Lim et al. (2023, p. 2), Generative AI can be considered as a technology that (i) uses deep learning models to (ii) generate human-like content (e.g., words, images) in response to (iii) complex and diverse prompts (e.g., languages, instructions, questions). This makes generative AI a “game changer” for the reform of the management education system. According to Gimpel et al. (2023, p. 3), Generative AI technologies have the potential to comprehensively change teaching and learning at universities. This technological development leads to significant uncertainties and changes in the academic teaching and learning environment. Students have questions such as: How can GenAI tools help me? Is the use of

ChatGPT allowed in seminars or theses, or is it considered cheating? How do I use GenAI tools effectively? What knowledge should I acquire to prepare myself for the long-term use of such tools, and what knowledge will be superfluous? Lecturers face similar questions from their perspective: What skills should I teach? How can I assess students' competencies rather than their ability to use generative AI models? How can I use Gen AI systems to increase my efficiency and improve my students' learning experience and outcomes?

The Association of University Lecturers (HLB) states: “It can be assumed that these systems are now being used productively in various contexts at our universities. The fact that some of the public debate is tinged with the general suspicion that our students are doing this with the intention of cheating prevents an objective debate on how to deal with these new possibilities. However, this debate is urgently needed due to the expected social upheavals” (HLB, 2023, p. 1). Given the revolutionary impact of generative AI technologies on higher education and the associated uncertainties and ethical issues among both students and faculty, there is an urgent need to develop strategies and guidance for their effective and responsible use. The aim of this paper is to address the notable tensions in education through a critical thinking approach that balances both concerns and enthusiasm for Generative AI. This is in line with Lim et al.'s (2023, p. 2) paradoxical perspective of Generative AI as regards the future of education. This discourse takes place against the background of the many years of experience of the three authors of this paper in academic

education and management consulting. Against the background that online MBA programs are generally viewed critically in terms of their quality (GMAC, Report 2022, p. 14), Barsky (2023) assumes that Generative AI has the potential to significantly improve online MBA programs in several respects: Customized learning; real-world simulations; data analysis; new teaching and assessment tools; and improved decision making. The focus is therefore on the following questions: How does the use of Generative AI in education influence the quality and effectiveness of academic training and guidance, and what challenges and opportunities does this present for lecturers and learners? Which examples from the management sector can be used to illustrate the basic and improvement possibilities of Generative AI? Given the revolutionary impact of Generative AI technologies on higher education and the associated uncertainties and ethical issues, both among students and lecturers, there is an urgent need to develop strategies and guidance for their effective and responsible use.

The following insights are based both on findings from many years of consulting experience and on the authors' work in MBA programs. Another central aspect of the methodology is the evaluation of current research articles and industry reports.

## **1.THE CONCEPT AND PARADOXICAL NATURE OF GENERATIVE ARTIFICIAL INTELLIGENCE**

One of the main objectives of the subsequent sections is to examine and contrast the characteristics and effects of human learning and machine learning, especially in the context of using Generative AI tools in management education.

Furthermore, it discusses how the integration of AI, especially in knowledge-intensive areas such as management consulting, creates new challenges and opportunities in the collaboration between humans and AI. It also looks at how the acceptance of AI is influenced by various factors, including the quality of AI results, the transparency and comprehensibility of algorithms, and the impact on human work performance and decision-making.

### **1.1 The Fundamental Challenge – Human Learning / Machine Learning**

“Domain expertise can mitigate the biases in statements  
generated by machine learning (ML).”  
Chouldhury et al. (2023, 1381)

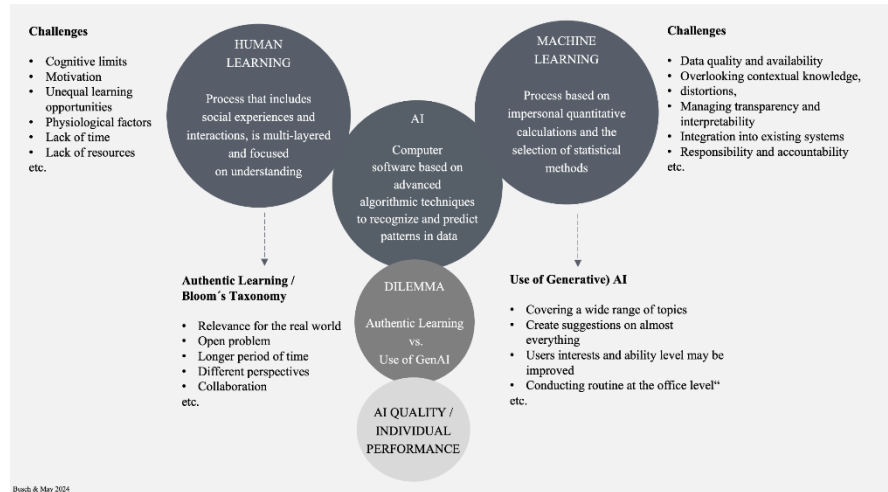
Busch & Grimes (2023, pp. 7-8) point out that machines learn differently from humans: Whereas human learning is rich in social context, diverse, future-oriented, and based on understanding, machine

learning relies on impersonal quantitative computation or formal rationality that selects a set of statistical models that describe the specific context of historical data. Although there is a risk that important contextual knowledge (e.g. inclusion of irrelevant information by omitting relevant statements. See Choudhury et al. (2023, p. 1382), biases (e.g., towards ethnic groups, see Whittaker et al., 2018, p. 21) and lack of transparency (e.g. regarding the data used, see Lindebaum et al., 2020, p. 256) are overlooked, AI offers users concise advantages and opportunities for action. Regarding the interplay of machine learning and human learning, Choudhury et al. (2023, p. 1381) conclude that the expertise of AI users can complement machine learning by mitigating biases.

According to Ratten & Jones (2023, p. 1), Generative AI has superior capabilities that make its use virtually undetectable. This is a dilemma for educators who want to utilize the technology and are interested in authentic learning at the same time. This problem is exacerbated by the fact that the objectivity of AI is questionable (Anthony et al., 2023, p. 1).

Authentic learning, according to Lowel & Young (2023, p. 3), is an instructional approach in which learners learn by applying and building knowledge in contexts that involve real-world problems and projects. In online environments, authentic learning can help learners develop higher order thinking skills (e.g., critical thinking, creative thinking, problem solving) to prepare for real-life tasks and has a significant impact on learner motivation and self-efficacy.

Students who are immersed in authentic learning activities cultivate the kind of "transferable skills" (to other activities or industries) that novices in any discipline have the most difficulty acquiring on their own (Lombardi, 2007, p. 3): The judgment to distinguish reliable from unreliable information; the patience to follow longer arguments, the analytical ability to recognize relevant patterns in unfamiliar contexts, the flexibility to work across disciplinary and cultural boundaries to find innovative solutions. The core characteristics of authentic learning include, for example, the relevance of the respective task to the real world, the openness of the respective challenge, the long-term nature of the discussion, the diversity of perspectives (ibid). Nguyen Thanh et al. (2023, p. 59) use Bloom's taxonomy (Kumar et al., 2024, p. 750) to assess the effectiveness of generative AI tools in the field of business (ChatGPT-4, Chat-GPT-3. 5, Google Bard and Microsoft Bing) and find that Generative AI tools perform very well at the lower levels of Bloom's taxonomy (e.g. "Remember" or "Understand"), while at the higher levels ("Evaluate" or "Create") they have a "decent" level of performance.



**Figure 1:**  
The Fundamental Challenges of Using Generative AI  
in Management Education

Figure 1 summarizes the discussion above and expresses the core hypothesis that human and machine learning each present unique challenges and opportunities. It also shows that the use of Generative AI presents a dilemma between the pursuit of authentic, understanding-based learning and the efficient use of generative AI.

## 1.2 Quality of AI and Individual Performance

"If algorithms deliver better forecasts than humans, then humans should prefer prefer algorithmic forecasts to human ones. But they often don't." Dietvorst et al. (2015, p. 11)

Based on the fact that - especially in knowledge-intensive areas such as management consulting - the skills of AI are increasingly overlapping with those of humans, the integration of human work and AI results in new fundamental challenges and opportunities. Based on experiments with Boston Consulting Group (BCG) consultants, Dell'Acqua et al. (2023, p. 1) found that in consulting tasks "inside-the-frontier", which are traditionally performed by highly qualified and well-paid professionals (e.g., brainstorming on innovative beverage concepts), the use of GPT-4 leads to significant performance improvements. For "outside-the-frontier" consulting tasks, such as which of the three distribution channels (own stores, franchisees or online) a company should focus on, it can be risky for professionals to use generative AI. Three factors - the surprising capabilities of large language models (LLMs), their ability to do real work without requiring the user to have technical knowledge, and their opacity and unclear failure points (hallucinations) - suggest that the value and drawbacks of AI for workers and organizations may be difficult to grasp (ibid, p. 4).

Lebovitz et al. (2021, p. 126) cite the inhibiting effects of the opacity of AI as justification. Allen & Choudhury (2022, p. 149) note that an employee's experience can be complemented by AI as they are able to judge the accuracy of an algorithm's recommendations. On the other hand, employees with more experience tend to reject helpful algorithmic advice. Dell'Acqua (2022, p. 1) examines the tension between AI quality and human effort and finds, in the context of personnel selection, that an increase in the quality of AI results in humans having less incentive to exert effort and remain attentive, allowing AI to replace rather than improve their performance. Using lower quality AI, on the other hand, resulted in recruiters spending more effort and time evaluating CVs and were less likely to automatically select the candidate recommended by the AI. The conclusion is that maximizing the performance of humans and AI may even require lower quality AI. Even if companies improve the quality of their AI predictions, performance may not improve because humans do not include them in their decision-making process (ibid, pp. 4-5).

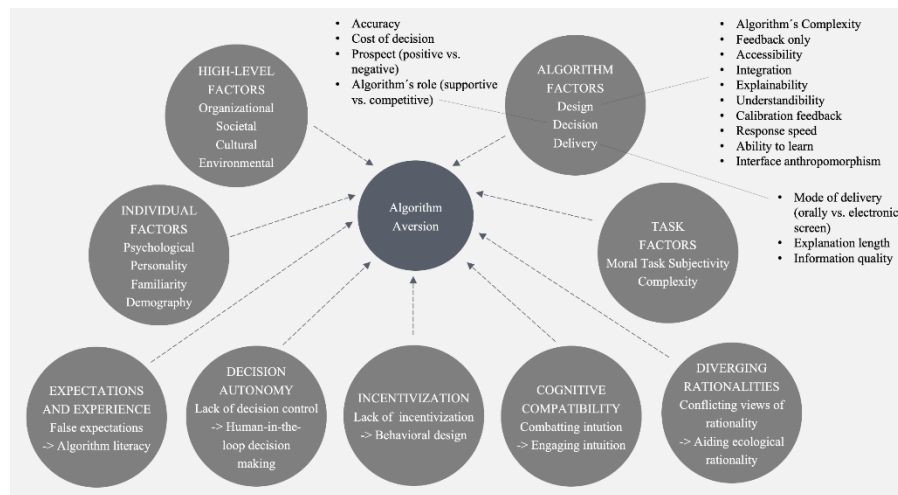


Figure 2:

### Determinants of the Formation of Algorithm Aversion / Solutions

(Source: Own depiction based on Mahmut et al. (2022, p. 14) and Burton et al. (2020, pp. 237-239))

Dievorst et al. (2015, p. 114) cite algorithm aversion as an explanation for this: People are averse to algorithmic forecasts, even when they see that they outperform a forecast made by humans. This is because people lose trust in algorithmic forecasts more quickly than in human forecasts when they see that they make the same mistake. For example, according to Logg (2017, 4), experts seem to prefer their own judgment over algorithmic advice, especially when algorithmic advice threatens their expertise and job security. Mahmud et al. (2022, p. 14) examine the question of which factors influence algorithm aversion. Given that users reject algorithms due to their "black box"-like design, it could be relevant to take care to unpack the "black box" when developing algorithms. Transparency and comprehensibility also apply regarding for whom (individuals), for what (task) and for what conditions (organizational, social) algorithms

are developed (ibid, p. 18). Burton et al. (2020, pp. 237–239) list the following causes of algorithm aversion) false expectations, lack of decision control: lack of incentives, fighting intuition and conflicting views on rationality) and discuss solutions for overcoming algorithm aversion (see figure above). Sowa et al. (2021, 139) have found that improved collaboration between humans and AI leads to an increase in productivity. In a comparative evaluation of the characteristics of good human employees with those of virtual "employees", they found that employees prefer an AI that is more reactive and restrained, i.e. that retains its "ability to act". - in the sense of acceptance of AI. According to Kelly et al. (2023, p. 1), acceptance can be defined as a behavioral intention or willingness to use, buy, or try a good or service. Perceived benefits, performance and effort expectations, attitudes and trust explain the behavioral intention, willingness, and usage behavior of AI in different industries.

## 2. GENERATIVE AI IN MANAGEMENT TEACHING AND RESEARCH

This section first provides an overview of the role and impact of Generative AI in various areas. The elaborations underline the transformative potential of Generative AI, from increasing productivity to promoting innovation. The second section covers several key strategies for incorporating Artificial Intelligence in management education, e.g., the fundamental components necessary for understanding or how AI can be practically applied in higher education.

### 2.1 Gen Ai Features and Capabilities

"AI systems are not able to think creatively or understand nuanced human emotions because they are only designed for specific tasks.

Users should verify information from reliable sources before relying on the answers provided by ChatGPT." **Haleem et al. (2022, p. 6)**

According to Haleem et al. (2022, p 1), ChatGPT is now at the top of several academic agendas. Administrators are forming working groups and holding institution-wide meetings to respond to the tools, with most offering advice to adopt the technology. ChatGPT is a generative pre-trained transformer. The word "Generative" or "G" in the acronym GPT stands for the tool's ability to produce text (speech generation). Pre-training, or "P", stands for the fact that the model is trained on an extensive amount of data (pre-trained knowledge base), "T" stands for "Transformer", the neural network, the type of model or algorithm that analyzes the data (Haleem et al. 2022, p. 2).

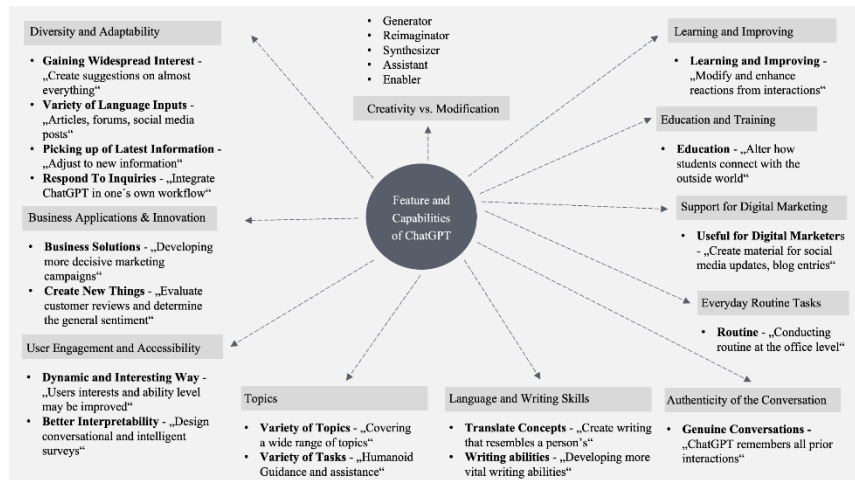


Figure 3:  
Major Roles of ChatGPT

Source: Own depiction based on Haleem et al. (2022, pp. 4-7) and Strobel et al. (2024, p. 4552)

Here is an example ChatGPT Prompt: "The word "Generative" or "G" in the acronym GPT stands for the tool's ability to produce text (speech generation). Pre-training, or "P", stands for the fact that the model is trained on an extensive amount of data (pre-trained knowledge base), "T" stands for "Transformer", the neural network, the type of model or algorithm that analyzes the data". Give concrete examples GPT from the field of management"). **ChatGPT Answer:**

**Generative (G):** In management, the generative capability of GPT can be used to create automated business reports, market analyses or management summaries. For example, a manager could submit a request to GPT to generate a detailed report on current market trends in a particular sector. The model would then produce a text summarizing this information based on its trained knowledge.

**Pre-training (P):** GPT's extensive pre-training enables it to have a broad understanding of management concepts and terminology. This can be used to provide answers to complex business questions, develop strategy recommendations or perform analysis based on a broad range of knowledge. For example, a manager could use GPT to gain insights into best practices for change management or international business strategies.

**Transformer (T):** In management practice, the Transformer architecture of GPT can help to filter or analyze important information from large business documents. For example, the model could be used to extract key insights from a large set of customer data or to create an efficient content summary of long reports by identifying the most relevant information.

Alshater (2022, p. 2) suggests that ChatGPT can be used in various ways to advance research. One possible application is the creation of simulations and scenarios for economic and financial models or the analysis of large data sets. When ChatGPT is trained to analyze and interpret data, it can identify trends and patterns that may not be immediately apparent to humans. This can be particularly useful in the financial sector,

where data analysis is crucial for making informed investment decisions. ChatGPT can also be used to create reports and summaries of economic and financial data, making it easier for researchers and analysts to understand and communicate their findings.

Generative Artificial Intelligence (GAI) seems to occupy the position of a disruptive technology that has the potential to significantly change industries from productivity (e.g. ChatGPT-4) to creativity (e.g. DALL-E). Based on the key characteristics "Degree of Creativity" (improve vs. innovate) and "Degree of Modification" (preserve vs. create), Strobel et al. (2024, p. 4552) present a typology of generative AI, which - from a management perspective - represent strategic options:

Generators (Type I - upper right) offer the possibility to create novel and innovative content based on only a few user inputs (e.g. text-to-image generators). Text-to-image generators such as Midjourney or text-to-video generators such as Synthesia are examples of this. Reimagers (type II - upper left) aim to reinterpret data in a new way. From a creative point of view, reimagers renew existing data material, such as images. Image-to-image reimagers, for example, retain the original motifs of photos and only change the style, extend the images beyond their edges or change objects with new variations (e.g. RunwayML). Synthesizers (type III - bottom right) are applications that offer the possibility of generating completely synthetic data for use cases such as training AI models or building large IT test landscapes. The level of creativity required is rather low, as the resulting synthetic output is heavily based on the original input. However, the goal is still the creation of something new, a synthetic modification of the original artifact (e.g. Syntho and Synthesis AI).

Assistants (Type IV - bottom left) Generate support for the user within an application domain (e.g. software development, law, accounting) with domain-specific expertise or skills. For this purpose, the applications were trained with domain-specific artifacts (e.g. source code, legal documents, etc.). The low level of creativity and modification therefore emphasizes the inherent abilities of assistants to improve and make things better while preserving the user's ideas. Typical examples of this type of GAI are programming assistants (e.g. GitHub CoPilot) or legal assistants (e.g. CoCounsel) that require sophisticated user input data (e.g. source code, documents) to make marginal refinements and improvements according to the user's needs.

Enablers (Type V) provide the necessary infrastructure to support processes such as training, fine-tuning or hosting Generative AI applications. While typical infrastructure service providers such as Amazon Web Services or Hugging Face provide both raw computing power and the hosting of models, Generative AI enablers aim to make applications easy to use without prior technical knowledge. Applications such as Graviti or Stable Diffusion Reimagine simply host GAI models developed by third parties. In addition,

enablers such as TrainEngine. AI and Dreamlook.ai offer training functions that allow users to refine their models with their own data. Enablers are a cross-section of all types with no clear boundaries in terms of their degree of creativity and modification.

## 2.2 Building Blocks of a Higher Education-Related AI Strategy

*"We see opportunities for scholars to increasingly make use of generative AI to assist with the entire value chain of knowledge production, from synthesis, to creation, to evaluation and translation." Grimes et al. (2023, p. 1617)*

*"With suitable teaching materials and pedagogical support the teaching of AI has changed in recent years from a technology-oriented to an interdisciplinary design." Ng et al. (2022, p. 1)*

In this section, some strategic aspects of AI in management education are addressed: (1) the building blocks of AI literacy, (2) the operationalization of AI use in higher education, (3) the integration of AI literacy into Bloom's taxonomy of using AI in higher education, (4) a basic typology of AI users, and (5) the stages of using generative AI.

Long & Magerko (2020, p. 2) define AI literacy "as a set of competencies that enable individuals to critically evaluate AI technologies, communicate and collaborate effectively with AI, and use AI as a tool online, at home, and in the workplace" (see Figure 4 for the individual dimensions).

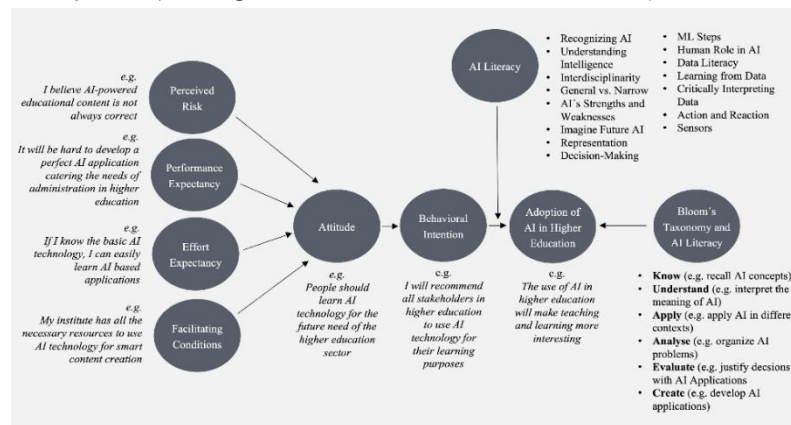


Figure 4:

Determinants of the Use of AI in Higher Education / AI Competence

Source: Own depiction based on Bhatteerjee & Bhattacharjee (2020, p. 10), Long & Magerko (2020, pp. 4-6) and Ng et al. (2021, p. 11)

Ng et al. (2021, p. 11) propose the use of Bloom's taxonomy to conceptualize AI literacy in such a way that learners are no longer just end users but should be able to reach higher cognitive levels to communicate, collaborate and create with AI. The potential benefits of using AI in education – in terms of strategic goal setting – are significant according to Harry (2023, 260): Personalized learning, one of the key benefits of AI in education, can lead to better student outcomes as they can learn at their own pace and in

a way that suits their learning style. Intelligent tutoring systems, chatbots and automated grading and assessment can increase efficiency, save teachers time, and provide more accurate and consistent feedback. For example, Duolingo's AI-based language learning platform provides a personalized learning experience tailored to each student's language level, interests and learning style. In addition, Duolingo's language learning chatbot provides language practice and feedback for students. Gill et al. (2024, p. 20) also suggest that ChatGPT will benefit a wide range of businesses, software developers and end users in the education sector. Kavitha & Lohani (2018, p. 1) emphasize the need to use AI to enhance virtual learning environments such as Moodle, Olat. Chatterjee & Bhattacharjee (2020, p. 10) examine the question of what are the factors that influence the attitude of key stakeholders of a university - students, teachers, researchers, non-teaching staff, administrative staff - towards the introduction of AI. According to this, the use of AI in higher education depends on the perceived risk, performance expectations, effort expectations and supporting framework conditions (see Figure 4).

Dell'Acqua (2023, p. 16) derives a typology of AI users: The centaur approach, which represents a connection between humans and machines - similar to the mythical figure that is half human, half horse - is based on a strategic division of labor in which humans and machines work closely together. Users who pursue this strategy alternate between tasks performed by AI and those performed by humans. They decide which tasks are better suited to human processing and which can be handled more efficiently by AI. For example, AI can be used to analyze global market trends, monitor competitors, and identify opportunities in different regions. This information helps executives to make strategic decisions about market entry, positioning and competitive strategies (Chat-GPT: Centaurs in Generative AI: examples from the field of strategic international management).

The second concept is referred to as cyborg behavior. Inspired by the human-machine hybrids depicted in sci-fi literature, this approach is based on complex integration. Users of the cyborg model do not merely delegate tasks to the AI, but intensively interweave their activities with the AI capabilities to the limits of their own abilities. This method often manifests itself in a dynamic distribution of roles in the processing of subtasks. For managers working in multiple languages, AI-based translation tools and language-understanding systems could be used, for example, to improve communication and understanding in multilingual teams and in international business negotiations (ChatGPT: Cyborgs in Generative AI: examples from the field of strategic international management).

Following Cook et al. (2024, n. p.), three phases of the use of Generative AI can be identified: 1. Use of publicly available tools: Companies can use general AI models or specific tools such as ChatGPT or Midjourney for different tasks, 2. Customization of the tools: Here, companies develop customized

generative AI tools based on their own data and know-how to improve customer experiences and offer personalized services, 3. Automatic and continuous data feedback loops: At this stage, Generative AI tools generate reliable signals from customers' natural use of the products or services. These signals are automatically fed back into the model to improve its capabilities with minimal human intervention.

### 3. PRACTICAL EXAMPLE

The tasks of international management can be systematized on the basis of the management control loop as follows: The analysis of the external corporate environment (e.g., country-specific PESTEL analysis, Five Forces), the analysis of the internal corporate environment (e.g., strengths and weaknesses analysis, SWOT), the planning of strategic goals (e.g., corporate competence, target market positioning, target groups/stakeholders, corporate culture, overall goals), corporate strategies (e.g. internationalization strategies, innovation strategies, marketing strategies, personnel strategies, logistics strategies, production strategies, financial strategies), the size and distribution of the budget, specific measures for the respective functional areas, organization (e.g., organizational structure and workflow, project management) and controlling (operational and strategic controlling).

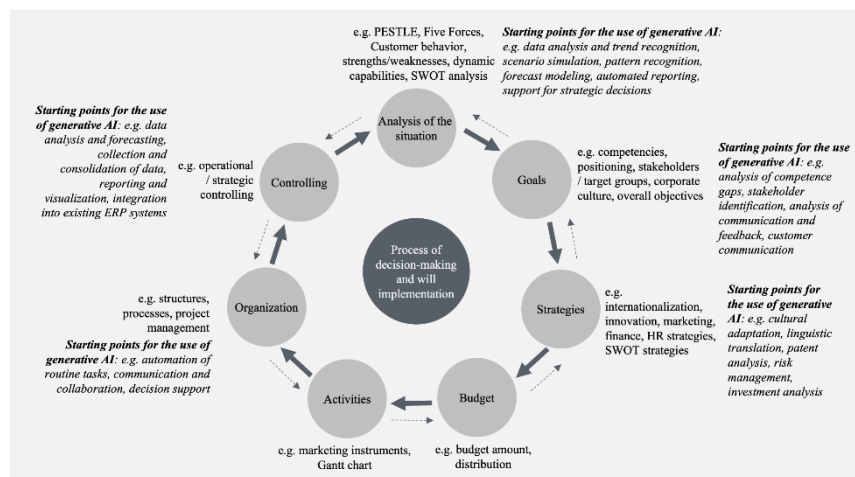


Figure 5:

The Building Blocks of the Management Control Loop and Starting Points for the Use of AI

Source: Own depiction

With the help of Generative AI, the following prompt can be used as an example to tackle the following task: (1) You are the CEO of an international manufacturer of washing machines. You ask your executive assistant to present a first draft of a systematic environment analysis (PESTEL analysis) for the German market for the next board meeting. Create a table: Pestel dimension, general explanation, industry-specific opportunities, industry-specific risks, sources of information, concrete examples, strategic consequences. (2) Write a 500–750 word note to your fellow board members.

PESTEL Dimension	General Explanation	Industry-specific Opportunities	Industry-specific Risks	Information Sources	Concrete Examples	Strategic Consequences
<b>Political</b>	Political stability, legislation, trade agreements.	Favorable trade agreements can facilitate exports.	Changes in environmental laws can increase costs.	Government reports, political analyses.	Trade agreements between the EU and other countries.	Adjusting export strategies, lobbying.
<b>Economic</b>	Economic growth, exchange rates, inflation.	Growing economy increases purchasing power.	Exchange rate fluctuations can affect exports.	Economic statistics, financial news.	Changes in the Eurozone and their impact on the Euro.	Price adjustments, diversification of markets.
<b>Socio-cultural</b>	Demographic changes, consumer trends.	Trends towards energy-efficient devices offer sales opportunities.	Changes in consumer preferences can affect demand.	Market studies, social media analysis.	Increasing environmental awareness among consumers.	Development of eco-friendly products.
<b>Technological</b>	Technological advancement, innovation.	New technologies can increase production efficiency.	Technological change can render existing products obsolete.	Technological journals, patents.	Smart home integration in household appliances.	Investment in research and development.
<b>Environmental</b>	Environmental laws, sustainability, climate change.	Demand for environmentally friendly devices.	Stricter environmental regulations increase production costs.	Environmental reports, scientific studies.	CO2 emission targets and their impact on production.	Developing more sustainable products.
<b>Legal</b>	Regulations, consumer protection laws.	Legal clarity can facilitate business operations.	Non-compliance with new regulations can lead to penalties.	Legal literature, law databases.	General Data Protection Regulation (GDPR).	Ensuring compliance, risk management.

Table 1:

First draft of a PESTEL analysis for the German market from the perspective of an international manufacturer of washing machines  
(ChatGPT revised)

Dear Colleagues,

I would like to give you an initial overview of the current PESTEL analysis of the German washing machine market. Such an analysis is a crucial step in preparing our company for changing circumstances and strengthening our position in one of Europe's most important markets. Political factors: Germany's political stability provides a solid basis for our business. Current government policy supports trade agreements and export initiatives, which is beneficial for our export sector. However, we must remain alert to developments in environmental policy, particularly with regard to stricter regulations that could increase our production costs. Our strategy should be to continue to actively participate in political discussions and intensify our lobbying efforts to protect and promote our interests.

Economic factors: Germany's economy is showing stable growth, which is boosting consumer purchasing power. This is an opportunity to increase our sales figures. At the same time, we are exposed to risks due to exchange rate fluctuations, particularly in the eurozone. Diversified market positioning and flexible pricing can help us to minimize these risks.

Socio-cultural factors: We are observing a trend towards environmentally friendly and energy-efficient household appliances in Germany. This offers us the opportunity to position ourselves as a leading brand in this segment. At the same time, we must remain alert to changing consumer preferences and ensure that our products meet them. Greater integration of consumer feedback into product development will be crucial here.

Technological factors: Technological progress, particularly in the areas of smart homes and IoT, opens up new opportunities for product innovation. The development of intelligent, networked washing machines could be a key growth driver. On the other hand, we also need to be able to keep up with the rapid pace of technological change to avoid being overtaken by competitors.

Ecological factors: Environmental issues are becoming increasingly important in Germany. We need to ensure that our products and production processes comply with strict environmental standards. This can be a challenge, but it also offers us the opportunity to establish ourselves as a leading brand for environmentally friendly washing machines. Legal factors: Compliance with local laws, particularly with regard to consumer protection and data protection (such as the GDPR), is crucial. We need to invest in our compliance systems to ensure that we meet all requirements and minimize potential risks. In summary, the German market offers both significant opportunities and challenges. Our strategy should aim to exploit these opportunities by adapting our products and services to local requirements, while minimizing risks through proactive management and continuous market monitoring.

I look forward to discussing these points in more detail at our next Board meeting and hearing your thoughts and suggestions

Figure 6:  
 Communication with Board Colleagues  
 (ChatGPT revised)

The above example shows that the first step in the use of generative AI can be about remembering or retrieving information (level 1 “knowledge” of Bloom’s classification, see Armstrong, 2010). This cognitive level is about (1) remembering the basic aspects of PESTEL analysis, (2) recognizing that PESTEL analysis can be used for strategic planning or even market analysis, (3) listing the six elements or specific factors, or (4) identifying initial sources or materials that contain information about PESTEL analysis or its application in real-world scenarios. Generative AI can be used to a considerable extent. However, without adequate company knowledge (e.g., in the form of a strengths and weaknesses analysis, but also individual company-specific experience), the (external) environment analysis generated by the AI can only be classified to a limited extent; the practical relevance is virtually insufficient.

A (relatively) in-depth understanding has considerable consequences for comprehension in the further course (level 2 of Bloom’s taxonomy). Comprehension refers to the ability to understand, interpret and – in one’s own words – explain newly acquired knowledge. This also shows that Generative AI must be supplemented to a considerable extent by human intelligence.

In the further course of our practical project, the aim will be to systematize the aforementioned “balance between AI and human intelligence”. On the other hand, the aim is to relate the quality of this balance to the learning objectives and learning outcomes of an MBA program that makes consistent use of Generative AI.

## CONCLUSION

This conference paper addresses the role of generative AI in international management education from an academic teaching and management consulting perspective. It highlights the challenges and opportunities arising from the integration of AI technologies into academic environments and emphasizes the need for a balanced strategic approach that considers both technology and learning-oriented aspects. The authors discuss the paradoxical nature of Generative AI and its potential benefits and pitfalls in the context of management education. They explore practical applications of this technology in international management contexts and strive to provide concrete guidelines for the effective and responsible use of Generative AI in higher education. The uncertainties and dilemmas that this technology poses for students and lecturers are also addressed. The work serves as an important resource for understanding the dynamic interaction between human and machine learning in the field of management education and highlights the complex intertwining of these elements in shaping the future of academic learning and practical applications.

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# COMMUNITY INVESTMENT MODEL IN DEVELOPING ECONOMIES USING CRYPTO ASSETS

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## ABSTRACT

*Blockchain technology and cryptoassets have adapted to the needs of today's society, whether in protecting your data (anonymity), speed in executing tasks (almost immediate transfers between any geographic point), protecting assets held (block chain and immutable ledger) and equality in benefiting from technological advances. This study aims to assess the economic-financial sustainability resulting from the adoption of a community financing system based on blockchain technology and the use of cryptoactives as an alternative to conventional currencies as a credit instrument in Alpha (developed) and Beta (developing) countries. Therefore, a collective financing model was adopted, using blockchain technology, which aims to finance economic agents in developing economies. After analysing the results, it was found that there is potential interest in executing smart contracts for financing purposes for Beta countries and investment purposes for Alpha countries.*

**Keywords:** *Block chain, Crypto assets, Peer-to-Peer, Developed Countries and Developing Countries.*

## INTRODUCTION

Since its foundation, the global financial system has undergone changes and revisions in the search for more efficient processes. However, continuous improvement has been subject to constraints, particularly in terms of trust between participants, regardless of their particular or institutional nature. The constraints are, for example, the inefficiency of markets, as noted by Bouri et al. (2018), volatility (Katsiampa, 2017) or the variation in the price of cryptoactives (Cheung et al., 2015). Considering the previous premises, the gradual acceptance, by financial markets and their stakeholders, of decentralized finance (DeFi) based on blockchain technology using cryptoassets becomes understandable. These innovations introduced unprecedented mechanics, which replace, in some way, the supervision of central banks and the commercialization of financial assets by commercial banks, with an alternative to trust between peers based on security in cryptographic mechanisms and total control of digital assets (Voshmgir, 2020). Thus, holding and custody institutions are relegated to the background, susceptible to (voluntary or involuntary) manipulations (Voshmgir, S., 2020). The need to improve technology, to better respond to users' needs, encouraged the increase in processes for continuous improvement in computational and technological exponentiation. As a result of the technological application of blockchain, in everyday processes, there was a need to develop new subsystems with the appropriate tools for the reality of the current digital world, in which the user is the holder of the digital information generated by them, which can be used with smart contracts. In this context, we sought to study the theoretical potential of a peer-to-peer financing model in the design of credit financing, applied to blockchain technology using smart contracts, providing liquidity for borrowers from economies in development. The results found allow us to affirm that there is no direct relationship between the volume of credit and inflation in developing countries, with the exception of Argentina and Costa Rica. This study contributes to the existing literature because it presents the possibility of reducing inflation through investment in crypto assets and financial decentralization in financing processes.

