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FOREWORD

Our journal's second issue of the year reflects a rich and diverse academic discourse: the studies presented here simultaneously revisit classical questions of administrative and ICT law and explore pressing challenges that arise from digital transformation, European Union regulation, and broader societal change. Our authors contribute fresh perspectives to the ongoing scholarly dialogue, addressing topics such as data protection, platform regulation, and the legal environment of artificial intelligence.

On behalf of the Publisher, I would like to thank our Authors for their dedication, and the members of the Editorial Board and the reviewers for accepting our invitations and for their invaluable work. Special thanks are due to the colleagues of the South Transdanubian Regional Library and Knowledge Centre, whose support is indispensable for the publication of our journal.

I wish all readers a good professional "immersion"!

Dr. Balázs Hohmann
Editor-in-Chief

ELŐSZÓ

Folyóiratunk idei második száma a sokszínű tudományos diskurzust tükrözi: a tanulmányok egyszerre nyúlnak vissza a közigazgatás és az infokommunikációs jog klasszikus kérdéseihez, és tárják fel azokat a kihívásokat, amelyek a digitális átalakulás, az európai uniós szabályozás és a társadalmi változások hatására mind sürgetőbbé válnak. Szerzőink friss nézőpontokkal járulnak hozzá a tudományos közösség párbeszédéhez, legyen szó adatvédelemről, platformszabályozásról vagy a mesterséges intelligencia jogi környezetéről.

A Kiadó nevében ezúton is köszönöm Szerzőink igyekezetét, a Szerkesztőbizottság tagjainak és a lektoroknak a felkérések elfogadását és áldozatos munkájukat. Külön köszönet illeti a Dél-dunántúli Regionális Könyvtár és Tudásközpont munkatársait, akik oly sok tekintetben nyújtanak segítséget folyóiratunk megjelentetéséhez.

Jó szakmai „merítkezést" kívánok minden Olvasónak!

Dr. Hohmann Balázs
főszerkesztő

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TOWARDS NATIONAL METHODOLOGIES FOR MEASURING CORRUPTION PERCEPTIONS

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ABSTRACT
The aim of this paper is to examine internationally used methods for measuring corruption perceptions and to draw findings and conclusions on the need for national corruption perception methodologies and how they can be aligned with international approaches. The article's findings suggest that there are a number of technical criticisms of international indicators regarding their validity, reliability and objectivity, which could be addressed by the development of a national indicator, while potentially improving aspects of the international indicator with respect to the above issues. The findings of this article are based on the results of the research and preparatory study carried out by the author in the framework of the KÖFOP-2.2.3-VEKOP-16-2016-00001 project, so-called "Capacity building and awareness raising for the increased detection and prevention of corruption cases".

KEYWORDS
Corruption, Corruption perception, Methodology, Interdepence.

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I. Introduction

The theoretical starting point for the topic under study is the idea that corruption is typically a latent phenomenon[1] embedded in the surrounding political, social, and economic environment, and therefore its assessment from official documents, statistics or other recorded sources is subject to significant limitations.[2] In line with this, the vast majority of national and international methodologies for measuring corruption focus on capturing perceptions of corruption. In order to delineate the international measurement methodologies, it is worth following the methodological division published in Debora Valentina Malito, *Measuring corruption indicators and indices* (2004), as it is considered suitable for categorising a wide range of indicators.[3]

Table 1 - *Summary table of methodologies for measuring corruption*

	Provider	Measures
Corruption survey based	European Bank for Reconstruction and Development (EBRD) & World Bank	Business Environment and Enterprise Performance Survey (BEEPS);
	Gallup International	Voice of the People Survey (VOPS);
	Global Business Media Limited	Business International Index; Corruption Experience Index
	International Budget Partnership	Open Budget Survey
	Transparency International	Corruption Perceptions Index
	Transparency International & Gallup International	Bribery perception index (BPI); Global Corruption Barometer (GCB)
(Global) **Governance Indices (II)**	European Commission	Eurobarometer
	EU ICS Research Consortium	International Crime Victimization Surveys (ICVS)
	European Values Study	European Values Study
	Freedom House	Nation in Transit (NIT)
	Global Integrity & Mo 'Ibrahim Foundation	Africa Integrity Indicators; Index of African Governance; The Corruption Notebooks; Global Integrity Index
	HIS Global Insight	Global Insight
	Institute for Management Development (IMD)	The Global Competitiveness Report (GRC)

[1] Luca Pieroni, Giorgio d'Agostino and Francesco Bartolucci, *Identifying Corruption through Latent Class Models: Evidence from Transition Economies* (MPRA Paper No 43981, 2013) 3–5.

[2] Anastasiia Shukhova and Yulii Nisnevich, *Measurement of Validity of Corruption Indices* (NRU Higher School of Economics Research Paper No 42, 2017) 3–8. https://doi.org/10.2139/ssrn.2901307

[3] Debora V Malito, *Measuring Corruption Indicators and Indices* (Robert Schuman Centre for Advanced Studies Research Paper 13, 2004) http://dx.doi.org/10.2139/ssrn.2393335

(Global) **Governance Indices (II)**	Latinobarometro Corporation	Latinobarometer
	Michigan State University	Afrobarometer
	The Political Risk Service Group	The International Country Risk Guide (ICRG)
	UNECA	Africa Governance Indicator (AGI)
	World Bank	World Governance Indicators (WGI); WB Country Policy and Institutional Assessment
	World Economic Forum	Executive Opinion Survey; World Competitiveness Yearbook; Global Competitiveness Report (GRC).
	WVS Association	World Value Survey (WVS)
State Capacity Indices (III)	Brooking institute	Index of State Weakness in the Developing World
	Brooking institute, the Institute for State Effectiveness, Institute for State Effectiveness, and the Australian National University	Sovereignty Index
	Canadian International Development Agency	Country Indicators for foreign policy project
	Centre for Global Policy, George Mason University	Political Instability Task Force
	Center for Systemic Peace and Center for Global Policy at George Mason University	State Fragility Index
	Columbia University	State Capacity Survey
	Fund for Peace, Foreign Policy	Failed States Index
	World Bank	LICUS

Source: Malito (n 3)

The first group of indicators examined by the author above is composed of survey-based indicators of corruption, typically developed in the 1990s, when the first calls for effective anti-corruption policies led to the development of a number of general and specific corruption indices or indicator systems. It should be noted here that these surveys have been criticised, in several instances in the literature, for being based on aggregated data rather than on self-reported surveys, which undermines the reliability of the indicators. In this article, it is mainly these indicators that are examined.

The second group of indicators is linked by the fact that they are based on analyses related to governance and are used to assess the performance, quality or even deficiencies of governance as a whole or of some of its components. However, some of these indicators are also survey-type, based directly on empirical survey

data. The indicators are only partially concerned with the measurement and assessment of corruption and its perception, [4] but this does not mean that the corruption-related data and sections they include are of little relevance for the indicator or for the survey topic in general. Rather, we can consider their corruption sections as a prominent aspect of each indicator that has a marked impact on overall government performance. It is important to stress, however, that the focal points and topics of the indicators are less important than their methodological solutions and, in particular, whose perceptions they measure (the public, economic actors or public administration employees) - therefore, the following will deal with the general methodological problems related to this issue.

The last group of corruption indicators consists of state capacity indices, which are mainly aimed at assessing the availability of the means of state action in relation to activities most exposed to corruption. These indices have proliferated since the 2000s, when the discourse on state capacity became a major focus of the governance debate.

II. A Critical Approach to international indicators

The critiques of international indicators are worth examining in relation to the development of national indicators because they will form one of the bases for the development of national corruption detection methodologies. Almost without exception, the literature presented here emphasises that the general methodological problem with the international indicator could be at least partially addressed by trying to remedy the problem by setting up and consistently maintaining national indicators.

In the context of indicators in this article, and taking into account the limitations of scope and the focused approach, I will analyse the general methodological gaps and problems that arise in the research related to this article not only in relation to the methodological solutions for the perception of international corruption, but also as critical observations and areas for improvement in relation to the indicators in general.

Perhaps the most relevant of these is the issue of ***conceptual clarity***. A problem that arises in the joint examination of the individual indicators is that the different methodological approaches mean different things by the individual concepts examined, and this can undermine the basis for their consistency.[5] There are already differences in the interpretation of the central concept of corruption,

[4] Toke Aidt, Jayasri Dutta and Vania Sena, 'Governance Regimes, Corruption and Growth: Theory and Evidence' (2008) 36(2) *Journal of Comparative Economics* 205–209. https://doi.org/10.1016/j.jce.2007.11.004

[5] Anja Rohwer, 'Measuring Corruption: A Comparison between Transparency International's Corruption Perceptions Index and the World Bank's Worldwide Governance Indicators' (2009) 7(3) *CESifo DICE Report* 42–52.

which, in terms of detailed methodological and survey aspects, create the possibility that indicators measuring corruption and its perception are at least partially not interpretable in relation to each other.

An excellent illustration of this is Malito's study cited above, which shows that even the two leading corruption perception methodologies, Transparency International's *Corruption Perception Index* (CPI), and the World Bank's *Control of Corruption Index*, show that organisations have somewhat different understandings of corruption and the phenomena it covers.[6]

According to Transparency International 2013, corruption is defined as "*Corruption is the abuse of entrusted power for private gain.*" which has as its core element the abuse of power and its purposefulness. [7]

By contrast, the World Bank defines corruption as "*The extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests*" which, like the definition above, emphasises private ends, but not necessarily only in relation to the abuse of power, but also situations where the exercise of public power does not actively, but by omission, reveal situations of corruption.[8] Additions are also important in this respect: in comparison to Transparency International's definition, the World Bank's interpretation also provides non-taxative examples that can shape the perception of the phenomena that are eventually interpreted as falling under corruption when creating indicators.

It should also be added that it is not only the conceptual clarity of corruption and related concepts within and between the organisations conducting the survey that is needed. The perceptions and conceptualisations of the surveyed participants about corruption and the divergence of the phenomena perceived as belonging to the scope of corruption within the framework of this conceptualisation may also cause serious methodological dilemmas, [9] which can be clarified on the basis of the different views in the literature, for example by means of information materials to assist the respondents.[10] However, this clarification may distort the participants' perceptions and perceptions of the issues under investigation and may ultimately

[6] Malito (n 3) 5-7.

[7] Transparency International, *What is Corruption?* https://www.transparency.org/en/what-is-corruption accessed 15 August 2025

[8] World Bank Data Catalog, *Control of Corruption: Estimate* https://datacatalog.worldbank.org/control-corruption-estimate-1 accessed 15 August 2025

[9] Mike Szymanski, Ivan Valdovinos and Evodio Kaltenecker, 'How Far Are We from Understanding Corruption? The Effect of Cultural Distance on Corruption Perception' (2021) 17(1) Critical Perspectives on International Business https://doi.org/10.1108/cpoib-06-2020-0079

[10] Thomas Roca, *Measuring Corruption: Perception Surveys or Victimization Surveys? Towards a Better Comprehension of Populations' Perception Mechanisms* (2011) http://dx.doi.org/10.2139/ssrn.1909860
Kokom Komalasari and Didi Saripudin, 'Integration of Anti-Corruption Education in School's Activities' (2015) 12(6) *American Journal of Applied Sciences* 445–448.

cause more problems in assessing authentic interpretations than it solves along the lines of divergent attempts to interpret corruption.

In most cases, the picture may be further clarified and the possibility of conceptual coherence may be undermined if the indicators are not considered specifically, but the interpretation of their results is considered in a broader perspective in relation to national and international organisations.[11]

The above conceptual divergence may become particularly problematic in cases where composite indicators to detect corruption are based on surveys of other indicators,[12] where some concepts may not be understood in the same way in different surveys and assessments, and where the indicator may eventually lose its conceptual clarity,[13] and this may be particularly true when indicators are based on other indicators whose methodological properties are not publicly available. Accordingly, the design of composite indicators requires a very high degree of methodological coordination on the part of the designing organisation.

The second aspect examined relates to the ***dependence of indicators***. The internal validity and credibility of an indicator is compromised if the independence of different sources cannot be guaranteed: the aggregation of several data sources may in fact include data that rely on the same survey or source to construct their own indicators. As a result, the resulting bias may not be avoided in the construction of the composite indicator. [14] The very use of a weighting system in taking the results of an indicator is a form of bias, the judgement of which depends on whether the bias can be considered methodologically justified or the result of a methodological error, without assuming that an intentional and unjustified bias has been made.

This circularity and interdependence is typically evident in the input data series of the corruption perception indicators - each indicator refers to and takes into account the values of the other indicator and as a result the indicators are at least partially disconnected from the primary data set. In themselves, the calculated correlations or referential methodologies would not imply a reduction in the credibility and validity of the indicators, and indeed, given the social science research methodologies, this is a natural solution that perception indicators using these survey and analysis methodologies rely on. However, the interdependence between indicators goes beyond this, and the results of each indicator reveal a part of what

[11] Marina D Mijatović and Dražena B Pejanović, 'The Comprehension of Corruption in Scientific Theory, International Documents of UN, EU, and Practice of Bosnia and Herzegovina' (2018) 46 *Baština* 201–209. https://doi.org/10.5937/bastina1846201M

[12] Tina Søreide, *Business Corruption: Incidence, Mechanisms, and Consequences* (Norwegian School of Economics and Business Administration 2006) 20–31.

[13] Jan Van Dijk and Fanny Klerx-Van Mierlo Indicators of corruption: further explorations of the link between corruption and implementation failure in anti-trafficking policies. *Working papers of International Victimology Institute (INTERVICT)*, 1. (2011), 15–30.

[14] Stephen F Knack, *Measuring Corruption in Eastern Europe and Central Asia: A Critique of the Cross-Country Indicators* (World Bank 2006) 13.

is implied by the methodological specificity of the indicators themselves.[15] These are independent - at least in part - from the original survey data, a kind of specific measurement error, a bias. However, the main international perception indicators presented below do not treat this phenomenon as an error and accordingly make efforts to eliminate or at least reduce the effects of bias, but simply acknowledge it. This is of great relevance for the professional, scientific evaluation and comparison of indicators, because the CPI indicator produced by Transparency International or the results of the World Bank's survey instruments, for example, typically have a major influence on the development of world economic trends and, within them, on the perception of individual states.[16] This phenomenon has been the subject of strong validity criticisms, often justified, by representatives of countries with lower scores in the ranking of the above indicators.

The large data collection resources required to construct the international indicator and the alternative provision of these resources provide a third line of criticism that can be taken into account, the ***problem of data gaps and substitutions***. A kind of resource rationalisation is at stake here, which can be partly justified from a professional point of view: international corruption perception indices, indicators and rankings, given the large geographical area, only partly use their own primary survey data, with the bulk of the input data being the results of other surveys and analyses carried out at fixed intervals.[17]

In the application of methodologies, in addition to the above, data gaps can cause problems that can greatly affect the transparency of the overall indicator and its methodology.[18] The biggest problems can arise when there are time-series data gaps for some of the factors and indicators considered and the analysts involved in developing the indicator try to make up for this by obtaining or deriving data from alternative sources, such as other indicators or each other's results.[19] And time series data gaps are likely to arise when observing the input data sets of some corruption perception indicators, because some international methodologies typically take into account more than two dozen surveys, indicators, indices and rankings when

[15] Paul G Wilhelm, 'International Validation of the Corruption Perceptions Index: Implications for Business Ethics and Entrepreneurship Education' (2002) 35(3) *Journal of Business Ethics* 177–189. https://doi.org/10.1023/A:1013882225402

[16] Omar E Hawthorne, *Do International Corruption Metrics Matter? The Impact of Transparency International's Corruption Perception Index* (Lexington Books 2015) 5–35.
Hongying Wang and James N Rosenau, 'Transparency International and Corruption as an Issue of Global Governance' (2001) 7(1) *Global Governance* 25–32. https://doi.org/10.1163/19426720-00701005
Matilda Dahl, 'How Do International Organizations Scrutinize Transforming States? The Case of Transparency International and the Baltic States' in Luis de Sousa, Barry Hindess and Peter Larmour (eds), *Governments, NGOs and Anti-Corruption* (Routledge 2008) 180–193.

[17] Pornanong Budsaratragoon and Boonlert Jitmaneeroj, 'A Critique on the Corruption Perceptions Index: An Interdisciplinary Approach' (2020) 7(1) *Socio-Economic Planning Sciences* 217–236. https://doi.org/10.1016/j.seps.2019.100768

[18] Rohwer (n 5)

[19] Christiane Arndt and Charles Oman, *Uses and Abuses of Governance Indicators* (OECD 2006) 30–45.

creating an indicator, some of which do not have time series data available to be used in all the assessments of the international indicator under study.

If it is necessary to supplement data to establish an indicator, in many cases it may not be necessary to consider whether the information that is being supplemented and taken into account is of sufficient quality, from a verifiable source and can be aggregated with other indicators. For this purpose, the literature suggests that the same set of requirements should be met for the surrogate input as for the intended original input. Thus, it is necessary that the methodology for generating the additional input data or indicator is pre-defined and published,[20] and that all its components are known or can be known.[21] If the additional data also process data from a composite indicator,[22] several surveys or other indicator systems, then the indicators, surveys and indices used to calculate and base these indicators should also meet the same requirements in terms of methodological aspects as the additional data, otherwise the content and construct validity of the indicator and the transparency of the methodology may be greatly reduced. Finally, it should be stressed that the replacement of data should not imply an expectation of an independent and impartial compilation of the original indicator, nor of a balanced approach.[23] This balance must be reflected both in the choice of the replacement and in the methodological elaboration of the aggregation.[24]

III. Critical remarks – National Solutions

In this chapter, I will analyse the feasibility of resolving the criticisms raised above by the development of national indicators, whether the development of a national indicator could provide a solution to the relevant problems.

The first of these problems I will start with the issue of conceptual clarity. In this respect, the development of national indicators seems to worsen the overall picture, since with the introduction of each new indicator, whether national or international, new conceptual interpretations may be introduced into the process of assessing the perception of corruption, which undermines the credibility of the data collected with regard to the different forms of corruption.

[20] Shukhova and Nisnevich (n 2) 3–10.

[21] Stuart C Gilman, 'To Understand and to Misunderstand How Corruption Is Measured: Academic Research and the Corruption Perception Index' (2018) 20(1) *Public Integrity* 76–82. https://doi.org/10.1080/10999922.2018.1472974

[22] Mihály Fazekas, István János Tóth and Lawrence P King, *Anatomy of Grand Corruption: A Composite Corruption Risk Index Based on Objective Data* (Corruption Research Center Budapest Working Paper No 3, 2014) 2.

[23] Staffan Andersson and Paul M Heywood, 'The Politics of Perception: Use and Abuse of Transparency International's Approach to Measuring Corruption' (2009) 57(4) *Political Studies* 746–767. https://doi.org/10.1111/j.1467-9248.2008.00758.x

[24] Kilkon Ko and Ananya Samajdar, 'Evaluation of International Corruption Indexes: Should We Believe Them or Not?' (2010) 47(3) *Social Science Journal* 508–515.

However, this is only prima facie in this case: if existing definitions are taken into account in the development of the national indicator, the use of a completely new definition can be avoided. On the other hand, it should be stressed that the creation and use of a nationally specific definition of corruption can be an important task in the development of a national indicator, as it can more accurately assess and react to the evolution of a nationally sensitive parameter of corruption. As a result, it can provide a more credible feedback on some national specificities of high latency corruption. In many respects, this is achieved by using focus group surveys to develop the conceptual framework of the national indicator, which can be used to measure back the conceptual framework of society and to design the measurement tools accordingly. However, one step should be avoided with great caution: neither in the implementation of the survey nor in the interpretation of the survey results should the data collected on the perception of corruption be confused with the characterisation of the real situation of corruption.

Several authors of the relevant literature also criticise the fact that the development of the Transparency International *Corruption Perception Indicator*, which is the most prominent of the international corruption perception indicators, and the choice of certain aspects of the methodology are not ultimately aimed at measuring the actual corruption situation or perception of corruption and thus improving it.[25] Rather, these authors see the use of corruption perception indicators, especially when coupled with aid or the justification of international economic decisions, as serving geopolitical ends and as a means for an interest group to intervene in the internal politics, power structure and even economic and social environment of a state.[26]

This point of view can be most clearly seen in William De Maria, paper titled *Measurements and markets: deconstructing the corruption perception index*, in which the author points out,[27] also in the context of the corruption perception index created by Transparency International, that the perception indexes are identified as the reality of corruption in the aid and business decision-making processes in the African developing countries he studied, according to the level of corruption in each state, as rated by organisations and interest groups he typically identifies as Western

[25] Carmen R Apaza, 'Measuring Governance and Corruption through the Worldwide Governance Indicators: Critiques, Responses, and Ongoing Scholarly Discussion' (2009) 42(1) *Political Science & Politics* 139–143. https://doi.org/10.1017/S1049096509090106

[26] William De Maria, 'Measurements and Markets: Deconstructing the Corruption Perception Index' (2008) 21(7) *International Journal of Public Sector Management* 777–785 https://doi.org/10.1108/09513550810904569

Steven Sampson, 'Diagnostics: Indicators and Transparency in the Anti-Corruption Industry' in Stephan Jansen, Eckhard Schröter and Nico Stehr (eds), *Transparenz: Multidisziplinäre Durchsichten durch Phänomene und Theorien des Undurchsichtigen* (VS Verlag für Sozialwissenschaften 2010) 97–111. https://doi.org/10.1007/978-3-531-92466-3_7

Scott V Campbell, 'Perception Is Not Reality: The FCPA, Brazil, and the Mismeasurement of Corruption' (2013) 22 *Minnesota Journal of International Law* 243, 247–281.

[27] De Maria (n 26)

economic interests. In his view, this situation is perverse because the perception index is not actually used to attribute the state of corruption, but its perception in the context under study, and generalisation and confusion of the individual aspects can cause serious social and economic disadvantages for developing countries. With regard to the methodological aspects, it finds that the index is inadequate to detect and address the relevant cultural differences in a real way, and that this is not given much attention in the development of the methodology. Moreover, the author believes that the most important aspects of the methodology are related to economic and business decision-making, and in this respect the perception of corruption of the respondents and respondents' perceptions of corruption are identified, assessed and analysed without taking into account the socio-cultural context, without which the data and contexts analysed are out of context and, in fact, uninterpretable. The author also concludes that while African governments and stakeholders contribute in good faith to the creation of indicators such as the above index, when analysing the deeper purposes of each indicator, they serve more to serve economic and geopolitical interests identified as Western, under the guise of filtering out what is falsely portrayed as a universal negative. Some authors identify this as a kind of neo-colonialist endeavour.[28]

That this is not an isolated problem for African countries is well illustrated by Muhamad Ferdy Firmansyah, *Impact of Political Institution Role to Anti-Corruption Perception Index: An Experience From Indonesia*, 2021, [29] in which he explains that the value and evolution of the national indicators considered by global corruption perception indicators, Indonesia's Indonesian Democracy Index (IDI) and Anti-Corruption Perspectives Index (Indeks Persepsi Anti-Korupsi/IPEK), are both highly dependent on the attitude of the government in power, because the content of the indices and the factors taken into account can be dynamically shaped by the choice of the statistical sample, and on the other hand, they have been interpreted differently in the past depending on whether the government in power was cooperating with or not with external interest groups.

Another line of criticism is the interpretation of the indicator results. In the review article by Erzsébet Németh and her colleagues, entitled „*The Scientific*

[28] Bill De Maria, 'Neo-Colonialism through Measurement: A Critique of the Corruption Perception Index' (2008) 4(2–3) *Critical Perspectives on International Business* 184–202. https://doi.org/10.1108/17422040810870079
Denisse R Olivari, 'Why Corruption Is Perceived to Be Higher in Poor Countries than in Richer Countries? A Critical Assessment of the Corruption Perception Index' (2013) 18(1) *Politikon* 46–48. https://doi.org/10.22151/politikon.18.4

[29] Muhamad F Firmansyah, 'Impact of Political Institution Role to Anti-Corruption Perception Index: An Experience from Indonesia' (2021) 2(1) *International Journal of Community Service & Engagement* 20–41.

Reliability of International Corruption Rankings",[30] the authors formulate a very important context for the assessment of the methods of measuring corruption, including the perception of corruption (i.e. perceptual and empirical methods and composite methods and indices partly or entirely formed from these), that the measurement system of the corruption perception indices - and this was also examined with particular reference to the Transparency International indicators - does not actually measure corruption itself with regard to a given country under study, but in many respects even these perceptual and empirical indicators do not interpret and approximate perception itself well, and elements distorting independence, impartiality and transparency can be identified in connection with the measurements. Much more radical criticisms are also voiced in the literature, with Seligson and Budsaratragoon et al. suggesting that it is wrong to draw any parallel between survey data on perceptions of corruption and the reality of corruption, based on survey data alone, because surveys only measure indirect and subjective opinions on corruption. In their view, processing this subjective and referential information in an objectified and standardised context and methodology does not give the results and the conclusions drawn from them any more credibility in terms of perceptions of corruption. [31]

This highlights the fact that conceptual clarity, the assessment and interpretation of results according to the correct conceptual framework, is a key issue in the field of corruption assessment, and that the national indicator to be developed, combining local specificities with internationally accepted concepts, can help to assess national specificities, which in many cases is more important than achieving a forcibly common conceptual web between nations.

A further good example of this is the criticism of the World Bank's governance sub-indices, which Melissa Thomas, cited above, elaborated in her 2010 study, *What Do the Worldwide Governance Indicators Measure?*. In her paper, the author notes that as policymakers and researchers increasingly focus on the impact of governance on economic development, there is a parallel and growing need to measure the quality of governance and to create indices and rankings similar to the World Bank indicators. He also points out that, while critical analyses in the literature have focused primarily on problems of bias or lack of comparability of indicators, for him it is more a question of whether indicators have '*construct validity*', i.e. whether they measure what they are intended to measure. In this context, the author argues that it is precisely in this respect that criticisms can be made, because aggregated

[30] Erzsébet Németh, Bálint Tamás Vargha and Katalin Ágnes Pályi, 'Nemzetközi korrupciós rangsorok tudományos megbízhatósága [The Scientific Reliability of International Corruption Rankings]' (2019) 3 *Hungarian Financial Review* 321–337. https://doi.org/10.35551/PSZ_2019_3_1

[31] Mitchell A Seligson, 'The Measurement and Impact of Corruption Victimization: Survey Evidence from Latin America' (2006) 34(2) *World Development* 381–404. https://doi.org/10.1016/j.worlddev.2005.03.012
Budsaratragoon and Jitmaneeroj (n 19)

questionnaires will not necessarily be suitable to measure the real level of corruption, nor even to provide an objective indicator of the perception of corruption, primarily because the data sources considered will have different concepts of corruption and related concepts, The data are not suitable for the aggregation process described above, which would allow for statistically sound findings and conclusions to be drawn from them, in the final analysis, for each country under study. Thomas's criticism is that governance and government activity and its expressions in relation to the indicators are so broad and poorly defined in a uniform way that they cannot be measured to a good approximation and therefore aggregation cannot be successful.

The next set of criticisms, to which national indicators can provide a response, relates to aggregation processes and data replication.

This is the subject of a study by Laura Langbein and Stephen Knack, also from 2010, paper *The worldwide governance indicators: six, one, or none?*,[32] in which the authors have specifically examined the validity and reliability of the World Bank's aggregate indices examined above, using factor analysis, measurement and causal analysis models. In the paper, the authors find that while the World Bank's methodological solutions were originally intended to measure various concepts of corruption control, rule of law, government effectiveness, quality of governance, political stability, and freedom of expression and accountability, and government performance towards them, but rather, they measure the same broad concept of government performance in a statistically verifiable way, with questions on specific dimensions of that concept, which is not suitable for the World Bank and the literature interpreting the indicators to draw far-reaching conclusions, e.g. for example, government efforts to reduce corruption and their impact. [33]

Although the World Bank experts have provided professional responses and reactions to the critical remarks,[34] it can be argued that the development of national indicator systems can provide an answer to the aggregation problems at the international level, since, in addition to providing a credible picture of the perception of corruption in a given country, it can also reduce the data gaps in the development of international indicators and provide them with continuous input data based on direct data collection.

[32] Laura Langbein and Stephen Knack, 'The Worldwide Governance Indicators: Six, One, or None?' (2010) 46(2) *Journal of Development Studies* 350–370. https://doi.org/10.1080/00220380902952399

[33] Gene A Brewer, Yujin Choi and Richard M Walker, 'Accountability, Corruption and Government Effectiveness in Asia: An Exploration of World Bank Governance Indicators' (2007) 8(2) *International Public Management Review* 200–217.

[34] Daniel Kaufmann, Aart Kraay and Massimo Mastruzzi, 'Response to "What Do the Worldwide Governance Indicators Measure?"' (2010) 22(1) *European Journal of Development Research* 55–58. https://doi.org/10.1057/ejdr.2009.49

Daniel Kaufmann, Aart Kraay and Massimo Mastruzzi, *Response to: "The Worldwide Governance Indicators: Six, One, or None"* (World Bank Group 2010) 4.

IV. Conclusion

The phenomenon of corruption naturally takes a latent form in all cases, and in view of this, international indicators on corruption almost invariably measure not the general or actual situation of corruption, but its social perception.

The most important problems, however, arise from this delimitation and its consistent enforcement, based on the results obtained and the literature analysed. On the one hand, the international indicators are invariably criticised for the fact that the methodologies they use do not use the same conceptual framework for certain phenomena of corruption and therefore cannot be aggregated without further correction. It should be noted that problems of conceptual identity cannot typically be rectified ex post on the basis of the data already collected and thus, if identified, may undermine the credibility of the indicator in relation to the issues under consideration.

On the other hand, the analysis carried out also identified that composite indicators are typically inputs to each other, and the resulting interdependence may not necessarily avoid the resulting bias - this was particularly evident in the Transparency International Corruption Perception Index and the World Bank Worldwide Governance Indicators.

Thirdly, it can be highlighted that not only the source of the data, but also the method of its collection is highly relevant to the validity of the data included in the indicator: in many respects, it has been identified that when the survey methodology is published, the organisations carrying out the survey work for the indicator do not disclose information on the measures taken to exclude or reduce to the minimum permissible level the distortions arising from the use of the chosen survey method. In a number of cases, it can be assumed that the failure to publicly disclose this information means that this aspect has not been assessed or has been given insufficient weight in the development of methodological considerations.

On the basis of the above experiences and conclusions, it becomes possible to delineate the aspects with regard to which the justification for the development of a national corruption perception methodology can be demonstrated, along the following lines. On the one hand, in view of the criticisms raised in relation to conceptual identity, a national corruption perception methodology may be able to provide a satisfactory synthesis: its methodology may use the internationally accepted conceptual framework of corruption to the extent necessary, but it allows for a country-specific survey and thus a more complete assessment of the perception of corruption in society. It is important to underline that the measurement of perceptions of corruption does not aim to provide an absolute measure of the state of corruption, but rather to narrow down the social perception, so "allowing" national specificities in this direction will, in my professional opinion, only improve the accuracy and credibility of the indicator.

On the other hand, the development of a well-established national indicator system can also help to improve the credibility of international indicators by

providing the possibility to use national survey results as input for international indices. This will help to reduce the number of situations where data have to be filled in, estimated, missing data bridged, which, despite all precautions, could distort the sample. In this respect, it is also advantageous to establish a national indicator and measure it over time to help us to rate a nation against itself, showing how the perception of corruption in society has changed in a given country over a given period. By comparing this with the time when the policy measures to prevent and prosecute corruption were introduced, it is possible to at least determine what social impact they had, whether there was any change in the perception of corruption among the target respondents. This could help to reduce the criticisms that arise when the reference to corruption indices is interpreted as foreign interference in a country's internal affairs.

However, in order to ensure the credibility of the national measurement methodology, a number of measures need to be taken, which can be derived from the criticisms of international indicators

Potential bias should be eliminated by preventive methods during the methodological development. A pre-defined and published methodological description is of particular relevance, and all its elements and solutions must be known or made known. This will ensure that methodological considerations remain transparent, understandable and traceable for both professional and lay audiences, and will also make the published survey results suitable for reproduction, as a test, from the sample of data surveyed at any time.

Publicity and openness ensure that the survey can be subjected to peer review at an early stage. The aspects included in the critique can be the main basis for methodological development later on, alongside other methods (e.g. focus group surveys). It is therefore advisable to make the methodology widely publicised before the surveys are carried out, even by discussing it at public events. Consistent collection and dissemination of these critical comments and a system of appropriate feedback and action can also create the possibility for flexible but deliberate changes to the methodology's specific features in response to changes in the social environment.

Every effort should be made to ensure that the input data samples of indicators considered are as far as possible based on primary data collection and do not take into account the results of other, possibly composite indicators, and that, where possible, no additional data series are used to address data gaps. Taking into account the literature, the methodologies that have been the least criticised are those that implement primary data collection, and this is not by chance: the adoption of data from other surveys always requires careful methodological consideration to avoid the problems described above. Data gaps should be addressed on the basis of prior considerations: the scope of the data collected should be based on the

methodological specifications and, if this is not feasible, the methodologists should respond by making changes and taking action where necessary.

The survey and analysis of the indicator should preferably be carried out by an independent and impartial organisation, separate from both government and economic actors, in all relevant respects - otherwise even the most robust methodology will be subject to the shadow of intended bias.

The methodology should also cover how the results can be interpreted, with what limitations, so that no conclusions can be drawn from the results that are not inferred from the survey results. In this context, it would be useful to draw up a communication code to guide the survey and the organisation carrying out the communication in terms of interpretation, and to communicate this guidance to the partners, government and social contacts involved in the methodology and in the creation of the survey, in order to encourage them to draw and publish conclusions from the survey data in accordance with the methodology, as a preventive measure.

To summarise the findings, national and international corruption perception indicators do not in fact work against each other, but mutually help to understand the complex phenomenon of corruption, and rather than favouring one or the other, the focus should be on the synergistic positive effects of their co-existence when considering the introduction of a national perception indicator.

THE ROLE OF ARTIFICIAL INTELLIGENCE IN THE IMPLEMENTATION OF ALTERNATIVE DISPUTE RESOLUTION MECHANISMS

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ABSTRACT

Alternative dispute resolution (ADR) has been gaining increasing importance in the management of legal conflicts, offering faster, more cost-effective, and cooperation-oriented solutions compared to traditional litigation. The emergence of artificial intelligence (AI) opens new perspectives in this field, particularly in mediation, where digital technologies can support both parties and mediators. This study demonstrates how AI can enhance the efficiency of mediation procedures: from processing and analysing large volumes of data, through providing information and decision support to the parties, to assisting and preparing mediators in their work. The research explores opportunities where AI, through interactive tools such as chatbots, simulations, or speech recognition systems, can improve transparency and build trust among parties, while also pointing out limitations and risks, especially in the areas of data protection, liability, and social acceptance. The paper argues that the relationship between mediation and AI is not merely a matter of technological innovation, but a systemic developmental direction that—if embedded in adequate regulatory and institutional frameworks—may contribute to the modernisation of the dispute resolution culture and its broader dissemination.

KEYWORDS

Alternative dispute resolution, Artificial intelligence, Efficiency, Transparency.

ARTICLE HISTORY

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I. Introduction

Alternative dispute resolution (ADR) is becoming increasingly popular as an alternative to litigation, as it tends to be more cost-effective, faster, and less burdened by conflicts than court proceedings. ADR encompasses mediation, arbitration, and other non-judicial mechanisms of conflict resolution. In recent years, the advent of artificial intelligence has opened new avenues for ADR, enabling more efficient and flexible methods of dispute management.

Among the arguments in favour of ADR, several can be effectively supported by AI—most notably speed and cost-efficiency.[1] This observation is based on the fact that in all domains where AI has been integrated, supporting mechanisms have emerged that fully serve these goals. The ability to process, analyse, and organise large amounts of data can significantly assist the proceedings concerned. At the same time, there are domains where the utility of AI remains limited.

The question at stake is complex: on one side stands mediation, a long-standing human need that has existed since the earliest written history—the aspiration to resolve conflicts as efficiently and peacefully as possible. The desire for peaceful solutions is universal, deeply embedded in human society and transmitted across generations.

On the other side, there is no such universal consensus on AI. Its relatively short history has already drawn the contours of a new digital order, comprehensible only to a narrow circle of experts. Many fear it, as it radically reshapes labour markets and disciplines across the sciences. For many, keeping pace with these changes and adapting to them is an impossible task, given their lack of time, resources, skills, or technological background. For this reason, AI divides societies—contrary to the essentially consensual nature of ADR. While peaceful dispute settlement has virtually no opponents, AI faces both numerous supporters and numerous detractors.[2]

The concerns raised against AI are entirely legitimate, particularly in relation to data protection, consumer rights, and liability. Beyond legal issues, in many regions the level of telecommunication or economic development is insufficient to enable people to take advantage of AI-based solutions. This is why I cannot agree with those who fully support AI solely on the grounds that it offers equal knowledge and opportunities to all. At the same time, it must be acknowledged that in certain respects AI can reduce social inequalities.

[1] Samuel D Hodge Jr, 'Is the Use of Artificial Intelligence in Alternative Dispute Resolution a Viable Option or Wishful Thinking?' (2024) 24 *Pepperdine Dispute Resolution Law Journal* 91.

[2] Ryan Abbott and Brinson S Elliott, 'Putting the Artificial Intelligence in Alternative Dispute Resolution: How AI Rules Will Become ADR Rules' (2023) (Series 2) 4(3) *Amicus Curiae* 685. https://doi.org/10.14296/ac.v4i3.5627

What is beyond doubt, however, is that it is futile to remain stuck at the question of whether AI is "good" or "bad", because in doing so, entire fields risk falling behind the rapidly advancing technological trends. Instead, it is necessary to identify those segments of mediation where AI can most effectively assist both the parties and the mediator. In short, we must take control of AI and shape it in a way that serves human purposes and channels processes into the desired direction. Accordingly, this study aims to present the ways in which AI can support the implementation of ADR mechanisms and to outline how mediation could be modernised and made more effective with its assistance.

II. The Integration of AI Solution into Mediation Procedures

AI-generated tools can assist both professionals and parties involved in gaining a clearer understanding of the legal framework and the possible outcomes of a procedure. They may also support parties in comprehending legal concepts, thereby enabling them to represent their interests more effectively during dispute resolution.[3] For example, if the parties have access to explanatory materials—including legal information, practical guidance, and educational resources—the decision-making process becomes significantly easier for them.

AI can also support mediators by offering access to structured datasets. For instance, databases categorised by case type could provide settlement rates calculated on various parameters, such as the type of legal dispute, the monetary value at stake, or the duration of pre-procedure conflicts. On the basis of such statistics, a mediator could form a comprehensive picture and develop complex strategies to specialise in certain types of cases. This would contribute to ensuring that highly specialised experts assist parties in reaching voluntary settlements, thereby encouraging a wider use of mediation.

In the following, I will examine whether AI can provide support for both the parties and the mediator during the different stages of the mediation process, and if so, in what forms and to what extent.

The first step in mediation is the written request of the parties, who jointly invite the mediator to participate in the procedure. The request must include the names and addresses (or registered seats) of the parties, the name of the mediator, the subject matter of the dispute, the language to be used, and a joint declaration that the parties wish to resolve their dispute through mediation. If only one party initiates the request, the mediator may attempt to involve the other stakeholders.

In my view, AI-based systems could already provide effective assistance at this initial stage of the procedure. For prospective parties, AI could supply detailed information about the stages of the process and how they are interconnected.

[3] John Lande, 'When AI Comes to the Table: How Tech Tools Will Change ADR' (2025) 43 *Alternatives to the High Cost of Litigation* 107 (University of Missouri Legal Studies Research Paper No 2025-25)

A chatbot,[4] in particular, could answer questions about ambiguous terms or logical relations, thereby increasing the likelihood that parties opt for this form of dispute resolution.

If appropriate data are available, AI could even recommend mediators according to their areas of expertise, professional experience, prior client satisfaction, or fees.[5] Once such an overview has been provided, there are further opportunities for harnessing AI. Before offering an automated template for the request, the system could guide the interested party through a questionnaire. This might ask whether the person has previously participated in mediation, what expectations they have of the procedure, what they anticipate from the mediator, and what they expect from the opposing party. Such preliminary surveys could provide mediators with insight into the goals, fears, and reservations of the parties. This would make it easier for the mediator to decide whether to accept the case, which could be particularly useful for mediators at the beginning of their careers.

AI may also contribute to the mental preparation of parties.[6] For example, simulation videos could familiarise them with the general atmosphere of the process.[7] The advantage of this is that parties do not only receive written information, but also gain an interactive experience of the environment. However, careful consideration is required, as such videos cannot convey empathetic gestures and non-verbal signals that may be decisive for choosing mediation. Moreover, the discrepancy between the simulated atmosphere and the actual first encounter could discourage parties. Therefore, such tools should be limited to demonstrating general aspects, such as the seating arrangement during mediation or the initial explanations provided by the mediator.[8]

[4] See: Balázs Hohmann, 'Chatbotok a kormányzati platformok szolgálatában: Alkalmazási követelmények és átláthatósági hatások [Chatbots in the Service of Governmental Platforms: Application Requirements and Transparency Effects]' (2023) 71(4) *Belügyi Szemle / Academic Journal of Internal Affairs* 691-695. https://doi.org/10.38146/BSZ.2023.4.8

[5] Emad Hussein, 'AI Meets Mediation: Shaping the Future of Dispute Resolution in a Digital World' (2025) 91(2) *Arbitration: The International Journal of Arbitration, Mediation and Dispute Management* 180-185. https://doi.org/10.54648/AMDM2025012

[6] Ashish Vaswani, Noam Shazeer, Niki Parmar, Jakob Uszkoreit, Llion Jones, Aidan N Gomez, Łukasz Kaiser and Illia Polosukhin, 'Attention Is All You Need' in Isabelle Guyon and others (eds), *Advances in Neural Information Processing Systems 30 (NeurIPS 2017)* (Curran Associates 2017) 5998

[7] David B Olawade, Ojima Z Wada, Aderonke Odetayo, Aanuoluwapo Clement David-Olawade, Fiyinfoluwa Asaolu and Judith Eberhardt, 'Enhancing Mental Health with Artificial Intelligence: Current Trends and Future Prospects' (2024) 3 *Journal of Medicine, Surgery, and Public Health* 100099 https://doi.org/10.1016/j.glmedi.2024.100099

[8] Adesina Temitayo Bello, 'Online Dispute Resolution Algorithm: The Artificial Intelligence Model as a Pinnacle' (2018) 84(2) *Arbitration: The International Journal of Arbitration, Mediation and Dispute Management* 159

AI-based systems could also serve an educational function, for instance, by identifying personality traits of participants based on their responses and recommending relaxation or focus techniques to help them remain calm and concentrate on reaching an agreement. For mediators, AI could assist with administrative aspects, such as reminding them of the statutory deadline of eight days for accepting or declining the appointment, or identifying conflicts of interest.