## 1. BLOCKCHAIN TECHNOLOGY

Davidson et al. (2018) define blockchain as a digital technology consisting of a database or records, distributed among several agents, of an immutable nature, with public registration and access, under the condition that all information contained therein is secure and available at any time and not editable. Blockchain technology, according to Peters and Panayi (2016), has the necessary conditions to modify the existing banking system through the use of smart contracts and the inclusion of immutable accounting

books. Richman et al. (2021) highlight potential advantages in diversifying alternatives to existing social and governance models, especially through decentralization.

## **2. BITCOIN**

Bitcoin is a digital cryptocurrency used in financial transactions without the need for an intermediary (Nakamoto, 2008). This innovation is added to the Bitcoin blockchain which, as Nakamoto (2008) says, is differentiated by its use of proof-of-work and timestamp. Huhtinen, (2014) states that this currency is used as a digital financial asset in transactions between economic agents, a condition resulting from: i) the possibility of being an asset that allows: the lack of centralized governance due to its P2P nature; ii) transactions between network elements execute operations without requiring a financial or banking entity; iii) the value of the cryptoactive is independent of external agents or regulators.

## **3. CRYPTOGRAPHY AND BLOCKCHAIN TECHNOLOGY**

Martins (2018) suggests that encryption has the differentiating characteristics of completeness and fidelity of information and anonymous confidentiality of participants. It continues with the categorization of encryption as symmetric and asymmetric: Symmetric encryption occurs when a single security key is performed to encrypt and decrypt the same message. Asymmetric encryption is characterized by the combination of double key and security, algorithmically correlated and partially independent. Among the differentiating characteristics of blockchain compared to pre-existing technologies, the security component stands out, namely in the elaboration and definition of a block chain (Mohammad and Vargas, 2022). Each block is made up of a piece of information from the previous block, a "hash", which provides continuity in the interconnection (chain). As the set of data after being encrypted generates a unique result for that sequence of information, the block generated next will be necessarily correlated to the predecessor by a set of encrypted and immutable data, by integration of the previous hash that influences the current hash result, and consequently, the subsequent hashes (Mohammad and Vargas, 2022).

## **4. SAMPLE**

To define the sample, we used the databases of The World Bank, the OECD and the International Monetary Fund. The data collected refers to the period between 2010 and 2020 (11 years), as a way of avoiding the impact of COVID-19 on the results. The sample included two types of countries: Alphas (developed countries) and Betas (developing countries). Each of the sub-samples includes ten countries.

The distinction between Alpha countries and Beta countries was made by comparing GDP per capita (in thousands of USD) and the interest rates applied by the banking system of each country. In terms of GDP per capita, the Alpha countries range between 15.88 and 123.21 thousand USD and the Beta countries between 4.18 and 24.92 thousand USD. The interest rates applied by the banking system in the Alpha countries vary between 1.18% and 8.30% and, in the case of the Beta countries, between 4.18% and 67.25%.

## 5. ANALYSIS MODEL

This model presents itself as a financing alternative based on cryptoactives and with a source of financing via P2P for companies and individuals, instead of the conventional model developed by banking institutions and central banks. This alternative suggests migrating from the CeFi system to the DeFi system. Investors from Alpha countries invest their capital in credits in Beta countries. This model presents itself as an alternative to previous models, because its assumptions are based on the issue of greater financial inclusion. This is defined as the ease or difficulty in accessing adequate financial and banking services for individuals and companies (Singh and Kondan, 2011).

This proposed financing model aims to assess the theoretical possibility of developing economies being financed by peer-to-peer agents from developed countries using DeFi as a mediator and broker, while reducing the FIAT currency in circulation in developing countries. To achieve this objective, the following research question was proposed:

Is there a relationship between the volume of credit (in dollars) and inflation in the country of origin of the credit? If so, which one, and how the can model the model affect or be affected?

In this hypothesis, we used the calculation of simple linear regression for each of the Beta countries to identify signs of a relationship between the volume of credit (in dollars) and the inflation rate existing at the end of the period (year) at the consumer price. This study is relevant because as the model presented intends to influence (to a greater or lesser extent) the inflation rate, there is the possibility that from certain inflation levels onwards the volume of real credit will be unaffordable for the present proposal.

Equation 1 represents the linear regression commonly used to estimate the values of the parameter  $\beta$ :

$$Infi = \alpha + \beta \text{Crediti} + \epsilon_i \text{ (Equation 1)}$$

Since  $Infi$  represents the inflation rate per country in period  $i$ ,  $\text{Crediti}$  represents the volume of credit per country in period  $i$ , and  $\beta$  is the parameter that measures the sensitivity of inflation in relation to the volume of credit,  $\epsilon_i$  represents the error term.

## 6. RESULTS

According to the results obtained in the individual analysis of each BETA country in the established period, it was determined that there is no direct relationship between the volume of credit and inflation. However, some countries (Argentina and Costa Rica) present greater divergences than others, which, according to the proposed model, could affect investors' decision-making when allocating their financial resources. It was also found that there is a predominance of maintaining the volume of credit in areas where inflation is lower or stable. However, the possibility of reducing inflation in Beta countries by applying this model will not depend on the increase or reduction in the volume of credit made available to Beta peers but on the aforementioned possibility of part of the returned interest rate being removed from circulation and remitted to central banks. The results found are in line with those found by Yüksel and Ozsari (2016) in a study that aimed to investigate the causal relationship between loans and inflation in Turkey. It was found that during the period under analysis there was no casual relationship between these variables. Following the same sequence of ideas, Korkmaz (2015) states that inflation does not affect the granting of (domestic) bank credit, on the other hand, the availability of domestic credit affects economic growth, as it promotes an increase in Gross Domestic Product through the increase in domestic consumption.

## 7. CONCLUSION

The future of blockchain technology will soon dominate the increasingly digital world. This leadership is essentially due to the ease of implementation and not because of the availability of the conventional technology offered (Islam et al., 2018). Othman et al. (2020) states that cryptocurrency and gold standard monetary systems have contributed significantly to reducing global income inequality and distribution of wealth. These authors consider that the traditional FIAT system contributes positively to global inequality in income and wealth and contributes significantly to its fluctuation. After analysing this hypothesis, it was found that there is potential interest in the execution of smart contracts for financing purposes by Beta countries and investment purposes for Alpha countries, as stated by Einav et al. (2016) who state that the peer-to-peer market proves to be efficient in controlling price variability through the ability to respond to the demand-supply relationship between economic agents. Due to fluctuations in the underlying value of the dP2P cryptoasset, it can be considered that this financial instrument will be recommended for sophisticated investors, preferably with knowledge of cryptoassets and their dynamics and with experience in the FOREX market (Chinthapalli, 2021). However, as far as Betas are concerned, if they want to hold a financial asset with greater stability than their country's FIAT, the dP2P crypto asset may

be a good option to consider in some situations. When executing this model, it would be advisable to have a portfolio of countries with lower exchange rate variations and lower interest rates so that monetary policies do not dissuade investment. The previous statements corroborate the contributions of Cheong (2019), who states that cryptocurrencies will be an interesting alternative for developing countries facing economic shocks and high inflation rates, as investors look for solutions that can provide them with security and financial stability and, for this reason, are more likely to abandon the use of local currency. The contribution of this study to the literature is related to the possibility of reducing inflation by using investments in cryptoactives and financial decentralization in financing processes.

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# INFORMATION TECHNOLOGY AND MACROECONOMIC PARAMETERS INTERACTION WITH EXPORT IN KOSOVO

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## ABSTRACT

*The purpose of this paper is to explore precisely how information technology (IT) parameters, alongside some other macroeconomic parameters, influence exports in the context of Kosovo. The research paper explored the influence of these parameters via the dynamic technique Generalized method of moments (GMM), employing secondary data from the World Bank database covering the years 2006–2021. Foreign direct investment (FDI) and fixed broadband subscription (FBS) have a statistically significant positive influence on the increase in exports in the context of Kosovo. Exports are significantly harmed in the meantime by the official rate of exchange (ORE). Two of the additional features, inflation (INF) and fixed telephone subscription (FTS) have contributed to a statistically insignificant influence. When it comes to selecting parameters and employing the dynamic approach via GMM, the methodology of this research is different from previous research. Conclusions of the research point to the need for further measures to strengthen or redesign the regulatory and technological infrastructures, since they influence export expansion.*

**Keywords:** *Export, official exchange rate, digitalization, panel data model.*

## INTRODUCTION

The article will assess the impact of digitalization on international trade (IT) in Kosovo. We investigated secondary data that expresses digitalization and variables that may have an impact on these flows to assess this impact as accurately as feasible. Given that global trade faces numerous challenges, particularly for less developed nations, and since digitalization eliminates these barriers, the research seeks to understand how digitalization can assist global trade. This research is even more important in light of the repercussions and hurdles brought about by the COVID-19 pandemic, which increased the demand for internet communication.

Several studies have been done over the last three decades to find evidence that digitization can facilitate global trade and remove several barriers such as various protectionist measures and physical distance limitations. Despite the findings of several studies and publications, addresses of digitization in low-income nations frequently remain towards future visions and ambitions. As reported by UNCTAD (Digital Economy Report 2019), the world economy is rapidly changing due to the rapid development of new digital technologies, with significant implications for Agenda 2030 on Sustainable Development. Greater levels of digitization in both economies and society are opening up new avenues for addressing global development concerns; yet, there is a risk that digital disruptions may only benefit those who are already well prepared to invent and deploy new technologies. In the report OECD Digital Trade and Market Openness (González and Ferencz, 2018), they argue that digitalization is having a profound influence on international trade.

The development of digital technologies has reduced internationalization hurdles and contributed to greater trade competitiveness. In recent years, the debate has evolved again, this time focused on how digital technologies are spreading throughout economies. This is known as digitalization, which is described as the transformation of enterprises via the use of digital technology, products, and services (Brennen and Kreiss, 2014). Digital products and services are enabling faster change in a broader range of industries. This is especially important in developing countries, where the digital economy has begun to impact conventional industries such as agriculture, tourism, and transportation.

The role of information and communication technology (ICT) in today's world is so crucial that the impact of prior decisive elements, such as geographical distance, is likely to be disguised and become increasingly irrelevant. On the other hand, some argue that the influence of Internet usage is minor, which is consistent with the findings of (Rodriguez-Crespo et al, 2019), who discovered a reduced impact of Internet usage on both export and import for poor and middle-income nations when compared to advanced countries. They also discovered a minor influence on import vs. export flows. In the same study, he claims that ICT

infrastructure and education levels are unimportant in explaining imports but have a minor impact on explaining export movements.

As a result, based on this viewpoint, the research attempts to contribute to the Kosova economy by addressing the challenges associated with the effect of digitization on exports. The research's contribution and originality are based on the use of cross-sectoral data (time series data for Kosovo), as well as a combined static and dynamic method to determine the degree of effect on the one hand, and the positive or negative relevance to export on the other. Furthermore, the findings of this investigation will very probably have policy repercussions for the respective countries. The study is divided into four sections: an introduction, a literature review, an econometric analysis, a discussion of the findings, and lastly conclusions and policy implications.

## 1. THEORETICAL BACKGROUND

The digital economy has become the essential word of the 21st century for some very good reasons. Many activities in almost all the sectors of the economy in most countries are increasingly being conducted using digital technology, although the extent of use may differ vastly amongst developed, developing, and least developed countries (Banga, 2017). In recent years, the digital economy has usually been credited with contributing to sustainable economic growth. Undoubtedly, the digitalization of the economy is projected to fuel economic growth. Digitalization promotes economic development through the proper use of human capital and natural resources; and the accumulation of productive capacity in the extractive industries (Farah, 2023).

The Covid 19 pandemic has driven the globe to reconsider the rules of international trade and has significantly changed the way people think about doing business, as well as global progress and economic growth. Better solutions to combat COVID-19 will require innovation and forward-thinking. This article explains how innovation and risk-taking can lead to positive policy solutions, motivated by an interest in COVID-19 and entrepreneurship. As a result, it explains the current problems of adopting an entrepreneurial policy strategy in the aftermath of COVID-19 by proposing new research pathways (Ratten et al. 2021). Major improvements are mostly desired in the global aspect, particularly in the approach to export, being constrained by a physical vision, and utilizing more information technology in communication, management, and administration. Low-technology products tend to expand the slowest in international trade, while technology-intensive products (which have the most beneficial benefits) grow the fastest (Sanjaya, 2000).

Because trade agreements with the European Union (EU) and Central European Free Trade Agreement (CEFTA) significantly influenced the liberalization of trade in the Western Balkans, there has

been an intensification of trade through export in all Western Balkan countries (Matkovski et al. 2022), including Kosova. Since the Pandemic has caused many European countries' supply chains to change due to the varied conditions of the current chains, the countries of the Western Balkans have been offered the option to export their products to EU countries. Taking advantage of this possibility, information technology has played a significant role in entering worldwide markets with its products. Other control variables, such as inflation, trade openness, total investments, and the output gap, have been identified as crucial determinants in explaining the Western Balkan countries' growth performance (Dauti and Elezi, 2022). The study covers six main variables to evaluate Kosovo's export-to-GDP ratio based on a review of the theoretical and empirical literature. Given the most recent international market developments, it is apparent that the "Age of Digitalization" has altered the dynamics and approach in all fields of doing business, thus this component has to evaluate the effect that it has on growing Kosovo's exports.

## 2. RESEARCH METHODOLOGY

Beginning from the perspective of research methodology, this research was created employing secondary data retrieved within the World Bank (WB) database, containing 16 observation periods on an annual basis. The assigned indicators/factors are expressed in percentages, wherein the dependent variable has been designated export-to-GDP, whereas the independent variables are fixed broadband subscription, fixed telephone subscription, foreign direct investments, inflation, and official exchange rate.

**Table 1.** Description of factors and expected impact Author's compilation

Variable	Denominations	Acronyms	Sign
Dependent variable	Export-to-GDP	<i>EXP</i>	
Independent variable	Fixed broadband subscription	<i>FBS</i>	+
	Fixed telephone subscription	<i>FTS</i>	+
Explanatory variables	Gross formation capital	<i>GFC</i>	+/-
	Foreign direct investment-to-GDP	<i>FDI</i>	+/-
	Inflation	<i>INF</i>	+/-
	Official rate exchange	<i>ORE</i>	+/-

The statistics employed serve only in the instance of Kosovo, as well as the motive of this research is to econometrically explore the selected parameter, and what effect they can have on the export. For validation of this purpose, the research employed the dynamic GMM approach, proposed by Arellano and Bond (1991), thereafter advanced by Arellano and Bover (1995), and Bllunden and Bond (1998). The aforementioned dynamic approach as described by GMM possesses various advantages compared to the static approach, permitting the elimination of potential obstacles regarding endogeneity, autocorrelation,

and certain additional issues (Ullah et al. 2018). Upon these factors, we formulated the equation in the instance of Kosovo.

$$\begin{aligned} \Delta \text{EXP}_{(i,t)} = & \varphi + \Delta \mu ( \text{EXP}_{(i,t)}_{(-1)} + \beta_1 ( \text{FBS}_{(i,t)} ) + \beta_2 ( \text{FTS}_{(i,t)} ) + \beta_3 ( \text{FDI}_{(i,t)} ) + \\ & \beta_4 ( \text{INF}_{(i,t)} ) + \beta_5 ( \text{ORE}_{(i,t)} ) + \pi_i + \epsilon_{it} \end{aligned}$$

Upon designing and developing the empirical approach, we are going to present what was discovered in this research. Thus, Table 1 traditionally reflects the number of observations, the mean value, the standard deviation (SD), and the smallest, and the largest value for each examined factor. The proportion of export-to-GDP achieved a mean value of 23.22, with an SD of 5.6. The smallest percentage achieved within the observed period was 13.17, however, the maximum achieved was 35.43. Additionally, extending with FBS, it produced a mean value of 25.39 coverage per 100,000 inhabitants having an SD of 5.05, however, FBS has produced a mean value of 15.42 coverage per 100,000 inhabitants having an SD of 5.96. Foreign direct investment as an extremely important injection for the native economies possesses a mean value of 6.85, having an SD of 3.56. The highest percentage that was recorded was 15.13, whereas the lowest value recorded was 2.83.

**Table 2:** Statistical summary

Variable	Observation	Mean	St. deviation	Minimal	Maximal
EXP_GDP	16	23.216	5.580	13.117	35.429
FBS	16	25.385	5.047	13.973	31.856
FTS	16	15.418	5.950	6.109	22.851
FDI	16	6.845	3.556	2.825	15.128
INF	16	2.245	2.938	-2.410	9.350
ORE	16	0.802	0.076	0.679	0.903

Source: Author's computation

Since the foundation of its institutions as well as its adoption of the EUR currency, Kosovo has witnessed a relatively low level of inflation. The mean value of inflation for the monitored period reached out to be 2.45, having a standard deviation of 2.93. The greatest value obtained throughout the examined period was 9.35 in 2022, which continues the upward trend into 2023. Finally, the official exchange rate has an average value of 0.80 having a standard deviation of 0.07.

The motive of performing this examination in the current investigation is targeted regarding two issues first, to explore the degree of the interaction across the variables, and second, to identify if the applied data has concerns about multicollinearity. Table 3 displays the outcomes of this inquiry in detail.

**Table 3:** Multicollinearity analysis

	EXP_GDP	FBS	FTS	FDI	INF	ORE
EXP_GDP	1.000					
FBS	0.454	1.000				
FTS	0.529	0.602	1.000			
FDI	-0.509	-0.579	-0.694	1.000		
INF	-0.033	-0.221	-0.389	0.349	1.000	
ORE	0.497	0.659	0.805	-0.542	-0.492	1.000

Source: Author's computation

A moderate positive association exists among export-to-GDP with FBS, FTS, and ORE. In contrast, a substantial adverse interaction exists between export-to-GDP and FDI, and a slight negative interaction exists between export-to-GDP and INF. Starting at the standpoint of multicollinearity, the results revealed that no individual metrics have a constant  $\beta \geq 0.55$ , proving that the applied data does not present any reason for concern in this aspect. Gurjati (2004), has stressed that if each of the metrics has a larger constant  $\tan \beta \geq 0.75$ , then it can be assumed that we have concerns with multicollinearity and that our data are inside the specified range. As a continuation of the results presented so far, before commenting on the regression results according to the GMM approach, we will first present some tests that provide information on the suitability of the data and the econometric approach employed. Regarding whether the data have any heteroscedasticity deficiencies, our results show that the  $p$ -value ( $\rho = 0.126$ , see Table 4) shows that there is an insignificant value and this provides us with evidence that the data do not have problems with this issue. From the point of view, if the data has autocorrelation, we applied Durbin-Watson, which in our case has a value of 2.389. This valuation is based on the interval 1.5 - 2.5, the data do not have problems with autocorrelation, if the data are outside this interval, then we have such problems. In relation, to the steadiness and appropriateness of the model, the outcomes of Wald  $\chi^2(6)$  have resulted ( $\beta = 56.891$ ; with  $\rho = 0.000$ ) which proves that the selection of the model is adequate. Finally, from the aspect of fitting the instruments within the model, the Sargan J-test was performed, and the result of this test turned out to be  $\rho = 0.932$ , which proves that it has an insignificant value and exactly verifies that the application of the instruments is adequate.

**Table 4:** Econometric one-step GMM discoveries

	Coef.	Std. Err	z	P >  z	95% Coef.	Interval
EXP_GDP	-0.068	0.294	-0.231	0.816	-.644	0.508
FBS	1.979	0.429	4.612	0.000	1.137	2.821
FTS	0.374	0.457	0.824	0.413	-0.521	1.268
FDI	1.807	0.769	2.357	0.019	0.299	3.315
INF	-0.447	0.295	-1.520	0.130	-1.025	0.132
ORE	-30.096	21.032	-1.436	0.052	-71.318	11.125
Cons,	-17.029	13.158	-1.298	0.196	-42.817	8.759
Heteroscedasticity test						
			4.941	0.126		
Durbin- Watson						
			2.389			
Wald chi2(6)						
			56.891	0.000		
Sargan test						
			13.049	0.932		

**Source:** Author's computation

Results obtained within the GMM method reveal that FBS has a strong statistical influence with a 99.9 percent confidence interval. The above argument relies on the  $\beta$  - coefficient ( $\beta = 1.979$ ; with  $\rho = 0.000$ ), which according to theories of academic interpretation means that each unit increase in FBS affects the increase in the export-to-GDP ratio by 1.98 units. In the meantime, the second digitalization evaluator, FTS, according to the econometric statistics, produced a positive influence, but with an insignificant impression. Our econometric discoveries correspond in line with the spirit of the research conducted by scholars Chenic et al. (2023) who empirically assessed the influence of FBS and FTS on export-to-GDP. Following the same intention authors Debbarma et al. (2022) declare that the higher the digitization infrastructure within a country, the companies will experience an extremely favorable impact on export promotion.

Foreign direct investments in the previous two decades have been considered a vital stimulus for emerging economies, and in particular for countries that have a high degree of immigration. Throughout this background, FDI in our instance has demonstrated to have a significant advantageous impact on the export-to-GDP having an interval of confidence of 99.9 percent. The  $\beta$  -coefficient ( $\beta = 1.807$ ; with  $\rho = 0.019$ ) demonstrates that every unit of rise in FDI is expected to have a beneficial effect on the increase by 1.81 units in the export-to-GDP. The results we obtained align with those of Durguti and Malaj (2022) whose research achieved the same conclusion by exploring the countries of Southern and Western Europe, adopting the gravity approach. The outcome of that research indicates a positive association among these two indicators.

The inflation determined via the present value of the coefficient ( $\beta = -0.447$ , with  $\rho = 0.130$ ) has resulted in a negative but statistically insignificant. Lastly, the official exchange rate with a confidence interval of 95.0 percent has resulted in significant adverse effects on export-to-GDP. Consequently, each increase per unit of this metric has a direct effect on the reduction of the export-to-GDP by 30.1 units. The discoveries of our study are in entirety consistent with the examination presented by Woo Kang and Dagli (2018), who explored 72 countries throughout the financial crisis of 2007-2009 and reached the conclusion that any reduction in the ORE is reflected with an advantageous effect to export-to-GDP or any increase in ORE affects the opposite aspect.

### 3. CONCLUSION

Information technology has made the methods of international economic cooperation more efficient, it has also simplified, rationalized, advanced, and accelerated the communication routes between businesses in the global aspect. According to Lagravinese (2021), there is undoubtedly still ample room for improvement in the facilitation of all international trade practices in a digital key.

Information technology will promote international trade as will the removal of other trade barriers. Some trade barriers are directly overcome through information technology. Thus, the volume of international trade will increase through the effective support of information technology. Underdeveloped and developing countries will benefit from the opportunity of openness provided by information technology. Digitalization can also have a significant impact on trade in services. The results presented in the second table show that FBS, FTS, FDI, and ORE have positive correlations with exports, while negative correlations have appeared in GFC data and inflation. Our study correlates with many studies worldwide. According to our study, even in the countries of Southeastern Europe, there is a high correlation between information technology and international trade. The study by Mai Lee Wang (2021) shows that the findings showed that (1) the effect of ICT was more positive on exports than imports, (2) the higher the ICT levels in the value chain were, the less effective they simultaneously were on both exports and imports, (3) the effect of ICT levels on trade increased over time, and (4) ICT improvement levels have more positive effects on trade in labor-intensive countries than on resource-intensive BRICS countries. To improve their export volume, BRICS countries would benefit from increasing their use of fixed-broadband and the internet.

Thus, the volume of international trade will increase through the effective support of information technology. Underdeveloped and developing countries will benefit from the opportunity of openness provided by information technology. Digitalization can also have a significant impact on trade in services

(Terzi, 2011). Still, export needs incentives starting from financial liberalization, which allows businesses to better finance access conditions and has a strong direct impact on producers and service providers as the main actors in export (Spahiu and Durguti, 2023).

#### **4. POLICY MAKING**

It is important to come up with an adequate strategy for adapting to new circumstances. Digitization has created new possibilities, especially for countries that cannot penetrate developed markets due to low economic capacity (Spahiu and Spahiu, 2021). After 2020, a new reality appeared in the global market: disruption of supply chains as a result of the pandemic. More popular economies that supplied the world, like China, had serious problems, and the advantages they had until now, were not exploitable. The goods coming from China now had very high prices. This new reality was an opportunity for faster development of the undeveloped and developing countries to take advantage of these gaps and create new and irresistible offers. These offers would be greatly facilitated by the great opportunities provided by information technology. However, it is not that Kosova has shown interest in using such an opportunity.

The government of Kosova must act more aggressively in using new trade opportunities. Due to low production and negative balance trade, Kosova has to create new international policies for market competitiveness to fasten exports and create stable supply chain relations for domestic companies with European countries. Individual businesses do the work that is in their power and take advantage of new profit opportunities, although the biggest burden falls on the government, which would have to create incentives that allow businesses to penetrate more easily.

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## LEGAL ASPECTS OF ARTIFICIAL INTELLIGENCE

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### ABSTRACT

*Artificial Intelligence (AI) systems, or the ability of a digital computer to perform tasks commonly associated with intelligent being, are being used on an ever-increasing scale worldwide. AI has become an important driving force behind the new technological revolution and industrial change. AI and blockchain have risen to the level of national policy. While the rapid development of AI brings convenience to people's lives, it also poses challenges to global changes and the development of human society, social governance, and legal regulation, such as the leakage of personal privacy, frequent data security problems, and prejudice and discrimination caused by algorithms. In general, there is a lack of timely and appropriate legal regulation in this area because the dangers of misuse of AI are increasing. Many countries have adopted strategic plans and documents related to AI, but there are no legal acts adopted as yet. Only the European Union has enacted a law that regulates AI. Taking into consideration the fact that AI is profoundly changing the world, it is necessary to think about how to promote the construction of responsible AI from the perspective of global governance in the future. In this paper, we analyze the need to regulate AI, the content of the regulation that needs to be enacted and in which direction it should be oriented, the content of the regulation adopted in the European Union as well as North Macedonia's position on this issue as a country eager to start the negotiations for accession in EU.*

**Keywords:** *AI national strategies, EU legislation, social responsibility, ethics*

## INTRODUCTION

As can be concluded from history, artificial intelligence (AI) which is considered a scientific discipline, appeared shortly after the invention of the first computers. It is attributed to the skills characteristic of intelligent beings, including proving hypotheses, reasoning, and playing games.

About how much importance AI will have in the future some scientists have been aware of for a long time. In 1960, the father of cybernetics, Norbert Wiener, stated that it was "now generally admitted, over a limited range of operation, machines act far more rapidly than human beings and are far more precise in performing the details of their operations. This being the case, even when machines do not in any way transcend men's intelligence, they very well may, and often do, transcend men in the performance of tasks (Werner, 1960)

The concept of artificial intelligence cannot be precisely defined. There are a large number of definitions of AI in the literature. The first definition of AI presented by John McCarthy referred to the unity of "science and engineering in the creation of intelligent machines," i.e. creation of especially intelligent computer programs. The definitions, which appeared a little later, can be grouped into four categories that take into account two main criteria. One group of definitions relates to the process of thinking and reasoning, while others take into account the factor of behaviour. Another difference between the definitions of AI takes into account the category of success. (Prija, Gasmi and Korać, 2021)

Over time, especially in recent years, the rapid growth of AI systems has led to these systems being used in almost every sphere of life. AI can be used in a wide variety of sectors such as healthcare, energy consumption, automotive safety, agriculture, climate change, and financial risk management. It can also help detect fraud and cyber security threats and enable security agencies to effectively fight crime.

Since it is used in several areas, the question of its legal regulation is also logically raised. From 2019 to 2020, scholars paid more attention to the study of AI jurisprudence by scientifically defining the corresponding rights, obligations, responsibilities, and other basic categories, laying solid foundations and providing theoretical support for the sound development of the legal system regulating AI. They also emphasize establishing a regulatory system compatible with the development of AI with a focus on finance, transportation, medical care, and urban construction, and building a reasonable and practicable AI law system following statutory procedures to ensure that the development of AI obeys rules and laws. In addition, more research has been conducted on the core of AI law, primarily on theoretical and practical discussions on "AI" and "big data", in which scholars analyze legal issues in AI applications from an overall perspective, providing more systematic and in-depth theoretical research on the connotation and the major body of accountability in AI law.

It's worth mentioning that COVID-19 spread throughout the world in 2020 and has taken a heavy toll on human society and the global economy. In the battle against COVID-19, AI has played an extraordinary role in safeguarding the common home of humankind. AI technologies have been widely applied on the frontline, such as health QR codes, whole genome sequencing, CT imaging, and smart medical care. Their presence provides support in each area, including epidemic monitoring and analysis, virus traceability, prevention, control and treatment, and resource allocation, and has significantly improved the capability and efficiency of epidemic prevention and control. With its extraordinary performance in the fight against the virus, AI seems to herald a new period of explosive growth. People have gained a deeper understanding of the power and role of AI. As a "double-edged sword", AI has brought risks and challenges while empowering society. Increasing attention and concern from the public have been raised for increasingly prominent problems involving security, law, ethics, and other aspects in the rapid development of new-generation AI (Yadong, 2022)

In the war in Ukraine and in recent periods during the war in Israel and Palestine where high military technology is used, AI plays a significant role, such as the use of drones, cybertechnologies, etc. Therefore, the issue of protection and prevention in the use of these AI systems is also further emphasized. We were able to see in these war conflicts that the use of AI may lead to a violation of the primary human right – the right to life.

Additionally, the presentation of the Chat GPT robot, which has the ability to talk like a human with a high degree of fluency and coherence, drew the world's attention to the use of AI in the service of humans, but also to the possible dangers it can bring. Hence, the security and ethics are the two main components that need to be addressed in AI laws.

In the next chapter, we will take a look at the existing legal framework of AI worldwide and the national strategies that the countries have adopted.

## **1. ARTIFICIAL INTELLIGENCE REGULATIONS**

Considering that AI development is still in its initial period, the major countries and regions in the world are not eager to introduce regulatory measures but rather to formulate a framework of governance principles.

If we make a comparative analysis of the most important legal systems in the field of artificial intelligence (USA, EU, China, UN) we can draw the conclusion that it represents the subject of strategic documents. In the mentioned countries and international organizations, it is regulated by the adoption of strategic documents that address the social, legal, political, and economic "background" of AI. AI systems

can be partially regulated, primarily in connection with the regulation of certain institutes within the framework of special legal texts on copyright and related rights, protection of personal data, administrative regulations, etc.

As part of its digital strategy, the EU wanted to regulate AI to ensure better conditions for the development and use of this innovative technology. AI can create many benefits, such as better healthcare; safer and cleaner transportation; more efficient production; and cheaper and more sustainable energy. Parliament's priority was to ensure that AI systems used in the EU are safe, transparent, traceable, non-discriminatory, and environmentally friendly. AI systems should be supervised by humans, rather than automation, to prevent harmful outcomes. The focus of the European Commission in the past when it comes to regulation of AI was modernizing product liability regulation in the digital age, enabling compensation for damage caused by robots, drones, and smart home systems that are unsafe due to software upgrade, error in AI, or digital services necessary to manage the product, as well as failure to deal with shortcomings and vulnerability to cyber-attacks by manufacturers. As a result, in June 2023, the European Parliament voted on a set of rules for AI, the first of its kind in the world. The final text of the law will be refined in the negotiations with the Council of the European Union. (expected to be adopted in 2024). The new rules establish obligations for providers and users depending on the level of risk from AI. Although many AI systems pose minimal risk, they should be evaluated. Also, the Law bans the use of AI for biometric surveillance, emotion recognition, and predictive policing, while systems like Chat GPT must disclose that content is generated by AI, and AI systems used to influence voters during elections are considered high risk.

Related to the level of risk while using AI we will briefly go through the EU rules for AI. In addition to risk-free or low-risk AI systems, there are also high-risk and unacceptable-risk systems. AI systems with unacceptable risk are systems that are considered a threat to humans and will be banned. They include:

- Cognitive behavioural manipulation of people or certain vulnerable groups: for example, voice-activated toys that encourage dangerous behaviour in children;
- Social scoring: classifying people based on behaviour, socioeconomic status, or personal characteristics;
- Real-time and remote biometric identification systems, such as facial recognition.

Some exceptions may be allowed: for example, "post" remote biometric identification systems where identification occurs after a significant delay, will be allowed to prosecute serious crimes, but only with court approval.

AI systems that negatively affect security or fundamental rights will be considered high-risk and will be divided into two categories:

1) AI systems used in products covered by EU product safety legislation. This includes toys, aviation, automobiles, medical devices, and elevators.

2) AI systems that fall into eight specific areas and will need to be registered in the EU database:

- Biometric identification and categorization of natural persons;
- Management and operation of critical infrastructure;
- Education and vocational training;
- Employment, management of workers, and access to self-employment;
- Access and enjoyment of basic private services and public services and benefits;
- Law enforcement;
- Management of migration, asylum, and border control;
- Help with legal interpretation and application of the law. (Artificial Intelligence Act, 2021)

The field of AI has made tremendous advances in the last few decades, but as smart as AI is now, it is getting exponentially smarter and becoming more autonomous in its actions. This raises a host of challenges to current legal doctrine, including whether the output of AI entities should count as 'speech', the extent to which AI should be regulated under antitrust and criminal law statutes, and whether AI should be considered an independent agent and responsible for its actions under the law of tort or agency. (Research Handbook on the Law of Artificial Intelligence, 2018). Therefore, it's impossible to predict its development but preventive regulatory measures must be taken.

In some areas it will be very difficult to implement regulations without any negative consequences. For example, no simple rule-chaining or pattern-matching algorithm can accurately model judicial decision-making because the judiciary has the task of producing reasonable and acceptable solutions in exactly those cases in which the facts, the rules, or how they fit together are controversial. (G Sartor and LK Branting, 1998).

Every AI system is different. The use of AI tools by public and private regulators must be guided by a comprehensive technological management strategy grounded in a revised conception of what regulatory responsibility entails. Secondly, the revised understanding, described as a 'new benchmark for legality', must be incorporated into the rules governing the exercise of regulatory power that depend on these technological measures. The revision of these rules requires a 'new coherentism' which focuses on the compatibility, and inter-contingency, of regulatory measures with newly established benchmarks for legality. (Deakin and Markou, 2020)

## 2. ARTIFICIAL INTELLIGENCE AND THE RULE OF LAW

What does computable law mean for the autonomy, authority, and legitimacy of the legal system? Are we witnessing a shift from Rule of Law to a new Rule of Technology? Should we even build these things in the first place? (Deakin and Markou, 2020). There are many questions that arise from the high level of usage of AI. There are two essential problems, related to its use and regulation. Ethical and societal dimensions of artificial Intelligence must be taken into consideration which means that if it is used unethically, the consequences can be fatal, and the sphere in which it is used unintentionally can also lead to unwanted consequences. The second problem derives from the inability of the inventors of AI to understand fully what the legal regulation of this area means and how should be done, in order to help lawmakers, and the lawmakers cannot understand how these systems work in order to regulate them accordingly. In this sphere, a lot of work will need to be done to increase the cooperation between the inventors of AI systems and those who will have to regulate them.

Taking into consideration the effects of the AI systems in the whole society and to avoid the shift to the Rule of Technology, we must analyze the possibility of re-working the Rule of Law, as a concept that ensures an orderly and just society that guarantees the fundamental rights and values. So that it covers the use of technological tools by both public and private regulators. First, for any community, it is imperative that technological management (just as with rules and standards) does not compromise the essential conditions for human social existence (the commons). The Rule of Law should open by emphasizing that the protection and maintenance of the commons is always the primary responsibility of regulators. Moreover, all uses of technological management, whether by public regulators or by private regulators or actors should respect this fundamental responsibility. Secondly, where the aspiration is not simply to be a moral community (a community committed to the primacy of moral reason) but a particular kind of moral community, then it will be a condition of the Rule of Law that the use of technological management (just as with rules and standards) should be consistent with its particular constitutive features – whether those features are, for instance, liberal or communitarian in nature, rights-based or utilitarian, and so on. Such is the nature of the second tier of responsibility. Many modern communities, have articulated their constitutive values in terms of respect for human rights and human dignity (Deakin and Markou, 2020). This is done through the conscious experience of people in one society. But AI lacks conscious experience, therefore it cannot define its own objectives. AI does not appear to be conscious and it cannot formulate its own ends. AI's inability to form ends poses difficulties for regulating it. We often assign moral blame and impose legal liability based on intent. But AI cannot form intent. Further, those who adopt AI will often have good intentions. That could allow AI to cause harm that escapes liability in our current legal systems (DiMatteo,

Poncibò, Cannarsa, 2022). For example, an employer might rely on AI to award promotions, hoping to make its decisions more objective and less susceptible to improper biases. But the effect may be the opposite. AI may predict future employee success using past employment decisions that were tainted by improper biases. The outcome could be discrimination against members of protected classes. In this regard, I would like to point out the importance of the differences in the legal systems when regulating AI.

For example, AI may be used significantly in some aspects of the contract law. It cannot negotiate complex legal terms, or draft clauses that allocate the risks of breach or reason about the mental states of the other party. However, AI can surpass humans in those aspects of the contracting process that involve (or require) real-time analysis of vast amounts of transaction parameters such as prices, delivery terms, product selections, etc. (DiMatteo, Poncibò, Cannarsa, 2022). The use of AI in the process of entering into contracts must be distinguished from its much simpler predecessor, namely electronic negotiation systems. The latter term refers to systems facilitating commercial communications, such as the structured exchange of electronic messages or electronic auction models (Schoop, Jertila and List, 2003). Although such systems increasingly rely on AI, they are limited to the support of human negotiators and cannot negotiate instead of humans (Dobrijevic, 2021).

In contract law, Artificial Intelligence can be helpful especially in many aspects because of the basic principles under which the contract law relies on. Even some characteristics of the contract law that at the first stance it looks like they can be only managed by humans like for example intention in concluding contracts, in contract law AI can deal with it. Although the intention is a human aspect the question is why the product was put on the market to be sold if there was no intention by the seller. AI just needs to inspect if the buyer fulfills all the conditions to conclude the contract for sale.

One of the main questions in the contract law is whether the operator of AI systems used to perform a contract can be held liable for damages. For a better understanding of the issue of liability for breach, a few words on contractual liability in common law and civil law are useful. One of the fundamental differences between common and civil laws is the different requirements for awarding damages in contract law. While the common law assumes strict liability of the contracting party in breach of contract (existence of a breach is sufficient), the civil law legal systems also require fault (intent or negligence) (DiMatteo, Poncibò, Cannarsa, 2022). Therefore, the use of AI in the common law legal systems would be more helpful in this regard because of the different manner of regulating the liability for damages.

The benefits of using AI are without doubt enormous. But regulating AI will not be easy. For example, AI plays an increasingly important role in the internal decision-making of corporations. The technology promises increased efficiency, especially for business decisions that are made on the basis of

extensive and complex data. AI makes it possible, for instance, to analyze data from customer relationships or production processes on a massive scale, and to prepare it for decision-making processes, such as in the context of algorithmic marketing, algorithmic market research or algorithmic controlling. Automated decision-making in corporations thus promises key entrepreneurial advantages and efficiency gains. However, automated decision-making also represents the crucial regulatory challenge of this technology (DiMatteo, Poncibò, Cannarsa, 2022). It must be taken into account that an error in the AI system that would contribute to adopting a wrong business decision can lead to big financial losses for the company, but also for customers and other entities on the market depending on the company's activity.

### **3. ARTIFICIAL INTELLIGENCE IN THE REPUBLIC OF NORTH MACEDONIA**

The use of artificial intelligence (AI) in the absence of strategy or regulation exposes citizens to the risk of potential abuse. Although many countries have already adopted a national strategy for AI, this is not the case in the Republic of North Macedonia. In September 2021, a working group for the National Strategy for AI was established, consisting of domestic experts, but also successful Macedonians who are globally recognized professionals in this field and work in world-renowned companies and universities. Unfortunately, only one meeting has been held since 2021. Most likely, the reason for the passivity of the working group is because the government has more priority goals in its agenda, and the country is awaiting presidential and parliamentary elections in spring. However, in my opinion, taking into account the fact that AI is developing at an enormous speed, and the aforementioned risks, the country should proceed faster with the adoption of the national strategy for AI.

In terms of next steps, the Fund for innovation and technological development in communication with UNDP, the World Bank, as well as other interested parties who have experience and knowledge in the development of a National AI Strategy, should provide a leading expert, i.e. a consultant or a team that will help in the process of developing the strategy, with the support of the working group, as well as in the process of developing a financial construction for the realization of the whole process. However, it should be taken into account that it is a very extensive process, for which significant resources, time and human, are necessary, but if the members of the working group are dedicated to the creation and development of a successful strategy, it will have positive benefits for the ecosystem.

First, all companies need to transform, collect data, adapt processes and systems, in order to get the most out of AI. At the moment when the market of the European Union opens, the biggest problem will be Macedonian companies that will not invest on time, because there will be greater competition with companies that are more technologically developed.

The main questions are: how ready is our country for the use of AI in the public sector? Do we have a relevant digital infrastructure, and what are the possible risks of the use of AI in the absence of a National Strategy? For this reason, communication and cooperation between different entities will enable the country to adopt a relevant and accurate national strategy on AI.

Although more countries are still limited in regulating AI, the problems that its use can cause and the consequences it can bring are already obvious. The greatest danger to people is the latest military technologies used, drones, cyber-attacks, etc. Republic of North Macedonia is no exception. Chat GPT is another example of the possible misuse of AI, as it is already heavily used by Macedonian students. In practice, some students use it to copy seminar papers, master thesis, and doctoral dissertations instead of using it as a benefit, to get more information on how to write a thesis. From the above mentioned, we can see that AI has two sides—positive and negative. It's up to human morality which one will be used.

## CONCLUSION

The benefits of artificial intelligence should be used but only for the benefit of humanity. It would not be advisable for AI to take over the whole control of certain fields. There must be limitations in its use precisely because of the fact that its unlimited use can cause great dangers leading to harmful consequences, even endangering people's lives.

AI brings with it many benefits for traditional social entities by helping in the efficiency and success of many business and private activities, faster and better than a human does. The fields of application of AI are numerous and include important sectors such as agriculture, transport, catering, tourism, healthcare, sports, arts, etc.

Further directions of development should be based on the arrangement of AI systems in special regulations and areas of law, and not exclusively on a single regulation for the application of AI in an equal way in all areas. The possibilities of information and communication technologies are enormous, which is also accompanied by a significant risk to the rights and freedoms of citizens, so it is necessary to investigate and arrange it in detail (legal norms) the relationship between the specific form of AI and the area of law in which is applied (administrative law, constitutional law, commercial law, data protection law, etc.). In addition, it is necessary to pay more attention to the implementation of new technology opportunities within traditional branches of law and institutions. In that sense, legal systems must adapt to the challenges that use of AI brings, i.e. they should provide a high level of reliability and safety of the functioning of the AI system. It can be achieved only by adopting new precise regulations, which will define the standards, which they have to fulfil high-risk and low-risk applications that use AI.

Bearing in mind that AI directly affects the lives of citizens and the functioning of society, legal systems and legal science should not remain silent on its appearance and the increasing use of new technologies in everyday life social and business activities.

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# ARTIFICIAL INTELLIGENCE IN EUROPEAN CRIMINAL LAW PERSPECTIVE

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## ABSTRACT

*Many official documents on artificial intelligence (AI) have been adopted by the European Union. The contribution deals with AI in European criminal law perspective. It focuses on the most important steps of the European Union in this field, namely the Directive 2016/680 on Protection of Personal Data Used by Police and Criminal Justice Authorities of 2016, the European Ethical Charter on the Use of AI in Judicial Systems of 2018, the Resolution on AI in Criminal Law and its Use in Criminal Matters of 2021 and the Proposal for a Regulation on Harmonised Rules on AI (AI Act) of 2021.*

**Keywords:** *artificial intelligence (AI), criminal law, criminal proceedings, European criminal law*

## INTRODUCTION

Artificial intelligence (hereinafter “AI”) – defined by the Cambridge Dictionary as “the use or study of computer systems or machines that have some of the qualities that the human brain has, such as the ability to interpret and produce language in a way that seems human, recognize or create images, solve problems, and learn from data supplied to them” (Cambridge Dictionary, 2023) – is a fast evolving area that can bring a wide array of benefits. As noted by the European Commission, by improving prediction, optimising operations and resource allocation, and personalising service delivery, the use of artificial intelligence can support socially and environmentally beneficial outcomes and provide key competitive advantages to companies and the European economy. Such action is especially needed in high-impact sectors, including climate change, environment and health, the public sector, finance, mobility, home affairs and agriculture. In the opinion of the European Commission “it is in the Union interest to preserve the European Union’s technological leadership and to ensure that Europeans can benefit from new technologies developed and functioning according to Union values, fundamental rights and principles” (European Commission, 2021).

Many official documents on AI have been adopted by the European Union, for example, the Building Trust in Human-Centric Artificial Intelligence of the European Commission of 8 April 2019 [COM(2019) 168], the Artificial Intelligence – a European Approach to Excellence and Trust of the European Commission of 19 February 2020 [COM(2020) 65] and the Framework of Ethical Aspects of Artificial Intelligence, Robotics and Related Technologies of the European Parliament as resolution of 20 October 2020 [2020/2012(INL)]. Since this contribution is focused on criminal law perspective at the level of the European Union, it is focused on criminal law related documents, namely:

- 1.The Directive 2016/680 on Protection of Personal Data Used by Police and Criminal Justice Authorities of 2016,
- 2.The European Ethical Charter on the Use of AI in Judicial Systems of 2018,
- 3.The Resolution on AI in Criminal Law and its Use in Criminal Matters of 2021, and
- 4.The Proposal for a Regulation on Harmonized Rules on AI (AI Act) of 2021.

## **1. THE DIRECTIVE 2016/680 ON PROTECTION OF PERSONAL DATA USED BY POLICE AND CRIMINAL JUSTICE AUTHORITIES OF 2016**

The protection of natural persons in relation to the processing of personal data is a fundamental right. The Charter of Fundamental Rights of the European Union and the Treaty on the Functioning of the European Union provide that everyone has the right to the protection of personal data [Article 8(1) of the Charter, Article 16(1) of the Treaty].

In 2016 was adopted the Directive 2016/680 of the European Parliament and of the Council on the Protection of Natural Persons With Regard to the Processing of Personal Data by Competent Authorities for the Purposes of the Prevention, Investigation, Detection or Prosecution of Criminal Offences or the Execution of Criminal Penalties (hereinafter the “Directive 2016/680 on Protection of Personal Data Used by Police and Criminal Justice Authorities” or the “Directive”). The Directive establishes a comprehensive framework to ensure a high level of data protection, while taking into account the specific nature of the police and criminal justice field. From a European Union perspective, it contributes to increased trust and facilitates co-operation in the fight against crime in Europe, by harmonising the protection of personal data by law enforcement authorities in the European Union Member States and Schengen countries. It is a part of data protection reform of the European Union, along with the General Data Protection Regulation, i.e. the Regulation (EU) 2016/679 on the Protection of Natural Persons With Regard to the Processing of Personal Data and on the Free Movement of Such Data of 2016 (also known as “GDPR”) and the Regulation (EU) 2018/1725 on the Protection of Natural Persons With Regard to the Processing of Personal Data by Institutions, Bodies, Offices and Agencies of the European Union.

As pointed out by Gasper, it should be underlined that data processing in the European Union, as regards the police and criminal justice co-operation context, was a field outside the European Union. Practically all member States of the European Union have bilateral agreements governing the exchange of personal data for law enforcement related purposes. On the other hand, the Directive 2016/680 on Protection of Personal Data Used by Police and Criminal Justice Authorities had to maintain a careful balance between, on the one hand, the requirements of police and criminal justice work and existing bilateral agreements, and, on the other hand, the requirement for an increased level for personal data protection (Gasper, 2021).

The Directive 2016/680 on Protection of Personal Data Used by Police and Criminal Justice Authorities lays down the rules relating to the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or

prosecution of criminal offences or the execution of criminal penalties, including the safeguarding against and the prevention of threats to public security [Article 1(1) of the Directive]. In accordance with the Directive, the Member States of the European Union shall, first, protect the fundamental rights and freedoms of natural persons and in particular their right to the protection of personal data, and, second, ensure that the exchange of personal data by competent authorities within the European Union, where such exchange is required by the European Union or Member State law, is neither restricted nor prohibited for reasons connected with the protection of natural persons with regard to the processing of personal data [Article 1(2) of the Directive]. On the other hand, the Directive shall not preclude Member States from providing higher safeguards than those established in this Directive for the protection of the rights and freedoms of the data subject with regard to the processing of personal data by competent authorities [Article 1(3) of the Directive].

As regards the scope of the Directive, it applies to the processing of personal data by competent authorities for the above-mentioned purposes. The Directive applies to the processing of personal data wholly or partly by automated means, and to the processing other than by automated means of personal data which form part of a filing system or are intended to form part of a filing system [Article 2(1)(2) of the Directive]. On the other hand, the Directive does not apply to the processing of personal data, first, in the course of an activity which falls outside the scope of European Union law, and, second, by the institutions, bodies, offices and agencies of the European Union [Article 2(3) of the Directive].

For the purposes of the Directive, the term personal data shall mean any information relating to an identified or identifiable natural person ("data subject"); in this context an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. As regards the term processing, it shall mean any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction.

The Directive introduced the *principles relating to processing of personal data*. The Member States of the European Union shall provide for personal data to be [Article 4(1) of the Directive]:

- processed lawfully and fairly,
- collected for specified, explicit and legitimate purposes and not processed in a manner that is incompatible with those purposes,

- adequate, relevant and not excessive in relation to the purposes for which they are processed, accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that personal data that are inaccurate, having regard to the purposes for which they are processed, are erased or rectified without delay,
- kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which they are processed, and
- processed in a manner that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organisational measures.

As regards implementation of the Directive into the national legal orders of the Member States of the European Union, in principle, its provision have been implemented. However, many States were late, as regards deadline for implementation (Custers, Sears, Dechesne, Georgieva, Tani, van der Hof, 2021). For example, in the Slovak Republic they have been implemented into, *among others*, the national Act No. 171/1993 Coll. on the Police Force (zákon č. 171/1993 Z. z. o Policajnom zbore).

## **2.THE EUROPEAN ETHICAL CHARTER ON THE USE OF ARTIFICIAL INTELLIGENCE IN JUDICIAL SYSTEMS OF 2018**

In 2018 was introduced the *European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and Their Environment* by the European Commission for the Efficiency of Justice. It is understood as one of the most relevant documents in relation to AI (Sourdin, 2021; Molbæk-Steensig, Quemy, 2023). The Charter is intended for public and private stakeholders responsible for the design and deployment of AI tools and services that involve the processing of judicial decisions and data. It also concerns public decision-makers in charge of the legislative or regulatory framework, of the development, audit or use of such tools and services. The use of such tools and services in judicial systems *seeks to improve the efficiency and quality of justice*. Judicial decision processing by AI, according to their developers, is likely, in civil, commercial and administrative matters, to help improve the predictability of the application of the law and consistency of court decisions, subject to compliance with the principles set out below. In *criminal matters*, their use must be considered with the greatest reservations to prevent discrimination based on sensitive data, in conformity with the guarantees of a fair trial.

Acknowledging the increasing importance of AI in modern societies, and the expected benefits when it will be fully used at the service of the efficiency and quality of justice, were introduced 5 fundamental principles entitled *European Ethical Charter on the use of Artificial Intelligence in the Judicial Systems and Their Environment*, namely:

1. *Principle of respect for fundamental rights*: ensure that the design and implementation of AI tools and services are compatible with fundamental rights,
2. *Principle of non-discrimination*: specifically prevent the development or intensification of any discrimination between individuals or groups of individuals,
3. *Principle of quality and security*: with regard to the processing of judicial decisions and data, use certified sources and intangible data with models conceived in a multi-disciplinary manner, in a secure technological environment,
4. *Principle of transparency, impartiality and fairness*: make data processing methods accessible and understandable, authorise external audits, and
5. *Principle "under user control"*: Preclude a prescriptive approach and ensure that users are informed actors and in control of their choices.

On the one hand, as pointed out by *Molbæk-Steensig* and *Quemy*, the above-mentioned principles through their simplicity cover the needs for AI development for judicial system quite well; this simplicity also results in a lack of details and the Charter is missing both the legal-philosophical clarity (*Molbæk-Steensig, Quemy, 2023*). On the other hand, each above-mentioned principle of the Charter is underpinned by detailed statements to its interpretation and application in a judicial setting.

As regards application of the Charter, their principles should be subject to regular application, monitoring and evaluation by public and private actors, with a view to continuous improvement of practices. In this respect, it is desirable that a regular review of the implementation of the principles of the Charter be made by these actors, explaining, where appropriate, the reasons for non-implementation or partial implementation, accompanied by an action plan to introduce the necessary measures.

### **3. THE RESOLUTION ON ARTIFICIAL INTELLIGENCE IN CRIMINAL LAW AND ITS USE IN CRIMINAL MATTERS OF 2021**

AI and autonomous systems, together with other new technology trends have gained the attention of legislators, including the European Parliament (*Borges, Sorge, 2022*). In several documents, the European Parliament has shown the need for action at the European Union level. The Member States European Union, by the European Parliament, demanded strong safeguards when AI tools are used in practice by the police (*Nikolinakos, 2023*).

In 2021 the European Parliament introduced the *Resolution on Artificial Intelligence in Criminal Law and its Use by the Police and Judicial Authorities in Criminal Matters*. At the beginning, the European Parliament stated that digital technologies in general, and the proliferation of data processing and analytics enabled by AI in particular, bring with them extraordinary *promises*, but also *risks*. Whereas AI development has made a big leap forward in recent years, making it one of the strategic technologies of the 21<sup>st</sup> century, with the potential to generate substantial benefits in efficiency, accuracy, and convenience, and thus

bringing positive change to the European economy and society, but AI has made also great risks for fundamental rights and democracies based on the rule of law.

For purposes of criminal law, the *Resolution on Artificial Intelligence in Criminal Law and its Use by the Police and Judicial Authorities in Criminal Matters* can be marked of a crucial European Union document in criminal justice development. The European Parliament, by the Resolution, highlighted the main issues of the AI in criminal law context, *among others* (in total 36 points; below are shortened statements):

-Point No. 1: As processing large quantities of personal data is at the heart of AI, the right to the protection of private life and the right to the protection of personal data *apply to all areas of AI*. Processing of personal data should be lawful and fair, the purposes of processing should be specified, explicit and legitimate, processing should be adequate, relevant and not excessive in relation to the purpose for which is it processed. Possible identification of individuals by an AI application using data that was previously anonymised, should be prevented.

-Point No. 2: All AI solutions for law enforcement and the judiciary also *need to fully respect* the principles of human dignity, non-discrimination, freedom of movement, the presumption of innocence and right of defense, including the right to silence, freedom of expression and information, freedom of assembly and of association, equality before the law, the principle of equality of arms and the right to an effective remedy and a fair trial.

-Point No. 3: The speed at which AI applications are being developed around the world does not allow for an exhaustive listing of applications. Given the role and responsibility of police and judicial authorities, and the impact of decisions they take for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, *the use of AI applications has to be categorised as high-risk* in instances where there is the potential to significantly affect the lives of individuals.

-Point No. 4: Any AI tools either developed or used by law enforcement or the judiciary *should be safe, robust, secure and fit for purpose*.

-Point No. 5: The positive contribution of certain types of AI applications to the work of law enforcement and judicial authorities across the European Union is welcomed, for example, *the enhanced case-law management* achieved by tools allowing for additional search options.

-Point No. 11: The European Parliament takes note of the risks related, in particular, to data leaks, data security breaches and unauthorised access to personal data and other information related to, for example, criminal investigations or court cases that is processed by AI systems. It underlines that security and safety aspects of AI systems used in law enforcement and by the judiciary *need to be considered carefully and be*

*sufficiently robust* and resilient to prevent the potentially catastrophic consequences of malicious attacks on AI systems.

-Point No. 14: It is essential, both for the effectiveness of the exercise of defence rights and for the transparency of national criminal justice systems, that a specific, clear and precise *legal framework regulates the conditions, modalities and consequences of the use of AI tools* in the field of law enforcement and the judiciary.

-Point No. 16: In judicial and law enforcement contexts, the decision giving legal or similar effect *always needs to be taken by a human*.

-Point No. 18. Law enforcement and judicial authorities should identify and assess the areas where some tailor-made AI solutions *might be beneficial* and to exchange best practices on AI deployment.

#### **4. THE PROPOSAL FOR A REGULATION ON HARMONISED RULES ON ARTIFICIAL INTELLIGENCE (ARTIFICIAL INTELLIGENCE ACT) OF 2021**

In 2021 the European Commission introduced the Proposal for a Regulation Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act). It is the world's first attempt to regulate AI systems in a horizontal way. In contrast to other legislation of the European Union, it is not sector-specific document, but it relates to the use of AI in general (Veale, Zuiderveen Borgesius, 2021; Ebers, 2023). The Proposal responds to explicit requests from the European Parliament and the European Council, which have repeatedly expressed calls for legislative action to ensure a well-functioning internal market for AI systems where, both benefits and risks of AI, are adequately addressed at the European Union level. It supports the objective of the European Union being a global leader in the development of secure, trustworthy and ethical AI.

The primary objective of the Proposal for a Regulation Laying Down Harmonised Rules on AI is to ensure the proper functioning of the internal market by setting harmonised rules in particular on the development, placing on the European Union market and the use of products and services making use of AI technologies or provided as stand-alone AI systems. In details, the European Commission puts forward the proposed regulatory framework on AI with the following specific objectives:

- ensure that AI systems placed on the European Union market and used are safe and respect existing law on fundamental rights and European Union values,
- ensure legal certainty to facilitate investment and innovation in AI,
- enhance governance and effective enforcement of existing law on fundamental rights and safety requirements applicable to AI systems, and

-facilitate the development of a single market for lawful, safe and trustworthy AI applications and prevent market fragmentation.

The Proposal sets harmonised rules for the development, placement on the market and use of AI systems in the Union following a proportionate risk-based approach. According to its draft version of proposed regulation, the Regulation should lay down (Article 1 of the Proposal for a Regulation Laying Down Harmonised Rules on AI):

- harmonised rules for the placing on the market, the putting into service and the use of AI systems in the European Union,
- prohibitions of certain artificial intelligence practices,
- specific requirements for high-risk AI systems and obligations for operators of such systems,
- harmonised transparency rules for AI systems intended to interact with natural persons, emotion recognition systems and biometric categorisation systems, and AI systems used to generate or manipulate image, audio or video content, and
- rules on market monitoring and surveillance.

It should be noted that the Drafted Regulation borrows two elements from the General Data Protection Regulation of 2016, i.e. the Regulation (EU) 2016/679 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data. The Proposal of Regulation has extraterritorial effect and turnover based fines. Thanks to those elements, the GDPR has become an international regulatory framework. Organisations that market AI systems to users in the European Union would be, if adopted, within scope of the Regulation, regardless of where the provider is located. The Draft Regulation extends the level of fines and territorial scope further, in that it covers output produced by the system that is used in the European Union (McFadden, Jones, Taylor, Osborn, 2021).

As regards criminal law, two crucial aspects of the Proposal for a Regulation Laying Down Harmonised Rules on AI should be mentioned, namely:

- The use of AI systems for 'real-time' remote biometric identification of natural persons in publicly accessible spaces for the purpose of law enforcement. It is considered particularly intrusive in the rights and freedoms of the concerned persons, to the extent that it may affect the private life of a large part of the population, evoke a feeling of constant surveillance and indirectly dissuade the exercise of the freedom of assembly and other fundamental rights. In addition, the immediacy of the impact and the limited opportunities for further checks or corrections in relation to the use of such systems operating in 'real-time' carry heightened risks for the rights and freedoms of the persons that are concerned by law enforcement activities. The use of those systems for the purpose of law enforcement should therefore be prohibited,

except in three exhaustively listed and narrowly defined situations, where the use is strictly necessary to achieve a substantial public interest, the importance of which outweighs the risks. Those situations involve the search for potential victims of crime, including missing children; certain threats to the life or physical safety of natural persons or of a terrorist attack; and the detection, localisation, identification or prosecution of perpetrators or suspects of the criminal offences referred to in the Framework Decision 2002/584/JHA on the European arrest warrant.

- Actions by law enforcement authorities involving use of AI systems. They are characterised by a significant degree of power imbalance and may lead to surveillance, arrest or deprivation of a natural person's liberty. In particular, if the AI system is not trained with high quality data, does not meet adequate requirements in terms of its accuracy or robustness, or is not properly designed and tested before being put on the market or otherwise put into service, it may single out people in a discriminatory or otherwise incorrect or unjust manner. The high-risk AI systems should include in particular AI systems intended to be used by law enforcement authorities for individual risk assessments, polygraphs and similar tools or to detect the emotional state of natural person, to detect 'deep fakes', for the evaluation of the reliability of evidence in criminal proceedings, for predicting the occurrence or reoccurrence of an actual or potential criminal offence based on profiling of natural persons, or assessing personality traits and characteristics or past criminal behaviour of natural persons or groups, for profiling in the course of detection, investigation or prosecution of criminal offences, as well as for crime analytics regarding natural persons. AI systems specifically intended to be used for administrative proceedings by tax and customs authorities should not be considered high-risk AI systems used by law enforcement authorities for the purposes of prevention, detection, investigation and prosecution of criminal offences.

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# THE EUROPEAN PUBLIC PROSECUTOR'S OFFICE IN THE FIGHT AGAINST CYBERCRIME

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## ABSTRACT

*The European Public Prosecutor's Office was established based on Regulation 2017/1939, which implemented enhanced cooperation with the goal of establishing the European Public Prosecutor's Office. This EU institution is responsible for investigating and prosecuting perpetrators who commit criminal offenses that affect the financial interests of the European Union, as provided for in Directive 2017/1371, and for bringing them to judgment. Expressis verbis the EPPO exclusively safeguards the financial interests of the EU, however this does exclude the possibility of prosecuting other types of criminal conducts that affect these primarily protected interests. With the proliferation of digital and information technologies, it becomes essential to examine how the EPPO addresses the issue of cybercrime, which undeniably has a significant impact on and interference with the financial interests of the EU. Within the EU, various modern tools have already been adopted or are in the planning stages to offer new alternatives for effectively combating the emerging and sophisticated forms of cybercrime. Consequently, the objective of this article is to introduce the European Public Prosecutor's Office and its potential in countering cybercrime. The article is organized into two chapters. The first chapter delves into the fundamental attributes of the European Prosecutor's Office, while the second chapter explores the role of the EPPO in combatting cybercrime, specifically in terms of detection and providing protection for the financial interests of the EU.*

**Keywords:** *European Public Prosecutor's Office, EPPO, European prosecution, European Union, enhanced cooperation, judicial cooperation*

## INTRODUCTION

The European Public Prosecutor's Office (EPPO) has had an arduous journey of establishment, culminating in 2017, the year in which it was *de jure* constituted. However, it did not *de facto* start its activities until 2020. This institution stands as first supranational body with criminal jurisdiction over individuals within territory of the participating Member States. The initial three-year operational period has already shown results that have certainly exceeded the initial expectations.<sup>1</sup> Statistical data indicate that it can the EPPO has played a significant role in combating cross-border crime. The European Public Prosecutor's Office has, in a sense, served as a response to the modern transformation of Europe and, more broadly, society. The modern development of industry, the economy (including trade and services), technology, as well as social, legal and economic institutions, has been accompanied by an equally rapid development of new forms of crime. In response to global trends, criminal activities have become more sophisticated and harder to detect, posing new challenges. Some forms of crime have grown so extensive and complex that the individual nations are no longer able to effectively sanction and enforce laws and uphold justice effectively. Strengthening mutual trust and cooperation in the investigation and prosecution of crime represents a progressive path forward.

As the guardian of EU legislation, the European Commission has consistently highlighted that enforcement across the EU is insufficient. This negative aspect can be found in the economic area, in the environmental sector or in the fight against terrorism, corruption and as well as other forms of serious criminal activity. The European Union was not intended to be a supranational entity bringing together regional states to exercise its own powers over them. However, the gradual integration of the EU began to change this perception as it became clear that even the EU could not do without effective tools, institutions and bodies endowed with the necessary competences to protect EU interests. The originally sufficient administrative mechanisms have become outdated, and until not long ago, the EU did not have its own body with criminal jurisdiction.<sup>2</sup> A key area of breakthrough has become the protection of the EU's financial interests, or of funds flowing from and into EU budgets. EU judicial cooperation has thus been complemented by a qualitatively higher form, which has been embodied by the EPPO as an independent EU body with criminal jurisdiction.<sup>3</sup>

Modern forms of criminal activity, such as cybercrime, bring new challenges for law enforcement authorities, including public prosecutors. The EPPO was created for the specific purpose of protecting the

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<sup>1</sup> According to available data, it can be traced that since the beginning of its operation, the EPPO has protected over 14.1 trillion euros. Viz. Annex: EPPO Consolidated Annual Activity Report 2022.

<sup>2</sup> Kuchta, J. Vývoj a současný stav legislativních snah o vytvoření Úřadu evropského veřejného žalobce. In: Zarivnij, P. (ed.). Veřejná žaloba a její perspektivy. Brno: MU, 2015, s. 46.

<sup>3</sup> Jelínek, J. Evropský veřejný žalobce v evropském prostoru. In Kriminální věda, 2018, roč. 51, č. 1, s. 60.

financial interests of the European Union, *de facto* effectively safeguarding funds. However, one of the new challenges is dealing with aspects of cybercrime.<sup>4</sup> What are the possibilities for the EPPO to investigate and prosecute cybercrime? This is not the only question we will try to answer as we will also highlight the patterns and specifics of cybercrime in general. Cyberspace, materialized above all in the Internet, now represents another dimension of human activity. Almost all of us today move in cyberspace in some way, either actively or passively. Technical devices have become a normal part of our lives and, with a little exaggeration, we can no longer imagine life without them. Technical devices such as mobile phones and computers, but also the Internet, serve us every day for work, entertainment, leisure, communication with friends, i.e. to meet our various needs. Today, however, the process of digitization is expanding, making us more dependent on the support and functioning of technology, but also making us more vulnerable. Such a state of affairs inevitably brings with it the possibility of committing harmful acts that damage or threaten protected values.

Modern society is often described as an information society because information has become the essential driving force impacting both the collective and individual sectors such as industry, economy, culture, and others. The informational character of society is closely linked to the development of information and communication technologies (ICTs), which are becoming increasingly pervasive in human activities by facilitating communication as well as the movement of goods, services, and people. As society evolves towards a more technocratic model, it faces new threats and risks which consequently cause significant damage in the form of financial losses, disruption of economic stability and activity, thereby causing considerable harm to the economies of individual countries and the EU as a whole. The EU advocates that the security of networks and information systems should be considered a fundamental prerequisite for the smooth functioning of the internal market. Given this context, the focus on cybersecurity aligns with the interest in protecting the EU's financial interests, so it seems logical to extend the existing competence of the EPPO to include cybercrime. Therefore, this article not only provides an overview of the EPPO but also explores the potential expansion of its jurisdiction to investigate and prosecute serious cybercrimes, a move that could significantly bolster cybersecurity within the EU.

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<sup>4</sup> However, the EPPO will also have to fully contend with the reality of the disparate levels of digitalization among the participating member states. Only when the EPPO is equipped with an adequate and appropriate range of digital tools necessary for its operations, can it become a key player in the fight against cyber and digital crime. This view is also held by the Estonian European Prosecutor, Kristel Siitam-Nyiri. (viz. Siitam-Nyiri, K. EPPO and Digital Challenges. In *EUCRIM – The European Criminal Law Association's Forum*, Issue 2021/1, p. 61-62.).

## 1. GENERAL CHARACTERISTICS OF THE EUROPEAN PUBLIC PROSECUTOR'S OFFICE

The European Public Prosecutor's Office is a supranational public prosecuting authority tasked with investigating, prosecuting, and bringing to justice perpetrators and accomplices of crimes that affect or threaten the EU's financial interests.<sup>5</sup> The EPPO was established through enhanced cooperation, meaning it does not encompass all EU Member States but only those that have elected to participate in this collaborative framework. Consequently, the EPPO's jurisdiction is confined to the territories of the participating Member States. This enhanced cooperation framework is designed to be temporary, aiming for the eventual full integration of the specified domain.<sup>6</sup> The EPPO has emerged as an autonomous and independent EU entity with legal personality, granting it the ability to operate with complete autonomy in its legal interactions, including the execution of specific agreements and contracts with external entities.<sup>7</sup> The EPPO features a decentralized organizational structure, with decentralized prosecutorial units known as European Delegated Prosecutors operating alongside the central office in Luxembourg. This decentralization extends to an alignment with national legal frameworks, as the operational procedures of the EPPO adhere to the criminal law provisions of the country where the investigation and prosecution are conducted.<sup>8</sup>

The current structure of the EPPO comprises a central level, led by the European Chief Prosecutor, who represents the entire Office and acts as its external representative. The first individual to assume the role of European Chief Prosecutor was Romanian prosecutor Laura Codruța Kövesi, who gained recognition as a formidable anti-corruption advocate within her home country. Beneath the European Chief Prosecutor, individual European prosecutors, one from each participating Member State, are organized into colleges and chambers. At the lowest decentralized level are the European prosecutors in charge, who maintain a permanent presence in their respective countries. Essentially, the function of the European Public Prosecutor entails the delegation of tasks to those operating within the national public prosecuting authorities on an *ad causa* basis. The foundation and operations of the EPPO thus rely on the EU legal framework at the supranational level, as well as the legal institutions and instruments of the national legal systems of the participating Member States.<sup>9</sup>

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<sup>5</sup> Article 4 of the Council Regulation (EU) 2017/1939 of 12 October 2017, implementing enhanced cooperation on the establishment of the European Public Prosecutor's Office.