During the first mediation session, the mediator must explain the principles of mediation, the neutrality and impartiality of their role, confidentiality obligations, potential involvement of experts, and the costs of the process. They must also clarify that they are not judges, do not take sides, and cannot provide legal advice. If the mediator is a lawyer, notary, or legal counsel, they cannot formally countersign the settlement agreement. After receiving this information, the parties confirm in writing their decision to proceed.

At this stage, AI could again play a supportive role.[9] Prior to the meeting, it could provide explanations and answer questions, enabling parties to attend the session with clearer expectations. Through such a program, they could even submit remarks on cost-sharing arrangements before the session. The system might recommend an equal division of costs to prevent later disagreements, thereby reducing the perception of bias based on financial contributions.

During the substantive stage of the mediation, the mediator allows each party equal time to present their views and emotions without interruption. Following this, discussions—including the presentation of evidence or expert opinions—aim at reaching an agreement. If one party becomes resistant, private sessions can be held to move the process forward.

Here, too, AI could provide valuable support. For instance, a signalling system could indicate when a party's speaking time is over, thereby reducing interruptions. A speech-recognition tool could record and analyse conversations in real time, identifying shifts in emotions or demands compared to initial questionnaires. Such systems might alert the mediator to signs of stress not visible through external cues, enabling targeted interventions or suggesting breaks.

Furthermore, the system could continuously analyse the dialogue, generate question prompts for the mediator, and evaluate uploaded documents to provide outcome predictions, thus reducing the need for expert input in routine cases. Nevertheless, in areas requiring psychological or specialised assessments, AI cannot replace human expertise[10].

When drafting the settlement, AI could generate standardised templates adaptable to specific cases. Secure storage of agreements, in compliance with data

[9] John Zeleznikow, 'Using Artificial Intelligence to Provide Intelligent Dispute Resolution Support' (2021) 30(4) *Group Decision and Negotiation* 789 https://doi.org/10.1007/s10726-021-09734-1

[10] Nadia Ahmad, *"Smart Resolutions: Exploring the Role of Artificial Intelligence in Alternative Dispute Resolution,"* 73 Cleveland State Law Review 273 (2025).

protection rules, would enlarge the dataset available for further analysis, thereby improving predictive accuracy over time.

For AI to be applied in mediation in the ways outlined above, a unified system must first be established. This naturally raises the question: who should be responsible for creating and maintaining such a framework? In my view, the most suitable approach would be for state or judicial supervisory bodies to take the lead. This is justified not only by the fact that successful mediations relieve the burden on courts,[11] but also because Hungarian law already provides a basis for such integration.

According to Section 4(1) of Act LV of 2002 on Mediation, "*The Minister of Justice shall maintain a register of mediators and legal entities or partnerships employing mediators.*" Such an official registry could be directly linked to a state-administered AI application, enabling prospective parties to select the most appropriate mediator through chatbot-assisted searches based on specialisation, experience, and other criteria.

A centrally operated system would also clarify responsibility for secure data management and liability for inaccurate information provided by the application. Comparable legal frameworks already exist: for example, under Section 132/D(1) of Act LIII of 1994 on Judicial Enforcement, if the Electronic Auction System (EÁR) operated by the Hungarian Chamber of Judicial Officers (MBVK) is unavailable to users for more than 10% of the published auction period, the auction notice is deemed never to have been published. This demonstrates that legal consequences for operator errors are already recognised by legislation. The architecture of the EÁR system could serve as inspiration for developing an AI-based mediation platform.

The EÁR comprises four main components: (i) a public interface for information gathering, (ii) a registered user interface for participation in auctions, accessible only after in-person verification, (iii) authorised enforcement officers responsible for verifying data and managing user access, and (iv) the operator, who oversees technical development, maintenance, and client support.

By analogy, a mediation platform could assign registration responsibilities to authorised mediators listed in the official register, while central authorities ensure data integrity and system functionality. This layered model would combine accessibility with accountability.[12]

[11] 'AI Mediation for Reducing Court Congestion' (Cornell Journal of Law & Public Policy, 26 November 2024) https://jlpp.org/ai-mediation-for-reducing-court-congestion/ accessed 15 August 2025

[12] David L Evans, Stacy Guillon, Ralph Losey, Valdemar Washington and Laurel G Yancey, 'Dispute Resolution Enhanced: How Arbitrators and Mediators Can Harness Generative AI' (2024) 78(1) *Dispute Resolution Journal* 57

Balázs Hohmann, 'Interpretation the Concept of Transparency in the Strategic and Legislative Documents of Major Intergovernmental Organizations' (2021) 2(1) *Közigazgatási és Infokommunikációs Jogi PhD Tanulmányok (PhD Studies in Administrative and ICT Law)* 48-55. https://doi.org/10.47272/KIKPhD.2021.1.4

In practice, the publicly available interface should be hosted on an official website. Here, anyone could access the full mediator registry with search filters such as name, region, and specialisation. Interactive tools—including introductory videos and chatbot-guided explanations of the procedure—would familiarise potential users with mediation. An AI-driven search engine could instantly retrieve relevant legislation based on keywords, narrowing results with clarifying questions. Up-to-date statistics on mediation success rates, cost distributions, and other indicators could also be displayed.

For registered users, the platform could offer more advanced features. Beyond national statistics, users could access mediator-specific data such as client evaluations, settlement success rates, and fees. Requests for mediation could be completed and submitted electronically, with mediators responding via the same system.

The platform could further streamline proceedings by allowing mediators to record audio of sessions, automatically stored in the system. AI could analyse transcripts to suggest likely settlement scenarios, generate negotiation strategies, and highlight recurring issues. Users would, however, need to be explicitly informed that such predictions are based solely on statistical data and cannot account for the unique interpersonal dynamics of each case.

On the mediator's side, AI could support both practice management and case-specific tasks. For practice management, the system could provide statistics on average case duration, reasons for unsuccessful settlements, scheduling, and document organisation. It could also assist in financial optimisation by forecasting the expected number of cases based on probability modelling.

For individual cases, AI could anticipate potential escalation points based on speech analysis, suggest breaks or guiding questions, and automate drafting and scheduling follow-up sessions.

For administrators and system operators, AI would reduce the manual burden of data entry, automatically generating records and statistical reports required for official oversight.

Of course, such a system would not be without challenges. Sensitive issues arise concerning the type of advice AI may provide to parties, the reliability of predictive analytics, and the extent to which mediators should rely on automated suggestions.[13] Nevertheless, the opportunities presented by AI-supported systems—if applied with proper caution—are substantial.

[13] Ben Davies, 'Ethics in Artificial Intelligence and Alternative Dispute Resolution: Generating AI/Human Reviewed Ethical Guidelines for ADR Practitioners and the Legal Profession' (2025) 20(2) *University of Massachusetts Law Review* 149. https://doi.org/10.2139/ssrn.4972220

III. Conclusion

The growing prominence of mediation and other forms of alternative dispute resolution (ADR) clearly demonstrates society's increasing demand for faster, more peaceful, and less costly methods of conflict management. This demand has existed since ancient times and remains just as relevant today. By contrast, artificial intelligence is still a very young phenomenon, surrounded by uncertainty and concern. Nevertheless, its emergence has undeniably ushered in a new era, fundamentally reshaping the world of work, scientific disciplines, and everyday decision-making. The encounter between these two domains—traditional human-centred mediation and digital technologies—is therefore both exciting and delicate.

This study has demonstrated the multiple ways in which AI can be integrated into different stages of mediation. For parties, it can provide information, orientation, and even preliminary mental preparation. Through chatbots, interactive tools, and simulations, parties may better understand the steps of the process, gain clearer insights into their options, and thus be more willing to choose mediation. From the mediator's perspective, AI can support preparation with statistical data, issue deadline reminders, organise documents, and even detect shifts in the emotional states of the parties. These are all areas where technology accelerates and simplifies the procedure while adding valuable layers of information.

It is essential to emphasise, however, that AI has clear limitations. It cannot replicate the human gestures, empathy, and trust that lie at the heart of successful mediation. A virtual simulation or automated suggestion can only point to possible directions; it cannot replace the human relationship between mediator and parties. For this reason, AI must be seen not as a substitute but as a complement: a tool that supports but never takes full control.

A crucial question for the future is who will establish and govern the unified system within which these AI solutions can function. As argued above, it would be most appropriate for state or judicial authorities to oversee such systems, ensuring data protection, transparency, and clear accountability.[14] At the same time, it is evident that for younger generations, technology use will become second nature, and they will expect that such procedures be supported by digital tools. Failure to develop these systems now risks leaving mediation behind the broader pace of technological change in society.

In conclusion, the application of AI in mediation is not a matter of a simple "yes" or "no". Rather, the key question is how we can shape technology to serve

[14] Balázs Hohmann, 'A mesterséges intelligencia közigazgatási hatósági eljárásban való alkalmazhatósága a tisztességes eljáráshoz való jog tükrében [The Applicability of Artificial Intelligence in Administrative Authority Proceedings in Light of the Right to a Fair Trial]' in Bernát Török and Zsolt Ződi (eds), *A mesterséges intelligencia szabályozási kihívásai: Tanulmányok a mesterséges intelligencia és a jog határterületeiről [Regulatory Challenges of Artificial Intelligence: Studies on the Borderlands of AI and Law]* (Ludovika Egyetemi Kiadó 2021) 403-410.

human purposes, steering it towards supporting peaceful conflict resolution. If this can be achieved, AI may provide genuine added value: making mediation more accessible, faster, and more effective, while preserving its essential human character. The future path is not a choice between human or machine, but a partnership of human and machine, where AI provides support while the ultimate decision always remains in human hands.

THE IMPACT OF VERY LARGE ONLINE PLATFORMS ON FUNDAMENTAL RIGHTS

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ABSTRACT

Since the early 2010s, online platforms have generated most internet traffic, embedding themselves in daily life while shaping political, cultural, and economic processes. Yet profit-driven platforms, powered by opaque algorithms and advertiser-oriented business models, pose serious challenges to the protection of fundamental rights—especially freedom of expression, access to information, and privacy.

This paper analyses the impact of Very Large Online Platforms (VLOPs) on fundamental rights and examines the European Union's regulatory responses, with particular emphasis on the Digital Services Act (DSA) and proceedings under Article 66 before the European Commission. The study draws on EU legislation, public documentation of ongoing cases, and selected international and Hungarian scholarship.

Focusing on the relationship between VLOPs and freedom of expression under Article 11 of the Charter of Fundamental Rights of the European Union, the paper argues that the DSA establishes an ex ante framework for rights protection. However, in the absence of developed case law, the effectiveness of this regime remains uncertain.

KEYWORDS

VLOP, DSA, Fundamental rights, Freedom of expression.

ARTICLE HISTORY

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I. Introduction

Since the early 2010s, the overwhelming share of internet traffic has been generated by online platforms. By now it has become almost a truism that these technological innovations—simultaneously simplifying and paradoxically complicating various aspects of our lives—permeate the everyday existence of the average individual and constitute an integral part of political, cultural, and economic processes alike. The functioning of profit-oriented platforms, driven by encrypted algorithms and primarily serving advertisers, often raises serious ethical concerns and poses significant challenges to the effective enforcement of human rights. Particularly exposed in this regard are the freedoms of expression and access to information, as well as the right to privacy.

The purpose of this study is to offer a concise, though not exhaustive, examination of the operation of Very Large Online Platforms (VLOPs), whose activities risk undermining fundamental rights, and of the EU regulatory responses intended to mitigate such risks—most notably the relevant provisions of the Digital Services Act (DSA). Special attention is devoted to ongoing procedures before the European Commission under Article 66 DSA, which directly relate to the subject of this paper.

The analysis proceeds by first identifying the economic, social, and human rights-related challenges posed by online platforms, before outlining the pertinent articles of the DSA that respond to—or, in certain respects, fail to address—these issues. Within the necessarily limited scope of this paper, the focus is placed on the interplay between VLOPs and the right to freedom of expression enshrined in Article 11 of the Charter of Fundamental Rights of the European Union, together with the derivative freedom to receive information. Other highly relevant domains, such as competition law aspects addressed by the Digital Markets Act (DMA), the regulation of widely used search engines, and further fundamental rights beyond those expressly highlighted, remain outside the purview of this study.

The research draws on EU legislation—particularly the DSA—on publicly available documentation of the ongoing proceedings before the European Commission, and on a selective review of relevant foreign and Hungarian academic literature. Given that no substantial body of case law has yet developed—either before the Court of Justice of the European Union (CJEU) or within national enforcement authorities—since the entry into force of the DSA on 16 November 2022, it would be premature at this stage to draw definitive conclusions regarding the effectiveness of this ex ante fundamental rights protection regime.

II. Conceptual Clarifications

1. The Relevant Regulatory Framework: The DSA

The Digital Services Act (DSA) is a directly applicable EU regulation adopted by the European Commission, binding in all Member States. One of its defining features is the gradual application structure, under which obligations are phased in over time for the service providers concerned. Within this framework, in April 2023 the Commission for the first time designated those providers qualifying as Very Large Online Platforms (VLOPs) or Very Large Online Search Engines (VLOSEs) under the Regulation.[1] This category comprised 17 platforms and 2 search engines, to which the relevant provisions of the DSA became binding as of August 2023. From 17 February 2024, however, the Regulation has extended to all online service providers, thereby ensuring a uniform regulatory framework across the EU's digital space. The choice of a regulation—as opposed to a directive—was motivated by the aim of ensuring harmonised and coherent application of the law without Member State divergences. The DSA's primary objective is the protection of EU citizens' rights in the digital environment. Its preamble sets out guiding principles such as the establishment of a safe, predictable, and reliable online environment, the tackling of illegal content and phenomena posing societal risks, the promotion of innovation, and the effective enforcement of the Charter of Fundamental Rights.[2]

The gradual approach is reflected not only in the temporal sequencing of obligations but also in their proportionality to the size, reach, and market significance of service providers. Larger actors with broader societal impact are subject to stricter requirements, while smaller providers face lighter burdens. This is apparent in the tiered system: the mildest obligations apply to intermediary service providers, whereas the most stringent provisions—set out in Section 5, entitled "*Additional obligations for providers of very large online platforms and of very large online search engines to manage systemic risks*" [3] — apply exclusively to VLOPs and VLOSEs. Among these, of particular significance, though not examined in detail here, are the proactive, preventive (ex ante) obligations of risk assessment[4] and risk mitigation[5]. The former requires VLOPs and VLOSEs to identify, analyse, and evaluate systemic risks stemming from the design, functioning, or use of their services and related systems, at least annually, and in all cases where new functionalities or significant

[1]Digital Services Act: *Commission designates first set of Very Large Online Platforms and Search Engines* https://digital-strategy.ec.europa.eu/en/news/digital-services-act-commission-designates-first-set-very-large-online-platforms-and-search-engines accessed 15 August 2025

[2]Tamás Klein, 'Platform Regulation and the Protection of Fundamental Rights' (2024) 25(2) *Symbolon* 18–20. https://doi.org/10.46522/S.2024.02.1

Regulation (EU) 2022/2065 on a Single Market for Digital Services (Digital Services Act), recital (9)

[3] DSA art 5

[4] DSA art 34

[5] DSA art 35

modifications are introduced.[6] The latter imposes an obligation to implement reasonable, proportionate, and effective measures, which may involve adjustments to operational systems such as content moderation, recommender and advertising systems, and their underlying algorithms; user-awareness initiatives; or enhanced safeguards for children's rights, including parental control tools. [7]

2. Very large online platform

According to Article 33(4) of the DSA, Very Large Online Platforms (VLOPs) and Very Large Online Search Engines (VLOSEs) are defined as platforms "which reach an average of at least 45 million monthly active recipients of the service in the territory of the European Union." [8] From this provision it follows that these online platforms, which exceed the specified threshold of 45 million active recipients of the service, have acquired particular prominence and scale. To understand their role, however, a more detailed examination of the concept of the online platform itself is indispensable. The term "online platform" encompasses a wide range of service types and variations, which differ both in their functionalities and in the ways they are used.[9] "*Websites that connect people with other people or with resources through algorithmically driven data streams, and that have attracted a sufficiently large number of users for their societal impact to be measurable.*"[10]

This category includes platforms of various forms and sizes,[11] such as search engines (Google, Bing), social media networks (Facebook, X), marketplaces (Amazon, eBay, Alibaba), creative content providers (TikTok), app stores, blogs, and many other types of online interfaces. [12]

Despite their diversity of forms and functions, online platforms share several core features: they rely on hardware-based infrastructures; their operation is primarily

[6] Niklas Eder, 'Making systemic risk assessments work: how the DSA creates a virtuous loop to address the societal harms of content moderation' (2023) 25(7) *German Law Journal* 1–22 https://doi.org/10.1017/glj.2024.24

[7] DSA art 35(1)

[8] DSA art 33(1)

[9] Balázs Hohmann, 'A Digital Services Act és a Digital Markets Act termékekre és digitális szolgáltatásokra irányuló fogyasztói jogviszonyokat érintő rendelkezései' (2023) 12(2) In Medias Res 70. https://doi.org/10.59851/imr.12.2.4

[10] Zsolt Ződi, *Platformok, robotok és a jog* (Gondolat Kiadó 2018) 103.

[11] European Commission, 'Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Online Platforms and the Digital Single Market Opportunities and Challenges for Europe' COM (2016) 288 final, para 2

[12] OECD, *What is an "online platform"? An Introduction to Online Platforms and Their Role in the Digital Transformation* (OECD Publishing 2019) https://doi.org/10.1787/19e6a0f0-en

Patrik Zsolt Joó, 'Korkép az Online Óriásplatformok és Keresőprogramok problematikájáról' [Diagnostic Perspective on the Challenges Associated with Very Large Online Platforms and Search Engines] (2024) 5(3) Közigazgatási és Infokommunikációs Jogi PhD Tanulmányok 33–43 https://doi.org/10.47272/KIKPhD.2024.3.3

fuelled by the vast amounts of user-generated data;[13] their ownership structures are formalised according to business models; and their governance is mediated through user agreements.[14] The processes and services unfolding on a given platform are driven by code and algorithms within its operational scope—for instance, those generating Facebook's news feed, powering product recommendations in online marketplaces, or matching supply and demand.[15]

II. The Emergence and Societal Impact of Very Large Online Platforms

1. A "Springboard"

The Big Tech "titans" that fall within the VLOP–VLOSE category—Google (Alphabet), Apple, Facebook (Meta), Amazon, and Microsoft—owe much of their rise to the aftermath of the dot-com bubble of the early 2000s. Among generally informed users, it has become commonplace to assume that the dominance of these companies stems from their efficiency, technological advantage, and competence. This is true only in part. Market success is not necessarily secured by those who offer the better technology or product, but rather by those who can mobilise greater financial resources and effectively advance their interests with political decision-makers. Research by Jonathan Tepper has demonstrated that companies investing the most in lobbying activities have in certain years outperformed the S&P 500 index by as much as five percentage points annually.[16] A portion of the profits derived from the business advantages gained through lobbying is reinvested by these companies into the very same activity, thereby sustaining a self-reinforcing cycle that significantly restricts the room for manoeuvre of new or smaller market entrants.[17] The initial prime driver of their growth was often financing provided by venture capital firms. Once a critical mass had been reached, however, these companies became characterised by market-distorting and frequently unethical practices such as aggressive pricing, systematic elimination of competitors, and large-scale acquisitions. A telling example is that Alphabet has acquired 258 companies, Meta Platforms 100, and Amazon 114 to date. [18]

2. Reign

"*One of the defining characteristics of global neo-capitalism is that geopolitics, geo-economic relations, and especially their transformations exert a significant impact on the internal power*

[13] José van Dijck, Thomas Poell and Martijn de Waal, *The Platform Society: Public Values in a Connective World* (Oxford University Press 2018) 9 https://doi.org/10.1093/oso/9780190889760.001.0001
[14] Ibid.
[15] Ződi (n 10) 63
[16] Jonathan Tepper and Denise Hearn, *The Myth of Capitalism: Monopolies and the Death of Competition* (Wiley 2018) 189
[17] Joó (n 12) 39
[18] European Commission, *'List of acquisitions' https://digital-markets-act-cases.ec.europa.eu/acquisitions accessed 15 August 2025*

structures and social relations of individual nation-states."[19] This is particularly true for "digital capitalism," where the development of Big Data, algorithms, and cloud computing has enabled platform owners and their corporations—referred to in the terminology of the Digital Markets Act (DMA), [20] as "gatekeepers"—to wield unavoidable economic and political influence. [21]

According to Article 3 of the DMA, gatekeepers are „*providers of core platform services that act as an important gateway for business users to reach end users. This position enables them to leverage their competitive advantages—such as extensive access to data—across multiple areas of activity.*"[22] In the words of János Papp, they have become the "*governors of the online world*".[23]