<sup>6</sup> Kořínek, Š. Komplikace a perspektivy Úřadu evropského veřejného žalobce. In *Jurisprudence*, roč. XXIX, č. 3/2020, s. 22.

<sup>7</sup> Zwiers, M. W. *The European Public Prosecutor's Office. Analysis of a Multilevel Criminal Justice System*. Cambridge – Antwerp – Portland: Intersentia, 2011, s. 360–361.

<sup>8</sup> Kořínek, Š. Evropský veřejný žalobce. In *AUCI*, 2019, roč. I.XV, č. 4, s. 14–15.

<sup>9</sup> Herrnfeld, H.-H. The EPPO's Hybrid Structure and Legal Framework. Issues of Implementation – a Perspective from Germany. *EU CRIM – The European Criminal Law Association's Forum*, Issue 2018/2, s. 117.

The European Chief Prosecutor leads and represents the entire Office, with internal responsibility for directing subordinate units and organizing activities. Its external competence lies in representing the Office externally, particularly in its interactions with other EU institutions and bodies, as well as EU Member States and third parties.<sup>10</sup> The College, which consists of the European Chief Prosecutor and all European prosecutors, holds the second-highest position within the hierarchy. It serves as the governing body responsible for the Office's overall operations, making decisions on key and strategic matters while ensuring the regularity and legality of prosecutions. However, the College does not have the authority to enact specific procedural acts in criminal cases. The College also establishes the Permanent Chambers, the highest executive body of the Office. The Permanent Chambers exercise influence over the course of criminal proceedings, from the investigative phase to the filing of indictments.<sup>11</sup> The Permanent Chambers supervise, direct, and coordinate the criminal prosecutions conducted by the competent European Public Prosecutor(s). Additionally, they are empowered to issue their own decisions in certain cases.<sup>12</sup> In particular, the Permanent Chambers are authorized to make decisions such as bringing an indictment before a court, dismissing a case, referring a case to national authorities, continuing an investigation, or issuing a binding instruction to a European Public Prosecutor.<sup>13</sup> The European Public Prosecutors play a supervisory role, which includes controlling, directing, instructing, and intervening in the exercise of the powers by the delegated European Delegated Prosecutors.

The base level within the organization is comprised of European Public Prosecutors, who are tasked with investigating criminal cases and, if necessary, prosecuting them in court. Each participating Member State is required to appoint at least two. In fulfilling their duties, these prosecutors must adhere to the EPPO Regulation and, more importantly, their own national laws. The role of European Public Prosecutors, maintained despite objections from several parties including the Czech Republic, addresses concerns related to legal unfamiliarity in the jurisdiction where the criminal proceedings take place.<sup>14</sup> Their role is often described as a *double hat* position, meaning they serve as national public prosecutors while also having the capacity to act as European Public Prosecutors in specific cases.<sup>15</sup> The final status of European Public

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<sup>10</sup> Csonka, P. – Juszcak, A. – SASON, E. The Establishment of the European Public Prosecutor's Office. The Road from Vision to Reality. *EUCRIM – The European Criminal Law Associations Forum*, Issue 2017/3, s. 128.

<sup>11</sup> Met-Domestici, A. The Hybrid Architecture of the EPPO. From the Commission's Proposal to the Final Act. *EUCRIM – The European Criminal Law Associations Forum*, Issue 2017/3, s. 145.

<sup>12</sup> Čl. 10 odst. 3 a 4 nařízení Rady (EU) 2017/1939 ze dne 12. 10. 2017, kterým se provádí posílená spolupráce za účelem zřízení Úřadu evropského veřejného žalobce.

<sup>13</sup> Klátik, J., Deset, M., Klimek, L. *Európska prokuratúra a perspektívy jej činnosti pri ochrane finančných záujmov EÚ*. Praha: Leges, 2019, s. 80.

<sup>14</sup> Jelínek, J. Evropský veřejný žalobce v evropském prostoru. *Kriminalistika*, 2018, roč. 51, č. 1, s. 66.

<sup>15</sup> Kořínek, Š. Evropský veřejný žalobce. In *AUCI*, 2019, roč. I.XV, č. 4, s. 20.

Prosecutors was the subject of lengthy political discussions, with the European Commission primarily favoring their *single hat* position.<sup>16</sup>

EPPO maintains a very close working relationship with Eurojust, which was its original precursor. Their relationship encompasses administrative, operational, and managerial aspects. However, Eurojust continues to serve as the principal coordinator of judicial cooperation in criminal matters among EU Member States, with cooperation mainly involving information exchange and general assistance in criminal cases, including communication and liaison with other Member States. The EPPO also collaborates closely with the European Anti-Fraud Office (OLAF), in a partnership that is both synergistic and complementary.<sup>17</sup> Their cooperation includes exchanging information, providing operational and technical assistance, coordinating specific tasks, and referring matters for administrative investigation, and vice versa.<sup>18</sup> To prevent duplication of efforts, as per the principle of *lis pendens*, if the EPPO initiates a criminal investigation, OLAF refrains from conducting an administrative one, and vice versa. The collaboration with Europol, characterized by information exchange and analytical support, is also noteworthy. Furthermore, the EPPO is authorized to enter into bilateral agreements with third parties, as exemplified by the established cooperative relationship between the EPPO and the United States.<sup>19</sup>

The role of the EPPO is to protect the EU's financial interests, as specifically defined in Directive 2017/1371 on the fight against fraud affecting the EU's financial interests by means of criminal law. The EU's financial interests encompass all revenue, expenditure, and assets, insofar as they are covered by, directly originating from, or assigned to the corresponding budgets.<sup>20</sup> The EPPO investigates and prosecutes individual crimes, which may include fraud, money laundering (among other things), corruption, embezzlement, and many others. Many of these offences are now referred to, among other terms, as European crimes, or Euro-crimes. The EPPO is also responsible for prosecuting the perpetrators and bringing them to justice. The public prosecution conducted by the EPPO is of a compensatory nature, as it represents a 'comprehensive prosecution', the main importance of which lies in minimizing procedural obstacles and in the uniform investigation and resolution of criminal cases in their entirety.<sup>21</sup>

The European Public Prosecutor's Office is empowered to investigate and prosecute fraud against the EU's financial interests. *De facto* the most common offense involves the illegal activity of submitting

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<sup>16</sup> Zwiers, M. W. *The European Public Prosecutor's Office. Analysis of a Multilevel Criminal Justice System*. Cambridge – Antwerp – Portland: Intersentia, 2011. s. 359.

<sup>17</sup> Kuhl, L. The European Public Prosecutor's Office – More Effective, Equivalent, and Independent Criminal Prosecution against Fraud? In *EUCRIM – The European Criminal Law Association's Forum*, Issue 2017/3, s. 140–141.

<sup>18</sup> Working Arrangement between The European Anti-Fraud Office ("OLAF") and The European Public Prosecutor's Office ("EPPO") done at Luxembourg on 5th July 2021.

<sup>19</sup> Memorandum of Understanding and Working Arrangement on Cooperation between the European Public Prosecutor's Office, on the one side, and the United States Department of Justice and Department of Homeland Security, on the other side, done at Luxembourg on 26. 07. 2022.

<sup>20</sup> Kořínek, Š. Evropský veřejný žalobce. In *AUCI*, 2019, roč. I.XV, č. 4, s. 16.

<sup>21</sup> Wade, M. L. A European public prosecutor: potential and pitfalls. *Crime Law and Social Change*, 2013, vol. 59, issue 4, s. 455.

false, incorrect, or incomplete information during the public procurement process, leading to the misappropriation or wrongful retention of funds. Additionally, the EPPO is tasked with prosecuting the misuse of funds allocated from an EU budget. It remains the responsibility of the relevant EU bodies or national authorities (not the EPPO, which is focused on foreign affairs and security policy) to sanction breaches of the mandatory obligation to provide relevant and decisive information, which results in similar undesirable consequences. Furthermore, the European Public Prosecutor's Office is also authorized to prosecute tax offenses (crimes against the common system of value-added tax) when the damage caused reaches a minimum of ten million euros.

In the future, the powers of the European Public Prosecutor's Office may also be extended to other serious crimes that damage or threaten the EU's protected interests. *Pro futuro*, the EPPO could have the authority to prosecute terrorist crimes, such as terrorist financing. This possibility has repeatedly been discussed among European or EU politicians.<sup>22</sup> It is evident that the fight against terrorism requires effective international judicial cooperation, e.g., the exchange of relevant information and taking adequate measures. There is no doubt that the EPPO would thus allow for a greater degree of coordination in the investigation and prosecution of terrorist offenses in the EU.<sup>23</sup> Such an extension of the EPPO's powers could be achieved by including Directive 2017/541 on combating terrorism.<sup>24</sup> In the context of considering extending the competences of the EPPO to the prosecution of terrorism, we also encounter its sub-category, which is cyber-terrorism, i.e., the intersection between terrorist crime and cyber aspects (see next chapter). Furthermore, an extension of the EPPO's powers to prosecute serious environmental crimes is being considered to ensure a higher form of environmental protection, as the current mechanisms seem inadequate.<sup>25</sup> Therefore, the competence of the EPPO could be expanded to include, in addition to criminal activities based on Directive 2017/1371, criminal activities based on the new Environmental Crimes Directive.<sup>26</sup>

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<sup>22</sup> Di Francesco Maesa, C. Repercussions of the Establishment of the EPPO via Enhanced Cooperation. EPPO's Added Value and the Possibility to Extend Its Competence. In *EUCRIM – The European Criminal Law Association's Forum*, Issue 2017/3, s. 158.

<sup>23</sup> Klátik, J., Deset, M., Klímek, L. *Európska prokuratúra a perspektívy jej činnosti pri ochrane finančných záujmov EÚ*. Praha: Leges, 2019, s. 84–85.

<sup>24</sup> Kořínek, Š. The European Public Prosecutor's Office and Counterterrorism. In *Trestní právo*, 2/2021, p. 21.

<sup>25</sup> BAAB, F. Will the European Public Prosecutor's Office be a stab to the heart? In *RED*, vol. 2, is. 1, 2021, p. 62.

<sup>26</sup> Under the current state, the still valid Directive of the European Parliament and of the Council 2008/99/EC of 19 November 2008 on the protection of the environment through criminal law remains in effect. However, it is highly likely to be replaced by a new legal act (Proposal for a Directive of the European Parliament and of the Council on the protection of the environment through criminal law, COM(2021) 851 final).

## 2. THE EUROPEAN PUBLIC PROSECUTOR'S OFFICE AND CYBERCRIME

Cyberspace, including the Internet, transcends national borders and is not limited by the territorial jurisdictions of individual states. Investigating and prosecuting cybercrime thus necessitates a common approach and a unified strategy, enhancing the security of the EU area.<sup>27</sup> This approach is essential for maximizing the effectiveness of cross-border prosecution of serious cybercrime, which often intersects with other areas of concern, such as economic or financial interests. Despite some harmonization of sectoral rules within the current EU legislative framework, fragmentation remains, especially among Member States, in the investigation and prosecution of serious crimes. The EPPO has been established as the first supranational judicial body with the authority to prosecute individuals for crimes, aside from institutions like the International Criminal Court. There are numerous compelling reasons to consider extending the EPPO's jurisdiction beyond protecting the EU's financial interests to include other serious crimes. Such an expansion would significantly enhance the security of the European region and the EU's geopolitical stance.<sup>28</sup>

The current legislative framework, based on the EPPO regulation, stipulates that the European Public Prosecutor is authorized to conduct investigative actions such as inspecting computer systems and securing data contained therein.<sup>29</sup> In most cases, these actions are carried out by the European Public Prosecutor according to the national legislation of their country. These are typical procedural means aimed at securing evidence important for criminal proceedings, among other purposes. Additionally, the Prosecutor is authorized to use standard legal assistance tools as well as special ones established at the EU level. An example of such a tool is the European Investigation Order, or potentially in the future, a European Preservation and Production Order for electronic evidence. The European Investigation Order (EIO) is a decision made by a judicial authority of one member state (issuing authority) for a judicial authority of another member state (executing authority) to carry out one or more investigative actions on its territory to secure specific evidence.<sup>30</sup> Although the EIO is a versatile tool for judicial cooperation, capable of being used for a wide range of evidence, it seems insufficient for electronic evidence. This inadequacy is one of the reasons for proposing a European Preservation and Production Order for electronic evidence in criminal matters. These new tools are expected to be a phenomenal breakthrough in the area of evidence collection in criminal proceedings and international judicial cooperation, as they allow a judicial authority to directly

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<sup>27</sup> Viz. Zarychta-Romanowska, K. Creating an EU "Homeland Security". In Scott, N. R., Kaunert, Ch., Fabe, A. P. H. (ed.). *Countering Terrorist and Criminal Financing. Theory and Practice*. Boca Raton: CRC Press, 2023.

<sup>28</sup> Sachetti, V. The EU Response to Terrorist Content Online: Too Little, (Maybe not) Too Late? In *European Papers*, 2021, vol. 6, no. 2, p. 985.

<sup>29</sup> Art. 30 par.1 of Council Regulation (EU) 2017/1939 of 12. 10. 2017 implementing enhanced cooperation on the establishment of the European Public Prosecutor's Office.

<sup>30</sup> Čl. 1 směrnice 2014/41/EU ze dne 03. 04. 2014 o evropském vyšetřovacím příkazu v trestních věcech.

approach private entities with an order to preserve and produce e-evidence.<sup>31</sup> Unfortunately, the EPPO regulation does not explicitly address issues related to cyber or computer aspects, which may require *pro futuro* revisions.

In the case of computer crime, or more precisely, cybercrime, it is necessary to understand this criminal activity in a broader context that includes cyber terrorism. Cyber terrorism can be defined as the use or misuse of information and communication technologies for terrorist activities by actors to achieve their terror-related objectives.<sup>32</sup> Cyber terrorism, a derivative of terrorism, may involve activities such as propaganda, financing, training, planning, execution, and ultimately, the terrorist attacks themselves.<sup>33</sup> In doctrinal terms, while many different definitions of cyber terrorism exist, they should all highlight the convergence of terrorism and cyberspace. This raises the question: why should the EPPO's competencies be expanded to include cybercrime, *in concreto* cyber terrorism? Terrorism impacts the fundamental values upon which the EU is built, making it essential to protect them. In the modern era, cyber-criminal activities, or cyberterrorism, have the potential to cause significant negative consequences, such as disrupting telecommunications, energy, industry, economy, and transport infrastructure. Addressing cybercrime requires close interstate cooperation to effectively maximize protection.

ICT and cyberspace are regularly used by terrorist actors, typically for online propaganda (spreading horrific videos to intimidate as many users as possible, among other things) but also for online radicalization (persuasion and enticement). Such activities lack the element of physical presence at the attack site but technically leave traces, meaning digital footprints. Like "conventional" forms of criminal activity, cybercrime (including cyberterrorism) exhibits many psychological aspects concerning both perpetrators and victims.<sup>34</sup> The use of the internet, especially for terrorist purposes, allows investigative bodies to track digital footprints and subsequently gather information that facilitates the punishment of such illegal activities.<sup>35</sup> To maximize security and strengthen the protection of rights, adapting to modern trends is indispensable. The current level of globalization is high, which must be matched by an appropriate level of legislation in individual states, as well as international judicial cooperation. In this respect, the EU has

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<sup>31</sup> Kořínek, Š. Kontura evropských předávacích a uchovávacích příkazů pro elektronické důkazy v trestních věcech v EU. *Výšetrovanie a skrátene vyšetrovanie trestných činov – teória a prax. Zborník vedeckých prac vydaný Katedrou vyšetrovania*. Bratislava: Akadémia Policajného zboru v Bratislave, 2023, s. 100-101.

<sup>32</sup> Halas, N. Kyberterorizmus v rámci legislatívy Európskej únie. In JALČ, A. (ed.). *Legislatíva EÚ a jednotlivých štátov EÚ v oblasti boja proti terorizmu: výzvy pre Slovenskú republiku*. Zborník z medzinárodnej vedeckej konferencie. Praha: Leges, 2020, s. 90-91.

<sup>33</sup> A cyber terrorist attack can be defined as a deliberate, politically or religiously motivated unlawful act carried out by a non-state actor (group) in a treacherous, cruel, or reckless manner, aimed at crippling public social structures, targeting a computer system or network, or using such a system or network as a means to commit the act.

<sup>34</sup> Prince, J. Psychological Aspects of Cyber Hate and Cyber Terrorism. In Awan, I., Blakemore, B. *Policing Cyber Hate, Cyber Threats and Cyber Terrorism*. Farnham: Ashgate, 2012, p. 21-38.

<sup>35</sup> Budinský, A. Digitální terorismus: informační fenomén. Diplomová práce. Brno: Filozofická fakulta MU, 2021, s. 33.

the potential to contribute to strengthening protection against serious transnational criminal activities, notably through the newly established EPPO.

Reflections on expanding the powers of the EPPO naturally arise from the interest in protecting fundamental social goods and values. According to the principle of subsidiarity, the EU is entitled to act when the desired objectives cannot be satisfactorily achieved at the level of the member states. Modern society is often referred to as an information society, where the quality of life, prospects for social change, and not just economic development depend on information and the ability to utilize it.<sup>36</sup> In a broader sense, information has become the key commodity of modern society. As former U.S. President B. Clinton once said, "*In the new economy, information, education, and motivation are everything*".<sup>37</sup> Given this widespread state of affairs, it is essential to be diligent in perceiving, organizing, and selecting relevant information. However, not everyone is capable of such information differentiation. Cyberspace, a world of virtual reality with the internet as its segment, provides us with a vast quantity of information and data. Unfortunately, most users in the virtual environment only superficially consume the information offered. This not only becomes fertile ground for cyber attackers, who often exploit the low information literacy of the majority of users. In this regard, we also point to the specific issue of so-called digital terrorism, which must be understood separately with an exclusive focus on information and data (propagation, manipulation, etc.).

Assuming that the jurisdiction for addressing serious cybercrime were transferred to the EPPO, an international law enforcement and legal enforcement body, the risk of jurisdictional conflict would be eliminated. Currently, there can be situations where two states claim jurisdiction over a particular crime with a cross-border element. This conflict of jurisdiction could lead to a violation of individuals' fundamental rights and freedoms, for instance, by breaching the *ne bis in idem* principle. Moreover, the volatility of the cyber-digital environment requires a very rapid exchange of information and securing of evidence, especially electronic evidence (abbreviated as *e-evidence*). However, traditional means of legal assistance in international judicial cooperation are not designed for the relentless conditions of the digital age. Even some more modern instruments, like the European Investigation Order, no longer seem adequate. In many respects, the European and Union system of prevention and repression of the mentioned forms of criminal activity remains insufficient. Expanding the EPPO's powers to investigate and prosecute cybercrime, including cyberterrorism, would at least partially fill these gaps. A more comprehensive Union approach

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<sup>36</sup> The process of information and communication technologies penetrating into society is referred to as the so-called informatization of society. As a result of this penetration, what was originally an industrial society becomes an information society. Viz. Cejpek, J. *Informace, komunikace a myšlení: úvod do informační vědy*. 2. vydání. Praha: Karolinum, 2005, s. 105.

<sup>37</sup> The "new" economy manifests as a systemic synergistic process converging towards the dependency of social, but primarily economic, entities on aspects of information and communication technologies. Viz. DOSTÁL, O. a kol. *Vybrané kapitoly z nové ekonomiky*. Praha: Wolters Kluwer, 2010, s. 9.

through the EPPO would allow for straightforward investigation and prosecution, timely securing of evidence, information sharing, and other benefits of a unified approach.<sup>38</sup>

The powers of the EPPO could be expanded to include not only Directive 2017/1371 on combating fraud affecting or threatening the EU's financial interests by means of criminal law but also Directive 2017/541 on combating terrorism. The mentioned Directive on combating terrorism, for example, stipulates that it is essential to criminalize actions consisting of unauthorized interference with information systems<sup>39</sup>, further referencing Directive 2013/40/EU on attacks against information systems. The Directive on attacks against information systems contains provisions that criminalize unauthorized access to and interference with an information system,<sup>40</sup> unauthorized interference with data, and unauthorized interception of data. From this, it is evident that the EPPO would be authorized to investigate and prosecute cybercrime, as well as its narrower definition in the form of digital crime. This would, of course, be contingent on meeting certain thresholds, such as the cross-border element (protected interest at the EU level), and fully in accordance with the principle of subsidiarity and proportionality. Ultimately, it would have to concern serious criminal activities that reach a sufficient level of severity.

## CONCLUSION

EPPO has become a significant player in combating crime and enforcing law and justice within the EU. We concur with the view that one of EPPO's main contributions may be seen in its independence from national dimensions in investigating and prosecuting serious criminal cases with a EU dimension, which could be influenced by the national political scene. Based on empirical results of EPPO's activities so far, it can be concluded that it is a satisfactorily functioning body that, at least for now, demonstrates added value in protecting the EU's financial interests. A certain level of efficiency has been achieved by investigating and prosecuting serious crimes with cross-border implications, increasing the need for an adequate level of effective cross-border cooperation, especially when multiple legal systems of individual states collide. Regarding the potential expansion of EPPO's powers, we believe that in the case of terrorism or serious environmental crimes, such a step would represent an institutionally functional solution for enhancing the efficiency of prevention and punishment of these forms of crime. On one hand, EPPO supports such considerations when it reflects the need for a higher degree of transferring powers to the European Public Prosecutor's Office.

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<sup>38</sup> Sachetti, V. The EU Response to Terrorist Content Online: Too Little, (Maybe not) Too Late? In *European Papers*, 2021, vol. 6, no. 2, p. 978.

<sup>39</sup> Article 3, paragraph 1, point (i) of Directive 2017/541 on combating terrorism.

<sup>40</sup> Directive of the European Parliament and of the Council 2013/40/EU of 12 August 2013 on attacks against information systems.

On the other hand, it remains cautious about "taking on" new powers. It must be acknowledged that the misuse of modern technologies for committing crimes, including various forms of terrorism, tries to keep pace with the growth of ICT, albeit not exponentially. The constant and very dynamic development of ICT, followed by the trend of automation (autonomous driving of motor vehicles, artificial intelligence, etc.) of functional systems, becomes an excellent backdrop for committing various forms of crime. Cybercrime, in most cases, affects the financial interests of individual states, including the EU, and almost always has a cross-border element. In this spirit, the protection of the EU's financial interests has far-reaching implications, as the element of economic relations remains, in general, to achieve continuous development and stability of the economies of individual partner states of the EU in a shared and common economic and legal space. The financial interests of the EU share common denominators with the financial interests of member states and individuals, arising from their functional connectivity in the common economic space of the EU. An adequate level of protection of the EU's financial interests, according to the so-called principle of fact assimilation, which requires achieving equivalent protection of the financial interests of the EU and its member states, can be more effectively achieved in the area.

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# ADMINISTRATIVE PROCEDURE UNDER THE LENS OF ELECTRONIC GOVERNANCE

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## ABSTRACT

*Administrative institutions bear the responsibility of wielding state authority and delivering services to the populace, with the overarching objective of meeting broader societal needs. This is accomplished by implementing administrative measures that adhere to the principles of administrative procedure. The feasibility of directly applying material legal provisions is widely acknowledged to be limited, as a series of procedural steps are necessary for their implementation in specific cases. To fulfill the legal interest of a citizen, a set of prescribed steps must be followed in distinct phases to guarantee the equity and legality of determinations made by the state administration. Information technology (IT) has been utilized to improve the efficiency of administrative procedures to meet the demands and legal interests of citizens. As a consequence, there has been a notable rise in the level of public satisfaction regarding the state's ability to effectively address a wide range of requests from its citizens. The successful implementation of e-governance has significantly improved the accessibility of services for citizens, primarily by reducing costs and expediting the fulfillment of their requirements. This paper aims to investigate the potential for enhancing administrative procedures in Kosovo through the implementation of electronic governance. By utilizing analytical, qualitative, and legal-dogmatic research methods, it has been found that notable deficiencies are present not only in the professional training of personnel but also in the legal infrastructure needed for the efficient application of electronic administrative procedure within the existing circumstances of Kosovo.*

**Keywords:** *Administrative procedure, Electronic signature, Training system, Public officials, Legal infrastructure.*

## INTRODUCTION

The administrative procedure incorporates mechanisms designed to ensure legal certainty for citizens when engaging with state institutions. The legal framework governing the interaction between the state and its citizens, as well as its effective enforcement, is crucial as it fosters satisfaction and trust among citizens and public institutions. Nevertheless, the execution of the law remains a significant obstacle in enhancing institutions in the context of Kosovo, and subsequently, promoting the rule of law.

It is widely recognized that legal provisions cannot be directly implemented, but specific measures must be taken to put them into effect in specific situations. Therefore, in order to satisfy an entitlement, a lawful concern, or a duty to the individual, a series of measures must be carried out during specific phases (administrative procedure) to guarantee that the ruling made by the administrative entity is just and lawful.

Administrative procedure, as defined in administrative legal theory and positive legislation of various legal systems, refers to a collection of legal norms that govern the conduct of administrative bodies and agencies. These institutions exercise their power by issuing administrative legal acts, which determine the rights, obligations, or interests of the relevant subjects (legal entities), while adhering to the norms of material law and managing administrative legal matters (Shala et al, 2019).

Government in developing nations is characterized by excessive costs, inadequate delivery, and insufficient responsiveness or accountability, mirroring the situation worldwide. The objective of good governance reforms is to rectify these deficiencies. However, despite the extensive time and effort invested in implementing these reforms, the progress achieved has been significantly less than anticipated. E-government presents a novel approach that enhances government procedures, fosters citizen engagement, and facilitates interactions within civil society (Institute for Development Policy and Management, 2001). The process of digitalization is progressively permeating various aspects of our daily existence. This also facilitates the connection between actors from both public and private domains. The growth of the IT infrastructure facilitates the process of digitizing administrative tasks. How can we accurately describe digital administration? It primarily involves streamlining procedures and processes. Contemporary communication formats are employed in the exchange of information between governmental institutions, administration, and individuals. The utilization of big data and artificial intelligence streamlines this interaction and enhances the efficiency of state offices. Citizens also reap the advantages of this as it expedites administrative processes.

Post-conflict states and countries undergoing transition, like Kosovo, encounter numerous challenges in establishing democratic institutions and achieving a functional democracy. Given that citizens and state institutions engage in various forms and instances of interaction, it is imperative that this

interaction is both transparent and effectively regulated. The primary form of interaction between citizens and state institutions is through administrative procedures. In these cases, citizens seek to exercise their rights or protect their legal interests as guaranteed by constitutional and other legal norms (Alidemaj H. A. et al, 2022).

Amidst the current swift progress in design and service provision, organizations and governments worldwide are progressively acknowledging the significance of embracing a user-centric approach. This approach aims to guarantee that services are designed with optimal efficiency and effectiveness to fulfil the varied needs and expectations of individuals (Democracy Plus, 2023). Within this framework, this paper aims to investigate the concept of user-centric administrative procedure, specifically examining the circumstances in Kosovo. This study aims to analyse the best practices and enablers for implementing user-centred administrative procedure in order to gain knowledge about the current state of service delivery in Kosovo and identify any potential obstacles that can be addressed.

The effective implementation of e-governance has greatly enhanced the availability of services for citizens, primarily by decreasing expenses and accelerating the fulfilment of their needs. The objective of this paper is to explore the possibility of improving administrative processes in Kosovo by implementing electronic governance. Through the utilization of analytical, qualitative, and legal-dogmatic research methods, it has been determined that significant issues exist in the professional training of personnel and the legal framework required for the effective functioning of electronic administrative procedures in Kosovo at present.

## **1. THE CHALLENGES PERTAINING TO THE IMPLEMENTATION OF THE ADMINISTRATIVE PROCEDURE IN KOSOVO**

There are a myriad challenges and impediments that arise when executing administrative tasks in Kosovo. These challenges stem from the neglect to adhere to fundamental principles of administrative procedure when making decisions on specific administrative matters, which are in conflict with both substantive and procedural provisions. The main challenges have been identified as the insufficient justification for administrative decisions, non-compliance with formal legal obligations, and ambiguities in the interpretation of substantive legal provisions (Alidemaj, 2021).

A hindrance to the efficient functioning of public administration in Kosovo is the incompetent implementation of the newly passed law on general administrative procedure, which was sanctioned in 2016 and came into force in 2017. Administrative officials have not taken advantage of the ample time and training

opportunities provided by the transitional provisions of the law to familiarize themselves with them and receive sufficient training. Consequently, there are substantial violations of the rights and legal interests of citizens (Alidemaj, 2022). According to the law, the government authorities must make a decision on any citizen's request within a specific period of 45 days. Failure to make a decision within the given time limit and failure to notify the party of a 45-day extension will be considered as implicit approval by the administrative bodies, as outlined in Articles 100 and 98 of Law No. 05/I-031 on General Administrative Procedure (LGAP). The objective of these actions is to optimize the efficiency and effectiveness of public institutions. However, the failure to effectively implement these legal regulations has resulted in negative outcomes, such as an increase in the denial of citizens' appeals and their legal recourse to higher-level administrative bodies in order to safeguard their rights and legal interests (Alidemaj et al, 2022).

The administrative procedures within the civil service must prioritize speed, efficiency, effectiveness, and cost-effectiveness. Hence, it is imperative for civil servants to refrain from complicating procedures and instead assist citizens in fulfilling formalities, while also avoiding any circumstances that could potentially jeopardize the interests of the administration, individuals, or groups of citizens. To enhance the efficacy of the state administration, the civil service must strictly adhere to elevated standards of professional performance.

The effectiveness of the civil service is primarily determined by the aptitude, education, and expertise of its employees. The Ministry of Public Administration is tasked with establishing the criteria for hiring, specifically the employment policy and the execution of training initiatives for the civil service. MPA has established the Kosovo Institute for Public Administration, a specialized agency aimed at providing professional-level training to civil servants (Doli, 2012).

Participation of civil servants in capacity-building events organized and conducted within the Civil Service should be considered as fulfilling professional responsibilities. Supervisors have the responsibility to facilitate and support their employees' participation in these programs (Law no. 08/I-197 on public officials, art. 26). In order to ascertain the correlation between the professional capabilities of civil servants in Kosovo and the overall effectiveness and competence of public administration, it is imperative to initially assess the educational attainment of civil servants at large. The educational attainment of civil servants at both the central and municipal levels is unsatisfactory and falls short of the standards set by the European civil service. Roughly 50% of civil servants at the central level possess a bachelor's degree, while a comparable percentage have only completed secondary education. This discovery undoubtedly casts scepticism on the ability of an administration comprised of highly educated civil servants to effectively implement the necessary legislation and reforms in Kosovo. This fact underscores the necessity of consistently addressing

this issue through a system of organized professional education, which should encompass not only individuals without university degrees but also those with rudimentary university diplomas (Group for Legal and Political Studies 2011, p. 10).

The Ministry of Public Administration (MPA) is responsible for formulating training programs and educational initiatives for the civil service in Kosovo. The MPA is employing the Kosovo Institute for Public Administration (KIPA), a dedicated executive agency, to provide training for civil servants who are appointed to work in central, municipal, or independent administrative institutions. The government of the Republic of Kosovo provides symbolic support to KIPA, while simultaneously facing increasing grievances regarding this institution. The primary source of discontent pertains to the limited quantity of adequately trained civil servants, the brevity of training programs, and the insufficient alignment with the specific requirements of various functional categories of civil servants (E. Haxhijaj, personal communication, October 23, 2023). From 2003 to the present, KIPA has organized several workshops for civil servants at different hierarchical levels, despite a decrease in support. The primary domains of instruction for civil servants in the realm of management and public administration encompass: initiation programs for public administration; HRM instruction programs; instruction programs on budget, finance, and public procurement; national legislation; instruction for local government; public relations instruction; and instruction in information technology (E. Haxhijaj, personal communication, October 23, 2023).

The demand for participation in vocational training is substantial, particularly among civil servants, particularly at the municipal level. In certain municipalities, the participation of civil servants in training programs is consistently limited, and in certain instances (particularly in small municipalities), civil servants are completely excluded from training sessions (Xh. Mehmeti, 2023).

	No. of groups	No. of days	No. of participants	Central level	Local level	Year
Training in general administrative procedure	34	68	614	426	188	<b>2018</b>
	16	32	652	652	0	<b>2019</b>
	3	6	26	26	0	<b>2020</b>
	9	18	78	56	22	<b>2021</b>
	4	8	67	23	44	<b>2022</b>
	4	12	76	57	19	<b>2023</b>
<b>Total</b>	<b>70</b>	<b>144</b>	<b>1513</b>	<b>1240</b>	<b>273</b>	

**Table 1:** Training in general administrative procedure conducted by KIPA

A notable characteristic of the training program at KIPA is the limited emphasis placed on training in the areas of legislation and administration. Nevertheless, civil servants exhibit significant shortcomings in these domains, which manifest in their implementation of administrative procedures, formulation of substantial administrative acts, and comprehension of the administrative control process. Typically, only a limited number of civil servants in most municipalities possess the capability to formulate a lawful and valid administrative decision.

Table 1 clearly demonstrates a substantial decline in the quantity of civil servants who have received training in general administrative procedures over the past six years. Evidently, there is a noticeable disparity between the number of individuals with training, with a greater emphasis on the central level of government rather than the local level. It is widely recognized that, in most cases, the general administrative procedure starts at the local level to review citizens' requests and concludes at the central level to assess the legality of decisions.

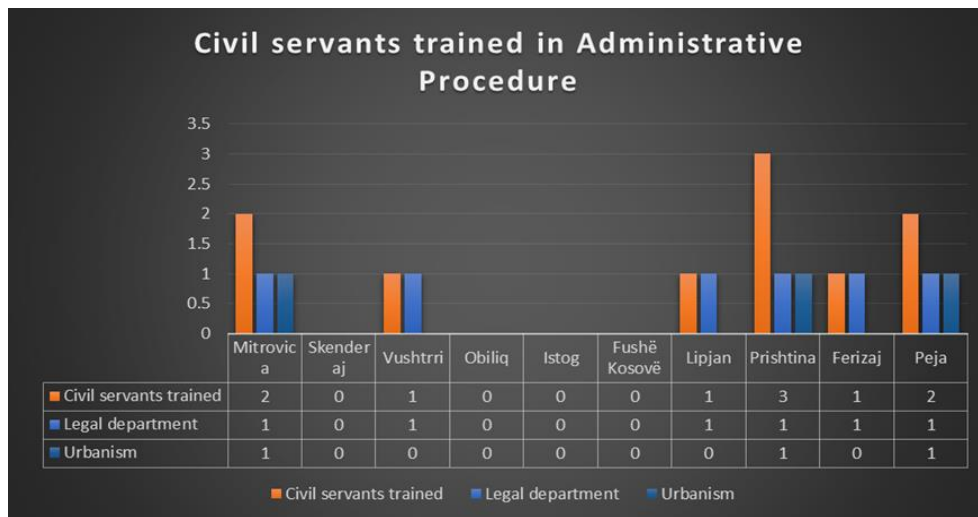


Figure 1 displays data collected from 10 municipalities in Kosovo, revealing that only a few municipal officials have received training in general administrative procedures. In certain small municipalities, there is a lack of officials who have received proper training in the accurate execution of the LGAP. At the local level, it is evident that the individuals who receive training are primarily from the legal office or urban planning department, while other municipal departments that may have a significant need for LGAP implementation are being overlooked.