2.1. Oligopolies

"*The majority of founders and CEOs (chief executive officers, i.e. the highest-ranking operational executives of companies) of corporations such as Amazon, Etsy, Google, or Salesforce openly espouse libertarian views. They reject taxation, which they often characterise as 'confiscatory' in nature, frequently transfer their wealth to offshore jurisdictions, and exhibit little faith either in politics or in democracy itself*"[24] "*Contemporary capitalism is characterised by oligopolies and by a state captured by the oligarchs who own them*".[25] This phenomenon is particularly visible in the United States, the world's leading economic and military power, where in many industries only one or two corporations exercise decisive influence. For instance, the soft drinks market is dominated by Coca-Cola and PepsiCo; in parcel delivery services, UPS and FedEx operate as virtually exclusive providers; and a similar level of concentration can be observed in the credit card market, where Visa and Mastercard constitute almost the sole alternatives.[26] The financial background underpinning the real economy is similarly concentrated.[27] Evidence of this is that roughly 80% of the shares of companies listed on the S&P 500 index are owned by five major institutional investors: BlackRock, Vanguard, State Street, Fidelity, and

[19] Erzsébet Szalai, *Lélek és Profitráta [Soul and Profit Rate]* (Napvilág Kiadó 2022) 72

[20] Regulation (EU) 2022/1925 of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act)

[21]Digital Markets Act: *Commission designates six gatekeepers* https://ec.europa.eu/commission/presscorner/detail/en/ip_23_4328 accessed 15 August 2025

[22] DMA para (3)

[23] János Tamás Papp, *A közösségi média platformok szabályozása a demokratikus nyilvánosság védelmében* [Regulation of social media platforms to protect the democratic public](PhD thesis, Pázmány Péter Catholic University 2021) 17

[24] Eduart Pignot, 'Who is pulling the strings in the platform economy? Accounting for the dark and unexpected sides of algorithmic control' (2023) 30 Organization 140–167. https://doi.org/10.1177/1350508420974523

[25] Zoltán Pogátsa, *A Globális elit* [The Global Elite](Kossuth Kiadó 2022) 39

[26] Pogátsa (n 25) 36

[27] Ibid. 37

JP Morgan.[28] The digital era has not brought any substantial shift towards a more balanced distribution of market power either. Global technological dominance is currently characterised by a bipolar structure: on the one hand, the so-called GAFAM corporations (Google, Amazon, Facebook, Apple, Microsoft) in the United States; and on the other, the Chinese technology giants such as Tencent, Alibaba, Baidu, and JD.com.[29] At present, the United States enjoys a significant advantage in this competition, as demonstrated by the fact that four of the world's most popular social media platforms—Facebook, Instagram, WhatsApp, and Messenger—are all owned by the American company Meta.[30] These are complemented by YouTube (owned by Google) and TikTok, the latter being the only platform under Chinese ownership. [31] The situation is further aggravated by the fact that for these corporations *"tax avoidance is not a marginal manoeuvre, but a mainstream practice."*[32] During the 2020 pandemic, when the overwhelming majority of consumers were forced into the online sphere, Amazon achieved its best financial results to date, while its CEO, Jeff Bezos, temporarily regained the position of the world's richest individual. This occurred despite the company reporting no profit—since it is officially incorporated in Ireland—and therefore incurring no corporate tax liability. According to estimates by the Tax Justice Network in 2020, large corporations and their owners avoid approximately USD 427 billion in taxes annually through tax havens and offshore structures. These practices contribute, at least in part, to *"higher prices, fewer start-up businesses, lower productivity and wages, greater income inequality, reduced investment, and the decline of small towns".* [33]

3. The Other Side of the Equation

Among the definitions set out in Article 3 of the DSA, the concept of the consumer is defined as follows: a consumer is *"any natural person who is acting for purposes which are outside his or her trade, business, craft or profession."* [34] This represents a narrow interpretation of the notion of the consumer, [35] which does not extend to entrepreneurs or companies. It should be noted that determining the scope of application of a given legal instrument is of fundamental importance, particularly in the case of complex and novel regulatory frameworks such as the DSA and the

[28] Tepper & Hearn (n 16) 202
[29] Ződi (n 10) 20
[30] Ankit Vora, '*The 20 Most Popular Social Media Platforms*' https://backlinko.com/social-media-platforms accessed 15 August 2025
[31] Joó (n 12) 37-39
[32] Pogátsa (n 25) 31
[33] Tepper & Hearn (n 16) 37
[34] DSA art 3 c)
[35] Thomas Lovolsi, 'Scope of the e-Commerce Directive 2000/31/EC of June 8, 2000' (2001) 7(3) *Columbia Journal of European Law* 473
Pierre Bourdieu, 'The Force of Law: Toward a Sociology of the Juridical Field' (1987) 38(5) *Hastings Law Journal* 814–818

DMA. This has significant implications for consumer protection, as one of its core principles is that consumers are entitled to heightened protection. The rationale is that in certain legal relationships—whether due to the nature of the service, the actual balance of power between the contracting parties, or the particular vulnerability of the consumer—the principle of equality between private parties is distorted.[36] In such an unequal relationship, the business frequently enjoys a significantly more advantageous position in asserting its interests and may unilaterally shape the legal relationship, disregarding the legitimate interests and expectations of the other party—the consumer. This problem is particularly acute in the context of digital platform services, where the operator—especially so-called gatekeepers falling within the scope of the DMA—occupies a dominant market position that enables it to determine the framework of the service without meaningful influence from either consumers or competitors. In this environment, consumers often become aware of the unfavourable nature of the terms of service only once they have already suffered disadvantages—for instance, when their rights are infringed or they incur harm as a result of the application of such terms.[37] Consider, for example, the phenomenon that more than half of the global population is compelled to use digital platforms that appear unavoidable and are deliberately structured to foster dependency. In this unequal relationship, the position of private corporations is particularly advantageous. The vulnerability of users also stems from the fact that the general terms and conditions—which define the framework of accessing the service—are often extremely lengthy and require specialised legal knowledge. As a consequence, the majority of users either do not read them, or, even if they do, they are unable to exert any meaningful influence over their content. This problem is further exacerbated by the fact that user activities on platforms—such as clicks, searches, or time spent on a page—are processed into profiles by complex and often encrypted algorithms whose operation requires a high level of technical expertise to comprehend. From the perspective of the user, therefore, the decision-making processes based on their data occur within a *"black box"*—that is, it is not clear to them why certain content appears on their screen or why other content disappears. Such opacity further deepens the asymmetry between service providers and users.[38] It must not be overlooked that Google and Facebook are fundamentally profit-oriented private corporations, operating according to their own internal rules, and deriving the overwhelming majority of their revenue from

[36] Daniel R Fischel and Stanford J Grossmann, 'Customer Protection in Futures and Securities Markets' (1984) 4(3*) Journal of Futures Markets* 273–275. https://doi.org/10.1002/fut.3990040303
Nikolett Zoványi, 'A fogyasztóvédelem történeti fejlődése és szabályozási elvei' [Historical development and regulatory principles of consumer protection] (2011) 3 *Debreceni Jogi Műhely* 71–78 https://doi.org/10.24169/DJM/2011/3/6
[37] See DSA és DMA recital (1)–(2)
Hohmann (n 9) 5
[38] Joó (n 12) 33-43

the sale of advertising.[39] At the core of their business model is not the quality of content, but rather ensuring that users spend as much time as possible on the platform and generate as many interactions (e.g. clicks) as possible. These data traces of user behaviour constitute an extremely valuable source of information for the algorithms, which process them to build precise profiles of us, thereby enabling even more targeted advertising. In essence, through the extraction of data from our activities, these companies accumulate ever deeper knowledge of our personal preferences, behavioural patterns, and the probability of our future decisions—serving the interests of advertisers and market actors, rather than our own.[40] As early as 2018, Shoshana Zuboff warned that the classical saying—*"if a service is free, then you are the product"*—no longer fully captures the reality of the digital age. In her view, users have by now ceased to be merely *"products"*; rather, they have become carriers of raw data, from which technology companies extract the essential resource—namely, personal information. These data are then processed by predictive algorithms in order to forecast how we are likely to behave, and it is this prediction that is subsequently sold.[41] Thus, the *"real product"* is no longer the user, but the predictive model built about them, which anticipates their future decisions and reactions.

III. Endangering and Protecting Fundamental Rights

1. The Fundamental Rights Protection Policy of the European Union

In the philosophy and *policy* of the European Union, the protection of fundamental rights is not merely a principle but constitutes the very foundation of the Union's functioning and identity.[42] The EU's objective is to establish a space built upon the pillars of human dignity, freedom, equality, democracy, and the rule of law, where the enforcement of fundamental rights forms an inherent component of every Union policy.[43] The primacy accorded to fundamental rights is evident in the TFEU, the TEU, and the Charter of Fundamental Rights of the European Union.

[39] Nick Srnicek, *Platform Capitalism* (Polity Press 2017) 61

[40] Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (Public Affairs 2019) 16. https://doi.org/10.1177/0049085719872928

[41] Szabolcs Diósi and Tamás Barcsi, 'The Legacy of Disciplinary Society – How Relevant is Foucault's Theory Today?' (2021) 16(1) *Évkönyv – Újvidéki Egyetem Magyar Tannyelvű Tanítóképző Folyóirata* 11–33. https://doi.org/10.18485/uns_evkonyv.2021.1

[42] Tobias Lock, 'Rights and Principles in the EU Charter of Fundamental Rights' (2019) 56(5) *Common Market Law Review* https://doi.org/10.54648/COLA2019100

[43] Divin de Buffalo Irakiza, 'The Charter of Fundamental Rights, the Aims of EU Competition Law and Data Protection: Time to Level the Playing Field' (2021) *Singapore Journal of Legal Studies* 39–55

The latter provides the primary reference point for the human rights dimension of the DSA.[44] Article 34 of the DSA enumerates acts of systemic risk of particular significance, together with their actual and potential negative impacts. Providers' risk assessments must cover, inter alia, the dissemination of illegal content through their services, the actual or foreseeable negative effects on civic discourse, democratic electoral processes, and public security, as well as serious adverse consequences for physical and mental well-being.[45]

In addition, systemic risks also encompass, as expressly highlighted in Article 34(b) DSA, the potential impairment of fundamental rights enshrined in the Charter: *"the actual or foreseeable negative effects on the exercise of fundamental rights, with particular regard to the fundamental right to human dignity, as enshrined in Article 1 of the Charter; the fundamental right to respect for private and family life, as enshrined in Article 7 of the Charter; the fundamental right to the protection of personal data, as enshrined in Article 8 of the Charter; the fundamental right to freedom of expression and of information, as enshrined in Article 11 of the Charter—including the freedom and pluralism of the media; the fundamental right to non-discrimination, as enshrined in Article 21 of the Charter; the fundamental right to the protection of the rights of the child, as enshrined in Article 24 of the Charter; and the fundamental right to a high level of consumer protection, as enshrined in Article 38 of the Charter."*[46]

Among these, the freedom of expression and information, as a fundamental right, will be the focus of the subsequent analysis.

2. Freedom of Expression

Freedom of expression, as a *mother right*, is enshrined in Article 11 of the Charter of Fundamental Rights of the European Union, under Title II on Freedoms:
(1) *"Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers."*
(2) *"The freedom and pluralism of the media shall be respected".*[47]
This fundamental right guarantees access to, collection, creation, dissemination, and sharing of information of public interest. Its core function lies in enabling the scrutiny of public power, the transparency of public institutions,[48] and the public

[44] Tamás Klein, 'A DSA alapjogvédelmi mechanizmusa, mint alkotmányjogi nóvum' in András Koltay, Tamás Szikora and András Lapsánszky (eds), *A vadnyugat vége? Tanulmányok az Európai Unió platformszabályozásáról* (ORAC 2024) 275. https://doi.org/10.59851/9789632586328_13
[45] DSA art 34 a)-d)
[46] DSA art 34. b)
[47] Charter of Fundamental Rights of the European Union [2016] OJ C202/2)
[48] Balázs Hohmann, 'The Interpretation of Transparency from the Legal Point of View' in Tamás Haffner (ed), *IV. Fiatalok Európában Konferencia – Tanulmánykötet* [IV Youth in Europe Conference - Proceedings](Sopianae Kulturális Egyesület 2018) 155–158.

confrontation of opinions, thereby ensuring that individuals can form well-founded views, remain adequately informed, and participate in democratic processes.[49] Essential to this is the possibility of diverse and multifaceted approaches to any issue,[50] as well as the cultivation and preservation of a culture of tolerance and constructive debate among individuals of different worldviews, political orientations, and economic interests.[51]

The effective realization of the guarantees contained in Article 11 of the Charter, however, is impeded by several phenomena. The subsequent subsections provide a concise, thought-provoking overview—leaving detailed elaboration to a future study—of three such challenges: entrapment within personalized publicity spheres, the opacity of overwhelming information flows, and the hidden deletion mechanisms employed by online content providers (commonly referred to as *shadowbanning*), with references to the relevant provisions of the DSA.

2.1. „Echo Chambers"

Cass Sunstein warned more than a decade ago about the phenomenon of so-called *"echo chambers"*, which significantly undermine the diversity of public discourse and the very foundations of a constructive culture of debate. In such a structure, users—often without being aware of it—are predominantly exposed to content and individuals who share similar worldviews. The resulting homogeneous informational environment, over time, erodes meaningful dialogue between communities with differing opinions, leading to the fragmentation of the online sphere along ideological and interest-based lines, a process commonly referred to as *"cyber-balkanization"*.[52]

This dynamic deepens ideological divides and increasingly subjects public debate to polarization and targeted propaganda. In response, and in the spirit of promoting greater transparency and accountability in digital services, certain provisions of the DSA seek to mitigate this trend. Article 25 explicitly prohibits the deception and manipulation of users, mandating that digital environments must support free and informed decision-making.[53] Article 38, moreover, obliges platforms to provide at least one recommender system option that does not rely on profiling.[54] This measure may serve as an important step toward exposing users to a plurality of

[49] Mihály Gálik and Gábor Polyák, *Médiaszabályozás* [Media Regulation] (Libri 2005) 58
[50] Charter of Fundamental Rights of the European Union art 11 (2)
[51] Kinga Sorbán, & Koltay András, 'Az új média és a szólásszabadság - A nyilvánosság alkotmányos alapjainak újragondolása' (2019) 8(2) *In Medias Res* 381-384.
[52] Cass Sunstein, *Republic.com 2.0* (Princeton University Press 2009) 11; Cass Sunstein, *#Republic: Divided Democracy in the Age of Social Media* (Princeton University Press 2017)
[53] DSA art 25
[54] DSA art 38

perspectives, thereby reducing the distorting effects of algorithmically amplified opinion bubbles and echo chambers.

2.2. Too Much Noise

According to 2024 data, 62.3% of the world's population uses social media, with an average daily usage of 2 hours and 23 minutes.[55] The ownership of such platforms entails not only enormous social responsibility but also significant difficulties, particularly regarding the issue of under- or over-regulation. This dilemma is often framed as the near-intractable conflict between *free reach* and *free speech*. The problem with under-regulation is that unlawful content can reach mass audiences, while *over-filtering* may result in the removal of lawful yet sensitive or controversial content, thereby tipping the balance of public discourse.[56] As has been asked, *"What is the quality and quantity of news to which users of social media platforms are actually exposed?".* [57]

It is one thing to ensure free access to information, but the average user is not primarily affected by constructive, cultural, or informational content—such as official reports or corporate filings—that would promote a foundation for reasoned debate. Rather, the decisive influence comes from the personalized feeds through which most users encounter political, economic, and ideological content. The *quality* of what appears in these feeds thus acquires a society-shaping significance. Yet, much of the content available on social media is comparable to junk food: watching or reading it is akin to the consumption of chips or other empty-calorie products. As some observers have bluntly put it, *"the overwhelming majority of the internet is garbage",*[58] — or, more politely, *noise* — that pollutes the mind and consciousness of its consumers. If one accepts the hypothesis that all forms of input—food, conversation, as well as the content we read or watch—constitute a kind of "nourishment," then the uncontrolled consumption of unfiltered, stimulus-driven content without awareness or reflection may itself be considered a systemic risk. Indeed, under Article 34(1)(d) DSA, this could reasonably fall within the category of *public health* risks. One of the most persistent and troubling social developments of the past decade in the Western world has been the rise of enduring dissatisfaction, the weakening of social cohesion, alienation, attention disorders, and distorted self-perception. At the same time, there has been a significant increase in stress-related

[55] Dave Chaffey, '*Global Social Media Statistics Research Summary*' https://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/ accessed 15 August 2025

[56] Heather Tillewein, Keely Mohon-Doyle and Destiny Cox, 'A Critical Discourse Analysis of Sexual Violence Survivors and Censorship on the Social Media Platform TikTok' (2024) *Archives of Sexual Behavior* 1–10. https://doi.org/10.1007/s10508-024-02987-2

[57] Csenge Halász, 'Alapjogok a közösségi médiában, avagy a véleménynyilvánítási szabadság és a tovatűnő magánélet nyomában' [Fundamental rights in social media, or in the wake of freedom of expression and privacy] (2021) 2(1) *Közigazgatástudomány* 6 https://doi.org/10.54200/kt.v1i2.20

[58] Ződi Zsolt, '*Közösségi média és manipuláció*' [Social media and manipulation] https://www.youtube.com/watch?v=grHo5vyc51s&t=963s accessed 15 August 2025

psychological and physical illnesses such as burnout and depression.[59] Although several provisions of the DSA undoubtedly mark progress in the regulation of the digital sphere, the legislation—likely in its attempt to strike a balance between under- and over-regulation—appears to have thus far overlooked the crucial issue of how the *quality* of platform content impacts users' mental health.

2.3. „Shadowbanning"

Restrictions on freedom of expression—even when justified in certain cases, such as in relation to hate speech, the promotion of terrorism, or the protection of minors—raise serious concerns, particularly when digital platform operators can unilaterally filter out opinions that deviate from the *mainstream*. Such censorship may not only occur in overt forms but also through covert mechanisms—such as *shadow banning*—whereby the reach of a user's content is reduced without their knowledge.[60] Prior to the entry into force of Article 17 DSA, for example, Facebook was under no obligation to notify users either in advance or retrospectively about the removal of their content or the suspension of their accounts. As a result, the platform could take decisions not only without justification but also without offering affected users any possibility of redress—even before such measures were enforced. This practice is particularly problematic given that an ever-growing share of both public and private communication takes place in digital spaces, meaning that such interventions may in practice restrict the fundamental right to freedom of expression.[61] The DSA, however, has introduced significant changes in this regard. Under Article 17, hosting providers are required to provide clear and detailed reasoning for any measure—such as the restriction of visibility, removal of content, down-ranking, suspension or termination of accounts, services, or payments—that affects users.[62]. Such reasoning must specify why the relevant content is considered unlawful or in what way it violates the platform's terms of service. Furthermore, Article 20 requires providers to offer easily accessible, free, and electronic complaint-handling and redress mechanisms that do not rely on automated decision-making—a particularly important step forward compared to previous practices.[63] In addition, Article 13 stipulates that providers established outside the

[59] Fazida Karim and others, 'Social Media Use and Its Connection to Mental Health: A Systematic Review' (2020) 12(6) Cureus 3 https://doi.org/10.7759/cureus.8627

[60] Geoffrey A Fowler, '*Shadowbanning is Real: Here's How You End Up Muted by Social Media*' *Washington Post* (27 December 2022) https://www.washingtonpost.com/technology/2022/12/27/shadowban/ accessed 15 August 2025

[61] Halász (n 57) 6

[62] DSA art 17

[63] DSA art 20

EU must appoint legal representatives within the Union, thereby ensuring that users residing in Member States have access to effective and enforceable remedies.[64]

IV. Implementation and Enforcement

1. Proceedings of the European Commission

In the context of ex-ante obligations, the European Commission and the national authorities—particularly the Digital Services Coordinators—play a pivotal role. Ensuring compliance with the rules depends on the effectiveness of supervisory mechanisms over platform providers, as well as on the comprehensiveness of monitoring and assessing safeguards for the protection of fundamental rights.[65] Articles 51 and 56 of the DSA define the allocation of competences in this regard. Pursuant to these provisions, the powers of the Digital Services Coordinators do not extend to the oversight of risk management and crisis response measures of very large online platforms and very large online search engines—these fall exclusively within the supervisory remit of the Commission.[66] The Commission thus occupies a central role in ensuring that these providers fully comply with their obligations under the DSA to carry out prior risk assessments and risk mitigation measures.

Article 66 empowers the Commission to initiate proceedings where there are reasonable grounds to suspect a breach of the rules. Such proceedings may also be triggered by national coordinators if they uncover evidence of a systemic infringement. In the course of these proceedings, the Commission may directly examine the adequacy of providers' risk assessments and, under Article 67, request information concerning, inter alia, algorithms, risk analyses, and internal processes. These data are essential for assessing compliance.[67] Pursuant to Article 69, the Commission is further entitled to carry out on-site inspections, including with the involvement of national coordinators. During such inspections, the Commission may request access to business operations, technical systems, algorithms, and databases, thereby supporting compliance monitoring and the detection of potential infringements.[68]

In urgent cases, Article 70 allows the Commission to adopt interim measures designed to prevent further harm and ensure immediate protection of fundamental rights.[69] Providers may also submit voluntary commitments to achieve compliance,

[64] DSA art 13

[65] Joris van Hoboken, João Pedro Quintais, Natalie Appelman, Ronan Fahy, Ivana Buri and Mathias Straub, *Putting the DSA into Practice: Enforcement, Access to Justice and Global Implications* (Amsterdam Law School Research Paper 2023/13, 17 February 2023) https://doi.org/10.17176/20230208-093135-0

[66] DSA art 51–56

[67] DSA art 67

[68] DSA art 69

[69] DSA art 70

which the Commission may render binding if deemed suitable to guarantee adherence to the rules. Should such commitments not be fulfilled, or if circumstances change, new proceedings may be launched. This mechanism incentivises providers to react proactively to regulatory expectations and to develop their own compliance solutions, thereby strengthening cooperation with the Commission.