To ensure a proficient and productive public administration, it is necessary to establish specific provisions for the engagement of civil servants in diverse professional development programs. The duration of training modules is correlated with the ongoing need for civil servants. The modules should be structured across an extended duration of time, preferably spanning at least two weeks, rather than the current practice of two

or three days. Additionally, the Kosovo Institute for Public Administration should be converted into an authentic educational institution that prepares individuals for the civil service in Kosovo. This can be achieved by offering training programs for newcomers lasting up to six months, as well as advanced courses for experienced civil servants, which would be conducted for two weeks annually.

## **2. IMPROVING THE IMPLEMENTATION OF LGAP: A POTENTIAL SOLUTION**

Prompt action is required to improve the implementation of Kosovo's administrative procedure law. The reform of state administration should not exclusively depend on normative methodologies and quantitative benchmarks. Additionally, it should integrate alternative methodologies that give importance to the excellence of work and safeguarding the legal rights and interests of citizens. Hence, the provision of adequate training for public officials, harmonizing legal and sub-legal acts with the LGAP, and adopting digitalization of administrative procedures could greatly enhance the enforcement of the law on administrative procedure (Alidemaj et al 2022, p.119).

To guarantee an efficient and effective government, civil servants' capacity to engage in a variety of professional development activities must be improved. Civil servants consistently argue for an extended duration of the training modules, specifically a minimum of two weeks, as opposed to the current duration of two to three days. Furthermore, it is necessary to reorganize the Kosovo Institute for Public Administration into a specialized institution known as the Public Administration School, which will focus on training professionals specifically for the civil service of Kosovo (Haxhiu et al 2021, p. 98-107).

Since the introduction of the new law (LGAP) in Kosovo seven years ago, the process of synchronizing the specific legislation with the LGAP has been advancing at a sluggish pace. The harmonization process primarily focuses on laws, excluding the secondary legislation that includes specific provisions followed by administrative authorities in their daily procedures. Past experiences with similar reforms in EU Member States have demonstrated that without a comprehensive process of legal harmonization, inconsistencies between the newly implemented legal act and the existing legislation will remain unresolved, leading to the ineffectiveness of the reform. If the special legislation is not in accordance with the general law, individuals participating in the proceeding must resort to an appeal body or judicial review in order to request the administration to apply the principles or provisions of the general law. This occurs because the governing body responsible for the administrative process usually complies with the specific legislation. If the appeal procedures are merely outlined as overarching principles in the LGAP, they may also undermine the efficacy of the reform provisions. Although the repeal of conflicting provisions may

appear necessary, it can lead to gaps or uncertainties within the legal framework (SIGMA Paper No. 62, pp.61-63). To prevent these problems, it is crucial to carefully consider the harmonization process.

The following mechanisms and practices can be advantageous for resolving the current accumulation of specialized legislation and ensuring continuous coherence between the LGAP and the specialized legislation. In order to achieve the most efficient coordination of the existing legislation, it is crucial to:

- Produce a thorough overview of all administrative processes, encompassing both the principal and subordinate laws that regulate their execution.
- Harmonize all legislation under strong central co-ordination.

The goal of the harmonization process is not to ensure the full implementation of the LGAP provisions in all aspects of special administrative procedures. General laws universally authorize the establishment of specific laws to regulate particular aspects with minor deviations. Hence, it is imperative to thoroughly contemplate the process of harmonization. It is imperative to ensure that the specific laws align with the overarching principles of the LGAP, and it is vital to avoid any unnecessary redundancies (SIGMA Paper No. 62, p. 63). Furthermore, no subordinate legislation facilitating the enforcement of the LGAP in Kosovo has been formulated during the seven-year period following its enactment (Alidemaj et al 2022, p.119).

An innovation that could potentially improve this situation is the implementation of electronic communication channels for interaction between citizens and public institutions. Nevertheless, the citizens of Kosovo do not possess digital identification. This has rendered any endeavour to utilize electronic communication during the execution of the administrative procedure impossible (SIGMA Paper No 62, p. 77). An affordable and readily accessible central infrastructure is required. In order to fully implement the provisions for electronic communication in the LGAP, it is necessary for applicants to be able to submit digitally signed documents and for the administration to be able to conclude and sign administrative acts in an electronic format. It is feasible to transition to electronic communication once the initial exchanges have occurred through traditional channels and the relevant email contacts have been verified. Nevertheless, the digital implementation of the administrative procedure should not entirely supplant the existing procedure, but rather operate concurrently by promoting the gradual adoption of electronic devices until complete electronic communication is guaranteed. This is attributed to the prevailing conditions in Kosovo and the limited capacity of each individual to obtain unrestricted access to electronic devices or acquire the necessary expertise to utilize them (Alidemaj et al 2022, p.120).

### **3. ADMINISTRATIVE PROCEDURE WITHIN THE SCOPE OF THE E-GOVERNANCE**

E-governance is the application of information technology to improve the quality of services offered by governments to citizens and businesses. This is expected to further enhance the connection between government officials and communities, thereby leading to a stronger, accountable, and inclusive democracy (Henman 2010, p. 3). E-government refers to the utilization of information and communications technologies (ICT) to enhance government operations, making them more accessible, efficient, and transparent. According to the European Commission, this transformation should be accompanied by organizational change and the acquisition of new skills in order to enhance public services, promote democratic participation, and improve public policy making. The implementation of e-government has the capacity to alter the dynamic between government officials and the general public. The effectiveness of e-government will be contingent not solely on technology, but also on the allocation of organizational resources and the presence of a strategic vision (Al-Hakim 2007, pp. x-xix).

E-governance refers to the utilization of Information and Communications Technology (ICT) in government operations. Therefore, e-government essentially represents a shift towards SMART governance, which encompasses governance that is uncomplicated, ethical, responsible, receptive, and open. Simplicity entails streamlining the rules and regulations of the government, minimizing convoluted procedures through the use of ICT, and ultimately creating a government that is easily accessible and user-friendly. Moral pertains to the utilization of technological interventions within the administrative and political apparatus to optimize the efficacy of various government entities. Accountability ensures the implementation of effective information management systems and other performance measurement mechanisms to ensure the responsibility of public service officials. Responsiveness pertains to the improvement of systems through the optimization and streamlining of processes. Transparency entails the dissemination of information to the public via platforms like websites or portals, thereby facilitating the comprehension and accessibility of the government's functions and processes. SMART governance is essential as it fosters government transparency to eradicate corruption, enhances the efficiency of information and service provision, reinforces political accountability and trustworthiness, and advances democratic procedures by involving and consulting the general public (Careers360, 2023).

E-governance tools enable faster and more efficient analysis of data within public administrations; efficient public services can cause significant cost savings or the development of novel varieties of services at the same time. The 'digital by default' strategy boosts cost savings. Programs that are 'digital by default'

have been created from the start to be so appealing that anyone who can use them will make the choice to do so. This implies that a significant number of transactions will be processed electronically. Only a small number of citizens will still have to interact with the government through higher-cost channels, such as mail forms on paper, in-person interactions in an office, or via the phone. However, the opportunity to alleviate administrative burdens holds greater significance than mere reductions in government costs. Administrative burdens refer to the financial obligations incurred by individuals and organizations in order to adhere to the information and registration prerequisites set forth by governmental regulations. These expenses can be diminished by expediting and reducing the cost for citizens to meet their responsibilities, such as obtaining permits or making tax payments. The efficiency and expediency of online information dissemination, the incorporation of information and communication technology (ICT) tools and procedures, and the utilization of data from both customers and businesses collectively enable time and energy conservation. E-government has the potential to provide benefits through the enhancement of transparency. Governments that make substantial amounts of data accessible online afford citizens and enterprises the chance to scrutinize said data in order to ascertain the congruence between government actions and societal objectives. By establishing avenues for citizens to engage in the creation of novel services, as well as to propose, provide feedback on, and exert influence on the formulation of policies, governments can foster increased citizen involvement in the governance process. The provision of e-government services is occasionally regarded as a means of mitigating corruption through the elimination of intermediaries between citizens and the actual services rendered (European Parliament-eGovernment 2015, pp. 4-6).

However, e-government poses several actual or potential challenges. The default provision of digital services may result in the exclusion of individuals who fall into the 'digital divide'. This refers to those in society who face challenges in accessing the internet due to factors such as poverty, physical disabilities, advanced age, limited digital literacy, or residing in rural areas with limited or no broadband connections. The implementation of alternative communication channels, such as face-to-face or telephone service desks, serves as a means to mitigate social exclusion, albeit at the potential expense of reduced cost savings. Governments may be required to provide assistance for digital skills training, not solely to bolster the labour market and enhance citizens' employment opportunities, but also to guarantee universal access to eGovernment services for all individuals. Public officials may require supplementary training and time to acquire new skills in order to effectively support electronic service. Alternatively, some officials may need to be reallocated to different responsibilities. The privacy of citizens may be infringed as governments increasingly gather and disseminate data with the aim of personalizing services or facilitating the implementation of 'register only once' digital registration. The potential vulnerability of personal data stored

by governments to data theft poses a significant concern. If appropriate caution is not exercised, the provision of unrestricted access to various sets of government-collected data may, under certain conditions, enable the comparison of individuals from one set to another, even if the individual datasets have been purged. Citizens may be deterred from utilizing electronic services due to a lack of confidence in the government's handling of their personal data and concerns regarding insufficient security and privacy measures. Governments incur costs when they provide open government data while ensuring security and privacy. Projects aimed at implementing e-government services also encounter risks associated with introducing significant alterations in intricate and politically delicate domains. Obstacles encompass deficiencies in leadership, insufficient allocation of resources for the creation of novel services, unfavourable dispositions among public officials, rigidity within the organization, and challenges in coordinating efforts across different jurisdictions, administrative divisions, or geographical areas (European Parliament-eGovernment 2015, pp. 6-7).

The cultural implications of new technologies pose non-technical barriers to the implementation of e-government. Cultural factors exert a greater influence on individual traits and subjective circumstances compared to the objective conditions pertaining to the development and acceptance of novel technology. The utilization of technology by citizens and policymakers is influenced by cultural norms and individual habits. Due to the substantial influence of culture on an individual's perspective, a considerable number of individuals exhibit resistance towards change and exhibit a gradual and deliberate adoption of novel technologies. In addition, enhancing the collaborative dynamics between internal divisions and external organizations, as well as embracing a corporate-oriented approach, are crucial factors for achieving effective e-government outcomes. In order to accomplish this, it was deemed imperative to implement significant cultural transformations. Incorporating organizational development into the implementation process ensures the accommodation of internal shifts in culture. Cultural characteristics can be ascertained through various factors, including social structure, religious beliefs, linguistic practices, educational systems, economic ideologies, and political ideologies. Technical enhancements encompass both structural modifications and cultural shifts. The successful implementation of technical change necessitates equal planning for changes in culture, despite their less tangible nature (Alshehri et al 2010, p. 40).

Research indicates that the absence of endorsement from senior executives reduces the likelihood of an innovation being embraced. Therefore, the successful implementation of e-government necessitates support from the highest echelons of government. Top management backing pertains to the dedication exhibited by senior management in establishing a conducive atmosphere that fosters engagement in e-

government applications. Consequently, it has a substantial impact on the acceptance and execution of e-government. In order to overcome the inherent resistance to organizational change, acquire the necessary resources for enhancing management, and establish and sustain a comprehensive commitment to new government practices, it is imperative to have active leadership participation and well-defined lines of responsibility for implementing management improvements. High-level leadership and a comprehensive IT vision are crucial for vertical e-government planning, resource acquisition, official motivation, collaboration with external partners and stakeholders, and coordination between different agencies and ministries. The development of e-government in transitional countries as well as emerging countries is mostly motivated by political leadership and a comprehensive vision of information technology. Leaders who view the adoption of e-government as a potential benefit are more inclined to endorse such initiatives, even when confronted with challenges. Conversely, leaders who perceive potential losses from the implementation of e-government are unlikely to provide consistent support. Hence, it is imperative for the government to provide education to future officials, executives, and administrators regarding the strategic planning and efficient management of ICT in various public sectors. This education should prioritize the enhancement of access advantages, economic growth, and the efficient dissemination of public data and services (Alshehri et al 2010, p. 41).

E-governance enables the digitization of administrative processes, resulting in notable enhancements in operational effectiveness and output. Tasks that typically required several days or weeks can now be accomplished within a matter of hours or minutes. It has been observed that a decrease in processing durations for government services is a significant advantage of e-governance, facilitating the completion of a greater number of tasks within a shorter timeframe and with reduced resource allocation. The utilization of online tools enables an elevated degree of citizen engagement and active involvement in the realm of governance. Citizens have the ability to offer feedback, express concerns, and actively participate in the process of decision-making by utilizing online surveys, forums, and social media platforms. Throughout the different contexts, cases have been recorded in which e-governance tools have been employed to engage citizens in the process of policy development, thus promoting a governance model that is more inclusive and democratic.

Portugal serves as an illustrative case of a European nation that has successfully adopted electronic administrative procedures. In the last two decades, Portugal has implemented a range of initiatives with the objective of streamlining administrative processes and enhancing efficiency. These measures include Decree-Law no. 135/99, the simplex protocol program, the revised Code of Administrative Procedure and its subsequent amendments. These reforms encompassed a diverse array of domains aimed at reducing

bureaucratic obstacles, enhancing administrative effectiveness, and facilitating the engagement among individuals, businesses, and the government. Significant endeavours encompass the establishment of electronic one-stop shops and the promotion of online administrative procedures, with the objective of streamlining procedures and enhancing public accessibility (JT Silveira et al, 2021).

Germany has a strong foundation in its legal system for implementing electronic administrative procedures, with the Administrative Procedure Act being a key component.

The aforementioned legislation establishes the standards for the conduct of governing bodies, thereby serving as a fundamental framework for the systematic and legal implementation of administrative duties. The Administrative Procedure Act outlines the protocols involved in the implementation of federal law by federal authorities and entities. The distinction between administrative laws at the state (Länder) level and those at the federal level in Germany is noteworthy, owing to the country's federal structure. Nevertheless, the fundamental nature of these laws remains largely consistent, guaranteeing a standardized approach to administrative procedures nationwide. The primary objective of digital management is widely recognized as the attainment of transparent, adaptable, cost-effective, and citizen-centric governance. The journey towards the digital procedure was arduous and protracted (Cristina Fraenkel-Haeberle, 2020).

Overall, countries in South-East Europe do not exhibit a notable prevalence of electronic administrative procedures, although a few of them are currently in the initial phases of establishing the necessary conditions for the adoption of such procedures in electronic format.

#### **4. ADDRESSING THE NEEDS OF PUBLIC SERVICE USERS IN KOSOVO-LEGAL INFRASTRUCTURE**

Kosovo has made significant progress in implementing a structured service delivery policy in the past few years. The 2016 revision of the LGAP incorporated significant principles and components, such as the once-only concept, payment proportionality, timely delivery, and the remuneration principle. In addition, Kosovo has implemented laws pertaining to licenses and permits, electronic identification, services, data protection and cyber security. In addition, the issue of service delivery has been examined in various significant strategic documents, including the National Development Strategy, Administrative Burden Prevention and Reduction Programme, Public Administration Reforms Strategy, and the upcoming e-Government Strategy. The efforts have been facilitated by the establishment of an operational government gateway and the launch of the e-Kosova platform. Nevertheless, there are still notable obstacles that remain. The government's lack of institutional coordination impedes the planning and monitoring of service delivery, leading to a fragmented strategy. There is a lack of quality management tools

that can effectively guide the design and delivery of services, especially in the context of digitalization. Implementing digital solutions frequently depends on initiatives led by donors and lacks a centralized process. Moreover, there exists a deficiency in digital competencies within the realm of public administration, and the presence of a comprehensive enterprise and interoperability framework that encompasses the entire government is either lacking or antiquated (Democracy Plus 2023, pp. 8-9).

The LGAP implements the 'once only' rule, which alleviates the workload on service users by mandating that public institutions independently acquire and reuse essential documents. The principle of gratuity, which asserts that administrative processes need to be conducted without any expenses, is a significant component of cost proportionality. The establishment of specific timeframes for the completion of administrative procedures, coupled with the principle of silent consent, serves as a structural framework to guarantee the prompt delivery of services. LGAP also promotes the advancement of electronic communication. Nevertheless, the absence of alignment with specific legislation and the necessity for additional digitalization endeavours pose obstacles to LGAP's function as a facilitator for user-centred product development and provision. However, the continuous endeavour to synchronize specific legislations with LGAP is a favourable advancement that has the potential to alleviate many of these issues (LGAP 2017, Articles 12, 73, 86, 98).

On January 7, 2022, the Law on Electronic Identification and Trust Services in Electronic Transactions (LEITSET) became available. The primary objective of this substantial legal framework is to govern the utilization of electronic identification data for the purpose of representing individuals and entities, as well as the implementation of trust services in electronic transactions and documents. This legislation is in line with Kosovo's strategic initiatives to strengthen its digital agenda and enhance the investment environment, with a specific focus on promoting remote transactions, electronic payments, and electronic commerce as a whole. The necessity for the establishment of a comprehensive legal framework became notably apparent amid the COVID-19 pandemic, as the lack of a strong legal basis for digital transactions prompted businesses and clients to resort to face-to-face interactions and payments in cash. The implementation of the LEITSET framework provides a systematic foundation for digital transactions, presenting companies in Kosovo with novel resources and mechanisms to shift from conventional business methodologies towards more inventive and technology-driven operations. It is anticipated that this transition will not solely enhance the effectiveness and safety of commercial activities, but also confer a competitive advantage, particularly for enterprises operating in the financial, information, and communications technology domains, among other sectors. Furthermore, the legislation delineates the structure for electronic identification and authentication procedures, which are to be commenced solely

upon the solicitation of the relevant legal or natural entities. Additionally, it requires individuals to possess a digital identity portfolio in order to securely access both public and private services. Furthermore, it establishes fundamental requirements for the utilization of qualified electronic signatures and seals, which includes evaluating the conformity of the devices employed to generate these signatures and seals (Law No 08/L-022 on Electronic Identification and Trust Services in Electronic Transactions).

Kosovo has made notable progress in enhancing its cyber security framework in order to effectively tackle the complexities posed by the digital era. In light of the escalating occurrences of cybercrime documented during the initial years of the 2010s, Kosovo formulated and implemented the National Cyber Security Strategy and Action Plan for the period spanning from 2016 to 2019. The objective of this plan was to augment the nation's cyber security capabilities, emphasizing a proactive stance towards cyber threats. The Kosovo government's 2021-2025 Program recognized cyber security as a growing concern, with a focus on enhancing professional skills, finalizing the legal framework, and upgrading cyber protection equipment. In addition, the Kosovo Security Strategy for the period of 2022-2027 delineated strategies for substantial allocation of resources towards cybersecurity, critical infrastructure, and capacity development, with the objective of enhancing Kosovo's ability to withstand and recover from cyber threats. The Law on Cyber Security was adopted by the Kosovo Assembly in 2023, a significant milestone in the nation's endeavours towards enhancing cyber security. The implementation of this legislation resulted in the creation of the Cyber Security Agency and facilitated the partial adoption of the EU Directive pertaining to attacks on information systems, thereby bringing Kosovo's cyber security protocols in line with European norms. Kosovo's high internet connectivity rate and the significant role of online and digital services in its economy underscore the importance of cyber security in the country. The potential consequences of successful cyber-attacks include the disruption of economic activities and the exacerbation of unemployment through the erosion of confidence among international partners. Kosovo's dedication to protecting its digital infrastructure and strengthening its defence against cyber threats is evident through the creation of the Cyber Security Agency and the implementation of comprehensive cyber security legislation. Implementing these measures is essential for preserving economic stability and societal harmony amidst the increasing susceptibility to cyber threats (Law No. 08/L-173 on Cyber Security).

The primary objective of the Law on Data Protection in Kosovo is to ensure the confidentiality and security of personal data. This legislation was implemented in order to conform to the standards set by the European Union, specifically the General Data Protection Regulation. It establishes the fundamental principles for the processing of data, encompassing aspects such as legality, fairness, transparency, and the limitation of data collection and usage.

It requires individuals to give their consent for the processing of their personal data, unless there are specific circumstances where the law allows for other legal justifications. The legislation additionally establishes the Data Protection Agency of Kosovo, which assumes the responsibility of overseeing and ensuring adherence to data protection regulations, addressing grievances, and offering directives to data controllers and processors regarding appropriate data protection protocols. The objective of this framework is to safeguard the rights and liberties of individuals in relation to the handling of their personal data, while simultaneously enabling the unrestricted exchange of information within Kosovo and across national boundaries, in accordance with global norms (Law 06/L-082 on Data Protection).

The E-Government Strategy for Kosovo, spanning from 2023 to 2027, signifies a notable advancement in the digitalization of public services, with the objective of improving effectiveness, openness, and availability for both citizens and businesses. The primary objective of this strategic framework is to facilitate the integration and modernization of governmental services by leveraging digital platforms. This approach aims to streamline bureaucratic processes and enhance the engagement between the government and the general public. The main focus is on enhancing digital infrastructure, establishing secure and compatible systems, and fostering digital literacy among both citizens and public employees. Furthermore, the strategy places significant emphasis on the significance of data protection and cybersecurity in order to ensure the preservation of the integrity and confidentiality of personal and sensitive information. The strategy aims to utilize technology to enhance administrative processes, enhance service delivery, and promote inclusive and sustainable development in Kosovo by fostering collaboration among public institutions, the private sector, and civil society (Kosovo's E-Government Strategy: 2023–2027).

eKosova is an all-encompassing government platform that greatly improves the provision of public services in Kosovo by converting traditional face-to-face services into digital formats. This platform has demonstrated significant advancements across multiple sectors, encompassing health, taxation, vehicle registration, police services, civil registry, education, and other domains. eKosova showcases the successful digital transformation in the country by providing accessible, efficient, and streamlined online public services to its citizens. With over 871,800 registered users and significant transaction numbers across various services, eKosova has positively impacted the daily lives of its citizens (Platforma eKosova).

The Government of Kosovo, as part of its E-Government Strategy 2023–2027, seeks to boost digital governance and transparency by incorporating services such as grant and subsidy applications into the eKosova platform. The primary objective of this initiative is to enhance equity in treatment, facilitate access to information, and mitigate the potential for misuse and corruption. Annually, the government

allocates approximately 300 million euros in grants and subsidies, signifying a notable advancement in the digitalization of application procedures for these financial resources. The strategy involves the dissemination of grant and subsidy requests, the establishment of application criteria, the provision of online application forms, and the provision of support to applicants. The implementation of this approach will not only optimize the application procedure but also promote transparency and equitable access for all individuals, businesses, and non-governmental organizations in Kosovo (Open Government Partnership).

The implementation of a digitized administrative procedure in Kosovo has encountered substantial obstacles, mirroring prevalent problems encountered in e-government initiatives globally. A significant obstacle lies in the task of effectively managing and manipulating databases across diverse organizational units, wherein data is frequently stored in disparate locations and formats. This scenario gives rise to ineffective communication among institutions, leading to postponed decisions and inaccuracies in the provision of government services. The successful implementation of digital transformation necessitates the combination of technical solutions and extensive social, cultural, and political backing, encompassing user acceptance as well. Successful execution necessitates meticulous strategizing, attending to the demands of citizens, and guaranteeing that digital services are easily accessible, convenient, and aligned with the public's requirements. The objective is to augment the interactions between the government and its citizens, enhance the efficiency of internal government operations, and foster greater citizen engagement in the democratic process. Nevertheless, despite substantial investments and initiatives, the expected adoption of e-government services in Kosovo has not been fully achieved, indicating a requirement for more targeted endeavours in e-service delivery plans and user-centric design (Artan Rexhepi et al., 2012).

## CONCLUSION

The implementation of e-government holds significant promise in enhancing the internal operations of the government and its provision of services to its constituents. The utilization of e-government extends beyond its role as a means to enhance cost-quality relationships within public services. It serves as a means of reform and a mechanism for government transformation. Therefore, the concept of e-government primarily revolves around transforming the manner in which the government conducts its operations and provides services, rather than solely focusing on the automation of current procedures, the effectiveness of which remains uncertain. This study analysed the existing body of literature to establish and demonstrate the various categories, phases, benefits, and obstacles associated with e-government. The advantages of e-government are evident across all sectors of government. Nevertheless, the

implementation of e-government encounters numerous crucial challenges, including non-technical issues that have significant consequences and necessitate thorough planning. The results presented in this study suggest the significance of conducting comprehensive research on the challenges encountered during the implementation of e-government. It is crucial to comprehend the interconnections among these barriers in order to propose effective solutions for their resolution. Further investigation will be undertaken to examine the e-government implementation stage designs, with the aim of exploring the necessary steps for governments to gradually implement these stages within individual departments, as well as exploring the potential application of these stages across the entire organization as a unified project.

A comprehensive strategy is imperative for the effective implementation of a digitized administrative procedure in Kosovo, encompassing strategic planning, user-centric approach and reliable support systems. To begin with, it is imperative to undertake a thorough evaluation of existing capacities and requirements, establishing a distinct perspective for the process of digital transformation that is in accordance with both domestic objectives and globally recognized standards. Incorporating stakeholder engagement into the initial stages of strategy development guarantees the acquisition of support and the identification of distinct user requirements, thereby cultivating a design that is both easily accessible and people-friendly.

Effective adoption and utilization of digital services require training and capacity building for both the employees involved in providing them and the citizens using them. This encompasses not solely the provision of technical instruction, but also the cultivation of a digital literacy and understanding culture in order to optimize the advantages offered by digital services. Furthermore, it is crucial to establish strong data protection and security procedures in order to safeguard sensitive information and foster confidence in digital systems. The enhancement of efficiency and service delivery can be achieved through the integration of interoperable systems that facilitate seamless communication among various governmental platforms. Ultimately, it is crucial to incorporate ongoing assessment and feedback mechanisms into the system to guarantee its responsiveness to user requirements and its ability to adjust to evolving technological environments and societal demands. This entails regular evaluation of the provision of services results, user contentment, and the overall influence on the efficiency of administration. This comprehensive approach guarantees the implementation of electronic administrative processes in Kosovo, while also ensuring their long-term viability, widespread acceptance, and beneficial influence on administration and citizen participation.

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# LEGAL FRAMEWORK OF CONSUMER CREDIT IN KOSOVO, IN THE FUNCTION OF CLIENT PROTECTION

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## ABSTRACT

*Consumer credit is one of the most prevalent products in the banking market. Financing daily needs is possible through consumer credit. This type of credit is offered by all commercial banks in Kosovo and also, and is frequently promoted. While clients in Kosovo use this product for various needs, such as purchasing goods or renovating their homes, their rights and obligations arising from this contractual relationship are not always clear. At the same time, Kosovo's legal framework is continuously enriching itself, attempting to harmonize with the requirements of the acquis. One of the sectors undergoing this harmonization is the banking sector, specifically consumer credit. Loan application and complaints play a significant role in positioning the client, where not everything is determined by legal regulations. The combination of artificial intelligence in this process would have an undeniable impact. In this paper we aim to address the legal regulations regarding consumer credit in Kosovo and how this regulation affects client protection regarding this product and simultaneously, how can artificial intelligence play a protective role of the client within this regulatory framework.*

**Keywords:** *legal framework, consumer credit, client protection, artificial intelligence.*

## INTRODUCTION

Throughout different time periods, it has been common to sell in the form of "credit", where the buyer pays the price in instalments for goods or services, thereby enabling businesses to sell goods that buyers couldn't afford to pay for in full. Consumer credit represents one area in which credit-debt relationships exist and is defined as 'money, goods or services provided to an individual in lieu of payment'.<sup>1</sup>

Also, in the case of concluding the contract for credit, similar to other contracts, the principle of freedom of contract applies, whereby the company and legislators guarantee that the concluded contract between the contracting parties has the effect of law for them ("contractus contrahendibus lex est" - what the contractors have determined by contract is law for them) or "pacta sunt servanda" (agreements must be kept). It is clear that the credit contract creates legal effects between the parties and does not create legal effects against third parties "res inter alios acta".

The process of incentivizing people to take credit and reaching agreements is part of modern production, just like the desire for goods and their purchase. New credit instruments have emerged and their use is steadily increasing. For banks, there are many definitions for credit, which frame credit from various perspectives or viewpoints. From the consumer's perspective, credit is an action that consists of an immediate purchase of goods and services that cannot be acquired until the seller or supplier makes the requested amount available. The use of specific credit circulation and payment instruments avoids dealing with large sums of cash, which carries a significant risk. From the seller's perspective, consumer credit is a tool for capturing the market, facilitating the sale of goods in the market, and creating financial resources for it. Consumer credit enables the sale of a larger quantity of goods or services, expanding the consumer-base that can purchase these goods or services offered by it. From the perspective of the financial institution, consumer credit is the action that enables the realization of benefits through normal lending processes, in various forms of consumer credit. The final result of this convergence of interests is increase of consumption and the provision of loans to the consumer for satisfaction.

## 1. CONSUMER CREDIT IN KOSOVO

Consumer credit has taken a significant role in the lives of citizens. Through this financial instrument, citizens make various purchases, enabling them to fulfil their daily needs, such as; buying a vehicle, building a house, or financing unexpected health expenses.<sup>2</sup> This makes consumer credit an important factor in personal economic growth and the development of the private sector in Kosovo.

Consumer credit, as a widely used product, has emerged as an open window to financial access, which has positively influenced the fulfilment of needs that can be met through this credit. This is

compounded by the fact that financial education in our country is in its early stages and many individuals have lack of knowledge about banking products which they use, including consumer credit. In order to avoid these challenges, it is undoubtedly necessary for clients to have a complete understanding of their responsibilities arising from the consumer credit contract, such as; general terms, interest rates, maturity and penalty fees that are foreseen in case of late repayment of the loan.

Searching at reports from the Central Bank of Kosovo (CBK) regarding lending, it is noticeable that there is a continuous trend of increasing the consumer portfolio scale, whereas they are reaching 600 million € with a yearly growth of 182.1 million Euro in 2022, which is an increase of 16% compared to the previous year.

Thus, consumer credit has made a significant impact on the lives of citizens in Kosovo, playing a key role in realizing important purchases and covering unexpected expenses. This financial instrument has contributed to personal economic growth and the development of the private sector. However, a serious challenge is the increase in personal debt exposure, especially due to limited knowledge about banking products and financial education in the country. To address these challenges and avoid negative consequences, it is important for individuals to have a complete understanding of their responsibilities, including general terms, interest rates, maturity and penalty fees. The sustainable growth in the consumer portfolio scale, as shown by reports from the Central Bank of Kosovo, highlights a continuous growth in this sector, with the potential to further contribute to the economic development of the country.

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Thus, consumer credit has made a significant impact on the lives of citizens in Kosovo, becoming a key partner in realizing important purchases and covering unexpected expenses. This financial instrument has contributed to personal economic growth and the development of the private sector. However, a serious challenge is the increase in personal debt exposure, especially due to limited knowledge about banking products and financial education in the country. To address these challenges and avoid negative consequences, it is important for individuals to have a complete understanding of their responsibilities, including general terms, interest rates, maturity and penalty fees. The sustainable growth in the consumer portfolio scale, as shown by reports from the Central Bank of Kosovo, highlights a continuous growth in this sector, with the potential to further contribute to the economic development of the country.

## 2. THE LEGAL BASIS OF CONSUMER CREDIT IN KOSOVO

Consumer credit, as mentioned, is a widespread product in banks operating in Kosovo. This product is offered to clients through a consumer credit contract. The principle of economic freedom is established in the highest legal act of the country,<sup>4</sup> and also has a contractually recognized place in the Law on Relations of Obligations, which is the basic law for all contractual relationships between parties in their legal relations.

The credit has its base with the loan and consequently, also in the provisions related to lending, therefore, the loan agreement is established between the two parties. From this perspective, according to the legislation, we have this definition for a loan: *"With the loan agreement, the lender is obliged to deliver to the borrower a specified amount of money or a certain quantity of other interchangeable items, while the borrower is obliged to return the same amount of money or the same quantity of items of the same type and quality after a specified period. The borrower may be obliged to debit the interest in addition to the principal. In economic agreements, the borrower is obliged to pay also interest, unless agreed otherwise."*<sup>5</sup>

Apart from this definition, other basic laws that directly or indirectly regulate the lending activity do not provide a specific definition for credit (except for the Consumer Protection Law, which gives a definition for the creditor).

The Central Bank of Kosovo (CBK), as the main institution for the supervision of the financial system, is equipped with the necessary legal authorizations to ensure the healthy and sustainable functioning of the financial sector. For this purpose, CBK has prepared and implemented a series of regulations that regulate and help improve the activities of financial institutions. One of the most important regulations issued by CBK is the "Regulation on Effective Interest Rate and Disclosure Requirements."

Within this regulation, CBK has included an important definition for credit, thoroughly defining the characteristics and key elements related to this financial product. *"Credit" means any direct or indirect legal loan or commitment to provide an amount of money with the right to return that amount given and unpaid and to pay interest or any other obligation on that amount.*<sup>6</sup>

The Regulation on Effective Interest Rate and Disclosure Requirements also serves as a mechanism to prevent incomprehensible or unfair practices in the credit field and to increase awareness and consumer protection. In addition to its protective purposes, this regulation also encourages the development of a competitive and effective credit market, creating a favourable environment for growth and innovation in the financial sector of Kosovo. With its ongoing commitment to the development and implementation of such regulations, the Central Bank of Kosovo actively contributes to building a sustainable, transparent, and reliable financial system for all users and participants in this market. Regarding the definition of consumer credit, it is the Consumer Protection Law that defines it, which in Article 3, Paragraph 1.49, it specifies:

"Credit agreement for a consumer – an agreement whereby a creditor grantor promises to grant to a consumer credit in the form of a deferred payment, loan or other similar financial accommodation, except for agreements for the provision on a continuing basis of services or for the supply of goods of the same kind, where the consumer pays for such services or goods for the duration of their provision by means."<sup>7</sup>

The Kosovo consumer protection law claims alignment with the former EU Directive on Consumer Credit (specifically, Directive 2008/48/EC of the European Parliament and of the Council dated 23 April 2008, addressing credit agreements for consumers and repealing Council Directive 87/102/EEC). However, in light of the recent enforcement of the new directive, careful consideration should be given to ensuring compliance with the latest requirements. The forthcoming sections of this paper will delve into fulfilling these updated requirements.