Under Article 72, the Commission may continuously monitor the implementation of the Regulation, requesting access to algorithms and databases, and relying on external experts where necessary. If a provider persistently breaches its obligations,[70] Article 75 provides for enhanced supervision, under which the Commission exercises approval powers over remedial action plans and closely monitors their implementation.[71] Article 73 enables the Commission to formally determine that a provider has violated its obligations, thereby obliging it to take further compliance steps.[72] Where such steps are not taken, Article 74 permits the imposition of fines of up to 6% of the provider's annual global turnover.[73] Moreover, Article 76 equips the Commission with an additional tool in the form of daily penalty payments, particularly where providers fail to meet their risk assessment and mitigation obligations.[74]

Beyond these supervisory mechanisms under the DSA, nothing in principle prevents affected individuals from pursuing independent judicial remedies in cases involving fundamental rights violations.[75] In such proceedings, they may invoke that the provider was subject to ex ante fundamental rights protection obligations under the DSA framework.

2. Cases Pending under Article 66 DSA

From August 2023 onward, providers classified as Very Large Online Platforms (VLOPs) and Very Large Online Search Engines (VLOSEs) have been required to fully comply with relevant DSA obligations. Since then, the European Commission has exercised its right under *Article 67* to request information from multiple platform providers—cases that have almost invariably involved their **ex-ante risk obligations**. Moreover, the Commission has initiated formal proceedings under *Article 66*. According to the Commission's publicly available communications and press releases, four particularly relevant cases—initiated after the DSA took effect—stand out:

[70] DSA art 72
[71] DSA art 75
[72] DSA art 73
[73] DSA art 74
[74] DSA art 76
[75] Fruzsina Gárdos-Orosz and Renáta Bedő, 'Az alapvető jogok érvényesítése a magánjogi jogviták során' (2018) 2 *Alkotmánybírósági Szemle* 3–10
Klein (n 2) 270.

2.1 X

On 13 October 2023, the European Commission submitted a request for information to the platform X (formerly Twitter), as suspicions arose that it might have played a role in the dissemination of illegal content—particularly material containing terrorism, violence, and hate speech—as well as disinformation.[76] Subsequently, on 18 December 2023, the Commission initiated proceedings under Article 66 of the DSA in connection with the unlawful content disseminated on X following Hamas' terrorist attacks against Israel. The proceedings focused on X's risk assessment and risk mitigation practices, as well as on the functioning of the Union's notice-and-action mechanisms regarding illegal content. The investigation also examined the extent and nature of the resources the platform devotes to content moderation. On 8 May 2024, the Commission issued a further request for information, seeking additional details concerning X's moderation activities, its capacities, as well as the Union-level risk assessment related to the use of generative artificial intelligence,[77] and other issues connected to the proceedings.

Finally, in July 2024, the Commission published its preliminary assessment, according to which X had violated the provisions of the DSA in several respects, including the prohibition of dark patterns, the transparency of advertising, and researchers' access to data. Although the preliminary investigation did not establish a violation of fundamental rights, the Commission considered that the ex ante obligations—particularly the measures aimed at identifying and mitigating risks—did not comply with the requirements of the DSA in the areas under review.

2.2 TikTok

On 19 October 2023, the European Commission submitted a formal request for information to the provider of TikTok, in light of suspicions that the platform was being used for the dissemination of illegal content and disinformation. The request particularly concerned content of a terrorist or violent nature, as well as material qualifying as hate speech.[78] Following this request, on 19 February 2024, the Commission initiated proceedings pursuant to Article 66 of the DSA.

[76] European Commission, *'Commission sends request for information to X under the Digital Services Act'* https://ec.europa.eu/commission/presscorner/detail/hu/ip_23_4953 accessed 15 August 2025

[77] Balázs Hohmann, 'A mesterséges intelligencia közigazgatási hatósági eljárásban való alkalmazhatósága a tisztességes eljáráshoz való jog tükrében [The Applicability of Artificial Intelligence in Administrative Authority Proceedings in Light of the Right to a Fair Trial]' in Bernát Török and Zsolt Ződi (eds), A mesterséges intelligencia szabályozási kihívásai: Tanulmányok a mesterséges intelligencia és a jog határterületeiről [Regulatory Challenges of Artificial Intelligence: Studies on the Borderlands of AI and Law] (Ludovika Egyetemi Kiadó 2021) 403.

[78] European Commission, *'Commission sends request for information to TikTok under the Digital Services Act'* https://digital-strategy.ec.europa.eu/en/news/commission-sends-request-information-tiktok-under-digital-services-act accessed 15 August 2025

The proceedings focused on several key areas. First, the protection of minors was of particular importance in the case of TikTok, given that a significant proportion of its user base consists of underage individuals. In addition, the Commission is examining compliance with the requirements on advertising transparency, as well as the extent to which the platform ensures researchers' access to data—an essential condition for monitoring and scientifically analysing the societal impact of the service.

Further issues under investigation include the addictive, attention-optimised design features of the platform, and the related identification and adequate mitigation of risks posed by harmful content. The Commission is assessing to what extent TikTok complies with its ex ante obligations under the DSA in these respects, with particular regard to the functioning of its risk assessment and risk mitigation mechanisms.[79]

2.3. Meta és Snapchat

On 10 November 2023, the European Commission submitted a request for information to Meta and Snapchat, seeking clarification on the risk assessment procedures and risk mitigation measures they apply to protect underage users, who are particularly vulnerable in the online environment. The request focused primarily on risks to mental and physical health, especially those arising from the use of these platforms by minors. The Commission examined the extent to which the providers—particularly Meta—comply with their ex ante obligations under the Digital Services Act (DSA).

A key consideration was the assessment of whether the business models, operational mechanisms, and content recommender systems of these platforms contribute to the emergence of risks, and what protective measures have been implemented to safeguard young users.[80] Following this request, on 10 May 2024, the Commission formally initiated proceedings under Article 66 of the DSA against Meta. The proceedings centre on the company's measures targeting, or indirectly affecting, minors, as well as its business model, which, according to the Commission's preliminary findings, may have a potentially negative impact on the well-being of young users. [81]

[79] European Commission, '*Commission opens formal proceedings against TikTok under the Digital Services Act*' https://digital-strategy.ec.europa.eu/en/news/commission-opens-formal-proceedings-against-tiktok-under-digital-services-act accessed 15 August 2025

[80] European Commission, '*Commission sends request for information to Meta and Snap under the Digital Services Act*' https://digital-strategy.ec.europa.eu/en/news/commission-sends-requests-information-meta-and-snap-under-digital-services-act accessed 15 August 2025

[81] European Commission, '*Commission opens formal proceedings against Meta under the Digital Services Act related to the protection of minors on Facebook and Instagram*' https://digital-strategy.ec.europa.eu/en/news/commission-opens-formal-proceedings-against-meta-under-digital-services-act-related-protection accessed 15 August 2025

2.4 TikTok, Snapchat, Youtube

On 2 October 2024, the European Commission submitted a request for information to TikTok, Snapchat, and YouTube concerning the design and functioning of their recommender systems. The request covered, inter alia, the impact of such systems on users' mental health and the measures implemented to curb the dissemination of harmful content.[82] Subsequently, on 29 November 2024, the Commission issued a further request for information to TikTok, inquiring into the platform's handling of risks related to the manipulation of user-generated content. This follow-up request focused in particular on the detection of systemic abuses, risks stemming from recommender systems, and structural threats to electoral processes.[83]

V. Conclusion

In addition to distorting free economic competition in the online sphere, the dominant platforms pose significant risks to consumer vulnerability and mental health, as well as to the fundamental rights underpinning the entire European Union. In partial response to these challenges, the DSA introduced, among its most important innovations, two new categories of platforms subject to enhanced obligations: the Very Large Online Platform (VLOP) and the Very Large Online Search Engine (VLOSE).[84] Moreover, one of the key advantages of the ex ante regulatory mechanisms introduced by the DSA—such as risk assessment and risk mitigation—is that they aim to address problems proactively, before they materialize. This is particularly important in the online environment, where the speed and scale of the dissemination of infringements far exceed those of traditional offline problems. Providers of very large online platforms and very large online search engines, as designated by the European Commission on the basis of their size and popularity, are obliged to conduct regular risk assessments in order to identify systemic risks to fundamental rights. They are further required to review such assessments periodically, including whenever they intend to introduce a new feature or service element that could significantly affect such risks on the European market.

[82] European Commission, '*Commission sends requests for information to YouTube, Snapchat, and TikTok on recommender systems under the Digital Services Act*' https://digital-strategy.ec.europa.eu/en/news/commission-sends-requests-information-youtube-snapchat-and-tiktok-recommender-systems-under-digital accessed 15 August 2025

[83] European Commission, '*Commission sends additional request for information to TikTok under the Digital Services Act*' https://digital-strategy.ec.europa.eu/en/news/commission-sends-additional-request-information-tiktok-under-digital-services-act accessed 15 August 2025

[84] Kelemen Bence Kis and others, 'Is There Anything New Under the Sun? A Glance at the Digital Services Act and the Digital Markets Act from the Perspective of Digitalisation in the EU' (2023) 19(1) *Croatian Yearbook of European Law and Policy* 225–248 https://doi.org/10.3935/cyelp.19.2023.542

The Regulation also provides a partial solution to profiling—though it remains to be seen to what extent users will exercise these rights—and renders previously inaccessible overseas tech giants more accountable to the European legal framework. At the same time, through consistent and predictable enforcement, the European Commission can incentivize providers to comply voluntarily with the Regulation, even in the absence of direct supervisory measures. This is due to the credible prospect that non-compliance may result in formal requests for information and, ultimately, proceedings under Article 66 DSA.

In the long term, this process may ensure that European fundamental rights protection principles are structurally embedded into providers' operations, including the algorithms and service mechanisms they deploy. Nevertheless, one must acknowledge the limitations of this framework: it cannot provide solutions for every scenario, due to both the particular characteristics of fundamental rights infringements and the inherent unpredictability of the future. In my view, while the Regulation clearly recognises many of the core challenges, it has yet to offer an adequate response to the torrent of online content that intoxicates awareness, fuels polarization, and undermines common ground—problems that spread virally across digital platforms. The actual effectiveness of the cited provisions and regulatory instruments will only become clear in practice. Several proceedings are currently pending before the Commission, the outcomes of which will provide further lessons; however, these will be the subject of a separate study.

ARTIFICIAL INTELLIGENCE IN PUBLIC ADMINISTRATION: OPPORTUNITIES AND CHALLENGES IN THE HUNGARIAN CONTEXT

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ABSTRACT

This study explores the transformative role of artificial intelligence in public administration, with particular regard to Hungarian conditions. While AI offers efficiency, transparency, and improved citizen engagement, challenges arise from digital inequality, infrastructural disparities, and data protection concerns. The analysis stresses that AI should supplement rather than replace human judgment, requiring ethical, transparent, and citizen-centred implementation tailored to Hungary's specific context.

KEYWORDS

Artificial intelligence, Public administration, Data protection.

ARTICLE HISTORY

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I. Introduction

The expansion of information technology has profoundly reshaped the functioning of public administration. Whereas administrative procedures once relied predominantly on face-to-face interaction and paper-based documentation, the spread of digital solutions has enabled the introduction of electronic registries, networked communication, and automated procedures. Information technology has thus become more than a mere technical tool; it represents a driving force of structural transformation, affecting everything from citizen–government interactions to the internal organization of administrative bodies.[1] Digitalized public administration is increasingly moving towards the model of the "service-oriented state," where simplicity, efficiency, and transparency are paramount. Contemporary administrative systems are no longer determined solely by legal regulation, but are also shaped by data science, user experience design, and system integration. Achieving these goals requires continuous investment in digital infrastructure, the establishment of interoperability across registries and platforms, and the consistent enforcement of data protection and cybersecurity standards.[2]

IT-based solutions now provide opportunities for advanced decision support, as well as for the application of artificial intelligence and Big Data technologies,[3] enabling public institutions to respond more rapidly and accurately to societal and economic changes. In this context, intelligent client-facing systems such as e-government portals, chatbots, and online appointment platforms have emerged.[4] These tools not only enhance citizen satisfaction, but also alleviate the administrative burden on civil servants, allowing them to devote more attention to complex tasks that require human judgment. Technological change is occurring both horizontally and vertically: information systems are being embedded across all levels of public administration, from ministries to local municipalities. As a result, digital literacy and IT competence have become essential requirements in the civil service, as they are indispensable to the effective and modern operation of administrative bodies.[5] It is equally important to note that technological progress is

[1] Seok-Jin Eom and Jooho Lee, 'Digital Government Transformation in Turbulent Times: Responses, Challenges, and Future Direction' (2022) 39 *Government Information Quarterly* 101690 https://doi.org/10.1016/j.giq.2022.101690

[2] Karen Yeung, 'The New Public Analytics as an Emerging Paradigm in Public Sector Administration' (2023) 27(2) *Tilburg Law Review* 1–10 https://doi.org/10.5334/tilr.303

[3] Helen Margetts, Cosmina Dorobantu and Jonathan Bright, 'How to Build Progressive Public Services with Data Science and Artificial Intelligence' (2024) 95(4) *The Political Quarterly* 653–662 https://doi.org/10.1111/1467-923X.13448

[4] Zeynep Engin, Jon Crowcroft, David J Hand és Philip Treleaven, 'The Algorithmic State Architecture (ASA): An Integrated Framework for AI-Enabled Government' (2025) *arXiv* preprint arXiv:2503.08725 https://doi.org/10.48550/arXiv.2503.08725

[5] Balázs Benjámin Budai, Gábor Bozsó, Sándor Csuhai and István Tózsa, 'Digital literacy and the capability to manage e-government in today's Hungary' (2024) 14(6) *Regional Statistics* 1–27 https://doi.org/10.15196/RS140608

transforming the very nature of the relationship between public authorities and citizens. Communication is increasingly real-time and interactive: through social media, open data initiatives, and online complaint platforms, citizens are no longer passive recipients of administrative services but are becoming active participants in the shaping of public processes.[6]

In light of these developments, this study investigates the opportunities and risks of integrating artificial intelligence into public administration, with particular attention to Hungarian circumstances. The analysis highlights how AI can enhance efficiency, transparency, and citizen engagement, while also exposing challenges such as digital inequality, infrastructural disparities, and data protection concerns. It argues that AI should serve as a supplementary tool rather than a replacement for human judgment, and that its successful application requires ethically sound, transparent, and citizen-centred implementation adapted to the Hungarian context.

II. The Challenges of Administrative Digitalisation

The development of electronic government undoubtedly brings a wide range of benefits, such as faster case management, greater transparency,[7] and improved cost-efficiency. Nevertheless, digitalisation is not without its drawbacks, which manifest at legal, technological, social, and organisational levels. From the perspective of this study, it is essential to review the most pressing challenges, as these constitute the environment into which artificial intelligence applications must be introduced.

1. Digital inequality

Digital inequality refers to the uneven access of individuals, communities, or regions to AI-based technologies and digital public services.[8] The central concern is that certain social groups—particularly the elderly, those with lower educational attainment, or those who are otherwise digitally disadvantaged—lack the ability to use electronic services effectively. This creates a risk of digital exclusion, which directly contradicts the principle of equal access to public administration.[9]

In Hungary, for example, data from the Hungarian Central Statistical Office (2021) indicate that many residents of rural areas—particularly in the Northern Great Plain and Southern Transdanubia regions—do not have home internet access or modern

[6] Balázs Hohmann, 'Integrity Advisors and the Development of Administrative Communication Culture' (2019) 4 *European Journal of Multidisciplinary Studies* 29 https://doi.org/10.26417/ejms-2019.v4i1-527

[7] Balázs Hohmann, 'Interpretation the Concept of Transparency in the Strategic and Legislative Documents of Major Intergovernmental Organizations' (2021) 2(1) Közigazgatási és Infokommunikációs Jogi PhD Tanulmányok (PhD Studies in Administrative and ICT Law) 48 https://doi.org/10.47272/KIKPhD.2021.1.4.

[8] Hungarian National Media and Infocommunications Authority, *Digital Divide in Hungary* (2021).

[9] Diego Mesa, 'Digital divide, e-government and trust in public service: the key role of education' (2023) 8 *Frontiers in Sociology* 1140416 https://doi.org/10.3389/fsoc.2023.1140416

IT devices, thereby limiting their ability to engage with online administration. The period of digital education during the COVID-19 pandemic made this divide especially evident: thousands of children were unable to participate in online classes due to the lack of computers or stable internet connections. This deficit indirectly hampered the acquisition of the basic skills required for the use of e-government services.[10] Similar challenges arose in the context of online systems for accessing social benefits and family support.[11] Older citizens and those with lower educational levels often struggled to use the Client Gate (Ügyfélkapu) or the Electronic Health Services Space (EESZT). Although the Hungarian Maltese Charity Service launched several initiatives to support the digital inclusion of elderly and vulnerable groups, their impact remained local and limited in scope.

Other examples include the Municipal Office Portal (OHP), which offers electronic administration for a wide range of matters—such as address changes, tax certificates, and public health benefits—yet remains difficult to use for segments of the population due to technical barriers or lack of digital skills. Similarly, the KRÉTA system, an administrative platform used in Hungarian schools, was designed to improve communication with parents and students, but many families—especially those in disadvantaged circumstances—encounter obstacles due to technical difficulties or limited IT literacy. In such cases, even the parents' lack of digital competence may become a barrier to access.

To mitigate these digital inequalities, it is of paramount importance to strengthen digital skills development, ensure reliable broadband access in underdeveloped regions, and design e-government platforms that are user-friendly and accessible to all.[12]

2. Infrastructural and Technological Disparities

The successful application of artificial intelligence systems, as well as digitalisation more broadly, presupposes the existence of adequate information technology infrastructure, including stable internet connections, appropriate devices, and network systems capable of supporting digital services. In Hungary, significant progress has been made within the framework of the National Infocommunications Strategy, yet infrastructural coverage continues to vary substantially across regions.[13]

[10] Hungarian Central Statistical Office, *Main Characteristics of ICT Device and Communication Usage in Households, 2020* (KSH, 2021) https://www.ksh.hu/docs/hun/xftp/idoszaki/ikt/2020/01/digitalis_tarsadalom_2020.pdf accessed 15 August 2025.

[11] Matías Dodel, 'Why Device-Related Digital Inequalities Matter for E-Government Engagement' (2024) *Social Science Computer Review* (online first) https://doi.org/10.1177/08944393231176595

[12] Richard Heeks, 'Digital inequality beyond the digital divide: perspectives from an e-government portal in Nigeria' (2022) *Information Technology for Development* https://doi.org/10.1080/02681102.2022.2068492

[13] Gergely Karácsony, *Okoseszközök – okos jog? A mesterséges intelligencia szabályozási kérdései* [Smart devices - smart law? Regulatory issues in artificial intelligence] (Dialóg Campus 2020) 81–83.

The Digital Welfare Programme and the Superfast Internet Programme (SZIP) sought to ensure that by 2018 every Hungarian household would have access to an internet connection of at least 30 Mbps. Although network rollout was achieved in most settlements, actual utilisation has often been hindered by cost, lack of equipment, or insufficient digital skills. Moreover, mobile internet coverage remains uneven: in many border areas or isolated settlements, network disruptions and limited bandwidth are still commonplace.

Technological disparities are also evident across public institutions. Hungarian municipalities, for instance, display significant differences in terms of both IT infrastructure and human capacity. While municipalities in larger cities rely on more advanced systems, those in small rural settlements often operate with only minimal technological resources, thereby exacerbating regional inequalities.[14] Similar challenges can be observed in public education. Despite the adoption of the Digital Education Strategy, many schools still lack interactive whiteboards, projectors, or sufficient computer capacity, leaving them at a disadvantage in terms of developing digital competences.

While governmental programmes aimed at reducing these disparities represent an important step forward, they often lack the long-term operational and maintenance support required for sustainable functioning. For artificial intelligence and digital public administration to succeed, addressing infrastructural inequalities on a national scale is indispensable.[15]

3. Data Security and Data Protection Issues

The digitalisation of public administration generates vast amounts of personal and sensitive data that must be managed with the highest degree of care. Inadequate data protection or system malfunctions may result in breaches that compromise citizens' rights and severely undermine trust in public institutions.[16] The integration of artificial intelligence into administrative processes further amplifies these risks, particularly regarding the fundamental right to the protection of personal data and the corresponding obligations of public authorities.[17]

[14] X. Duanmu, Jintong Yu, Xiaoyan Yuan and Xuecheng Zhang, 'How Does Digital Infrastructure Mitigate Urban–Rural Disparities?' (2025) 17(4) *Sustainability* 1561 https://doi.org/10.3390/su17041561

[15] Polyxeni Vassilakopoulou and Eli Hustad, 'Bridging Digital Divides: a Literature Review and Research Agenda for Information Systems Research' (2023) 25 *Information Systems Frontiers* 955–969 https://doi.org/10.1007/s10796-020-10096-3

[16] Balázs Benjamin Budai, Gábor Bozsó, Sándor Csuhai and István Tózsa, 'Trends in Trust in Public Institutions in Hungary 2017–2023' (2024) 3(8) *Journal of Ecohumanism* 9433–9457 https://doi.org/10.62754/joe.v3i8.5561

[17] Grega Rudolf and Polonca Kovač, 'The Role of Automated Decision-Making in Modern Administrative Law: Challenges and Data Protection Implications' (2024) 22(2) *Central European Public Administration Review* 83–108 https://doi.org/10.17573/cepar.2024.2.04

Traditionally, public administration has been one of the largest data controllers, especially through registries of citizens and the processing of case-specific records. Artificial intelligence, however, expands the scope of data processing by enabling sophisticated pattern recognition, data aggregation, and predictive analysis, which pose significant challenges to informational self-determination.[18]

One of the most pressing concerns is automated profiling.[19] AI systems can aggregate data from a wide variety of sources—both legitimate and potentially dubious—to construct detailed personality profiles of individuals. Such profiles may serve as the basis for decisions that significantly affect a person's rights or legitimate interests.[20] In recognition of these risks, the EU's General Data Protection Regulation (GDPR) expressly prohibits fully automated decision-making—including profiling—that produces legal effects concerning individuals or similarly significantly affects them, unless meaningful human intervention and effective remedies are guaranteed.

This aspect of AI use is particularly sensitive in administrative proceedings, where decisions typically involve the exercise of public authority and directly alter an individual's legal status. Fully automated decision-making in such contexts would jeopardise the principles of the rule of law and the protection of fundamental rights, thereby requiring careful legal regulation and institutional safeguards.[21]

In practice, the application of AI in public administration is currently limited to relatively simple, non-discretionary matters—such as the automatic sanctioning of traffic violations. Beyond such use cases, lawmakers and administrative authorities must ensure that algorithms are introduced only in contexts where data protection and the safeguarding of individual rights are consistently and effectively guaranteed. The large-scale processing of personal data inherent to AI systems must be approached with caution, as the potential for profiling threatens the very essence of the right to informational self-determination.

[18] Christoph Langer, 'Decision-making power and responsibility in an automated administration' (2024) 4 *Discover Artificial Intelligence* 59 https://doi.org/10.1007/s44163-024-00152-1

[19] Gergő Kollár, 'A mesterséges intelligencia alkalmazásának adatvédelmi aggályai a közigazgatásban' [Data Protection Issues on the Application of AI in Public Administration] (2022) 3(1) *Közigazgatási és Infokommunikációs Jogi PhD Tanulmányok* 5–27 https://doi.org/10.47272/KIKPhD.2022.1.1

[20] Paraskevi Christodoulou and Konstantinos Limniotis, 'Data Protection Issues in Automated Decision-Making Systems Based on Machine Learning: Research Challenges' (2024) 4(1) *Network* 91–113 https://doi.org/10.3390/network4010005

[21] Aya Rizk and Ida Lindgren, 'Automated decision-making in public administration: Changing the decision space between public officials and citizens' (2025) 42(3) *Government Information Quarterly* 102061 https://doi.org/10.1016/j.giq.2025.102061

4. System Failures and Technical Issues

The digitalisation of administrative systems offers substantial advantages in terms of efficiency, transparency, and user-friendly service provision; however, it also entails a range of technical risks. The most common challenges include system failures, service outages, incompatibilities caused by software updates, as well as the potential for data loss or system crashes.[22]

Administrative IT systems frequently malfunction or operate with interruptions, particularly during early development phases. The temporary inaccessibility or defective functioning of platforms such as the ASP system or other e-government portals can hinder case management and negatively impact user satisfaction.

Digital administration portals – including Hungary's *Ügyfélkapu* or the KRÉTA educational system – may become periodically unavailable due to overload or display error messages during transactions. In addition, cybersecurity incidents (for example, denial-of-service attacks or data breaches) can severely disrupt administrative processes. The Hungarian e-government infrastructure has also experienced nationwide outages, such as the major system failure on 11 July 2025, which paralysed case management for four days due to disrupted data connections between state databases.

Addressing these challenges requires continuous system testing, the establishment of redundant IT infrastructure, and the strengthening of customer service capacities. Maintaining public trust further depends on transparent communication regarding technical failures and their resolution, especially in sensitive areas such as taxation, health records, or electoral registers.[23]

5. Legislative and Organisational Lag

Technological progress often advances more rapidly than the ability of legislation or administrative institutions to adapt. This results in legal uncertainty and outdated regulations, both of which hinder effective operation. One of the most significant barriers to digitalisation in public administration is the inability of legislative processes and administrative structures to keep pace with the speed of technological innovation.[24] Artificial intelligence and other digital technologies evolve at a rapid rate, while regulatory frameworks and the internal functioning of state organisations frequently respond only belatedly to these developments.

[22] Ines Mergel, 'Digital service teams in government' (2019) 36(4) *Government Information Quarterly* 101389 https://doi.org/10.1016/j.giq.2019.07.001

[23] Anna Visvizi and Miltiadis D Lytras, 'Rescaling and refocusing smart cities research: from mega cities to smart villages' (2018) 9(2) *Journal of Science and Technology Policy Management* 134–145 https://doi.org/10.1108/JSTPM-02-2018-0020

[24] Mariana Mazzucato, *Governing Missions in the European Union* (Publications Office of the European Union 2019)

A central challenge lies in the inadequacy of existing legal norms to address the novel issues arising from the operation of AI systems. Questions relating to responsibility in algorithmic decision-making, the requirements of data protection and transparency, and the auditability of machine learning systems are often left insufficiently resolved. In parallel, organisational shortcomings also impede the success of digital transformation. Many public institutions lack a sufficient number of skilled IT professionals and do not engage in strategic planning that incorporates legal, data protection, and ethical perspectives.[25] Decision-making processes are frequently fragmented, with parallel development projects undertaken in the absence of coordination.

The uneven level of digital competence among civil servants and local government staff exacerbates these difficulties. Although institutions such as the National University of Public Service and other training organisations have launched courses in this area, regular and practice-oriented continuing education is still not the norm. Consequently, employees are often unable to take full advantage of the digital systems that have already been implemented.

The success of digital public administration therefore depends on the simultaneous existence of a sound regulatory environment and institutional digital maturity. AI-driven administration can only become reliable if it is supported both by adequate legal safeguards and by strong organisational competencies.

III. Practical Applications of Artificial Intelligence in E-Government

1. Automated Case Management and Decision-Making

One of the most straightforward application areas of artificial intelligence in public administration is the automation of administrative procedures that do not require discretionary judgment and can be based on rule-driven decision-making.[26] Examples include the imposition of vehicle taxes, the automatic issuance of fines for traffic violations (such as through the Hungarian VÉDA system), or the determination of childcare benefits according to predefined statutory conditions.[27] In such cases, AI does not act as a creative or autonomous decision-maker, but rather operates on logical structures that replicate legal rules.

[25] Balázs Budai, Sándor Csuhai and István Tózsa, 'Digital Competence Development in Public Administration Higher Education' (2023) 15 *Sustainability* 12462 https://doi.org/10.3390/su151612462

[26] Elin Wihlborg, Hannu Larsson and Karin Hedström, '"The Computer Says No!"—A Case Study on Automated Decision-Making in Public Authorities' in *Proceedings of the 49th Hawaii International Conference on System Sciences (HICSS)* (IEEE 2016) 2903–2912 https://doi.org/10.1109/HICSS.2016.364

[27] Agneta Ranerup and Lupita Svensson, 'Automated decision-making, discretion and public values: a case study of two municipalities and their case management of social assistance' (2023) 26(5) *European Journal of Social Work* 948–962 https://doi.org/10.1080/13691457.2023.2185875

This can significantly reduce case-processing times, enhance user satisfaction, and alleviate the workload burden on human staff within public administration.[28] Nevertheless, even in the context of automated decision-making, it is essential that citizens are duly informed when a decision affecting them has been made by a machine, and that they are guaranteed the right to human review.[29] These safeguards are consistent with Article 22 of the EU General Data Protection Regulation (GDPR), which prohibits solely automated decision-making with significant legal effects unless meaningful human oversight and redress are ensured.[30]

2. Data Processing and Decision Support

One of the greatest strengths of artificial intelligence lies in its capacity to analyse and interpret large datasets. In public administration, the vast volumes of information accumulated in tax returns, social benefits, and population registers create valuable opportunities for predictive analytics. AI can, for instance, be deployed in risk assessment, such as identifying potential audit targets for tax authorities; in fraud prevention, by detecting irregular patterns that may indicate tax evasion or benefit misuse; and in capacity optimisation, including forecasting client flows and planning administrative deadlines.[31]

In decision-support systems, AI does not act as an independent decision-maker. Rather, it provides public officials with recommendations, highlights alternative courses of action, or synthesises relevant facts to assist in the decision-making process.[32] This model aligns closely with the current legal framework, as it ensures that human judgement and legal discretion remain central to administrative authority. In this way, AI enhances efficiency and analytical depth without displacing the human responsibility that is indispensable to legitimate governance.[33]

[28] European Commission, *White Paper on Artificial Intelligence: A European approach to excellence and trust* (COM(2020) 65 final, 19 February 2020)

[29] Balázs Hohmann, 'A mesterséges intelligencia közigazgatási hatósági eljárásban való alkalmazhatósága a tisztességes eljáráshoz való jog tükrében [The Applicability of Artificial Intelligence in Administrative Authority Proceedings in Light of the Right to a Fair Trial]' in Bernát Török and Zsolt Ződi (eds), A mesterséges intelligencia szabályozási kihívásai: Tanulmányok a mesterséges intelligencia és a jog határterületeiről [Regulatory Challenges of Artificial Intelligence: Studies on the Borderlands of AI and Law] (Ludovika Egyetemi Kiadó 2021) 403.

[30] Kollár (n 17) 6-10.

[31] Balázs Réfi, 'Mesterséges Intelligencia: Mi az AI és mire használható?' Bluebird (blog) https://bluebird.hu/mesterseges-intelligencia/ accessed 15 August 2025

[32] Vinícius DH de Carvalho, Maria SF Todaro, Rodrigo JR dos Santos, Thais CC Nepomuceno, Tainá Poleto, Carlos JJ Figueiredo and José A de Moura, 'AI-Driven Decision Support in Public Administration: An Analytical Framework' in Álvaro Rocha et al (eds), *Information Technology & Systems* (Springer Nature Switzerland, Cham 2024) 237–246. https://doi.org/10.1007/978-3-031-54235-0_22

[33] Erzsébet Fejes and Iván Futó, 'Artificial intelligence in public administration – supporting administrative decisions' (2021) 66(S1) *Public Finance Quarterly* 23–51 https://doi.org/10.35551/PFQ_2021_s_1_2

3. Chatbots and Natural Language AI Systems in Public Administration

The role of artificial intelligence in citizen support services has become increasingly prominent. Chatbots—intelligent conversational agents—are now capable of providing relevant answers to user queries posed in natural language, either in written or spoken form. These systems rely on the toolkit of natural language processing (NLP), particularly in the case of chatbots and virtual assistants, enabling the automated interpretation of unstructured text and the generation of context-sensitive responses.

Such solutions play a crucial role in enhancing the accessibility of public administration, delivering information swiftly, and alleviating the administrative burden on human officers.[34]

Notable international examples include Canada's digital assistant *AskJulie*, which operates on the immigration office's website and automatically responds to inquiries in both English and French.[35] Similarly, *EMMA*, the chatbot of the US Citizenship and Immigration Services, assists clients in multiple languages.[36] In the United Kingdom, the HM Revenue and Customs (HMRC) deploys an NLP-based assistant to handle frequently asked questions, thereby significantly reducing the workload of officers. [37]

The European Union has also supported the integration of chatbots into public administration. Within the framework of the Digital Single Market strategy, several member-state initiatives—such as France's *Service-Public* and Estonia's *Bürokratt*—have adopted NLP to modernise citizen interaction. [38]

Hungary has likewise witnessed the emergence of AI-driven chatbots specifically developed for administrative purposes. Examples include the customer-support robot of the National Tax and Customs Administration (NAV), the advisory assistant available on the *Ügyfélkapu* portal, and the chatbot employed by the Ministry of Human Capacities (EMMI) to coordinate vaccination appointments. These systems demonstrate high efficiency in managing simple, frequently recurring queries, yet it remains essential that they always allow users to be redirected to a human case officer when dealing with more complex issues.

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[34] Balázs Hohmann, 'Chatbotok a kormányzati platformok szolgálatában: Alkalmazási követelmények és átláthatósági hatások [Chatbots in the Service of Governmental Platforms: Application Requirements and Transparency Effects]' (2023) 71(4) Belügyi Szemle / Academic Journal of Internal Affairs 691. https://doi.org/10.38146/BSZ.2023.4.8

[35] Shared Services Canada, 'CanChat—SSC's first generative AI chatbot' https://www.canada.ca/en/shared-services/campaigns/stories/canchat-sscs-first-generative-ai-chatbot.html accessed 15 August 2025

[36] US Citizenship and Immigration Services, 'Emma Virtual Assistant' https://www.uscis.gov/tools/meet-emma-our-virtual-assistant accessed 15 August 2025

[37] HM Revenue & Customs, 'Customer service performance updates' (GOV.UK) https://www.gov.uk/government/collections/hmrc-customer-service accessed 15 August 2025

[38] European Commission, *eGovernment Benchmark 2022* (Publications Office of the EU 2022) 42-45 https://data.europa.eu/doi/10.2759/409115 accessed 15 August 2025

The proliferation of chatbots is advantageous not only in terms of cost efficiency but also by increasing the flexibility and round-the-clock availability of administrative services for citizens. At the same time, their deployment raises important ethical and legal concerns, particularly with respect to data protection, the quality of automated responses, and transparency.

IV. Finding and synthesis

The application of artificial intelligence in public administration simultaneously opens new perspectives and raises profound challenges. The innovative opportunities and developmental pathways outlined in this study demonstrate that AI has the potential not only to increase efficiency but also to strengthen citizens' trust—provided that its introduction occurs within an ethical, legally regulated, and transparent framework. A fundamental conclusion is that AI in public administration can only function in a supplementary capacity: it can support officials in their tasks but cannot replace human judgement where individual circumstances or legal sensitivities must be taken into account. Accordingly, the recommended regulatory approach is to keep the scope of fully automated decisions narrow, while broadly extending decision-support applications, ensuring that algorithms remain transparent and auditable in every case.

The success of AI systems depends on the availability of a modern, interoperable, and high-quality data infrastructure. This requires unified data models, the promotion of open data, and robust data protection and security safeguards. At the legislative level, the boundaries of AI use must be clearly defined, with particular attention to cases that directly affect citizens' rights.

Enhancing societal acceptance and ethical legitimacy also relies on improving digital competences: training programmes for civil servants should address not only technical aspects but also the legal and ethical dimensions of AI, while citizen engagement and public information campaigns can foster broader trust in new systems. Furthermore, comprehensive oversight mechanisms—including civil society feedback—are needed to ensure that AI systems serve the public interest rather than becoming ends in themselves. Both domestic and international experiences indicate that AI can add substantial value in many areas of public administration—from automated case management and predictive analytics to conversational agents and virtual assistants. However, to ensure their long-term sustainability, pilot projects are strongly recommended, as they allow for low-risk testing, the identification of operational flaws, and better alignment with user needs.

In sum, AI represents a key instrument for the modernisation of public administration. It has the potential to contribute to a faster, more transparent, and citizen-centred state. Yet this potential can only be realised through gradual and carefully considered implementation, underpinned by legal and ethical safeguards, the centrality of human oversight, and the continuous cultivation of public trust.

V. Conclusion

The application of artificial intelligence in public administration marks a paradigm shift: a turning point that goes beyond mere technological modernization and has the potential to redefine the entire logic of governance and the exercise of citizenship rights. Yet this transformation is not automatically positive; its success depends on the extent to which social justice, democratic oversight, and transparency can prevail throughout its implementation. AI systems are merely instruments—their value is determined by the environment, rules, and objectives under which they are deployed.

The future of public administration stands at a crossroads. One path leads to an efficient yet opaque and unaccountable digital bureaucracy, which may exacerbate feelings of vulnerability and distrust among citizens. The other path points toward the creation of a "service-oriented state," where AI systems support decision-makers, simplify everyday administrative tasks, and thereby enhance citizen satisfaction and participation. The former scenario would be a dead end, while the latter offers an opportunity to build a fairer and more modern state.

The key conclusion is that AI cannot replace the human element in public administration: it must not take over the ultimate role of judgment and accountability. However, it can relieve human capacity from repetitive, routine tasks and enable decision-makers to focus on complex matters with significant societal implications. This duality—the alignment of automation with human responsibility—is what will define the future of the digital state.

In the long run, the introduction of AI will reshape not only the internal operations of public administration but also the relationship between the state and society. Citizens must not remain passive consumers of digital services; without their active participation, feedback, and trust, these systems will remain incomplete. For this reason, social dialogue and civic engagement are at least as important as technical development.

Overall, AI in public administration can only become a true innovation serving the public good if the state succeeds in striking a balance between efficiency, legal certainty, and respect for human rights. The challenge is no less than ensuring that the digital state is simultaneously fast, fair, and human-centered—with AI playing the role of a tool rather than an end in itself.

KÖZHITELESSÉG A DIGITÁLIS KORBAN: AZ INGATLAN-NYILVÁNTARTÁS ÁTALAKULÁSA MAGYARORSZÁGON

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ABSZTRAKT

Az ingatlan-nyilvántartás a jogbiztonság és a gazdasági élet egyik alapintézménye, amely a tulajdonviszonyok átláthatóságát és a forgalom biztonságát hivatott garantálni. A tanulmány célja, hogy bemutassa a magyar ingatlan-nyilvántartás történeti fejlődését, különös tekintettel a rendszerváltás utáni változásokra, valamint az elektronikus nyilvántartási rendszer (E-ING) bevezetésére. A vizsgálat rámutat arra, hogy a szabályozás mindig szorosan követte a társadalmi-gazdasági változásokat, ugyanakkor a technológiai fejlődés új kihívásokat is teremtett a jogalkotás és a jogalkalmazás számára. Az elemzés kitekintést nyújt a környező országok – Szlovákia, Csehország és Ausztria – gyakorlatára, összehasonlítva a magyar megoldásokkal. A tanulmány kiemeli az elektronikus ügyintézés előnyeit és kockázatait, különös figyelemmel a közhitelesség átalakuló szerepére, valamint az automatizált döntéshozatal és a jogi képviselet új felelősségi dimenzióira. Az eredmények arra mutatnak, hogy az ingatlan-nyilvántartás digitalizációja nem csupán adminisztratív könnyítést jelent, hanem egyben új jogi és elméleti kérdéseket is felvet, amelyek hosszú távon meghatározzák a jogbiztonság kereteit.

KULCSSZAVAK

Ingatlan-nyilvántartás, Digitalizáció, Elektronikus ügyintézés.

KÉZIRATTÖRTÉNET

BENYÚJTVA 2025.06.20. | FELÜLVIZSGÁLVA 2025.07.25. | ELFOGADVA 2025.07.30.

I. Bevezetés

Az ingatlan-nyilvántartás a modern jogállam egyik sarokköve, amely biztosítja az ingatlanforgalom átláthatóságát, megbízhatóságát és jogbiztonságát.[1] Magyarországon a telekkönyvi intézmény és annak utódai évszázadok óta meghatározó szerepet töltenek be a tulajdoni viszonyok rögzítésében és hitelesítésében. A szabályozás történetében jól kirajzolódik az a tendencia, hogy az állam mindig a társadalmi, gazdasági és technológiai változásokhoz igazította az ingatlan-nyilvántartási rendszert.[2]

A XX. század második felében a különálló földnyilvántartás és telekkönyv egységesítése,[3] majd a rendszerváltást követő tulajdoni reformok jelentettek fordulópontot. Az 1990-es évektől kezdődően a digitalizációs törekvések fokozatosan alakították át az ingatlan-nyilvántartás működését: először az adatok számítógépre vitele és hálózatosítása, majd az elektronikus ügyintézés feltételeinek megteremtése vált meghatározóvá. Az új, 2021-ben elfogadott és 2025-ben hatályba lépő ingatlan-nyilvántartási törvény az E-ING projekt keretében egy átfogó, teljes körű elektronikus nyilvántartási rendszert vezetett be, amely alapjaiban formálja át a jogalkalmazás és a jogbiztonság kereteit.[4]

A tanulmány célja, hogy áttekintse e fejlődési ívet, bemutassa a jogszabályi változások társadalmi és technológiai hátterét, valamint feltárja az elektronikus rendszer bevezetésének gyakorlati és elméleti következményeit. A dolgozat továbbá nemzetközi kitekintést is nyújt a környező országok ingatlan-nyilvántartási gyakorlatára, összehasonlítva a magyar megoldásokkal. A vizsgálat központi kérdése, hogy miként őrizhető meg az ingatlan-nyilvántartás alapvető funkciója – a jogbiztonság garantálása – egy olyan környezetben, ahol a digitalizáció és az automatizáció új kihívások elé állítja a jogrendszert.

II. Az ingatlan-nyilvántartás történeti adottságai

Közelebbről megvizsgálva, az ingatlan-nyilvántartás viszonyrendszereit, egy hosszú múltra visszatekintő, izgalmas és összetett világ nyílik meg előttünk. A terület elemzése közben nem győzzük kapkodni a fejünket a történelmi múlt és a sokrétű szabályozás kapcsán.

Dr. Kampis György kiváló monografikus feldolgozása lehetővé teszi a múltszázadi teljes ingatlan-nyilvántartáshoz tartozó jogterület áttekintését. Részletes segítséget nyújt a magyar telekkönyvi intézmény történeti kialakulásáról, az új szabályozás elveinek és részletének megtárgyalásáról, valamint a főbb európai államok

[1] Lajos Vékás, 'Az ingatlan-nyilvántartás közhitelességének megerősítéséért' (2001) 48 Magyar Jog 129–136.