### **3. OBLIGATIONS OF FINANCIAL INSTITUTIONS DURING THE LENDING PROCESS IN THE CASE OF CONSUMER CREDIT**

The approval of the Consumer Protection Law has had a positive impact on the regulation of consumer credit. Specifically, this law dedicates a section to the consumer credit agreement.<sup>8</sup>

The obligations of the banks and other financial institutions in the case of consumer loans begin with the information that must be included in the product presentation, information that must be included in the pre-contract and which is of great importance, especially for the periods when this information is disclosed, as providing accurate information to the client at this stage allows a comparison of the information between different offers in the market and choose the most suitable offer.

In addition to the obligations imposed by the Consumer Protection Law, the regulations of CBK also play a crucial role. In the field of consumer credit, the Regulation on Effective Interest Rate and Disclosure Requirements is particularly important. In this context, it covers essential parts related to the information and elements of the credit that must contain:

- Type of credit
- Purpose of using the credit (this must be evidenced by the client's invoices for large amounts).
- Specific conditions of the credit related to the amount, currency, maturity date, interest rate, administrative fee.
- Warning in case of late payment of credit instalments.
- Collateral and its kind (if any).
- Obligations and penalties of the parties and when they arise and apply.<sup>8</sup>

When granting a loan or restructuring it, the bank offers the client an amortization plan at the time of agreement, expenses and penalties applied, prepayment penalty.

#### **4. IMPORTANT POINTS ON THE EUROPEAN DIRECTIVE ON CONSUMER CREDIT**

Directive (EU) 2023/2225, dated October 18, 2023, handles with consumer credit agreements and revokes Directive 2008/48/EC. The directive is a response to evaluations conducted in 2014 and 2020, which identified that the previous directive was only partially effective in ensuring consumer protection and promoting a unified market in the field of consumer credit. Among other factors, this Directive takes into account the challenges posed by digital banking, including unforeseen developments in the market, legal uncertainties for new credit products, and fragmented regulatory frameworks among member states.<sup>8</sup>

The new directive aims to adapt to technological advancements related to consumer credit, offering legal certainty and harmonization. The directive recognizes the need for a level playing field for businesses, emphasizing the importance of consumer protection in accordance with the Treaty on the Functioning of the European Union and the Charter of Fundamental Rights.

Key points include the necessity for a harmonized Union framework, full harmonization to ensure sustainable consumer protection and provisions limiting the ability of member states to introduce different national laws, unless permitted by the directive. The directive acknowledges the evolving nature of consumer credit and aims to create a transparent and efficient legal framework, promoting cross-border activities and accommodating future forms of credit. Definitions within the directive define the areas of harmonization and member states are given flexibility in areas not covered by its provisions.

This directive discusses the implementation of Directive 2008/48/EC in Member States and proposes amendments to increase consumer protection in credit agreements. Furthermore, it suggests expanding the coverage of the directive to include previously excluded agreements, such as those involving credit amounts of less than 200 euros.<sup>9</sup> The goal is to ensure consumer protection, transparency and trust in cross-border consumer credit markets. The directive is proposed to apply to all types of creditors, whether legal or physical persons, with some considerations for different market circumstances and specific credit agreements.

Furthermore, the directive aims to provide information to consumers free of charge, focusing on accommodating people with disabilities. It affirms respect for fundamental rights and principles, including regulations for data protection.

The document emphasizes that the directive does not circumvent the General Data Protection Regulation (GDPR).<sup>8</sup> The directive also harmonises with the unfair commercial practices Directive, ensuring consumer protection against deceptive practices.

In the latest directive, specific regulations are proposed for advertisements of credit agreements, emphasizing clear and concise information, representative examples and warnings about the loan costs. It is suggested to prohibit certain advertisements considered risky for consumers and allows member states to regulate information requirements in their national laws.

The importance of a sustainable communication medium is emphasized, including digital versions and the freedom for consumers to choose such mediums, also the need for consumers to have access to general information about credit products, receive proper pre-contractual information and introduces the European Standard Information Form for Consumer Credit to enhance transparency and comparison of credit offers.

The directive highlights the importance of transparency and comparability in credit offers, suggesting that pre-contractual information should include the annual percentage rate, represented by a typical example corresponding to the average duration and the total amount of credit for the type of agreement. Creditors are required to remind consumers of withdrawal options if pre-contractual information is provided less than one day before the consumer is bound by the agreement.

The total cost of credit for the consumer, including all costs except notarial costs, is determined objectively based on the current knowledge of creditors. Credit agreements with periodically reviewed interest rates are distinguished from those with fixed rates. Member states are allowed to regulate certain national provisions, such as; prohibiting the requirement for consumers to open a bank account or pay fees for ancillary services related to the credit agreement.

The text recognizes the need for comprehensive pre-contractual information for consumers and suggests that credit intermediaries generally adhere to pre-contractual information requirements. However, it acknowledges exceptions for providers of goods or services acting as credit intermediaries in an ancillary capacity. Member states have the flexibility to regulate the mandatory nature of the information provided to consumers before concluding the credit agreement.

Consumers have the right to additional assistance in understanding credit agreements and creditors must provide explanations for the offered products. The text addresses the use of artificial intelligence in customizing credit offers and emphasizes the need for clear consumer awareness when automated decision-making is involved.

To prevent practices such as linking the products, Member States are encouraged to closely monitor minority financial services markets. Linking practices are generally discouraged, except in cases where the service or financial product is fully integrated into the credit, such as; an overdraft facility. The text also addresses issues related to insurance policies, offering consumers at least three days to compare insurance offers in relation to credit agreements.

Lastly, the directive highlights the unfair treatment faced by cancer survivors in accessing financial services due to their medical history. Member states are encouraged to ensure that insurance policies are not based on personal data related to the diagnosis of oncological diseases by consumers after a certain period following the completion of medical treatment. Agreements for credit agreements or support services must be a clear affirmative act by the consumer and cannot be concluded through options of silence or non-payment.

## **5.HARMONIZATION OF KOSOVO'S LEGISLATION WITH THAT OF THE EU**

Kosovo is on the right track regarding legislation in the banking sector, including credit products, especially consumer credit. Significant progress has been made with the issuance of the Consumer Protection Law, as seen during the analysis of legislation in this article, extra attention is dedicated to consumer credit in this law. On the other hand, the Central Bank of the Republic of Kosovo (CBK), as the regulator of the entire financial system, is continually enriching the secondary legislation of the banking sector. In the field of consumer credit, the Regulation on Effective Interest Rate and Disclosure is crucial, as mentioned earlier, advancing the position of the client even in the case of consumer credits. Recent technological developments, especially the period after the pandemic that accelerated the digitalization of the banking industry, have highlighted the need for continuous legislative changes, which will regulate these new relationships in the technology field.

Despite the advancement in banking legislation, with a focus on consumer credit, these recent developments seem to have presented an immediate need for these ongoing changes. Fortunately, we have a benchmark when it comes to changes and when it comes to advancements in legislation and that is the legislation of the EU. When it comes to legislation in the financial and banking products field, where the consumer credit takes part, no matter how advanced this legislation is, it will only contribute to advancing the client's position in front of these banking products.

In the line of harmonization with EU legislation, the Consumer Protection Law in Kosovo and the Regulation for the Effective Interest Rate and Disclosure should take into account the recent changes in the Consumer Credit Directive.

Areas where these changes should focus include: Inclusion of legal entities in consumer protection: this change will impact the advancement of protecting a large clientele since many companies in Kosovo are organized as legal entities and which have only one owner; the inclusion of amounts for consumer protection when it comes to consumer credits below the threshold of 200 euros, and the digitization of banking services through the latest technology has had an impact on the lives of creditors, enabling them, for example, to apply for consumer credits even through their phones or ATMs.

The banking sector is the one that has best utilized information technology by adapting banking products, which has had a significant impact on reducing the operational expenses of banks. In the process of consumer credits, the combination of artificial intelligence in the consumer credit application process, in the pre-contractual or information phase, as well as in the complaint phase, would have a direct impact on improving the client's interaction with financial institutions.

## **RECOMMENDATIONS**

- Remove the top limit for coverage of consumer credits, even for amounts under 200 euros.
- Increase caution, especially in the field of protecting the privacy of clients throughout the entire loan process. Today, we are aware that client privacy is not always respected, even when obtaining banking products such as consumer credit, which adversely affects the client in this process.
- Include legal entities in the customer field, given that a significant number of clients are precisely legal entities that take credits for business purposes.
- Banks and financial institutions should play a proactive role in informing clients about all obligations arising from the consumer credit agreement so that the client is aware of all charges that may apply throughout the contractual relationship from consumer credit.
- Use a basic form similar to that provided in the directive (*European Standard Information Form for Consumer Credit*), which would enable clients to compare prices for consumer credit from multiple offers that they may receive from various financial institutions.

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# AI AND POTENTIAL RISKS FOR DEMOCRACY, INTERNATIONAL RELATIONS, AND INTERNATIONAL SECURITY

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## ABSTRACT

*Artificial Intelligence (AI) captured the public's interest and imagination in 2023, especially with the release of ChatGPT-4. This has led to the belief that AI and its applications could be among humanity's greatest achievements, potentially shaping the course of history. However, every human achievement, particularly technological revolutions, brings with it dilemmas and questions. This is especially true for AI. The extent to which AI is dangerous for human society is a question that no one can currently answer accurately. Among the challenges, the threats to democracy are significant—not only due to the potential for misinformation, election interference, and other disruptions, but also because AI might alter our ideas about governance in the future. Such developments could be so drastic that we may consider new governance models influenced by AI. What is most concerning is the potential for AI proliferation to be exploited by non-state actors (e.g., terrorist organizations, organized crime groups) and undemocratic states for their agendas. Furthermore, a competition between the USA and China in AI development could ensue. This paper argues that states must take all necessary measures to preserve internal democracy and guarantee international security. Achieving this requires a comprehensive approach to AI governance involving states, private technology companies, civil society, experts, unions, and more. International cooperation, avoiding great power competition, is essential to prevent AI misuse. Only through such an approach can we hope for a world where AI enhances human life rather than destroying it.*

**Keywords:** *AI, democracy, AI governance, international security, cooperation*

## INTRODUCTION

Artificial Intelligence (AI) has captivated public imagination, particularly with the release of advanced models like ChatGPT-4. This technological breakthrough marks the beginning of a transformative era that has the potential to reshape various facets of human life. While AI offers remarkable opportunities for innovation and improvement in fields such as science, medicine, and technology, it also presents significant challenges that extend well beyond these areas. The impact of AI on personal relationships, governmental functions, and international interactions underscores the need for a comprehensive understanding of its broader implications.

The integration of AI into everyday life has far-reaching consequences for democratic institutions, international relations, and global security. The power of AI to influence public opinion, alter political dynamics, and affect international power structures raises critical questions about its role and potential risks. As AI technologies continue to advance and proliferate, it is essential to scrutinize how they might undermine or bolster democratic values, disrupt existing international order, and challenge global security paradigms.

The primary research question of this paper is whether AI represents a significant risk to democracy. To address this, the paper will explore several additional questions: Is there a pressing need for national regulations to manage the impact of AI? Should international cooperation be enhanced to tackle AI-related challenges on a global scale? And, how crucial is it to involve a diverse range of stakeholders, beyond just state actors, in the development and implementation of rules and frameworks governing AI's impact on democracy, international order, and global security?

To provide a thorough analysis, this paper will employ a literature review combined with an examination of the actions and attitudes of various stakeholders involved in AI governance. By investigating these dimensions, the paper aims to offer a nuanced understanding of how AI affects democratic processes, international relations, and security dynamics. It will also assess the effectiveness and necessity of regulatory frameworks and cooperative efforts designed to address the multifaceted challenges posed by AI. This exploration will contribute to a broader discussion on ensuring that AI's development aligns with democratic principles and supports international stability.

## 1. AI BETWEEN HOPE AND THREAT TO HUMANITY

The introduction of AI into everyday life has created both hope and fear. AI offers possibilities for progress in science, medicine, technology, education, the rule of law, direct democracy, and increased accountability for governments, along with enhancing the wellbeing of humanity. However, there is also fear that AI misuse might lead to various threats to humanity, such as control over private lives, misuse of personal data by private companies and state establishments (especially autocracies), and military applications creating an edge in global rivalries, particularly within the context of the US-China rivalry. These concerns highlight the dilemmas regarding AI's role, especially in challenging the functioning of the democracies, and humanity's ability to harness its positive potential while containing the negative aspects ethically and legally.

Understanding AI terminology is essential for discussing the risks and opportunities it presents to democracy. As Jungherr (2023) argues, Artificial Intelligence (AI) and Artificial General Intelligence (AGI), also known as 'strong AI,' represent two distinct paradigms. According to Mitchell (2019), AI is typically narrow, trained on domain-specific data to perform domain-specific tasks effectively. In contrast, AGI is envisioned as possessing the ability to autonomously perceive, reason, decide, and act across varying contexts with human or superhuman capabilities (Jungherr, 2023). The ongoing advancements in AI, such as ChatGPT, raise the legitimate question of whether we are gradually entering the era of AGI. It is well-known that significant tech companies, including OpenAI, have long-term goals to create AGI (Rudolph, Tan, and Tan, 2023).

Technological revolutions, including AI, have historically laid the foundations for political dynamics changes. Such changes induce competition, creating winners and losers among actors, factions, and population groups, at least in the short term (Jungherr, 2023). As Andrew Maynard, a professor of advanced technology transitions at Arizona State University, pointed out, "basically every time we innovate, we solve a problem and create new problems" (cited by Tropiano, 2024). Thus, the fear that AI will affect democratic functioning and potentially damage democracy's features is legitimate. There is also concern that populist politicians and authoritarian regimes might use AI to undermine democracy and the international order established since World War II. Initially, there were high hopes that AI would positively impact our lives, improving democracy and governance to serve the people's best interests (Cupać, Shcopmans, and Tuncer-Ebetürk, 2024; Tropiano, 2024; Kan, 2024; Jungherr, 2023). Similarly, there were hopes that social networks would promote direct democracy, but instead, they have often fostered hate speech and societal division, damaging democracy in the US and Europe with the rise of the extreme right (Haidt, 2022).

## 2. AI AS A CHALLENGE TO DEMOCRACY

There is no doubt that AI poses a modern challenge to democracy. It will impact how governments function in the near future, how they establish links with citizens, and whether their level of accountability toward citizens increases or decreases. Whether democracies influenced by AI will lean more toward autocracies, or whether autocracies will be democratized as a result of AI, is something that cannot be predicted with precision today. Social scientists, inventors, tech engineers, civil society leaders, private entrepreneurs, and responsible politicians must carefully consider which path democratic systems will take and how autocratic regimes will react. Since states remain the primary actors in international relations, these developments will also impact the future international order, particularly international security.

AI has the potential to enhance democratic processes in several ways. According to Morrison (2023), AI can predict election outcomes more accurately than traditional polls, helping campaigns allocate resources more effectively and focus on issues that matter most to citizens. Furthermore, AI can assist governments in policy decision-making by processing vast amounts of data, and it might also empower citizens through mechanisms like citizens' assemblies, potentially altering the balance of power between governments and citizens (Morrison, 2023). Cupać et al. (2024) identified four structural changes brought by AI: tech corporations as a new quasi-governing class; citizens as data and the rise of automated governance; divided societies and declining trust in democracy; and AI as a focal point of democratic-authoritarian competition. These changes could undermine democracies and cause democratic regression while also offering opportunities to improve governmental structures and efficiency. Conversely, these structural changes could exacerbate authoritarian regimes in countries like China and Russia, which are significant actors in international security. However, there is also the theoretical possibility that AI could pave the way for democratization in authoritarian regimes (Cupać et al., 2024).

The risks AI poses to democracy are substantial. Chesney and Citron (2018) expressed particular concern about the harmful impact of AI on social cohesion. Thus, AI could deepen societal divisions and damage the social fabric, potentially undermining democracy in the long run. Authors like Bremmer and Suleyman (2023) and Morrison (2023) highlight several concerns, resonating with those discussed by Chesney and Citron. AI could give governments unprecedented surveillance power over citizens, exacerbate misinformation and deep fakes, undermine trust and the social contract, erode individual and collective freedoms, create powerful digital and physical weapons and destroy millions of jobs, amplifying social inequalities. Within a same logic according to Jungerr (2023) the impact of AI on democracy can be analysed in four different levels: at individual level, it is related to the impact of AI on people to exercise the self-rule; at group level, the impact of AI on the equality of rights of different groups of population; at

institutional level, the impact that AI in the perception of elections as fair and just and as mechanism to channel and manage the political conflict; and at the systems level the AI impacts the competition between democratic and autocratic political systems.

The discussions and arguments by the aforementioned authors touch on many sensitive issues related to AI and democracy. While many aspects warrant further elaboration, the following sections will focus on the role of deepfakes and AI political propaganda in democracy, the need for legal frameworks and AI governance, and the role of AI in international relations and international security.

### **3. AI-GENERATED POLITICAL PROPAGANDA AND DEEPFAKES**

AI's potential for generating political propaganda and deepfakes poses significant risks to democratic processes and public trust (Easterly, Schwab, and Conley, 2024; Tropiano, 2024; Jungherr, 2023; Anderljung and Scharre, 2023; Chesney and Citron, 2018). Notable examples include deepfake videos and misinformation spreading rapidly across platforms like YouTube and Twitter. For instance, a deepfake video of President Biden ordering an attack on Russia, posted by The Post Millennial (2023), a conservative news outlet, in their Twitter (X) account, was clearly marked as AI-generated. However, when reposted in Twitter (X) by The Patriot Oasis (2023) without such a disclaimer, it amassed 8.1 million views, illustrating the widespread impact of AI-generated misinformation. Similarly, a deepfake video of President Zelensky surrendering to Russian troops gained significant traction on social media (Singh, 2024).

AI-made political videos, even when transparent about their AI origins, demonstrate AI's potential use. For example, the Republican Party's "Beat Biden" video, posted on YouTube in April 2023, imagined disastrous scenarios if Biden won reelection, including a Chinese invasion of Taiwan and increased US crime rates (GOP, 2023; Powell and Dent, 2023). While such videos can deepen societal divisions, they also highlight the potential for future deepfakes. AI-generated deepfakes have been used also against former President Trump who is also the current Republican nominee, indicating their disruptive potential for democracy, trust, and social cohesion (Isenstad, 2023). Conversely, AI can also produce innovative and positive content, as seen in the "Dalí Lives" project, where AI brings back Salvador Dalí to interact with museum visitors (Singh, 2024).

The primary concern with AI-generated political propaganda and deepfakes is discerning what is real from misinformation, disinformation, or propaganda. Deepfakes can undermine social cohesion and trust in traditional media platforms (Chesney and Citron, 2018). While traditional media such as TV, newspapers, and radio, as well as established media outlets, continue to maintain high ethical standards in their reporting, societal divisions along political lines are eroding trust in mainstream media. The extreme

right in Europe and the US is already sceptical of any news from what they consider liberal media rooted in political establishments. In this context, where political distrust is high and society is polarized into extreme, contradictory factions, even if they are in the minority (Haidt, 2022), the potential for deepfakes is significant. Therefore, the harm to society is considerable, deepening social divisions and threatening freedom of expression and democracy in general.

#### **4. LEGAL FRAMEWORK AND AI GOVERNANCE**

Governance models might shift from direct democracy to more entrenched autocracies. Even in established democracies, the rise of AI could lead to a transition from self-rule to expert rule, potentially undermining democratic principles (Jungherr, 2023). Expert rule could resemble Plato's vision of governance by philosopher-kings (Plato, 2000; Dahl, 1989; Dahl, 1998). This shift may result in the emergence of what Cupac et al. (2024) describe as a new quasi-governing class, termed data-driven plutocrats. Schneier and Sanders (2023) explore additional impacts of AI on democracy, such as the increased use of AI by campaigners and pollsters, the potential for AI to create political parties, and AI's possible role in drafting legislation or generating political campaign contributions. These risks underscore the urgent need for effective regulation of AI.

Policymakers are addressing the rise of AI by developing legal frameworks. Notably, the EU AI Act and the G-7's "Hiroshima AI Process" aim to standardize AI governance. A significant step was taken during the AI Safety Summit held on November 2-3, 2023, in Great Britain, where 28 countries, including the US and China, along with the EU, issued a joint declaration. This declaration emphasized that "AI should be designed, developed, deployed, and used in a manner that is safe, human-centric, trustworthy, and responsible" (The Bletchley Declaration, 2023). It also advocated for collaboration among all stakeholders, including nations, international organizations, tech companies, academia, and civil society, to ensure AI safety. Despite the many challenges in establishing a legal framework for AI, the EU has taken a leading role with the drafting and adoption of the EU Artificial Intelligence Act (2024), which will come into force on August 1, 2024.

However, some policymakers, like Senator Ted Cruz, have expressed concerns about the adequacy of current legislative understanding and regulation of AI (cited by Bremmer and Suleyman, 2023). Legal experts, such as Professor Gary Marchant from ASU (2024), question the feasibility of creating an effective legal framework for AI due to the rapid evolution of AI technologies. He believes that AI-related issues will be addressed through court decisions, a process that will take time (Marchant, 2024). Additionally, there is a risk that extensive regulation could stifle innovation (Tropiano, 2024). This has always been a double-

edged sword. Ethical issues should also play a significant role in the self-regulation of AI by tech companies and experts. While ethical guidelines should be supported by legal prohibitions, they can help prevent AI from encroaching on areas that could harm humanity (Tropiano, 2024). Bremmer and Suleyman (2023) advocate for AI governance that transcends traditional state regulations and international cooperation. They argue that while states should retain veto power over policy decisions, AI governance should also involve AI tech companies as key stakeholders in setting norms, both legal and ethical, regarding AI's impact on democracy, governance, and international security. They also support closer cooperation between the US and China, as the two major powers with significant potential to influence humanity through AI (Bremmer and Suleyman, 2023). In one of his final pieces in *Foreign Affairs*, Henry Kissinger, along with Graham Allison, argued that AI regulation should involve three components: ethical self-regulation promoted by tech companies and supported by governments (specifically the US government); a legal framework with bipartisan support in the US; and international cooperation, particularly between the US and China. They suggested using the example of nuclear arms control between the US and USSR during the Cold War as a model for AI control between the US and China (Kissinger and Allison, 2023).

The author of this paper supports the concept of AI governance that incorporates state efforts to regulate sensitive issues related to AI and democracy, international cooperation—particularly between the US and China—and the involvement of tech companies, scientists, trade unions, civil society, and ethicists as key stakeholders in the decision-making process, while states retain veto power. This approach is endorsed by Bremmer and Suleyman (2023) and Kissinger and Allison (2023). However, it is important to recognize that the control and regulation of AI vary significantly between democratic and autocratic regimes. In the United States, AI companies operate within a market economy, which encourages collaboration between government, industry, and academia. However, government investment in R&D has declined since the Cold War, and direct state control over companies is minimal. In contrast, China employs a model where private companies are often subsidized by the state, featuring notable civil-military fusion, domestic competition, and substantial funding for emerging leaders. This makes AI companies in autocratic regimes more easily controlled by the state compared to those in democratic systems (Schmidt, 2023). The EU, with its legal framework and market influenced by this framework but still maintaining vibrant democratic structures in most member states, could serve as a model—provided it does not stifle innovation. However, as Schmidt (2023) argues, while innovation power will be the deciding factor in the US-China rivalry, it is crucial for the US government to enhance its involvement in R&D and streamline bureaucratic procedures for cooperation with the private sector, particularly in procurement.

## 5. AI, INTERNATIONAL RELATIONS AND INTERNATIONAL SECURITY

AI has significant implications for international relations and security. The competition between the USA and China in AI development could lead to a new kind of arms race, with AI technologies playing a critical role in military capabilities, espionage, and cyber warfare (Bremmer and Suleyman, 2023; Schmidt, 2023). This competition might also shape global alliances and influence the balance of power between democratic and autocratic states.

In other hand AI creators are emerging as geopolitical actors, akin to how major technology firms have become sovereign entities in the digital realm (Bremmer & Suleyman, 2023). The risks to the international order from AI stem from great power competition and the potential for various actors to develop advanced AI capabilities. The critical question is whether this competition will lead to more regulation or exacerbate tensions between powers like the US and China. Bremmer and Suleyman (2023) argue that greater international cooperation and the inclusion of technology companies in discussions are essential for effective global governance of AI. In contrast, Eric Schmidt (2023), former CEO and Chair of Google, advocates for close collaboration among the US government, academia, and the private sector to maintain a competitive edge in innovation, including AI. Schmidt also emphasizes the importance of welcoming talented immigrants, noting that more than half of the AI researchers in the US are from abroad. According to Schmidt (2023), this is crucial for maintaining an advantage over China in AI development.

The proliferation of AI technologies presents significant security risks due to the ease and low cost of copying and sharing algorithms. Non-state actors, including terrorist organizations and organized criminal groups, could exploit AI for malicious purposes, including cyberattacks, misinformation campaigns, and autonomous weapon systems. Additionally, rogue states, autocratic regimes but also illiberal democracies might use AI to advance their agendas and even cooperate with terrorist organizations and criminal groups to fulfil their geopolitical goals. Both the US and China are heavily investing in AI capabilities, often seeking to deprive each other of critical advancements. Current conflicts, such as those between Russia and Ukraine, Azerbaijan and Armenia, Israel and Hamas/Iran, and Israel and Hezbollah/Iran highlight the potential for AI to influence warfare and international security dynamics (Schmidt, 2023; Jungherr, 2023).

International cooperation and coordination are essential to prevent AI misuse and ensure global security. As it was stated above states must work together to establish norms and regulations for AI development and deployment, avoiding great power competition and promoting peaceful uses of AI technologies. Only through such cooperation there is a hope to create a world where AI enhances human life rather than posing existential risks.

## CONCLUSION

AI presents both significant opportunities and challenges for democracy, international relations, and international security. Its potential to enhance democratic processes, streamline governance, and drive innovation is substantial. However, the transformative power of AI also introduces risks that must be meticulously managed to prevent negative consequences for society.

On the one hand, AI can significantly improve governance by providing advanced tools for decision-making, increasing transparency, and fostering more effective public services. It can enhance democratic processes by making information more accessible, facilitating more inclusive participation, and enabling more responsive and accountable governance. On the other hand, as argued throughout this paper in response to the main research question, AI poses substantial risks to democracy and its institutions. These risks include the erosion of privacy, the amplification of misinformation, and the potential for increased surveillance and control. The potential for the erosion of democracy in democratic states is real, even though the future remains uncertain, contributing to a fear factor associated with the unknown. Below, the answers to the additional research questions posed in this paper are elaborated.

Thus, effective AI governance requires a multifaceted strategy involving a wide range of stakeholders, including governments, private technology companies, international organizations, civil society, and academic institutions. International cooperation is crucial to creating consistent standards and regulations that can address cross-border challenges and prevent the misuse of AI technologies. By fostering dialogue and collaboration among these diverse groups, we can develop frameworks that support ethical AI development and deployment.

Addressing the ethical and legal challenges associated with AI involves creating robust regulations that protect fundamental rights while promoting innovation. This includes establishing clear guidelines for AI usage, ensuring transparency in AI algorithms, and implementing measures to prevent bias and discrimination. It also requires continuous oversight and adaptation of regulations to keep pace with technological advancements.

Democratic states must balance the preservation of internal democratic values with the need to maintain international order and security. This involves safeguarding civil liberties and democratic principles while also ensuring that AI technologies do not undermine global stability. Effective oversight by public and regulatory bodies is essential to achieving this balance.

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## ETHICS IN THE PUBLIC ADMINISTRATION OF KOSOVA

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### ABSTRACT

*Ethics in the public administration of Kosova is an important and debatable topic. Ethical principles are essential for the functioning of a professional, transparent, and trustworthy administration. If public administration is grounded in ethical principles, it can build citizens' trust and influence the overall development of the country. In this context, it is crucial to understand the role of ethics in the process of reforming the public administration of Kosova.*

*The research particularly focuses on identifying factors influencing ethical adherence in administration and determining ways to strengthen this adherence. Additionally, a specific approach to using information and communication technology in public administration, including artificial intelligence, is essential. In this context, the role of ethics in the use of these technologies and ensuring their ethical and fair utilization must be considered. The research provides recommendations related to the development of administration and its achievements, slow-paced reform, and political influences linked to the lack of ethics in administrative bodies. To achieve these goals, it is crucial to have a strong legal framework and control mechanisms for implementing ethics in the public administration of Kosova. Ethics training should be tailored and specialized for public officials, addressing specific ethical issues in administration. In conclusion, an integral approach to ethics in the public administration of Kosova is essential, encompassing all its dimensions, from ethical decision-making to the use of information and communication technology. This would contribute to creating a modern, transparent, and trustworthy public administration that would contribute to the country's overall development. In favor of these objectives, a legal framework and an additional mechanism for controlling the implementation of ethics in public administration are recommended, along with more specialized ethics training. It has been observed that combining training for public officials, including more serious consideration of issues related to ethics in administration, will contribute to aligning administrative reform with the standards of European Union states, which Kosova aims to join.*

**Keywords:** *ethics, public administration, ethical decision-making, artificial intelligence, ethics commissioner.*

## INTRODUCTION

Ethics is a crucial component of the success of public administration. This is evident from the growing interest in administrative ethics. Parties are showing interest in its implementation. Undoubtedly, like any country, Kosovo aims for an ethical public administration: responsible, efficient, professional, non-discriminatory, incorruptible, transparent, and accountable.

Ethical approaches in public administration, in general, are relatively recent. In this regard, it can be said that "the serious development of ethics as a study field within public administration began only about three decades ago" (Cooper, 2001). Therefore, the intensity of studies and interest in ethics have increased since the 1970s and onwards. Since then, significant progress has been made in research, with numerous studies in this discipline. Institutions have also increased their interest in ethics.

The ethical behavior of public officials is a concern for public administration and society as a whole. Considering that ethics implies moral values applied in administration, Denhardt (2007) asserts that "every action of every public official dealing with the formulation as well as the implementation of public policies inherently carries the complexity of values" (p. 87).

The entire activity of public administration must be guided by ethical principles defined by general societal morality and the legal framework. These values must be applied in practice and not remain merely on paper. Changing the mindset about morality and ethics in providing public services contributes to the development and modernization of administration.

Ethics consists of a set of norms that transform ideals into practical values, while values are collectively accepted principles guiding our judgment toward what is "right or wrong" in society in general and especially in public administration. Ethical issues are directly related to the functioning of a state, its institutional building, the efficiency and effectiveness of the state apparatus, the fair recruitment of candidates based on merit, and the provision of quality services to citizens, among others. Add to this the standards that need to be achieved in the process of Euro-Atlantic integration and the strengthening of Kosovo's state-building aspect. In this perspective, public administration in Kosovo must be much more interested in practicing ethics, as it facilitates the achievement of the goals for which it has a mandate. This research is based on a normative approach to gaining knowledge about the issue under consideration. Comparative sociological methods have also been applied.

The research relies on content analysis and comparative analysis of texts to identify problems arising from a lack of ethics and the benefits when applied. The aim is to raise the level of consideration for ethics in the new public administration of Kosovo, emerging from a long period of classical occupation, to help it move forward.

## 1.ORIGIN AND DEFINITION OF ETHICS

Since its origin, ethics has emerged as a general good that can be understood as a public good in the context of our inquiry. "The good stands above all," said Aristotle (2001, p. 10). Ethical issues have been raised since the time of Socrates and his followers, including Plato and Aristotle. Therefore, the concept of social-ethical approaches is ancient. Later, it was categorized as a branch of philosophy. Its application in specific social spheres arose as a necessity for the development and growth of state apparatus, such as in public administration. This development occurred in the early part of the 20th century. In the Middle Ages, figures like Thomas Aquinas dealt with ethics, stating, "Man behaves by his nature only if he chooses the good and the pleasing" (Stumpf, 2003, p. 183). Nicola Machiavelli emphasized, "Tyranny is created either by the people or the aristocracy" (2003, p. 36), followed by Thomas Hobbes with the theories of "state of nature" and "social contract," contributing to ethics (2005, p. 49) and surpassing the period of separation of philosophical thought from religious doctrine.

In the 19th century, the debate on ethics continued with representatives such as Jeremy Bentham and his work "An Introduction to the Principles of Morals and Legislation" (2000), followed by John Stuart Mill, who stated, 'Pleasures differ only in quantity' (2006, p. 45). This continued with Spinoza and Jean-Jacques Rousseau, who brought revolutionary thought to social science. He expressed ethics: "All men are equal by nature" (Damrosch, 2005). Other ideologists who have expressed ideas about ethics include Immanuel Kant, Hegel, Karl Marx, Friedrich Nietzsche, etc., up to modern authors who provided impetus to practical ethics in public administration.

A common denominator in defining ethics reveals that it is a moral norm that "distinguishes good from evil" and guides an individual's choice "to do what is good." Ethics comprise a set of norms, ideals, and practical values that are essential for public administration. According to Rohr (1991), ethics can be defined as a systematic endeavor that employs reason to imbue moral, individual, or social experiences with meaning and establish guidelines for human behavior (p. 10). Thus, ethics encompasses the study of what is considered right or wrong in a given set of rules and how these rules are implemented and enforced in public administration. As Denhardt (2007) stressed, the process of ethics involves distinguishing between right and wrong and acting on what is deemed right (p. 153). This is the fundamental objective of administrative ethics and is the focus of our research.

## 2. LEGAL FRAMEWORK

Kosova, emerging from a "dark" period, faced significant challenges. It was simultaneously required to achieve "reconciliation" and "state-building." With the help of the international community and its efforts, Kosova managed to establish the democratic process to some extent, albeit with difficulties and significant gaps. The challenges of public administration, especially in the ethical sphere, are of the same nature.

The intensity of social development has necessitated a growth in the number and adaptation of various types of public institutions and agencies. This complicates the ability of public administration to precisely define ethical standards. For a new state like Kosova, this is doubly challenging. Everywhere we go, we often encounter a lack of standards that set clear boundaries for ethical behavior. As a result, ethical standards often remain at a lower level compared to the legal obligations that every administration faces in response to public demands. "As a result, ethical standards often provide only the smallest common denominator among organizations, rather than common ideals for public life. Ethical dilemmas in public life mainly involve achieving a balance between competing or conflicting values" (Chapman, 2000, p. 109). Another definition of ethics states that it is a "systematic effort through the use of reason that gives meaning to our moral, individual, or social experience in such a way as to determine the rules that guide human behavior" (Rohr, 1991, p. 10). Since ethics involves standards of "right and wrong" or the study of these standards, it is necessary to discuss what is right and wrong in the context of some rules in public administration, how they are implemented, and whether they are right or wrong. Thus, Denhardt (2007) expresses that "ethics is the process through which we distinguish right from wrong and act by what we call right" (p. 153). This is precisely the essence of administrative ethics and the objective of our research.

## 3. ETHICAL PRINCIPLES OF PUBLIC ADMINISTRATION

The rules of conduct for civil servants in the Republic of Kosova are determined by the Constitution, the Law on Civil Service of Kosova, and the Regulation on the Code of Conduct in Civil Service. "Currently, one of the main requirements for public administrators is to act based on several norms, practices, and ethics, which, if applied correctly, will develop and advance the science, processes, and art of public administration" (Koxhaj, 2008, p. 12).