[2] László Kovács, 'Feszültségi pontok a tulajdonjog és az ingatlan-nyilvántartás szabályainak találkozásánál' (2009) 56 Magyar Jog 471–479.

[3] György Fenyő, 'Ingatlan-nyilvántartás vagy telekkönyv?' (2002) 54(3) *Geodézia és Kartográfia* 10–17.

[4] Márton Rosta, 'Gondolatok az új ingatlan-nyilvántartási törvényről' (2021) Themis 2, 64–95 https://doi.org/10.55052/themis.2021.2.64.95

bemutatásával közvetlenül megnyit egy tágabb teret, ezzel mind a nemzeti, mind a nemzetközi térbe is betekintést nyerhetünk.
Az új telekkönyvi jogszabályok 1961. év február hó 1. napján léptek hatályba, és hatálybalépésükkel hatályukat vesztettek az eddigi telekkönyvre vonatkozó szabályok, - néhány kivételtől eltekintve. Az új telekkönyvi jogszabályok rendet teremtettek, és az korábban áttekinthetetlen és elavult normák helyébe egymással szervesen összefüggő jogszabály lépett.[5] A könyv rámutat, hogy a szabályok aktualizálása és új rendszerek felépítése nélkülözhetetlen mind a jogalkotók, mind a jogalkalmazók számára.
Az ingatlan-nyilvántartás aktualizálása, naprakész tulajdonságának megfelelése, - valódi feladatának beteljesítése nyomán - mindig elől szerepelt a jogalkotásban.
A következő történelmi párhuzam a Magyar Forradalmi Munkás-Paraszt Kormány 1042/1971.(IX. 29.) számú határozata az egységes ingatlannyilvántartási rendszer és szervezet kialakításáról rendelkezett, továbbá a földügyi szakigazgatási tevékenység továbbfejlesztéséről határozott. A gyökeresen átalakult társadalmi és gazdasági viszonyok miatt az állami földnyilvántartás és a telekkönyv intézményének átformálását szükségessé tették. A külön-külön vezetett állami földnyilvántartás és telekkönyv helyett, egységes ingatlannyilvántartási rendszer vált fontossá. Az egységes ingatlannyilvántartási rendszer létrehozása, és szervezet kialakítása fokozatosan, minden adat, jog, és információ tényszerű szerepeltetésével valósult meg.[6]

1. Változás szükségessége a rendszerváltás után

A társadalmi változások, az átalakult igények, a technológia fejlődése nem hagyja nyugodni a jogalkotást sem. Az ingatlan-nyilvántartási törvény kommentárja leszögezi, hogy ez a széles és átfogó jogterület mindig komoly kihívás jelent mind a jogalkotó, mind a jogalkalmazó számára. Ez a megállapítás különösen igaz az ingatlan-nyilvántartás szabályaira. Az új jogszabályok kiemelt célja az, hogy az - törvényjavaslathoz fűzött miniszteri indokolás[7] szerint is alátámasztva - ingatlan-nyilvántartást elektronikus adatbázissál fejlessze, és az eljárások gyakorlatilag teljesmértékű digitalizációja következzen be.[8]

A törvény indokolása hangsúlyozza a jogszabály felépítésének a kódexjellegét, amelyet az új Inytv. és a Inyvhr. tartalmaz, vagyis ez a két jogszabály tölti meg tartalommal az egységes új ingatlan-nyilvántartás szabályait.[9] Ez a kettő törvény hosszú múltra tekint vissza, és rendszerváltást követően bekövetkezett tulajdoni

[5] György Kampis, Telekkönyvi jog (Közgazdasági és Jogi Könyvkiadó 1963) 469.
[6] Útmutató az ingatlannyilvántartás szerkesztéséről (Földhivatali munkapéldány, Petőfi Nyomda Vállalat 1973) 180.
[7] Indokolás az egyes ingatlan-nyilvántartási tárgyú és kapcsolódó törvények módosításáról szóló 2024. évi XXVII. törvényhez
[8] Dániel Gelencsér and Gábor Kiss (eds), Az ingatlan-nyilvántartási törvény kommentárja (ORAC 2025) 27.
[9] U.o. 27.

reformokkal robbanásszerűén leterhelté vált a földhivatal, az ingatlanok és az új tulajdoni viszonyok száma az eddig nem megszokott mértékben növekedett. Ezt a változást az 1997. évi CXLI. törvény az ingatlan-nyilvántartásról[10] (a továbbiakben: régi Inytv.) rendezte, szolgálta, és alkalmazott új jogszabályokat az akkori kihívás kezelésére.[11]

A kor előrehaladtával bebizonyosodott, hogy a tulajdoni lapok manuális vezetése helyett digitalizációra van szükség, amely az EU PHARE „Földhivatalok számítógépesítése" című segélyprogram támogatásával valósult meg, amelynek a közvetlen célja az integrált földhivatali számítógépes rendszer létrehozása, ezzel az ingatlanok tulajdoni és térképi adatainak egységes kezelése megfelelő fejlettségi fokra lépett.[12]

Az ingatlan-nyilvántartási adatok számítógépre vitele a Komplex Decentrális Ingatlan-nyilvántartási Rendszer (a továbbiakban: KDIR) 1994. évben indult el, és hároméves munkának adott teret. Az ingatlanok adatainak a digitalizációja három év alatt megtörtént, a projekt sikeres és hatékony volt. Az ügyintézés a fejlesztésnek köszönhetően gyorsabbá és megbízhatóbbá vált.

Következő fejlődési szint volt a földhivatali adatbázisok összekapcsolása egységes hálózattá. Ez egy olyan mérföldkő volt az adatszolgáltatásban, amelyet mind a mai napig élvezhetünk, a joggyakorlás során az adatszolgáltatást biztosítják, az ingatlanforgalmat szolgálják. Ez minden felhasználó közvetlen érdeke.

Meg kell említenünk, hogy az informatikai fejlesztésen túl az anyagijogi szabályok felülvizsgálatát is el kellett végezni: megváltozott politikai tér miatt az állami tulajdonok kezelése, jelzálogjog teljes átszabályozása megvalósult.

A fent elmondottak alátámasztják, hogy a társadalmi, gazdasági és jogszabályi változások harmonizációjára mindig figyelemmel kell lenni, a munkát mindig el kell végezni. Így volt az az 1990-es években is.

2. Változás szükségessége az elektronikus eljárás megjelenése után

A változást most is egy rendszerváltás, nevezetesen egy elektronikus rendszer kiépítése hozta el nekünk. Feltehetjük a kérdést, hogy mi volt a legfőbb indítéka ennek az ingatlan nyilvántartási törvénynek. Most nem a diktatúra és a demokrácia közötti stafétabot átadás-átvétel, hanem a régi Inytv. óta eltelt húsz év, és a húsz év alatt bekövetkezett változás. Új igények kitaposták maguknak az utat, amelyet a jogszabályoknak követniük kell. Az eddig jogszabályokkal kikövezett utak mellett párhuzamosan épültek ki újabb szabályozatlan területek, amelyet a társadalmi igény szükségletei teremtettek meg.

A szabályozás hatálybalépése nem volt problémamentes, a jogalkotó több alkalommal elhalasztotta mind az új Inytv., mind az ahhoz tartozó végrehajtási

[10] 1997. évi CXLI. törvény az ingatlan-nyilvántartásról (már nem hatályos joganyag)
[11] Gelencsér and Kiss (n 8) 50.
[12] U.o. 51.

rendelet hatálybalépését, továbbá a jogszabályokat átgondolta, átszabta, harmonizálta.

A változást hozó jogszabály 2021. évben született meg, de csak 2025. évben lépett hatályba. Ez jelzi a szabályozás nehézségét, a téma összetettségét, a szakértőkre nehezedő súlyt, valamint az változás aktuális jellegét, hogy igenis szükség van az új normák megalkotására.

3. Elektronikus eljárások más jogterületeken

Az elektronikus útra lépés aktualitása már időszerű volt. A jogalkotó a bírósági eljárások felgyorsítása érdekében 2008. évtől folyamatosan vezette be az elektronikus kapcsolattartást. Ez egyes eljárásokban és bizonyos felek, illetve képviselőik számára választható, más esetekben kötelező volt. Lényege, hogy az érdekelt felek a bíróságokkal a jogszabályi kereteken belül papíralapú beadványok helyett, elektronikusan kommunikálhatnak, vagy kötelességük kommunikálniuk jogszabályi előírás alapján.

Erre szeretnék néhány példát bemutatni:

- ÁNYK (Általános Nyomtatványkitöltő) egy ingyenesen használható, úgy nevezett Java alapú keretprogram, amelyet a Nemzeti Adó- és Vámhivatal (a továbbiakban: NAV) biztosít. Fő célja, hogy elektronikus úton lehessen benyújtani különféle bevallásokat, adatszolgáltatásokat és egyéb űrlapokat a hatóság felé. Az ingatlanforgalom szempontjából azért fontos a témánkat illetően, mert az úgynevezett B400-as NAV adatlapot is ezen a rendszeren nyújtottuk be, amikor vagyonszerző félként visszterhes szerződés esetében nyilatkoznunk kellett az adó megfizetéséről, valamint az illeték kiszabásáról, esetleg az illetékkedvezmény igénybevételéről. A papírmentes kommunikációt ez a rendszer még nem szolgálta, hiszen a földhivatal felé papíralapon kellett kinyomtatott formában a földhivatali eljárás keretein belül becsatolni, és a földhivatal továbbította a NAV felé, ha a tulajdonjog bejegyzése megtörtént.

Ezt az egész rendszert, vagyis az ÁNYK évek óta a magyar elektronikus ügyintézés egyik alapkövének számító eljárási formát szintén a NAV által üzemeltetett és folyamatosan fejlesztett ONYA (Online Nyomtatványkitöltő Alkalmazás) rendszer felé történő átállás váltotta fel. Kiemelt cél, hogy a jövőben még egyszerűbb, online felületen lehessen intézni az adóügyeket, így az ingatlanforgalom esetében is az illetékmegfizetési kötelezettségünket.

- Az úgynevezett e-Papír (epapir.gov.hu) egy ingyenes, hitelesített alkalmazás, amellyel elektronikusan lehet kapcsolatot fenntartani különböző állami és önkormányzati szervekkel pl.: kormányhivatal, rendőrség

Szintén a papírmentes és internetalapú eljárást szolgálja, amely felület használata kötelező, ha a jogszabály a felhasználó esetében úgy rendelkezik.

- Az iFORM űrlapok segítségével jogalkalmazóként (pl.: ügyvéd) a bíróságok felé benyújtandó beadványok (pl. keresetek, kérelmek, fellebbezések) benyújtását tudjuk megtenni. Az iFORM űrlapok a https://magyarorszag.hu/ oldalon a „Bíróság" menüpont alatt, kitöltési útmutatókkal és ügyféltájékoztatókkal együtt érhetőek el.

A fenti példákon keresztül láthatjuk, hogy a 2021. évben kitűzött cél az ingatlan-nyilvántartás online térbe történő terelése igenis fontos, aktuális és nem volt a valóságtól elrugaszkodott gondolat.

4. A változás bekövetkezése és az E-ING eljövetele

Az elektronikus ingatlan-nyilvántartás létrehozása érdekében a Kormány döntött az 1004/2016.(I. 18.) Korm. határozatban a Közigazgatás- és Közszolgáltatás-fejlesztés Operativ Program (KÖFOP) keretében a KÖFOP-1.0.0-VEKOP-15 azonosító számú „E-ingatlan-nyilvántartás" című projekt (a továbbiakban: E-ING projekt) létrehozásáról és megvalósításáról. Konkrét és kifejezett célja, hogy az ingatlan-nyilvántartást elektronikus adatbázissá fejlessze, az ingatlan-nyilvántartási eljárásokat elektronizálja, ennélfogva csökkentse és realizálja a földügyi eljárások átfutási idejét és költségszintjét, vagyis a közigazgatási adminisztratív terhek is arányosan csökkentjenek.[13]

Első sarokkő a változás talaján a nyilvántartási rendszerek összehangolása.

Az E-ING projekt elsődleges feladata az ingatlan-nyilvántartás és az állami térképi nyilvántartásvezető informatikai környezet összehangolás volt, amely eltért a főváros és a vidék esetében. A rendszerek összehangolása időszerű volt.

A fentieken túl tekintsük meg, hogy mely rendszerek kerültek egységesítésre: szoftver- és alapadatok, a TAKAROS ingatlan-nyilvántartási információs rendszer, Budapesti Ingatlan-nyilvántartási Információs Rendszer, a Digitális Alaptérképen alapuló Térképkezelő Rendszer, a Topobase szoftver.

Az egységbe foglalt rendszer a kormányzati nyilvántartásokkal is összekapcsolásra került, ezzel az összehangolással az új szabályozás biztosítja a hatékony közigazgatási eljárást.

Az E-ING projekt kereteben a következő területeken valósulnak meg fejlesztések, változások:

- elektronikus ügyintézés bevezetése az ingatlan-nyilvántartási eljárásokban;
- földügyi informatikai rendszerek szolgáltatóképességének hatékonnyá tétele;
- földügyi adatbázisok stabilitása;
- földügyi eljárások e-megoldásainak a kialakítása;
- E-ING működtetéséhez szükséges szabályozásai és intézményi háttér létrehozása, megszervezése;

[13] Gelencsér and Kiss (n 8) 57.

- E-ING bevezetéséhez bevezetéshez és mindennapi ügyintézéshez szükséges online adatbárisok, háttérprogramok, IT-biztonsághoz kapcsolódó fejlesztések beépítése;
- Online térben való ügyintézéshez az elektronikus aláírások bevezetése;
- Mobilon történő ügyintézéshez szükséges applikációk támogatása;
- Kormányhivatal ügyintézőinek elérhetőségének a kezelése és összehangolása a kormányhivatali HR rendszerrel;
- Adatbetöltés külső forrásból, amelyek az ügyintézést szolgálják.

A speciális fejlesztésként megemlíthető még a meghatalmazás modul jelenlevők közötti aláírás esetén, tabletes E-Ingatlan aláíró modul, szolgalmi jog teljes tartalmának megjelenítéséhez szükséges okiratkezelési funkció, szerződés regisztráció (az úgynevezett zöldpapír kiváltása, amely a hitelesség és védelem miatt a biztonsági okmányon való termőföld adásvételek rögzítésére szolgál[14]) kiterjesztése az INYER modulra.[15]

Második sarokkő a papíralapú ügyintézés felváltása elektronikus ügyintézésre, mind a hatóság, mind az ügyfél oldaláról: elektronikus nyilvántartás bevezetése, és elektronikus ügyintézés[16], vagyis a háttér kiépülése utáni megvalósítás.

Harmadik sarokkő a jogalkalmazók köre. Ebben a témában újabb fejezetet kell nyitni a téma összetettsége és fontossága érdekében.

III. Ügyvédek a változás talaján

A Magyar Ügyvédi Kamara (a továbbiakban: MÜK) folyamatosan szolgáltatta a kamarai tagok számára az E-ING projekt aktuális állásának adatait, információit, továbbá az oktatásban is hatalmas és hatékony segítséget nyújtott a jogalkalmazók számára[17]. A segítségnyújtás azért is fontos volt, mert egy teljesen új világ következik be az ügyvédek életében.

A jogszabályi köntös is megváltozott. Az ügyvédi tevékenységről szóló 2017. évi LXXVIII. törvény[18] (a továbbiakban: Üttv.)

„*39/A. § (1) Ingatlanra vonatkozó vagy ingatlannal kapcsolatos jog vagy tény közhiteles nyilvántartásba való bejegyzésére irányuló eljárásban (a továbbiakban: ingatlan-nyilvántartási ügy) jogi képviselet ellátására az az ügyvéd és kamarai jogtanácsos jogosult, akinek a jogosultságát az ügyvédi kamarai nyilvántartásba bejegyezték (a továbbiakban: ingatlan-nyilvántartási ügyben eljárásra jogosult).*

(2) Az ingatlan-nyilvántartási ügyben való jogi képviselet ellátására vonatkozó, valamennyi a jog vagy tény bejegyzésével közvetlenül érintett személy által egybehangzóan adott

[14] Gergely Szabó, 'Viszlát zöld papír! Változnak a földadásvétel szabályai' (Agrofórum Online, 19 November 2021) https://agroforum.hu/agrarhirek/agrargazdasag/viszlat-zold-papir-valtoznak-a-foldadasvetel-szabalyai/ accessed 15 August 2025.

[15] Gelencsér and Kiss (n 8) 57.

[16] E-ING https://landing.eing.foldhivatal.hu/ accessed 15 August 2025.

[17] 18/2018. (XI.26.) MÜK szabályzat az ügyvédi tevékenységet folytatók továbbképzési kötelezettségéről

[18] 2017. évi LXXVIII. törvény az ügyvédi tevékenységről

meghatalmazást az ingatlan-nyilvántartásról szóló törvény felhatalmazása alapján kiadott kormányrendeletben meghatározott tartalommal és módon, elektronikus űrlapon kell megszerkeszteni és hitelesíteni."

Az Üttv. deklarálja az eljárásra jogosultságot, eljárási módot, amelytől eltérés nem megengedett.

A fenti állítás rögtön megcáfolható, hogy az úgynevezett átmeneti időszakra nem vonatkozik a kötelező eljárást megalapozó szabályozás. Egy kulcsfontosságú eleméről szólnunk kell, nevezetesen az 500 ezredik végleges döntés plusz 10 nap szabályra[19]. A jogalkotó az átállás zökkenőmentessége érdekében egy átmeneti időszakot vezettek be, ameddig a papíralapú és az elektronikus ügyintézés párhuzamosan futhat. Ez egyben egy könnyítő tényező is, mert sikerül kiépíteni a bizalmat az új eljárás irányába, de – ahogy azt már megfogalmaztam – a párhuzamos eljárás az elérni kívánt célt torzítja, az e-közigazgatás határait szűkíti, a papíralapú ügyintézést görgeti maga előtt.

Az ügyvédeket érintő főbb változás továbbá az is, hogy jóllehet a tulajdoni lapról bárki csak a jogosult nevét és lakcímét ismerheti meg. Az ingatlan-nyilvántartás célja a nyilvánosság és a jogbiztonság megteremtése, de az kiemelt adatvédelmi szempontok miatt a természetes személyek azonosító adatainak megismerhetőségét korlátozzák[20], kivéve, ha az ügyintézés (például egy adásvétel) indokolja a teljes körű adatok megismerését, de akkor is csak a jogszabályban meghatározott személyek számára. Vagyis azok, akik ingatlan nyilvántartási eljárás kezdeményezésére jogosultak, - úgymint az ügyvédek - számukra a tulajdoni lap teljes tartalma megismerhető az úgynevezett ügyleti tulajdoni lap[21] formájában.

Ismerjük meg az ügyleti tulajdoni lapot. Az ügyleti tulajdoni lap egy speciális, az E-ING rendszerrel bevezetett típusú tulajdoni lap másolat, amely fontos szerepet játszik az ingatlanokkal kapcsolatos elektronikus ügyintézésben, az adásvételek és egyéb bejegyzések során. A fontossága abban rejlik, hogy az ügyleti tulajdoni lap a teljes tulajdoni lap másolatánál is részletesebb adatokat tartalmaz.

Eddig ismertük az úgynevezett „szemle" tulajdoni lapot, amely csak az aktuális, érvényes adatokat mutatta, a „teljes" tulajdoni lap a törölt bejegyzéseket is tartalmazta: törölt jelzálogjog, törölt tulajdonosok nevei, egyéb adatok.

Az ügyleti tulajdoni lap[22] ehhez képest még tovább megy: tartalmazza a bejegyzett és a már törölt jogok és tények jogosultjainak valamennyi azonosító adatát, kivéve a személyi azonosítót. Például a név, születési hely és idő, anyja neve, lakcím, cég esetén a székhely és cégjegyzékszám. Ezek az adatok sem a szemle, sem a teljes tulajdoni lap másolatokon nem szerepelnek.

[19] E-ingatlanügyvédek blog, 'Az új Inytv hatályba lépése' (11 June 2025) https://e-ingatlanugyvedek.hu/az-elektronikus-ingatlan-nyilvantartas-bevezetesehez-kapcsolodo-atmeneti-szabalyok accessed 15 August 2025.

[20] 2021. évi C. törvény az ingatlan-nyilvántartásról, 76. § (1). bek.

[21] U.o. 76. § (2). bek.

[22] U.o. 76. § (1). bek. c) pontja

Feltehetjük a kérdést, hogy miért fontos ez: az ügyleti tulajdoni lap bevezetésének oka az ingatlan-nyilvántartási eljárások teljes körű digitalizálása volt, különösen az automatikus döntéshozatali eljárások támogatása.

A fentieken túl meg kell említeni, hogy csak elektronikus dokumentumként lehet igényelni az ügyleti tulajdoni lapot, papíron nem. Az igénylés feltételeit az ingatlan-nyilvántartásról szóló 2021. évi C. törvény (Inytv.) 76. § (2) bekezdése, valamint az ehhez kapcsolódó végrehajtási rendelet szabályozza.

Az okirat elvváltozatlanul fennmarad, de a bejelzés alapja az úgynevezett elektronikus okirat lesz. [23]

A közhitelesség tekintetében érdemi változás nem történik, - ha jelenlegi hatályos szabályozás fennmarad, - annyi jegyzendő meg, hogy az adatokra is kiterjed a közhitelesség egészen az ellenbizonyításig.[24]

A kérelemhez kötöttségelve az elektronikus űrlap bevezetésével a beadványt ennek megfelelően elektronikus úton és elektronikus űrlap segítségével kell benyújtani.

A kérelemhez kötöttség elve az ingatlan-nyilvántartási eljárásban – főszabály szerint – csak akkor indul meg, ha a jogosult, az érdekeltek ezt előterjeszti. Ebből adódóan a földhivatal (vagy az E-ING rendszer) nem fogja hivatalból, automatikusan bejegyezni a változásokat, például egy öröklésből eredő tulajdonosváltást, kivéve, ha erre jogszabály kifejezetten felhatalmazza. Az Inytv. 17. § (1) bekezdése szerint: *„Jogok és tények bejegyzésére irányuló ingatlan-nyilvántartási eljárás – ha e törvény másként nem rendelkezik – kizárólag kérelemre, bírósági elrendelésre vagy hatósági felhívásra hivatalból folytatható."*

1. Kérelem benyújtása a jogi képviselő által

A kérelemhez kötöttség elve az E-ING rendszerben pontos, előre meghatározott formájú kérelmekre épít.

- Elektronikus űrlap használata: a kérelmet e-aktában kell benyújtani. A hiánytalan benyújtást segíti az űrlapot strukturáltsága.
- A benyújtás a kötelező jogi képviseletet is előírja. A jogi képviselő felel az elektronikus okiratok előkészítéséért, ellenjegyzéséért és az elektronikus kérelem rendszerbe való feltöltéséért. Úgynevezett ellenjegyzéssel látja el, amelyet az elektronikus aláírás garantál.
- A kérelem úgynevezett közös kérelem. A legtöbb *„jog vagy tény jog vagy tény bejegyzésével közvetlenül érintett valamennyi személy közös kérelme alapján"*[25] indítható meg.
- A kérelem tartalma a kérelmezők adatainak megadásánál már figyelembe vette, hogy a személyiadat- és lakcím-nyilvántartásban[26]

[23] 2021. évi C. törvény az ingatlan-nyilvántartásról, 15. §
[24] U.o. 16. §
[25] 2021. évi C. törvény az ingatlan-nyilvántartásról, 44. § 1. (bek.)
[26] 1992. évi LXVI. törvény a polgárok személyi adatainak és lakcímének nyilvántartásáról

szereplő kérelmezők esetében csak a vezetéknév, keresztnév, születési név, és személyi azonosító megadása kötelező, mivel a nyilvántartásban az összekapcsol elektronikus szolgáltatásoknak köszönhetően az adatok megkereshetőek, rögzíthetőek.

- A kérelem tartalma szempontjából természetesen meg kell adni: az érintett település megnevezését, az érintett ingatlan fekvését és helyrajzi számát is a kérelem tárgya megjelölésével egyidejűleg, amely lehet adásvétel útján történő tulajdonjog törlése, bejegyzése.

Tárgyunk tekintetében fontos megjegyezni újra, hogy a bíróság elrendelésére, hatósági felhívásra, az adatok változásának bejegyzésére irányuló eljárás indulhat hivatalból vagy kérelemre is.

Továbbiakban újabb változás, hogy a rangsor elv érvényesülése jóllehet változatlan, de a rendszer ismeri a másodperc alapú érkeztetést[27], és ennek megfelelően a ranghely a benyújtás másodperc időpontjának felel meg. Ennek akkor van jelentősége, hogyha több bejelzési kérelem érkezik.

A bejelzési elv vonatkozásában azt mondtuk, hogy a jogok esetében van egy konstitutív hatály (tulajdonjog, jelzálogjog, holtig tartó haszonélvezeti jog), amelyek bejegyzéssel létesíti, keletkezteti a jogot; a deklaratív hatályú jogok, illetve tények (öröklés) esetében csak akkor fejtenek ki joghatást, hogyha azt az ingatlan nyilvántartásban feljegyzik. Például az elidegenítési és terhelési tilalmat említeném, illetve vannak olyan tények, amelyek fejjelzés nélkül is kifejtik joghatásukat.

2. Fontos jogszabályi változások egy ügyvéd szemüvegén keresztül

Fontos hangsúlyozni, hogy szabályanyag egy része a Polgári Törvénykönyvről szóló 2013. évi V. törvényből (a továbbiakban: Ptk.) átkerült az új Inytv.-be és annak végrehajtási rendeletébe.

Az Ptk. módosítása útján új jogként megjelenik az építményjog[28], az ingatlan nyilvántartásban történő bejelzés keletkezteti ezeket a jogokat, ez konstitutív hatályként határozható meg.

Példaként szolgál az elővásárlási jog témaköre, amelyet a Ptk. 6:221-6:223. §-ai szabályoznak, annak szerződésen alapuló keletkezését, a keletkezett jog gyakorlását és jogkövetkezményeit. A Ptk. 5:81. § kifejezetten a tulajdonostársakat megillető elővásárlási jogot rögzíti osztatlan közös tulajdon esetén. A közös tulajdon esetében megállapíthatjuk, hogy a tulajdonostársat harmadik személlyel szemben elővásárlási jog illeti, ez az ingatlan nyilvántartásban nincs bejegyezve, vagy ugyanígy a termőföldekre vonatkozó, a földforgalmi törvény[29] alapján fennálló elővásárlási

[27] 179/2023. (V. 15.) Korm. rendelet az ingatlan-nyilvántartásról szóló 2021. évi C. törvény végrehajtásáról

[28] 2013. évi V. törvény a Polgári Törvénykönyvről 5:159/A. § [Az építményi jog fogalma]

[29] 2013. évi CXXII. törvény a mező- és erdőgazdasági földek forgalmáról

jogok is, minden további nélkül kifejtik joghatásukat, bár az ingatlan nyilvántartásban nincsenek bejegyezve.

Az új Inyvhr. sok újdonságokat tartogat a jogi képviselők számára. Léteznek olyan korábban tényként kezelt tilalmak, amelyek már az Új Inyvhr. 20.§-a szerint jogként szerepelnek: elidegenítési tilalom, elidegenítési és terhelési tilalom.

Új jogintézmény a tulajdonjog-fenntartáshoz kapcsolódó vevői jog. A tulajdonjog függőben tartás jogintézményét, a korábban legfeljebb 6 hónapra szóló függőben tartást felváltotta a tulajdonjog-fenntartáshoz kapcsolódó vevői jog, amely a vevő érdekeit védi, és Ptk. 6:216. §-a, valamint az új ingatlan-nyilvántartási törvény, és annak végrehajtási rendelete szabályoz. Rögzítenünk kell, hogy az adásvételi szerződésben meghatározhatjuk hónapban is, vagyis határozott határidő megjelölésével a tulajdonjog-fenntartáshoz kapcsolódó vevői jog bejegyzését az ingatlan-nyilvántartási törvénybe, de határozatlanság esetén a jog 5 év eltelte után az ingatlan-nyilvántartásból hivatalból törölve lesz.[30]

Újabb sarokkő a papíralapú ügyintézés felváltása elektronikusra, amely eljárás esetében minden a jogügylethez szükséges iratokat: bejegyzési kérelmet, a szükséges nyilatkozatot, az esetleges meghatalmazásokat, okiratokat, és egyéb rendelkezésre álló dokumentumoknak egy úgynevezett E-aktában[31] kell benyújtani, és annak megőrzése, úgynevezett irattározása az ügyvéd feladata lesz. A technikai feltételért rendszer a Lechner Tudásközpont fejlesztésében és üzemeltetésében megvalósuló projekt valósítja meg. Az E-akta megőrzésén túl az ügyvédek feladata az eredeti okirat megőrzése is, amelyet klasszikusan tintával aláírva, papíralapon hoztak létre, mivel a földhivatal már nem fog papíralapú dokumentumot kezelni, őrizni.

De az új eljárásban történő részvételhez nem elég a változásokat kívülről szemlélni. Azokkal szembesülni kell, el kell sajátítani, MÜK által szervezett oktatásban részt kell venni, vizsgát kell tenni a megszerzett tudásból. A továbbiakban erről lesz szó.

3. Fontos elméleti hátteret érintő változásokról

Az ingatlan-nyilvántartási ügyben való eljárási jogosultságnak vannak olyan feltételei, amelyek a MÜK által előírt követelmények, nevezetesen a következők:

- kamarai szabályzatban előírt továbbképzésen való részvétel és a számonkérés teljesítése,
- rendelkezik az ingatlan-nyilvántartási ügyben való eljáráshoz szükséges feltételekkel,

[30] 179/2023. (V. 15.) Korm. rendelet az ingatlan-nyilvántartásról szóló 2021. évi C. törvény végrehajtásáról, 45. §.

[31] Lechner Nonprofit Kft, 'Ingatlan-nyilvántartás – áttekintés' https://lechnerkozpont.hu/oldal/ingatlan-nyilvantartas-attekintes accessed 15 August 2025.

- olyan kiegészítő felelősségbiztosítással rendelkezik, amelynek káreseményenként számított legalacsonyabb összege ötvenmillió forint és
- nem áll ingatlan-nyilvántartási ügyektől való eltiltás fegyelmi büntetés vagy ingatlan-nyilvántartási ügyben való eljárási jogosultság felfüggesztésének a hatálya alatt.[32]

A számonkérés előfeltétele a MÜK által biztosított e-learning vagy a területi kamara által biztosított képzés elvégzése kreditpont szerzés részeként, amely elméleti és gyakorlati vizsgaanyagot tartalmaz, de a számonkérés csak elméleti szinten történik.

IV. Nemzetközi kitekintés

Az ingatlan-nyilvántartás célja mindenütt a jogbiztonság és az átláthatóság garantálása az ingatlanforgalomban. Bár az alapelvek hasonlóak, az egyes országok rendszerei eltérő felépítést és eljárásokat alkalmaznak.

Az EU biztosítja a tagállamok ingatlan-nyilvántartásra vonatkozó adatainak és gyakorlatának megismerését, amely anyagforrásból a dolgozatom is tudásanyagot merít.

A kutatás folyamán a hozzánk közelebb lévő kontinentális jogot alkalmazó országokat vettem vizsgálat alá, amely országok gyakorlata hasonló lehet a nemzetünk gyakorlatához, vagy éppen példaként szolgálhatnak, hogy az elérni kívánt cél nincs is olyan messze.

1. Szlovákia

A szlovák ingatlan-nyilvántartás alapját az online térben könnyen elérhető és gyors hozzáférést biztosító https://zbgis.skgeodesy.sk/mapka/sk/kataster oldal adja, amely az egységes ingatlan-nyilvántartási rendszert tartalmazza.

Szlovákiában az ingatlan-nyilvántartási feladatokat a körzeti hivatalok látják el. A rendszer egy átfogó adatbázist nyújt, amely segítségével az ingatlanoknak mind geometriai adatait (kataszteri térképek), mind leíró adatait (tulajdonosok, bejegyzett jogok és terhek) megismerhetjük.

A szlovák ingatlan-nyilvántartás – tartva az európiai digitális ütemet – online térben is elérhető, amely gyors kezelési felületet ad a jogi és ténybeli adatok megismeréséhez. Továbbá rögzítenünk kell, hogy a naprakész információáramlás miatt az adatok heti rendszerességgel frissülnek. A nemzetközi kommunikációt az angol nyelvű felület biztosítja a szlovák nyelv mellett.

A portál használatával a következő adatok állnak rendelkezésre:

- Geoinformációs adatok, amelyek kataszteri térképek az ingatlanok térbeli elhelyezkedését és határait rögzítik,
- Építményekről, sík területekről, parcellákról leíró adatok,
- Települések és kataszteri körzetek nyilvántartása,

[32] 18/2018. (XI.26.) MÜK szabályzat az ügyvédi tevékenységet folytatók továbbképzési kötelezettségéről

- Összefoglaló statisztikai adatok az ingatlanpiacról,
- Az egyes földterületek kalkulált értéke azok típusaik alapján,
- Információk az ingatlan-nyilvántartás előtt folyamatban lévő ügyek jelenre vonatkozó adatairól,
- Értesítések a bejegyzési kérelmekkel kapcsolatos meghozott döntésekről.

A szlovák kataszteri hivatalok feladata, az ingatlanok beazonosításához alapvetően a település kataszterének nevére és a parcellaszámra van szükség. Épületek és telkek esetén fontos, hogy bár az épület és az alatta fekvő telek két különálló ingatlanként kezeltetik, a parcellaszámuk mindig azonos.

A tulajdoni lap három részből épül fel:

1. Az ingatlanra vonatkozó fizikai tulajdonságok: földterület nagysága, telek típusa, az ingatlanhoz tartozó engedélyek, az ingatlan elhelyezése a felhasználási struktúrára, így községi területhez való viszonya, egyéb adatok.
2. Tulajdonosokra és egyéb jogosultakra vonatkozó adatok, tulajdoni hányadok, a tulajdonjog szerzésének a jogcíme, elérhetőség adatai.
3. Terhek: ingatlant érintő jogok és terhek felsorolása, tulajdoni lapon történt módosítások, változások feltüntetése.

A szlovák ingatlan-nyilvántartási portál 2004. év óta működik., és 2007, év szeptember hónap óta az adatok ingyenes rendelkezésre állnak, amelyet a törvény biztosít.[33]

A veszélyek és biztonság kérdéséről már szó esett a dolgozatomban. Az elektronikus ingatlan-nyilvántartási rendszer sebezhetőségére utal, hogy 2025. év januárjában kibertámadás érte a szlovák kataszteri rendszert, ami átmeneti fennakadásokat okozott a szolgáltatás működésében. A zsarolóvírus a rendszer leállását okozta, amely vírus eredetét külföldinek tekintik a hatóságok.[34]

2. Csehország

Csehországban szintén a Kataszteri Nyilvántartás[35] működik, amelyet a Cseh Földmérési, Térképészeti és Kataszteri Hivatal kezel.

A rendszer ténybeli leírásokat és jogi információkat nyújt a felhasználók részére online formában.

[33] European Justice, 'Tagállami szintű nyilvántartások – Szlovákia', https://e-justice.europa.eu/topics/registers-business-insolvency-land/land-registers-eu-countries/sk_hu accessed 15 August 2025.

[34] Márk Benics, 'Szlovákia történetének legnagyobb kibertámadása érte az ingatlan-nyilvántartási rendszert' (444.hu, 9 January 2025) https://444.hu/2025/01/09/szlovakia-tortenetenek-legnagyobb-kibertamadasa-erte-az-ingatlan-nyilvantartasi-rendszert accessed 15 August 2025.

[35] ČÚZK (Czech Office for Surveying, Mapping and Cadastre) https://cuzk.gov.cz/en accessed 15 August 2025.

Az elektronikus tájékoztató rendszer 2001. év óta elérhető, ezzel a környező országok körében jelentős előnyben jár Csehország.

Az ingatlanjogviszonyokkal kapcsolatos hivatalos kivonatokért díjat kell fizetni. Ezek a kivonatok minden releváns információt tartalmaznak az adott ingatlanról, amely papíralapon, vagy elektronikus úton, online hozzáféréssel is igényelhető. A szolgáltatás ellenértéke a kivonat terjedelmétől függ.

A térképek lekérése, továbbá az ingatlanokra vonatkozó alapvető információk (tulajdonosok nevei, tulajdonosok címei) tekintetében végzett internetes keresés ingyenes.[36]

3. Ausztria

Ausztriában az ingatlan-nyilvántartást a Telekkönyv biztosítja, amelyet a Telekkönyvi Hivatalok vezetnek. Az osztrák rendszerre jellemző a közjegyző kiemelt szerepe az adásvételek során. A Telekkönyv hiteles információt tartalmaz mind a jogi, mind a tényszerű kérdésekre.

Az ingatlan-nyilvántartás és annak elektronikus irattára elérhető díjfizetés ellenére érhető el, amely adatbázis részletes adathalmazt szolgáltat, az összes érvényes bejegyzést tartalmazza.

Fontos hangsúlyozni, hogy régebbi törölt, korábbi tényeket és adatokat, más bejegyzéseke nem minden esetben érhetők el elektronikus formában. Régebbi adatok csak papíron állnak a felhasználók rendelkezésére.[37]

Összegzés

A történelem során az ingatlan-nyilvántartás közhitelességét és nyilvánosságát mindig is egy semleges, harmadik fél – például a hiteles helyek, bíróságok, majd később különböző hatóságok és állami szervek – biztosította.

Az új Inytv. sem szakít ezzel a hagyománnyal, de tovább mozdítja a rendszert a magánjogi jogviszonyok felé, ami a közhitelesség elvének bizonyos mértékű átalakulását is jelenti.

A legnagyobb változás leginkább az automatikus döntéshozatali eljáráson alapuló automatizált folyamatokban mutatkozik meg. Mivel ezek az eljárások jelentős részét teszik ki a bejegyzéseknek, az ingatlan-nyilvántartási hatóság garanciális szerepe részben kiüresedettnek érezhetjük. A rendszer az automatizáció révén egyre nagyobb felelősséget hárít a jogalkalmazókra pl. ügyvédekre, közjegyzőkre, akiknek fokozottan kell ügyelniük a benyújtott adatok pontosságára és jogszabályi megfelelőségére. Ezáltal a közhitelesség fenntartása új dimenziót kap,

[36] EU e-Justice, 'Land Registers in EU Countries – Czech Republic (HU)' https://e-justice.europa.eu/topics/registers-business-insolvency-land/land-registers-eu-countries/cz_hu accessed 15 August 2025.

[37] European Justice, 'Tagállami szintű nyilvántartások – Ausztria', https://e-justice.europa.eu/topics/registers-business-insolvency-land/land-registers-eu-countries/at_hu accessed 15 August 2025.

ahol a bejegyzésért való felelősség egy része áthelyeződik a kérelmet előkészítő szakemberekre.[38]

Az átfogó és rendszerszintű változás bekövetkezett pillérjeit a következő felsorolással írhatjuk le:

- Nemzetközi versenyképesség és digitalizáció: Célunk, hogy a magyar ingatlan-nyilvántartás modern és digitálisan versenyképes legyen nemzetközi összehasonlításban, ezzel is hozzájárulva az ország általános gazdasági versenyképességéhez.
- Elektronikus ügyintézés: A papíralapú ügyintézés helyét egy sokkal gyorsabb és hatékonyabb elektronikus rendszer veszi át, megkönnyítve az ügyfelek és a hatóságok dolgát.
- Adatkapcsolat más nyilvántartásokkal: Az ingatlan-nyilvántartás összekapcsolhatóvá válik az állam más közhiteles elektronikus adatbázisaival. Ez biztosítja az automatikus adatfrissítést, az elektronikus információáramlást és a kapcsolattartást, sok esetben automatizált formában.
- Áttekinthetőség és naprakészség: A rendszer biztosítja, hogy az ingatlan-nyilvántartás adatai áttekinthetők, teljes körűek és mindig naprakészek legyenek.
- Könnyű hozzáférés a jogosultaknak: A hatóságok, bíróságok és más jogosultak számára könnyű, elektronikus hozzáférést biztosítunk a rendszerhez, az egyedi jogosultsági szintek beállításával.
- Egységes rendszerek: A megyei és fővárosi kormányhivatalok ingatlanügyi hatósági feladatait támogató rendszer, valamint a térképi adatbáziskezelő rendszer egységessé válik, ezzel is egyszerűsítve a munkát.
- Intelligens adatbázis-funkciók: Az intelligens adatbázis alkalmassá válik komplex adatfeldolgozásra és hatékony adatkeresésre, ezzel új lehetőségeket nyitva meg az elemzések és döntéshozatal terén.[39]

Az új Inytv. Kommentrája hangsúlyozza, hogy az új szabályozás kódexként gondol önmagára. Az ingatlan-nyilvántartásba bejegyezhető jogok, tények és adatok körét a jövőben kizárólag az ingatlan-nyilvántartási szabályozás fogja meghatározni. Elsősorban maga az új Inytv. és annak végrehajtási rendelete lesz az irányadó, míg

[38] Kitti Szajlai, 'A magyar ingatlan-nyilvántartás történetének mérföldkövei' (2023) Közjegyzők Közlönye 4, 63–74.

[39] U.o.. 63-74.

Ld. Balázs Hohmann, 'A mesterséges intelligencia közigazgatási hatósági eljárásban való alkalmazhatósága a tisztességes eljáráshoz való jog tükrében [The Applicability of Artificial Intelligence in Administrative Authority Proceedings in Light of the Right to a Fair Trial]' in Bernát Török and Zsolt Ződi (eds), A mesterséges intelligencia szabályozási kihívásai: Tanulmányok a mesterséges intelligencia és a jog határterületeiről [Regulatory Challenges of Artificial Intelligence: Studies on the Borderlands of AI and Law] (Ludovika Egyetemi Kiadó 2021) 403.

a Ptk. szerepe ezen a téren jelentősen beszűkül, csupán egy szűk szeletet kap. Ezzel a változtatással az ágazati jogszabályok helyett egy egységes, központi szabályozás jön létre, ami tisztább, átláthatóbb és letisztultabb rendszert eredményez.[40]

[40] Gelencsér and Kiss (n 8) 60.
Balázs Hohmann, 'Interpretation the Concept of Transparency in the Strategic and Legislative Documents of Major Intergovernmental Organizations' (2021) 2(1) Közigazgatási és Infokommunikációs Jogi PhD Tanulmányok (PhD Studies in Administrative and ICT Law) 48 https://doi.org/10.47272/KIKPhD.2021.1.4