Based on the Regulation on the Code of Conduct, the fundamental principles of civil service in Kosova are a) legality; b) non-discrimination; c) obligation to respond to requests; d) effectiveness and efficiency; e) responsibility; f) impartiality and professional independence; g) transparency; h) avoidance of conflicts of interest; and i) the principle of equal opportunities for the community and gender (2015, Article 5). Non-compliance with these principles emphasized by the regulation is considered an ethical lapse in the

daily work of a public administrator. When there is deviation from ethical decisions and behavior, the administration damages public and party interests.

*Legality* is realized when employees act according to the law and apply the rules and procedures stipulated in European Union legislation. "The employee must take special care to ensure that decisions affecting the rights or interests of individuals are based on the law and that their content is by the law" (European Code, 2015, Article 4). However, can procedures influenced politically and violating human dignity in favor of personal and preferential interests be considered legal? "Public officials must avoid using their duties for purposes that have no legal basis or are not in the public interest" (Municipal Code, 2020, Article 4).

*Impartiality* and professional independence. Legal violations for personal, family, or even partisan gains are found at two levels of governance. Public officials, by not respecting administrative principles and ethics, often clash with their competencies by making biased decisions contrary to legal norms. This indicates a lack of awareness of the importance of training public officials on ethical behavior. Various sources and research from different organizations, both local and international, speak of violations of legality and conflicts of interest. "The overall institutional structure for implementing legislation on conflicts of interest, a broad definition of corruption, and conflicts of interest as a form of corruption requires the design and implementation of specific measures and mechanisms applicable in all public institutions, which should also address aspects of integrity, transparency, accountability, and good governance within each public institution" (Lëvizja FOL, 2010, p. 8).

*Non-discrimination* and the ethics of equal opportunities. Regarding public demands and decision-making, the employee ensures that the principle of equal treatment is respected. "Members of the public in the same situation will be treated similarly" (European Code, 2015, Article 5). However, the Organization for Economic Co-operation and Development (OECD, 1996) notes that "in countries where there is no central coordinating body for ethics and where the responsibility for ethics is left to the individual desires of public employees, the approach to integrity is built based on values aimed at the public sector and sometimes supplemented with decentralized codes of conduct" (p. 61). Despite the precise regulation of the issue under discussion, there are still individual layers that feel discriminated against and consider that some public officials do not respect the "ethics of equal opportunities" to the detriment of public interest.

In monitoring equality at work, the Ombudsman in Kosovo (IAP) in its Annual Report (2022) has highlighted violations of the equality of public officials, stating, "Also, other issues addressed in the form of complaints to the Ombudsman Institution (IAP) include the improper treatment of some staff in public institutions by management, claims of unequal treatment, as well as denial of the right to promotion and

career development, etc." (p. 77). Also, in analyzing the work of the Ombudsman, we did not observe specific evidence of ethical violations. From this, we understand that the mechanisms that control the work of the public administration in Kosovo are not oriented to specifically prevent unethical behavior. In this case, we recommend that ethics be regulated as a separate legal category so that the authorities, control mechanisms, and managers are obliged to respect administrative ethics and apply it in practice.

*Respect for others.* Civil servants must act with respect for each other and citizens. They must be polite, cooperative, and ready to act when needed. "They must make sincere efforts to understand what others want and also to express themselves clearly, using simple language" (European Code, 2015, p. 11). The administration demonstrates coherence for advanced human rights if it successfully avoids discrimination against parties in the procedure, thus demonstrating high ethical behavior. "The employee must avoid any unjustified discrimination based on nationality, gender, race, color, national or social origin, genetic characteristics, language, religion or belief, political or any other nature, minority membership, property, birth date, disability, age, or sexual orientation" (ibid., Article 5). Based on the data so far on public administration employees in Kosovo, we understand that, in the absence of necessary training on ethical behavior in administrative activities, there are employees who act in violation of ethical norms regarding collegial cooperation and providing services to citizens.

*Competencies* must be exercised only for the purposes for which they are stipulated based on the relevant legal provisions. "In particular, the employee prevents the use of these competencies for purposes not based on law or not justified by the public interest" (ibid., Article 7).

*Gifts or favors.* Officials should not use work relationships or take action to create opportunities for gifts or favors from citizens. "Public administration employees at all levels are quite prone, open, and without any immunity towards the most reported and evident ethical violations such as corruption, nepotism, injustice, etc." (Hallunovi et al., 2020, n.p.). Under political influence, public officials tend to become corrupt and engage in questionable actions, even though they should be impartial and independent. The behavior of public servants should not be guided by personal, familial, or state interests or political pressure. "An employee should not participate in a decision in which he or she, or a close family member, has a financial interest" (European Code, 2015, Article 8).

*Professional* development and ethics are crucial in the phase of reforming the public administration of Kosovo. "Lacking a certain level of professionalism, public administration cannot fulfill the function of achieving the highest level of efficiency" (Alidemaj, 2021, p. 143). In this regard, one of the causes, besides the lack of adequate training, is the absence of treating public officials based on merits and results. This is acknowledged by the Regional School of Public Administration (ReSPA, 2018), which states that "the

motivating function is based on the assumption that the employee's performance can be improved by establishing a clear link between specific efforts and positive or negative incentives, such as salary increases, career advancement, or punishment for poor performance" (p. 65).

As for shortcomings in the assessment of the performance of public officials, when analyzing the structure of the performance report for public officials, there is no requirement to evaluate the ethical behavior of the employee (Office of the Prime Minister of Kosovo, Form 1) and no section that assesses the ethical behavior of the employee. Even on this issue, the European Commission notes deficiencies. "Despite practical guidelines for assessing the performance of civilian employees and the training offered to the Department of Public Officials Management and Human Resources Management Units, the performance management system remains ineffective" (Report on Kosovo 2023, p. 14). Although the European Commission, in the same report, during the monitoring of public administration reform in Kosovo, emphasized that "The Independent Oversight Board for Civil Service is effectively exercising its mandate to handle complaints and monitor the implementation of legislation regarding civil service" (p. 14), we have found that in the report of this mechanism (2018) where disciplinary violations of public officials are made public, there is no explicitly evident case of ethical violations.

*Ethics training.* Employee motivation should be oriented towards the job, fair, courteous, and visible in his or her behavior with the public. The training sphere has significant weaknesses in the work of institutions designed for this purpose. Ethics training is almost entirely lacking. The challenges in professionalizing public officials through training are also found by the European Commission in its report (2023). It notes that "there is no systematic approach to the professional development of civil servants. Training at both central and local levels depends primarily on donor support" (p. 14). This task is within the competence of the Kosovo Institute for Public Administration (IKAP). However, central institutions need to prepare a legal framework with more competencies so that this institute can fulfill its duty. Therefore, the European Commission's report seeks to draw attention to the fact that "a mandatory training program defined by law for public officials for all civil servants was developed in 2022 but has not yet been implemented" (p. 14). Thus, this situation requires legal corrections to the mission of IKAP, not neglecting the human resources policy chosen for ethics training. In the Annual Report of the Work of this Institute for the year 2021, where the results of the training are discussed, it is seen that the aim is the quantity of the training without emphasizing its quality because it is stated that "the institution must increase the volume of training based on the needs for training. Currently, IKAP trains no more than 24% of the entire civil service effectiveness" (IKAP Report, 2021, p. 23). The concern of IKAP should be oriented towards quality and sensitivity to ethical issues in the public administration of Kosovo.

In this context, we recommend that the ethics training system should be based not on quantity but on quality. The "Train the Trainers" training system would be an advantage for the administration, enabling it to then "train itself." It is primarily beneficial if officials in leadership roles at all levels of management are trained so that they can assist their subordinates when they encounter or face ethical dilemmas. In fact, for these purposes, within IKAP, it is necessary to establish a separate training structure that will specialize solely in ethical issues in administration. The engagement of "internal trainers" on ethics is possible according to the regulations on the engagement of trainers in the training process in general (Government of the Republic of Kosovo, Administrative Instruction 13/2018).

*Equal opportunity* in protecting the rights and interests of individuals is implied when a public official ensures that the rights of parties are respected at every stage of the decision-making procedure. Every individual who is a party to the procedure has the right to submit written comments when his rights or interests are affected. This rule is based on European administrative ethical rules, according to which "the citizen, if necessary, has the right to present oral remarks before a decision is made" (European Code, 2015, Article 16). The law on administrative procedure protects the party from having its case resolved within a limited time frame: "In making decisions, procedural deadlines based on relevant laws must not be neglected, where the official ensures that the decision on any request or complaint against the institution is made within a reasonable time, without delay, usually within forty-five (45) days from its commencement" (Law No. 05/L-031, Article 98).

*Ethical approach* to the protection of personal data. The protection of personal data must be equal and without discrimination. This is a specific issue of ethics, obligated and sufficiently sanctioned by legal norms. The law stipulates that "individual data cannot be processed without the consent of the party, except in special cases provided by law" (Law No. 06/L-082, Article 3). The same rule applies in European administrative regulations, where an official working with personal data about a citizen respects the individual's private life under the provisions of Regulation EC45/2001 of the European Parliament and of the Council of December 18, 2000, on the protection of individuals about the processing of personal data by the Community institutions and bodies, as well as the free movement of such data. According to it, in particular, "the official avoids the processing of personal data for illegitimate purposes or the transmission of data to unauthorized persons" (Official Journal of the European Communities, 12.01.2001).

#### 4. ETHICAL ASPECTS OF THE REFORM IN ADMINISTRATION

Ethical issues are connected to the reform of public administration. In some cases, shortcomings were emphasized even more. In Kosovo, the government has drafted a working document addressing this issue. The "Public Administration Reform Strategy 2022-2026," in its composition, includes a plan for implementation consisting of reform activities, indicators, institutions responsible for implementation, implementation financial costs, etc. "The reform implementation plan will be reviewed and refreshed on a biennial basis within the strategic framework set by the strategy" (p. 56). The specific objectives of this strategy are planning and coordination of policies; service delivery; public service and human resource management; accountability; and transparency.

Currently, democratic processes in Kosovo are monitored and supported by the European Union and other UN mechanisms, etc. In the European Commission's report on Kosovo (2023), it is emphasized that "Kosovo has a readiness level and has made no progress about public administration reform during the reporting period. Monitoring the implementation of the legislative framework for public administration reform (PAR) in line ministries is still ineffective" (p. 11). The lack of reform causes significant gaps in the work of public administration. The administration suffers from the syndrome of incoherence. Ethical problems also remain unresolved. Furthermore, the European Commission in its report rightly recommends that Kosovo "improve the functioning and accountability of public administration, including the rationalization of agencies and the introduction of performance management in agencies; for this purpose, administrative capacities need to be strengthened, vacant positions need to be filled regularly and by the principle of merit-based recruitment, and the new Law on Public Officials needs to be amended in line with the principles of a modern public administration" (Report on Kosovo, 2023, p. 12).

Pereira (2000), in the UN document "Promoting Ethics in Public Service," concludes that "public officials are part of the elite. As such, their ethics, besides being the ethics of power and efficiency, are also the ethics of the public interest as an actively pursued goal.

However, corruption of this professional ethics can have two origins: personal and political" (p. 20). The author suggests that ethical corruption comes from the head of power, so the focus should be directed not only towards the individual (a public official) but also towards groups (elites). This should be taken seriously in Kosovo, as the prevailing political culture leaves many open possibilities for this type of "ethical corruption."

## 5. CONSIDERATIONS FOR ETHICAL ISSUES

In addition to the need for more intensive and quantitative training, as seen in the IKAP Report (2021), which was insufficient to meet the needs of the public administration for public officials equipped with knowledge of ethics, the issue of controlling ethical violations must be addressed as a problem in itself.

From the report prepared by the Independent Monitoring Council of the Civil Service of Kosovo (IMCSCS) for the year 2022, in the section highlighting violations according to the "subject of the complaint" (p. 23), it appears that in none of the categories of violations for which the Council has made decisions, there is any mention of a decision on the violation related to ethical issues. This indicates that ethical matters are not referred to as violations.

If an administrative organization is serious about ethics and deems it necessary to address ethics, it must continuously pose several questions to itself. Authors Geuras and Garofalo expressed their views on this issue in "Practical Ethics in Public Administration" (2010):

How many ethical issues do you raise for discussion in your daily work?

Is there an opportunity to raise these issues for discussion?

Regarding ethical issues, do you think more within or outside of work? Why?

Is there a suitable platform within your organization for the discussion of ethical issues?

Has a culture of discussing ethical issues been established within your organization?

Does ethics consist of adhering to legal codes or ethical codes?

What are the most important professional ethical issues encountered in daily work? And so on.

All these issues could be addressed through effective and professional training within the frameworks designated for this purpose, such as IKAP, and overseen by the Commissioner for Ethical Issues, whom we recommend in this study.

## 6. ETHICS CONTROL MECHANISM

The Commissioner for Ethics, as a monitoring mechanism over public administration and its officials, has been evident in several developed states, such as the United Kingdom, Canada, etc. This commissioner is mandated to assist public administrators in adhering to administrative ethical standards.

In Canada, the Ethics Commissioner oversees and sanctions the implementation of legal acts and codes of conduct as per the mandate given by the legislature. For countries like Kosovo, the "sanctioning" competence of this mechanism would be of interest. The Commissioner oversees members of both chambers of the Canadian Parliament and conflicts of interest. In the Annual Report (2023) of the Canadian Ethics Commissioner's Office, it is stated that "Our office provides independent, rigorous, and consistent

guidance as well as advice for members of Parliament and holders of federal public offices, conducts investigations, and, when necessary, applies appropriate sanctions to ensure full compliance with the Code of Conflict of Interest for Members of the House of Commons and the Conflict-of-Interest Act" (p. 2).

Given the significant importance of controlling public administration, control over the observance of ethical principles takes on an equally important dimension, especially in today's increased number of administrative organizations, and the central government finds it challenging to highlight all shortcomings and deficiencies. Considering how little ethical issues are addressed, it becomes apparent that the mechanism overseeing the ethical implementation of public administration principles needs to be strengthened in Kosova.

The public administration of Kosova needs a more specific treatment of ethical issues. We believe that establishing a commissioner for administrative ethical issues would be appropriate.

## **7. ETHICS AND ARTIFICIAL INTELLIGENCE**

After the era of e-governance, the administration is facing challenges in the implementation of artificial intelligence (AI). It must be emphasized from the beginning that this constitutes a giant step that affects all aspects of life. Here, we are focusing on the implications in the sphere of public administration, as the assimilation of this scientific achievement represents a significant interest. The adoption of artificial intelligence requires complex study and preparation. The needs for this extend from human resources to the legal framework. Everyone is looking at how this technology should be adopted. The year 2022 was decisive for artificial intelligence. But what is at the core of artificial intelligence? "At its core, AI involves creating machines that can think and act intelligently and includes tools such as Google's search algorithms or machines that can drive themselves" (Liberale, 2023). Meanwhile, author Walt Mayo, in Forbes magazine, expresses that "artificial intelligence is any technology that seeks to replicate a broader aspect of human intelligence" (Date: 07.10.2021). Even the European Parliament addresses artificial intelligence in its report titled "Artificial Intelligence: How It Works, Why It Matters, and What We Can Do About It." This report highlights that "artificial intelligence is perhaps the defining technology of the last decade and possibly the future" (2020). The specialized UN agency for information technology, the International Telecommunication Union (ITU), has issued guidelines for artificial intelligence by publishing a report (2022) titled "United Nations Activities on Artificial Intelligence (AI)" for all its agency structures. The introduction to this report states, "This tool is for anyone seeking to understand how the UN is working to influence AI to bring improvement to humanity. On these pages, you will see UN entities working on how to harness AI to

help mitigate climate change, transform education, combat hunger, eliminate poverty, and much more" (p. iii).

Thus, the importance and seriousness with which the UN approaches it are evident. The significance of this innovation is also demonstrated by the fact that the UN has established a special coordinating group for artificial intelligence called the "Interinstitutional Working Group on Artificial Intelligence" (ibid., p. iv) in joint direction with UNESCO and the International Telecommunication Union. Ethical issues regarding artificial intelligence at the UN level are addressed by UNESCO. The UNESCO General Conference adopted the Recommendation on the Ethics of Artificial Intelligence in November 2021, while the principles for the ethical use of artificial intelligence in the UN system were approved in September 2021.

International organizations are working to be ready for the adoption of artificial intelligence. Guidelines and legal infrastructure for its control have been developed. This should also be the first task of the administration of Kosovo. In this context, the public administration of Kosovo must take adequate measures to deal with this situation. First and foremost, a human framework must be ensured to address this issue, followed by legislation. Secondly, the government and parliament need to develop programs that define the schemes for the application of this intelligent technology in the new administration of the state of Kosovo. UNESCO has also issued several recommendations on the ethics of using artificial intelligence, titled "Ethics of Artificial Intelligence" (2021). In this recommendation, UNESCO emphasizes two components in the case of the involvement of artificial intelligence: values and principles. The values include "respect, protection, and promotion of fundamental human rights and human dignity; environment and ecosystem; diversity and inclusivity; peace and justice" (p. 18–23). The principles are "proportionality and non-harm; protection and security; justice and non-discrimination; sustainability; right to privacy and data protection; oversight and human determination; transparency and explainability; responsibility and accountability; awareness and literacy; governance and collaboration with multiple parties; and adaptability" (ibid., p. 18–23). This recommendation guides protective measures against abusive influences with artificial intelligence, as often technological achievements are highly suitable for abusive and corrupt groups to use them to the detriment of society and purpose. Therefore, the recommendation states, "States should establish effective measures, including, for example, policy frameworks or mechanisms, and ensure that other interested parties, such as private sector companies, academic and research institutions, and civil society, adhere to them, encouraging, among other things, all interested parties to develop human rights, rule of law, democracy, and ethical impact assessment by guidelines, including the United Nations Guiding Principles on Business and Human Rights" (p. 48). Regarding the ethical impact of AI on human rights, UNESCO recommends that "Member States and private sector companies should develop mechanisms for

due care and monitoring to identify, prevent, mitigate, and account for how they address the impact of AI systems on human rights, rule of law, and inclusive societies" (p. 26). States should develop programs that minimize potential risks. Consequently, "governments should adopt a regulatory framework that establishes a procedure, especially for public authorities, to conduct ethical assessments of the impact on AI systems to anticipate consequences, mitigate risks, avoid harmful consequences, facilitate citizen participation, and address social challenges" (ibid., p. 26). And an ethical AI assessment system requires that it "establish appropriate monitoring mechanisms, including audibility, traceability, and explainability, which allow the assessment of algorithms, data, and design processes, and include external review of AI systems" (ibid., p. 26). In addition to the legal framework and mechanisms for enforceability control, AI also needs legal protection, which UNESCO recommends in the same recommendation. It is emphasized that "Member States should enhance the judicial capacity to make decisions regarding AI systems according to the rule of law and international law and standards, including the use of AI systems, ensuring that the principle of oversight is preserved. If AI systems are used by the judiciary, sufficient protective measures are needed to ensure, among other things, the protection of fundamental human rights, the rule of law, and the independence of the judiciary, as well as the oversight principle to ensure a reliable public, development-oriented, people-centered, and the use of AI systems in the judiciary" (p. 28).

The public administration of Kosova has also taken steps in this direction by drafting the document "Digital Agenda of Kosova 2030" (2023), where it presents its project for the use, conditions, and objectives within the framework of the macro framework for the digitization of public services. This document aims to clarify some issues, including "problem assessment; determination of solutions for identified problems; proposal of objectives; implementation, monitoring, and evaluation; assessment of indicative resources (budget)" (p. 4). There is no doubt that the application of AI in the public administration of Kosova is necessary and even inevitable. The administration must be careful to create a legal and technical infrastructure that allows it to be used for the benefit of the state and the public, not forgetting that in the future, it should be more oriented towards the ethics of AI issues.

## CONCLUSION

The current framework for ethical standards and oversight does not guarantee the application of ethical principles, and the oversight for their application is not sanctioned. There is an evident need for a robust ethical framework to address ethical dilemmas and regulate competing values in public life. Establishing a distinct legal category for administrative ethics ensures that authorities, oversight mechanisms, and managers are obligated to respect and apply ethical standards in practice.

Assessment of civil servants and detachment from political influence. We are emphasizing the importance of treating public officials based on merit and results for the effective functioning of public administration, with as much detachment as possible from political influence.

Ethical considerations in performance evaluation and qualitative training. There is a lack of assessment of ethical behavior in the Performance Appraisal Form for civil servants in Kosovo. Recommendations include improving the quality of ethical training, establishing a dedicated training structure for ethical issues, and creating a mandatory training program designated by law for public officials. The training program, "Train the Trainers," would help overcome ethical dilemmas.

Ethical issues in the context of public administration reform emphasize the need to strengthen administrative capacities, fill positions based on merit, and amend laws to align with the principles of modern administration. They are addressing ethical issues in Public Administration Reform (Public Administration Reform Strategy), focusing on planning, coordination, service delivery, human resource management, accountability, and transparency.

A Commissioner for Ethical Issues would be an added value to the reforms in public administration in Kosovo. This mechanism would monitor and address ethical breaches within public administration. It should have the legal authority to oversee and penalize ethical breaches.

The establishment of a human structure and legislation is required to address the ethical implications of artificial intelligence in public administration. They are additionally, building appropriate monitoring mechanisms to assess the ethical impact of artificial intelligence systems. "Kosovo's Digital Agenda 2030" should align with ethical considerations for the implementation of artificial intelligence, emphasizing the ethical use of technology for the benefit of the state and the public.

Additionally, judicial capacity needs enhancement to handle legal issues related to AI following local and international laws, especially concerning human rights.

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## THE IMPACT OF AI ON DEMOCRACY

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### ABSTRACT

*In the contemporary landscape dominated by technological advancements, this study explores the intricate relationship between Artificial Intelligence (AI) and democracy from a theoretical perspective. As AI technologies continue to shape various aspects of society, including governance, there is a pressing need to examine how these advancements impact democratic processes. The primary objective of this research is to provide an overview over how contemporary artificial intelligence is currently shaping democracy. The research on this topic will be conducted using the document review technique and will mainly make use of various secondary data and recently published articles and documents. Anticipated findings aim to contribute valuable insights into the nuanced interplay between AI and democratic principles. This study holds significance as it adds to the evolving discourse on AI and its implications for the fundamental tenets of democracy.*

**Keywords:** *AI, impact, democracy, citizens.*

## INTRODUCTION

Artificial intelligence (AI) has rapidly emerged as a powerful force across different domains, holding great capabilities for changing our future. From changing healthcare diagnostics (Lee et al., 2023) to reforming education (UNESCO, 2023) and even piloting autonomous vehicles (Goodall, 2023), AI's potential for dramatic change continues to evolve at a very fast rate. Democracy is defined as a system of governance in which the power lies with the people, either in a direct form or through their elected representatives (Mansfield, 2020). There are several core principles that define the system and involve: popular sovereignty, political equality, and individual liberty. These principles are relevant as they ensure that all citizens have a hand in shaping their lives and ensure that their rights are also being protected.

The relationship between AI and democracy is rather complex and is rather multifaceted. This means that this relationship is defined by both challenges and opportunities. On the one hand, AI has the capability to improve democratic processes and improve the political participation of citizens. AI-powered tools have the capabilities to analyze vast amounts of data in order to identify patterns and trends, potentially culminating in more informed and evidence-based policy decisions (Landemore, 2023). This data-driven approach that stems from AI has the capability to provide valuable insights for various policymakers, enabling them to tackle different problems in a more effective manner. Issues such as climate change and economic inequality (International Telecommunication Union, 2023) can be potentially ameliorated by the impact of AI. In addition to this, AI-powered platforms are able to facilitate the communication between citizens and their representatives, thus fostering greater participation and enhancing the quality of democracy (Brookings Institution, 2021). By creating differences that have a higher degree of flexibility and interactivity, AI can lead to better discussion among citizens, make their concerns more visible, and hold their representatives accountable for their actions within their constituency (United Nations Office for Sustainable Development, 2023). Furthermore, AI is also able to positively impact efficiency and transparency within the government systems. Another important contribution of AI is its ability to automate administrative tasks and streamline service delivery which can ultimately free up valuable resources and more importantly allow for more transparency in governmental operations (Council of Europe, 2023). In this regard, such higher levels of transparency have the potential to increase public trust and confidence in democratic institutions.

Nevertheless, while there are obvious benefits, the use of AI in the context of democracy is also associated with many relevant issues. One of the most relevant problems is the potential for AI to be used as a tool for public manipulation and thus to negatively impact democratic processes. Tools that are powered by Artificial Intelligence can be used to generate and spread disinformation and thus create echo

chambers and lead to greater social polarization in democratic societies (Brennan Center for Justice, 2023). Various rather malicious actors within the political landscape could exploit these capabilities of AI to influence public opinion, sway elections which might ultimately lead to lower levels of trust among democratic institutions. Furthermore, AI systems trained on biased data can lead to even greater inequality levels among individuals and to even more discriminatory practices (European Parliament, 2023).

The so-called “algorithmic bias” can lead to unfair outcomes in important matters involving employment, housing, and criminal justice which can further marginalize the most vulnerable groups of the society and undermine the principles of fairness and justice which are crucial to the health of democracy (Jobin et al., 2019). Additionally, overuse of AI in decision-making processes has the capability give greater power control to a few citizens and this then holds the potential to put democratic control and accountability at risk (Landemore, 2023). As AI systems advance further, it is of great importance that we ensure that they are developed and used ethically and responsibly and that there are clear guidelines in regard to their use which ultimately must positively impact the efforts of preserving the quality of democracy.

The rather complex relationship between AI and democracy makes it necessary to have a very cautious approach, in order to effectively balance innovation with the need of upholding democratic principles. Open and transparent discussions about the potential risks and benefits of AI are of great importance and they must involve diverse stakeholders like policymakers, technologists, and civil society in order to effectively tackle issues such as the impact of AI on democracy (Jobin et al., 2019). In addition to this, public education initiatives have the capability to help individuals understand AI's capabilities and issues which ultimately can lead to a more informed participation and critical thinking (United Nations Office for Sustainable Development, 2023).

In addition to this, clear regulations and control mechanisms are important to ensure that AI is developed and used responsibly so as to effectively uphold the core values of fairness, transparency and accountability which form the core of democracy (Brennan Centre for Justice, 2023). Ultimately, by fostering a collaborative and inclusive approach when dealing with the relationship between AI and democracy, we can navigate this complex landscape and turn AI into a tool that positively shapes democratic processes within societies.

## 1.METHODOLOGY

This paper has been used using a qualitative approach to better understand the impact of artificial intelligence on democracy. More specifically, there has been an attempt to use document review as the primary method of obtaining data. It must be noted that the process of document review has included a multitude of sources that have included both scholarly and institutional based documents in order to better analyse and understand the practical implications related to the implementation of AI on democratic societies. It must be that in the context of effective document review process and in relation to the needs of producing this paper, it has been imperative to use recent sources that are better able to present the current state of the implementation of AI in practice in the context of democratic societies.

## 2. POSITIVE IMPACT OF AI ON DEMOCRACY

Artificial intelligence (AI) has been evolving very rapidly and this situation is important as it makes it relevant to take a very careful approach when aligning it with democracy. While there are concerns about the potential of AI to negatively impact democratic processes (Brennan Center for Justice, 2023), recent advancements also tend to showcase its potential for fostering a democratic landscape characterized by greater public participation, efficiency and transparency. In this regard, it is important to emphasize the positive impacts of AI on key areas of democratic functioning, and thus emphasizing the need to use the AI in such a manner as it positively impacts democratic processes.

First, one of the most important aspects of AI in terms of enhancing democratic processes is its ability to positively impact public participation within the democratic societies. This because traditional methods of communication have not been deemed as effective for ensuring public participation. In this regard, AI-powered platforms have the ability to personalize information delivery based on the preferences and specific interests of people, making it easier for citizens to be more aware and informed of various policies that might be of relevance to them (Landemore, 2023). This personalized approach has the potential to raise political awareness and increase political participation in the democratic process by motivating individuals to take part in various topics that might be of relevance in their day-to-day lives (United Nations Office for Sustainable Development, 2023).

Additionally, AI-based tools such as chatbots have the ability to lead to better communication between citizens and their political representatives. These virtual assistants are able to provide 24/7 access to government service. Such services allow citizens to be more informed regarding various policies, register to vote, and even communicate and express their concerns to their representatives (United Nations Office for Sustainable Development, 2023). This accessibility empowers individuals to take part into the dialogue

and hold their representatives accountable for their political actions which ultimately leads to greater levels of political participation and democracy.

Furthermore, AI is also very important in terms of enabling better decision-making within democratic societies. By the fact that AI is able to analyze vast amounts of data from various sources, AI algorithms have the ability to effectively identify trends, patterns and issues that might in fact go unnoticed if it were not for the use of such technologies (ITU, 2023). These insights can guide policymakers towards evidence-based solutions which then increases the efficiency and effectiveness of the governance within democratic societies. For example, AI can analyze data on social determinants of health to identify areas with high poverty rates and potential health risks, allowing various policymakers to better allocate several resources as they can be better able to tackle various societal issues (ITU, 2023). Moreover, AI has also the potential to effectively assist in policy evaluation by predicting the potential outcomes of different proposed policies. This ability to predict outcomes can enable simulations and adjustments before they have been implemented in the real world, allowing policymakers to improve their decision-making by leading to decisions that are better informed with more awareness of the various consequences (Landemore, 2023).

In addition to positively impacting citizen engagement and informed decision-making, AI hold the capabilities to enhance government efficiency and transparency which are important elements of a well-functioning democracy. The process of automating routine administrative tasks such as data processing and document analysis is able to save the time and other resources of individuals, allowing government officials to focus on complex and critical tasks that require the cognitive abilities and critical thinking prowess of humans (Council of Europe, 2023).

Additionally, AI can facilitate open access to government data which leads to more knowledgeable citizens that have the ability to have a closer look in relation to the work of their representatives. Such higher levels of transparency enhance public trust and confidence in democratic institutions by ensuring greater accountability and thus lowering the risk of corruption or possible abuse of power (Council of Europe, 2023). In relation to the above mentioned points, AI-powered platforms can be used to publish government budgets, reports that demonstrate spending, and legislative proposals in a user-friendly format which allows for greater access of their citizens to the work of their governments which ultimately leads to more informed and active citizens.

Finally, an important positive impact of AI lies in its potential to combat important issues that involve disinformation and fake news which are putting democratic discourse integrity into risk. More specifically, AI algorithms can be trained to detect and point out potentially misleading content on various social media

platforms and in different online news sources, based on different criteria such as different language patterns, source credibility, and accuracy (Brennan Center for Justice, 2023). In this regard, by enabling simple identification and removal of false information, AI can effectively mitigate the spread of disinformation and protect the public from possible manipulation from their government counterparts (Brennan Center for Justice, 2023). This can ensure that democratic dialogue and democracy in general remains grounded in truth and facts which can lead to better informed citizens and more effective political participation, but also to better solutions from policy-makers.

However, it is important to emphasize that while there is much debate on the positive effects of AI on democracy, it is very important to properly address its use and implementation within democratic societies. In relation to this, addressing potential issues such as algorithmic bias, the concentration of power in the hands of small groups of people, and the potential misuse of AI for the needs of surveillance and manipulation is truly of very high importance (Jobin et al., 2019). In this regard, open discussions together with robust regulations and clear ethical guidelines are important means to ensure that AI serves as a tool for the betterment of democracy and not to contribute to its demise (Jobin et al., 2019). Finally, by maintaining a collaborative and inclusive approach to the development and implementation of AI, democracies have the opportunity to navigate this complex landscape and harness the potential of such technology to create a more sensible and better informed democratic society.

### **3. NEGATIVE IMPACT OF AI ON DEMOCRACY**

While there are clear benefits associated with the use of artificial intelligence on democratic societies, it would be inadequate to ignore the potential negative effects that such technology can have in this political system. In relation to the negative effect of AI, this technology can worsen existing power imbalances, lead to new forms of discrimination, increase surveillance capabilities among citizens, and facilitate the rapid spread of both misinformation and disinformation, all of which can negatively impact the democratic processes within a society. While this part of the paper will focus on the negative part of artificial intelligence, it will also highlight the importance of vigilance and intentional mitigation measures in order to better manage the effects of such technologies.

The creation of power imbalances in societies is one of the dangers that stem from the application of AI in the politics of the various societies. The development and deployment of AI systems are generally under the control of large corporations or governments which emphasizes the practical power imbalances created by such systems (Crawford, 2021; Council of Europe, 2023). In this regard, this concentration of power can enable these actors to hold disproportionate power when it comes to the use of such

technologies, potentially shaping public opinion, affecting policy decisions and even impacting the results of elections in particular countries. Furthermore, the lack of diversity, inclusion and equity within the field of AI development has the potential to result in biases encoded into these systems. For instance, facial recognition algorithms have often exhibited racial and gender biases, leading to possible discrimination and infringements on civil liberties. It must be emphasized that marginalized communities have been particularly affected by such erratic behavior of artificial intelligence (West et al., 2019).

AI has also the potential to undermine important elements of democratic societies such as privacy and freedom. This can result from the rather pervasive and rather not clear nature of AI-powered technologies which, as mentioned earlier can lead to great levels of mass surveillance (Feltovich, 2021). Governments or corporations can harness the potential of such technologies to monitor citizens' online activities, predict their future behavior, and even track their physical movements. In line with this argument, such surveillance can erode trust in democratic institutions and negatively impact free speech and expression, especially in regards to political dissent or critical engagement in relation with the activities of the government (Zuboff, 2019; Feltovich, 2021). Furthermore, AI-powered tools do also possess the potential for effective authoritarian control (Taylor, 2023). Such examples demonstrate the power of the AI to effectively serve as a tool for limiting the freedom of the people.

Another dangerous threat lies in the ability of AI to weaponize information and increase the levels of polarization in various societies. More specifically, deepfakes, hyper-realistic AI-generated videos or audio, can be used to impersonate individuals and create fabricated content that leads to distrust in democratic institutions and undermines the credibility of political discourse within democratic societies (Chesney & Citron, 2019). In addition to this, AI by employing disinformation and misinformation can lead to political divisions and hinder the formation of consensus on key issues that are relevant for the society. Social media platforms, often driven by AI-powered recommendation engines, have the ability to amplify and personalize content which is misleading, creating echo chambers where differing views and sources have a smaller probability of being encountered (Lazer, 2022; Brennan Center for Justice, 2023). Additionally, AI-powered bots and trolls can be programmed to propagate propaganda, sow discord, and erode trust even when it comes to the proper organization of democratic electoral processes (Howard & Wooley, 2016). Such manipulative use of AI has the potential to undermine the very fabric of democracy and spread cynicism among citizens which ultimately leads to lower levels of political participation and democracy.

Beyond the aforementioned threats, concerns exist about AI's potential impact on employment and economic inequality. Automation enabled by such technologies has been considered to be particularly

dangerous for individuals that are often engaged in blue collar or services occupations. Such tendencies can worsen existing economic inequality and exacerbate social unrest. This then has the potential to lead to greater political instability and could even become a fertile ground for extremist societies to flourish (Acemoglu & Restrepo, 2018). Furthermore, the use of AI in decision-making systems, such as those that are used for determining credit scores or even bail eligibility, can increase existing biases and even deepen existing discriminatory practices. In the end, this reinforces inequalities and undermines the principle of fairness under the law which has been deemed of the highest importance for the functioning of the democracy (Crawford, 2021).

It is also necessary to provide a short discussion on the potential for mitigating such effects. Mitigating these adverse effects of AI on democracy requires a serious and proactive approach from a diverse set of actors. Firstly, ensuring transparency and accountability in the development and use of AI systems is very important (Council of Europe, 2023). Mechanisms for auditing algorithms and tracing how AI-driven decisions are made are very important to ensure fairness and prevent biases from being part of such technologies. In addition to this, developing and enforcing robust ethical frameworks and regulations that deal with the use of AI within democracies becomes an element of primary importance (Jobin et al., 2019). Further, establishing oversight bodies responsible for monitoring AI applications and ensuring that they function in alignment with democratic values can be beneficial toward mitigating their negative effects (Taylor, 2023).

Moreover, it is important to address issues of power and representation through diversity, equity, and inclusion elements within general development of Artificial Intelligence (Crawford, 2021). In relation to this, encouraging a greater participation in the development process can lead to more equitable AI technologies that have the potential to reflect societal problems and address diverse needs. Investing in media education and digital literacy to equip the public with critical thinking skills is very important for individuals who aim to operate successfully in a world that fueled by AI technologies and full of disinformation (Lazer, 2022).

Importantly, collaboration between a diverse set of actors that involve governments, civil society, technology companies, and academia is crucial for the development and implementation of responsible AI practices that serve democratic societies without endangering its core ideals (Council of Europe, 2023). In this regard, fostering an open and fruitful dialogue about the potential pitfalls of AI and working in collaborative problem-solving has the capability to facilitate development of effective strategies to address the challenges brought by the technologies.

The relationship between AI and democracy is rather complex and multifaceted. Again, while there are many benefits associated with the use of AI, there are also negative potential impacts. Ultimately, taking such risks into consideration and working actively working to mitigate them is crucial in ensuring that AI serves as a force that in fact enhances the quality of democracy in all societies.

#### **4. CASE STUDIES OF AI IMPLEMENTATION**

As it has been discussed until now in this paper, the relationship between artificial intelligence (AI) and democracy is a rather complex relationship that is characterized by both threats and opportunities. While AI holds the potential to empower citizens and enhance transparency in the context of democratic systems, its ability to be used for discrimination and disinformation purposes has in fact been a rather concerning aspect. This part of the essay attempts to showcase both sides of the implementation of AI in the context of democracy and how these processes have in fact happened in real life scenarios.

On the optimistic side, Taiwan serves as a good example of showing how AI could be used to strengthen the democracy of a country. Aware of the difficulties faced by overseas voters, Taiwan implemented the "iVoting" platform in 2019. This innovative solution uses facial recognition technology to facilitate the process of remote voting and thus significantly increase the participation and inclusivity of the electoral process in the country (Ministry of Foreign Affairs, Republic of Taiwan, 2023). In addition to this, AI-powered chatbots like "e-Jarvis" provide citizens with 24/7 access to various government services and operations to all citizens. Such accessibility has the ability to empower individuals and give them a sense of urgency, allowing them to cooperate with the government and hold it accountable, ultimately impacting positively the strength of democracy (Ministry of Interior, Republic of Taiwan, 2023).

However, the 2016 Philippine presidential election serves as a potential reminder of the negative effects associated with the use of AI in democracy. Social media platforms, heavily influenced by AI algorithms that personalize content based on user data, became arenas for the spread of disinformation (Domingo et al., 2017). These campaigns employed AI-powered bots and trolls which were used to spread hateful messages and target various vulnerable groups (Ramesh & Manghnani, 2018). This coordinated effort, facilitated by AI, was able to instill confusion and even distrust among people, potentially swaying public opinion and undermining public faith in the development of the democratic system (Gilaberte, 2020). The impact of AI on democracy seems to transcend these examples.

On the one hand, AI-powered tools can be very helpful in identifying and flagging potentially dangerous online content thus aiding in the fight against the spread of disinformation, an important element of ensuring that citizens are well-informed (Brennan Center for Justice, 2023). However, according to

Crawford “concerns exist regarding potential biases within these algorithms and the risk of censorship, highlighting the need for careful consideration and ethical development” (Crawford, 2021). Additionally, AI can be an important factor that could be used toward streamlining voter registration, improving ballot security, and even securing greater levels of access for voters with disabilities which makes the electoral process more inclusive and efficient (Deloitte Insights, 2018). However, this potential advantage depends on robust data privacy measures and regulations regarding potential vulnerabilities in AI-powered voting systems (Council of Europe, 2023).

In general, artificial intelligence represents a plethora of opportunities and threats in relation to the development of democracy. While its potential to empower citizens and increase the levels of democracy cannot be denied, the risks associated with both discrimination and manipulation cannot be ignored. Moving forward, responsible development, transparency, and various regulations are important to ensure that AI in fact enhances democratic processes.

## 5. RECOMMENDATIONS AND FUTURE CONSIDERATIONS

While AI presents undeniable potential for strengthening democracies, its potential pitfalls necessitate proactive mitigation strategies. This section explores potential solutions and safeguards, proposes frameworks for ethical development, and identifies key areas for further research and policy development to ensure AI serves as a tool for a stronger and more inclusive democracy.

### **Mitigating the Negative Impacts:**

*Transparency and Accountability:* Enhancing transparency in AI development and deployment is crucial. Establishing clear reporting mechanisms for algorithms' decision-making processes and fostering public understanding of how AI systems function are essential steps. Additionally, robust oversight bodies with diverse representation are needed to hold both developers and users of AI accountable for potential biases and harmful applications.

*Combating Disinformation and Manipulation:* Countering AI-facilitated misinformation requires a multi-pronged approach. Investing in educational initiatives that equip citizens with critical thinking and media literacy skills is essential. Additionally, fostering collaboration between technology platforms, media organizations, and fact-checking institutions can aid in identifying and debunking false information before it spreads widely. Furthermore, regulations and frameworks governing online content moderation need to be developed and implemented with careful consideration of freedom of expression and potential censorship concerns.

*Addressing Bias and Discrimination:* Mitigating bias in AI systems requires vigilance throughout the development process. Implementing diverse and inclusive teams in AI development, along with employing robust data cleaning and auditing procedures, are crucial steps. Additionally, establishing ethical guidelines and developing bias detection algorithms can help identify and address potential biases within AI systems before deployment.

*Ensuring Data Privacy and Security:* Safeguarding individual privacy and upholding data security are paramount when dealing with AI-driven technologies. Implementing robust data protection regulations, coupled with enforcing user consent and control over their data, are essential measures. Additionally, investing in cybersecurity solutions and establishing clear legal frameworks governing data use by both private and public entities are crucial safeguards against potential misuse.

### **Frameworks for Ethical Development and Responsible Use:**

*Developing Ethical Guidelines:* Establishing clear ethical guidelines for the development and use of AI in the democratic sphere is critical. These guidelines should address issues such as transparency, accountability, fairness, privacy, and safety. Moreover, these principles should be developed through collaborative efforts involving diverse stakeholders, including technologists, policymakers, civil society organizations, and the public.

*Promoting Public Dialogue and Education:* Fostering open and inclusive dialogue about the potential benefits and risks of AI is crucial. Public education initiatives should create awareness about how AI functions, its potential impacts on society, and the ethical considerations surrounding its use. This promotes informed public engagement and empowers citizens to participate actively in shaping the future of AI in a democratic context.

*Promoting International Cooperation:* Addressing the challenges and opportunities presented by AI requires international collaboration. Establishing international frameworks for ethical AI development and responsible use, along with fostering collaboration on research and development initiatives, are crucial steps towards ensuring the positive impact of AI extends beyond individual nations.

### **Key Areas for Future Research and Policy Development:**

*Understanding Long-Term Impacts:* Conducting research to understand the long-term societal and democratic implications of AI is crucial. This includes studying the potential impact of AI on employment, social inequalities, and the evolution of political discourse.

*Developing Regulatory Frameworks:* Crafting robust and adaptable regulatory frameworks for AI development and use in the democratic sphere is essential. These regulations should address issues like data privacy, algorithmic bias, and the use of AI in critical aspects of democracy, such as elections.

Investing in Responsible AI Research and Development: Investing in research and development efforts focused on ethically sound AI design, bias mitigation techniques, and robust explainability frameworks is crucial. Additionally, supporting research on the potential positive applications of AI in enhancing democratic processes can pave the way for its responsible use.

By implementing these solutions, frameworks, and pursuing further research and policy development, we can ensure that AI serves as a force for strengthening and fostering a more inclusive democracy. By proactively addressing the challenges while embracing the opportunities, we can shape a future where AI complements and enhances, rather than undermines, the fundamental democratic values of transparency, accountability, and citizen participation.

## **CONCLUSION**

This paper attempted to present the impact of AI on democracy. More specifically, the paper attempted to analyze both opportunities and threats with the implementation of such technologies in the context of democratic societies. It must be noted that the recent rapid development of AI powered chatbots such ChatGPT, Gemini and others has in fact been an important factor in revitalization of the debate in regards to the multitude of considerations surrounding the implementation of AI in different democratic societies. As it has been presented in the paper, the introduction of these technologies has been associated with rather diverse effects in the context of democracy.

The first part of the paper attempted to provide a general overview of the implications associated with the use of technology in the AI. More specifically, this part represented both the advantages and disadvantages associated with the use of technology in the context of democracy. Based on the arguments provided in this part of the paper, there is a rather complex relationship between AI and democracy and cannot be defined in simple terms.

The next part of the paper dealt with negative impact of AI on democracy. Generally speaking, the negative part of the effect of AI on democracy was generally associated with the impact of democracy on the spread of negative phenomena that involve hate, discrimination and also weakening of the political discourse by misinformation and disinformation. Before ending the discussion, there was also an attempt to demonstrate the use of AI by presenting real-life scenarios where such technology was used for both positive and negative effects in relation to its impact on democracy. Philippines and Taiwan were presented in order to illustrate the dual impact of AI on democracy which helps create awareness of the rather complex impact of such technologies.

Finally, there is universal consensus that AI has demonstrated signs that have led to conclusions that there may be relevant ramifications associated with the relationship between these technologies and democracy. Presently, it cannot be clearly stated that democracy will be impacted positively or negatively by such rapid changes. Nevertheless, there is also a rather clear understanding that in order to preserve and enhance the current levels of democracy it is vital that we embrace AI and technology in general with great caution.

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## THE CAUSES OF TERRORISM

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### ABSTRACT

*Terrorism is a growing threat to both global and local security in the modern world. National criminal laws around the world address terrorism, and its effects are evident at all levels of society. Extremist organizations, dissatisfied with a nation's governance, often resort to assassinating leaders, including emperors, kings, military generals, and various state authorities. Scholars have long sought to understand the root causes of terrorism, with the aim of launching effective counter-terrorism campaigns. Despite extensive research, no definitive differences have been identified, suggesting the presence of additional influencing factors. This paper aims to address several questions concerning the economic, political, and social factors contributing to the frequency of terrorist attacks over the past 20 years. Analysis reveals that socioeconomic inequality, democracy, human rights, and educational attainment are significant factors. However, this essay will emphasize that religion plays a crucial role in the increase in terrorist incidents. For example, recent arrests of religious leaders in Kosovo and neighbouring regions, who were suspected of recruiting youths for the "battle for the country of Sham" in Syria, highlight this point. Research on personality traits and terrorism suggests that the desire for group affiliation may also contribute to terrorist activities, as terrorist groups often provide a sense of belonging for those seeking such connections.*

**Keywords:** *Terrorism, Causes, Nations, Society, Security, Actions, Law*

## INTRODUCTION

Terrorism can be defined as the deliberate use of systematic violence aimed at spreading fear among the population and government representatives to achieve personal, political, or ideological goals. Terrorists are adept at manipulating public perception; while they may cause relatively few casualties, their actions can instill terror on a massive scale and disrupt large political structures.

The widespread fear generated by terrorists creates a sense of insecurity, powerlessness, and distrust in the state's security authorities, who are supposed to ensure public safety. By targeting innocent people, terrorists aim to attract the attention of both local and international audiences, instilling fear to pressure governments into meeting their demands.

Although terrorists often lack the capability to confront well-established security agencies directly, they employ methods designed to inflict pain and fear. These methods are intended to force citizens to act against their will. Terrorism is characterized by the intentional use or threat of violence against innocent individuals, aiming to compel people to take actions they would not normally consider. Terrorists typically resort to unexpected attacks, viewing their actions as a means to disrupt and terrify larger entities, much like small creatures disturbing a jungle and causing panic among larger animals.

Terrorism endangers global peace, state security, and human lives. It is a complex social phenomenon influenced by a range of internal and external factors. Its characteristic violence and terror evoke strong emotions and contradictory reactions. However, such emotions often hinder a clear understanding of the problem, leaving terrorism as a subject of ongoing discussion and analysis without full comprehension. The term "terrorism" is frequently misused, with states, especially in racist, colonial, or autocratic regimes, labeling political opponents as terrorists.

Modern terrorism is a violent behavior that generates or threatens violence to disrupt governmental and social-political systems, promoting political, ideological, or religious principles through violence. It can be classified into conventional and unconventional forms, with unconventional terrorism including the use of weapons of mass destruction.

## 1. LITERATURE REVIEW

"Terrorism" (from Latin "terroris", meaning "terror") refers to a doctrine, method, and tool used to instil fear and uncertainty in the public through the systematic use of violence. At various stages of history, terrorism has been identified as a negative phenomenon in society and can be defined as the use of violence to create a pervasive climate of fear in a population to achieve specific political objectives. The fight against terrorism has existed as long as terrorism itself, though it has recently taken on new dimensions without

achieving significant success. One reason for this lack of success may be the difficulty in reaching a consensus on defining terrorism and identifying terrorists (Brčić, 2019, pp. 58-59).

Definitions of terrorism are often complex and controversial due to the inherent violence and brutality involved. The term "terrorism" was originally coined to describe the Reign of Terror during the French Revolution from September 5, 1793, to July 27, 1794, when the Revolutionary Government employed violence and harsh measures against citizens suspected of opposing the Revolution. Conversely, popular resistance to Napoleon's invasion of the Spanish Peninsula led to the emergence of "guerrilla" warfare, derived from the Spanish word *guerra*, meaning "little war" (UN Office on Drugs and Crime, 2018). Dominique Venner, in his work "The History of Terrorism", traces the roots of terrorism back to the French Revolution when the Constituent Assembly decided to "put terror on the agenda" and enacted the "Law of Suspects." Venner argues that terrorism, as a historical phenomenon, began in the early 19th century and has expanded continually, gaining broader public recognition with the rise of media (Venner, 2005).

In her book "Terminate Terrorism", Feste explores recent anti-American terrorism crises, including the Cuban Air Force epidemic, the Tehran hostage crisis, the Beirut bombings, and Al-Qaeda attacks. She uses a conceptual framework for conflict resolution, negotiation, and interest-based negotiation, combined with shifts in decision-making strategies (Feste, 2010, p. 272).

While terrorism in historical contexts often referred to state violence against domestic enemies, since the 20th century, the term has been more commonly applied to violence aimed at governments to influence policy or overthrow regimes. Law (2016), details how the definition of terrorism has evolved, how tactics and strategies have changed, and how those who use terrorism adapt to advancements in technology, communication, and political ideology.

Some definitions view all acts of terrorism, regardless of their political motives, as mere criminal activity. For example, the FBI (2019) defines international and domestic terrorism as "violent criminal acts." However, this criminality-based approach is problematic because it fails to differentiate between various political and legal systems, and does not account for cases where violent actions against a government may be seen as legitimate. An often-cited example is the African National Congress (ANC) of South Africa, which engaged in violent actions against the apartheid government but received widespread global sympathy. Another example is the French Resistance during World War II, which fought against Nazi occupation.

## **2.METHODOLOGY**

This paper aims to highlight both the rise of terrorism and the lack of similar research in Kosovo (Maloku, 2015). Additionally, it employs the legal dogmatic method, which clarifies the accuracy of legal norms. The research builds upon various previous approaches (Maloku et al., 2021). The normative method was also utilized to examine the formal aspects of the law, such as norms and legal acts, rather than their practical applications.

The paper also incorporates the historical method to evaluate how the phenomenon of terrorism has been addressed by both historical and contemporary states. The study relies on desk research and document analysis of secondary data from published publications, reports, and legal articles. Thanks to technological advances, researchers now have access to extensive volumes of secondary data (John, 2014).

## **3. QUESTIONS FOR DISCUSSION**

In the study of the causes of terrorism, many questions have been considered that concern the community. Are there root causes of terrorism? Terrorism is a global issue, and terrorist incidents have drawn significant attention since September 11, 2001. Can we identify the causes of terrorism and reduce the number of incidents?

These are some of the questions I will attempt to answer in this paper. Additional questions addressed include: Are bureaucratic policies and corruption among the causes of terrorism? Are there individuals who commit terrorist acts without being influenced by terrorist groups?

## **4. WHAT IS TERRORISM?**

Terrorism is the use of violence to advance a goal or ideology at the expense of the general population. It can take many forms and have many causes. An attack may be rooted in religious, social, or political conflict, such as when one community is oppressed by another. Terrorism itself is not a philosophical movement but a tool used to frighten the civilian population, causing psychological fear and uncertainty (Wilkinson, 2002). Latifi and Demolli (2019) emphasize that without violence, there is no terrorism.

Terrorism is a multidimensional social phenomenon, requiring a multidisciplinary definition. It can be closely examined from the perspectives of criminology, criminal law, sociology, and other social sciences, which would enable an adequate understanding and possible resolution.

Defining terrorism remains a contentious issue, with no consensus in sight. The Criminal Code of the Republic of Kosovo defines the criminal offense of terrorism as "the commission of one or more of the

following criminal offenses with the aim of seriously intimidating the population, unjustly coercing a public body, the government, or an international organization to perform or not perform any action, or destabilizing or destroying the basic political, constitutional, economic, or social structures of the Republic of Kosovo, another state, or an international organization” (Criminal Code of Kosovo, 2019).

Kosovo has made legislative advances regarding the criminal offense of terrorism, aligning its laws with international norms. Many citizens from Kosovo have been recruited by foreign terrorist organizations, necessitating an effective state response to mitigate this risk.

At the international level, a problem arises when an individual labeled a terrorist by one segment of society is seen as an idol or freedom fighter by another segment. Therefore, it is essential to define procedures that are unacceptable and illegal within the context of a country’s criminal legislation and the international community as a whole. This means developing social awareness in all societies about the criminality of terrorism, regardless of the perpetrators’ social group. The concept of terrorism needs a universal and accepted definition, as well as international consensus, to enable all nations to develop a cohesive counter-terrorism policy that supports bilateral and multilateral goals.

Terrorism is premeditated violence against a non-combatant mass with the aim of influencing public opinion to achieve political, military, or ideological objectives. Consequently, the terms terrorist and terrorize derive their meanings from these actions. Terrorism involves committing a crime by an individual, group, or state to instill fear in people, often exceeding the actual consequences of the act. These acts target either the population or critical state departments. The causes of terrorism are often political, aiming to destabilize a society or seek revenge. Various goals have led to the establishment of different organizations that, through their political or religious messages, instill fear and panic among the population. Many political ideas have been instrumentalized by terrorist organizations to justify their actions, resulting in terrorist groups within every ideology.

Previous research suggests multiple causes of terrorism. It occurs in both poor and rich countries, regardless of their form of government. Likely, various circumstances combine to create the conditions for terrorism. However, several factors seem to increase the likelihood of terrorism occurring in a given society. Different forms of terrorism each have their own causes. More likely, any form of terrorism results from a combination of factors, including political and economic modernization and the deprivation of social structures from human rights. The political science community refers to these causes as “root causes,” direct or indirect factors that help us understand various incidents of terrorism.

This paper will discuss three categories of terrorism causes:

- Economic reasons; Political Causes; Social Causes.

## 5.ECONOMIC CAUSES

The most popular theory is that poverty causes terrorism. When people are deprived of certain resources and opportunities, poverty can create resentment and lead some to turn to terrorism to express their anger. The problem with poverty as a cause is that it encompasses a wide variety of smaller causes that contribute to what defines someone as poor. One difficulty with poverty as an explanation is that it can be challenging to quantify. Many criteria can describe poverty, such as the poverty gap or the size of the homeless population. In the Middle East, many societies still have great potential, but many citizens remain unemployed, leading to a lower standard of living. When social inequality develops, people become angry because they cannot achieve what others easily can, creating internal conflict within a region and making terrorism more likely.

Many other indicators can represent poverty, including levels of education, wealth gaps, and social inequality. The GINI Index (GINI, 2019) is a popular indicator of a country's equality. A combination of these causes contributes to the overall measure of economic stability. Many studies have concluded a strong correlation between poverty and incidents of terrorism. An interesting variant of the poverty theory is that natural disasters create opportunities for terrorism (Berrebi & Ostwald, 2013). Berrebi and Ostwald argue that natural disasters create strain and hardship within societies. For example, the floods in Pakistan in 2010 weakened the government, creating an environment where the Taliban and other terrorist organizations could operate more freely. This demonstrates that abject poverty can further terrorist activity due to the government's inability to combat it, as their resources are diverted to natural disaster relief efforts.

A final argument consistent with the poverty theory states that economic sanctions increase the possibility of terrorism. Choi and Luo (2013) argue that there is no evidence that poverty alone will increase the presence of terrorism, but other causes must be involved. When economic sanctions are imposed on a nation, economic conditions within that nation decline drastically. People placed in even worse conditions than before must find other means to support themselves (Morina, Curri, & Curri, 2023), creating fertile ground for terrorist recruitment. These organizations thrive by recruiting those who believe their only option is to rebel against the government that has failed them and driven them into poverty (Choi & Lou, 2013).

The lack of economic opportunities and slow GDP growth are strongly linked to an increase in terrorist activities. Therefore, it is the process of falling into poverty or experiencing increasing poverty that raises the likelihood of terrorism. Additionally, modernization can complicate societies to the point of vulnerability, creating situations of poverty. Within this category of economic causes are also

unemployment and social inequality. These factors can combine to create an ideal environment for the recruitment of terrorist organizations. When people in a particular area are deeply dissatisfied with their lives, they are more likely to turn to extreme measures or be persuaded to do so. All this evidence suggests that, at least initially, economic factors can be an extremely strong predictor of terrorism.

## 6. POLITICAL CAUSES

An alternative theory posits that political factors such as government repression lead to terrorism (USIP, 2014). The criteria used to measure government oppression include political rights and civil liberties. Unstable and undemocratic societies often have weak governments, causing widespread suffering. Human rights violations also fall into this category, as they result directly from government action and are considered forms of oppression. Violations such as expropriation and humiliation lead to serious citizen grievances against the government. Some studies show that terrorism has a stronger connection to social injustices perpetrated by the government than to poverty. When a government is unable to provide a basic standard of living, citizens become dissatisfied, creating an environment where terrorist organizations can recruit more individuals. It is the government's responsibility to provide essential resources such as hospitals, care, jobs, and education. Additionally, the government must ensure political freedom for its citizens.

Studies have shown that political freedom is related to terrorism. Countries in the middle of the political spectrum are more likely to experience incidents of terrorism, while free countries and authoritarian regimes face fewer terrorism issues. The period of transition from authoritarian to democratic regimes often leads to more terrorist incidents, as transitioning nations struggle to provide full freedom to their citizens, causing deficiencies in other areas.

The United Nations General Assembly, in its 1985 resolution, identified mass racism and violations of human rights as fundamental causes of terrorism. When a state shows low respect for human rights, citizens are more likely to have grievances against those in power. In response to governmental wrongdoings, some citizens may turn to terrorism. Terrorist organizations can offer their members the resources needed to fight against political injustices. Government repression, in its various forms, has been shown to contribute to the presence of terrorism.

## 7. SOCIAL CAUSES

Some other possible causes may be related to social issues. Education levels have been mentioned in several different studies, but there hasn't been much evidence to prove it as an important variable. However, it is still a good indicator of the social situation within a country. The Human Development Index includes per capita income, life expectancy and education and found that there is a correlation between terrorism and human development.

Religion is another social aspect to consider. Modern terrorism is seen to have an enormous increase in religious extremism, the scale of violence has intensified and the global reach has expanded. Religious terrorism can be defined as political, where the violence is motivated by an absolute belief that an otherworldly power has sanctioned it, or terrorist violence are ordered for the greater glory of the faith. People who participate in religious terrorism believe that every act they commit will be forgiven and possibly rewarded in the afterlife (Morina, Curri, Krasniqi, & Azemi, 2023).

There are many different forms of religious terrorism, but the most common is extremist Islam. Overall, there has been a dramatic increase in terrorism and religion in recent times, making it one of the major contributors to terrorism globally. Therefore, a country's dominant religion seems worth examining to see if it plays a role in the number of terrorist attacks. Although there doesn't seem to be much variety or abundance of research available, there were some very positive indicators that could provide some great theories.

Through all of this, I still believe that government repression is the best indicator of the presence of terrorism within a society, but that social and economic causes also play an important role.

## CONCLUSION AND RECOMMENDATIONS

Terrorism is a global issue that affects everyone, from individuals to states. It threatens the fundamental principles of national and international order, including shared values of freedom, human rights, peace, justice, security, and democracy. Terrorists derive income from various sources, including donations from non-profit organizations, online fundraising, illegal income from the occupation of territory, kidnapping for ransom, illegal sale of antiquities, narco-terrorism, and organized crime. As a transnational phenomenon, combating terrorism requires robust international legal cooperation at both regional and global levels.

Terrorism is becoming more widespread, complex, ambitious in its goals, and destructive to the protected values and freedoms of individuals worldwide. The lack of a clear and objective definition of terrorism allows for subjective classification of terrorist acts, where some perpetrators are labeled as serious

criminals while others are seen as freedom fighters or liberators. The anti-terrorist coalition underscores that terrorism is a threat not only to national security but also to the entire global security system.

Francis Bacon's assertion that "knowledge is power" highlights the necessity of the strength and power of knowledge and unity, especially when the protected democratic values of liberal democracies and the freedoms of individuals are at risk. The world must become more aware of the dangers of terrorist financing and money laundering. Effective cooperation within the anti-terrorist coalition is crucial in combating these phenomena.

Ideologues and political leaders can transfer causes from a structural to a motivational level, inspiring people to take action. Ideology, as rhetoric, serves to explain the reality of situations and encourage specific behaviours. Motivating factors can be seen as concentrated symptoms of deeper structural causes.

Structural causes, such as demographic imbalances, globalization, rapid modernization of societies in transition, growth of rootless individualism and atomization, relative deprivation, and class structure, impact people's lives in ways they may not fully understand. Facilitators, or accelerators, make terrorism possible and attractive without being the main cause. Examples include the evolution of modern news media, transportation, weapons technology, and weak territorial controls by states. Proponents of the "ecology of terrorism" thesis argue that international terrorism arises because modern circumstances have made it extremely easy to employ terrorist methods.

Precipitating causes are the direct drivers of terrorist attacks. These can be significant or provocative events, or anything else that incites revenge or action. Even peace talks can provoke opponents of political compromise to commit terrorist acts to derail discussions and undermine moderates.

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# EVALUATION OF SOME MORPHOLOGICAL PARAMETERS IN HANDBALL PLAYERS OF THE SUPER LEAGUE OF KOSOVO

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## ABSTRACT

*Handball belongs to the group of polystructural sports, with high expenditure of energy loads, which must be selected in terms of morphological and motoric parameters. The aim of this study was to evaluate some morphological parameters in handball players. A total of 93 handball players from the Kosovo Super League took part. Based on the results obtained according using Shapiro-Wilk analysis, we have normal values of the following parameters: length of the palm of the hand, endomorph type, fat mass in kilograms and fat mass percentage. The average body size in our sample is  $(183.97 \pm 7.83)$ , while the body weight is  $(84.10 \pm 13.74)$ , fat mass  $(15.4\%)$ . The average muscle mass is  $(41.36 \pm 5.63)$  kg, while the body fat mass in kg  $(12.44 \pm 7.08)$  and in percentage  $(14.12 \pm 6.04\%)$ , body BMI is  $(24.78 \pm 3.62)$ . From this we can conclude that the selection of Kosovar players is not at satisfactory levels and consequently also in other parameters more compared to other research. We believe that this happened as a result of the differences between the minimum and maximum results, this can cause a heterogeneity that occurs in different play positions.*

**Keywords:** Handball, parameters, morphological

## INTRODUCTION

Handball consists of intensive play, swift (sprints), jumps, declines, and “battles” within the official rules of the game, and, where permitted, catching, drawing, pushing and holding opponent players (Havolli, Bahtiri, Begu, Ibrani, & Makolli, 2018). Success in the team game depends on numerous external and internal factors (with regard to an individual), among which anthropological characteristics of a player have a fairly important role. Some of the most important anthropological components are, undoubtedly, the morphological characteristics of a player which are supposed to be compatible with game specific kinesiological demands. The physical demands of handball include running with and without changes of direction at speeds ranging from walking to rapid sprints, vertical jumping, various types of throwing, and direct physical contact, plus an ability to make multiple sprints at high speed. Several qualitative and quantitative studies of top-level male handball players have demonstrated that key characteristics of the successful professional include endurance capacity, sprint performance, jumping ability, and high throwing speed (Hermassi, Chelly, Tabaka, Shephard, & Chamari, 2011; Manchado, García-Ruiz, Cortell-Tormo, & Martínez, 2017). Handball players are usually classified according to their specific playing positions when attacking: goalkeepers, located in the goal, the first line made up of backs and centre backs, and the second line made up of the pivots and wings (Sibila, Mohoric, & Pori, 2010). In handball, as in other team sports, shooting a ball at the goal is the culmination of an offensive phase. The morphological characteristics of the body and motor abilities certainly have great influence on outstanding performance in handball (Sibila et al., 2010). Handball is characterized by running, jumping, blocking, catching, and throwing; even though most of the work is done with the legs, play is realized by the hands.

Success or failure depends on whether a team attains its ultimate aim: scoring a goal. There are several arguments for the efficacy of this organization, which include mechanical (derived from Newton’s Laws) and muscular aspects (a result of muscle pre-stretching or of optimal muscular coordination). According to various studies (Joris, Edwards, Van Ingen Schenau, & Kemper, 1985), the factors that determine throwing velocity are technique, coordination, and maximum explosive power of the muscles in the upper and lower body, which indicates the importance of developing training methods that improve both accuracy and throwing velocity.

According to the literature, handball in Kosovo began to be played in the early 1950’s, with modest results. The best result for Kosovar handball players recently is the qualification of the Kosovo U-21 Representation in the World Championship, which was held in Spain in 2019. Also, these players have been part of this research. Earlier in Kosovo, some partial research studies were carried out, with a specific and

mainly morphological sample. Our sample is comprehensive (includes players playing in Kosovo's elite league).

The goal was to evaluate the morphological parameters of the Kosovo Super League players.

## 1.METHODOLOGY

Ninety-three active handball players of the Kosovo super league participated in this research. The measurement of the morphological characteristics was done by a team of experts from the Center for Sports Medicine in Prishtina, while the laboratory and field tests were carried out at the "Universi College" of the Faculty of Physical Culture, Sports and Recreation, which also has new technology and a team of experts trained to measure motor and functional characteristics.

We chose a model of morphological characteristics that includes four latent dimensions: longitudinal dimensionality, transverse dimensionality, body mass dimensionality, and that of subcutaneous adipose tissue and body composition. Descriptive statistics and Shapiro-Wilk method was used to process the data with SPSS 24.

## 2. RESULTS

Based on Table 1, we have normal distribution except for the parameters, the hand length, endomorph type,

	N	Min- Max (Mean± SD)	Statis.	Df	Shapiro-Wilk p
Height	93	161.0-204.5 (183.97±7.83)	.990		93 0.699
Weight	93	59.4-118.5 (84.10±13.74)	.969		93 0.027
Skeletal muscle mass	93	27.4-53.9 (41.36±5.63)	.984		93 0.301
Ectomorf	93	-2.2-5.8 (2.28±1.58)	.889		93 0.638
Mezomorf	93	1.7-9.6 (5.27±1.51)	.989		93 0.769
Endomorf	93	2.5-7.0 (5.33±1.24)	.991		93 0.000
Wingspan	93	161.5-212.0 (186.63±9.58)	.924		93 0.595
Thigh circumference	93	47.0-74.5 (60.02±6.02)	.988		93 0.108
Hand length	93	17.1-26.0 (19.74±1.34)	.977		93 0.000
IBM	93	18.4-38.3 (24.78±3.62)	.913		93 0.009
intracellular water	93	22.5-42.9 (33.17±4.33)	.962		93 0.193
extracellular water	93	13.8-26.4 (19.63±2.71)	.981		93 0.065
Protein	93	9.7-18.5 (14.37±1.91)	.974		93 0.160
Minerale	93	3.4-6.7 (4.92±0.71)	.980		93 0.142
fat mass kg	93	2.5-47.2 (12.44±7.08)	.979		93 0.000
fat mass %	93	3.0-39.9 (14.12±6.04)	.868		93 0.000
right hand	93	2.6-5.9 (4.24±0.70)	.930		93 0.233
left hand	93	2.4-5.7 (4.17±0.69)	.982		93 0.211
right leg	93	7.7-14.4 (11.15±1.30)	.982		93 0.671
left leg	93	7.6-14.4 (11.07±1.28)	.989		93 0.682

fat mass in kilograms and fat mass percentage. We believe that happened as a result of the difference between the minimum and maximum score, and this can be understood since we are dealing with a heterogeneous sample that plays play different positions.

The average of the body height in our sample was (183.97±7.83), while the weight of the body was (84.10±13.74), if we compare these data with the results of the authors' (Chaouachi A., Brughelli M., Levin G., Boudhina N., Cronin J., Chamari K.,

□ 2009) the average body height was

about (6 cm) longer while the weight (4 kg) heavier, fat mass (15.4 %).

While among the elite Slovenian handball players, based on the authors' (Sibila M., Pori P., 2009), the average of the body height was (188.44 cm), while the weight (89.56 kg) and also the muscle mass is in favor of the Slovenian team (46.58 kg). As far as the Spanish professional league, body height was (191.6 cm) and weight (97.1 kg) (Ramos-Campo J.D. et al, 2014).

The average muscle mass was ( $41.36 \pm 5.63$  kg), while the body fat mass in kg ( $12.44 \pm 7.08$ ) and in percentage ( $14.12 \pm 6.04\%$ ), BMI in this sample is ( $24.78 \pm 3.62$ ), as well as the parameters others of body composition are very similar to the authors' publication (Ramos-Campo J. D., Sanchez M. F., Garcia E. P., Arias R. J., Cerezal B. A., Suarez J. V., Diaz J. F. J., 2014)

## **CONCLUSIONS**

The selection of Kosova players in terms of morphological parameters is not at a satisfactory level and consequently in other parameters our sample is weaker compared to the two publications mentioned above, in terms of beneficial physical characteristics for handball players. We recommend that the selection becomes more comprehensive in terms of the selection of handball players as qualitatively as possible.

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