

Research Article

ADVANCING SUSTAINABLE JUSTICE THROUGH AI-BASED CASE LAW ANALYSIS: UKRAINIAN EXPERIENCE

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ABSTRACT

Background: Ukraine has a unique Unified State Register of Court Decisions that publishes all court decisions in cases considered and resolved by courts in the public domain. There are more than one hundred million such documents in the register today. This provides unique opportunities for collecting, analysing, and summarising the empirical base of justice. This has the potential to form the basis for further transformation of the national model of justice. This study's impetus may have risen from the realisation that relying solely on human resources for such endeavours may present challenges.

Methods: The study is based on the hypothesis that using hardware and software to analyse large data sets of state registers of court decisions and judicial statistics data can identify persistent patterns and causes of inefficient functioning of the judicial system.

Results and Conclusions: The study led to the development of software with functionality that annotates court decision text, intended for further use in advanced Natural Language Processing algorithms. Furthermore, the study underscores the need to develop an algorithm for predicting risks and outcomes of court proceedings and a methodology for processing large amounts of data from the Unified State Register of Court Decisions. This is justified based on specific indicators of the effectiveness of dispute resolution. This article advocates for the use of machine learning algorithms as an innovative tool to generalise large data sets from court decision registers, particularly to obtain objective data on a large scale. The article also examines the prerequisites for establishing the Institute of National Judicial Practice and explores its functioning in the present stage of judicial reform.

1 INTRODUCTION

Every year, Ukrainian courts handle over 4 million cases, with the vast majority involving civil matters concerning Ukrainian citizens.¹ The effectiveness of the judicial system is mainly assessed by citizens, which significantly affects the level of their trust in the judiciary and the state power as a whole. According to opinion polls, the majority of citizens do not trust the judiciary.²

At the same time, the quality of the administration of justice in Ukraine radically affects its assessment by international organisations and partners. In the World Bank's Doing Business reports, Ukraine ranked 64th out of 190 countries in 2020.³ In terms of the number of complaints lodged against Ukraine at the ECtHR, the country occupies one of the highest positions, with almost one-third of the decisions made against Ukraine testifying to violations of the length of court proceedings or enforcement of court decisions.⁴ Unfortunately, several judicial reforms in Ukraine have not significantly affected the efficiency and quality of the administration of justice and the organisation of justice in the country.⁵

- 1 'Judicial Statistics' (*Ukrainian Judiciary*, 2023) <https://court.gov.ua/inshe/sudova_statystyka> accessed 4 November 2023.
- 2 'Citizens' Assessment of the Situation in the Country and the Actions of the Authorities, Trust in Social Institutions (February–March 2023)' (Razumkov Centre, 15 March 2023) <<https://razumkov.org.ua/napriamky/sotsiologichni-doslidzhennia/otsinka-gromadianamy-sytuatsii-v-kraini-ta-dii-vlady-dovira-do-sotsialnykh-institutiv-liutyi-berezen-2023r>> accessed 4 November 2023; 'Citizens' Assessment of the Situation in the Country, Trust in Social Institutions, Politicians, Officials and Public Figures (May 2023)' (Razumkov Centre, 14 June 2023) <<https://razumkov.org.ua/napriamky/sotsiologichni-doslidzhennia/otsinka-gromadianamy-sytuatsii-v-kraini-dovira-do-sotsialnykh-institutiv-polytykiv-posadovtsiv-ta-gromadskykh-diiachiv-traven-2023r>> accessed 4 November 2023.
- 3 'Ease of Doing Business rankings' (*The World Bank, Doing Business archive*, May 2019) <<https://archive.doingbusiness.org/en/rankings>> accessed 4 November 2023; 'The World Bank in Ukraine' (The World Bank, 10 October 2023) <<https://www.worldbank.org/en/country/ukraine/overview>> accessed 4 November 2023; Olga Hetmanets, 'Ukraine has improved its position in the Doing Business ranking' *Economic Truth* (Kyiv, 24 October 2019) <<https://www.epravda.com.ua/news/2019/10/24/652904/>> accessed 4 November 2023; 'Ukraine has improved its ranking in the Doing Business-2020 ranking' (*State Tax Service of Ukraine*, 24 October 2019) <<https://tax.gov.ua/media-tsentr/novini/print-395389.html>> accessed 4 November 2023.
- 4 'Ukraine and the European Court of Human Rights' (*Permanent Representation of Ukraine to the Council of Europe*, 31 August 2021) <<https://coe.mfa.gov.ua/spivrobotnictvo/ukrayina-tayevropejskij-sud-z-prav-lyudini>> accessed 4 November 2023.
- 5 Oksana Khotynska-Nor, *Theory and Practice of Judicial Reform in Ukraine* (Pravova yednist', Alerta 2016); Oksana Khotynska-Nor and Andrii Potapenko, 'Courts of Ukraine in Wartime: Issues of Sustainable Functioning' (2022) 31 *Revista Jurídica Portucalense* 218, doi:10.34625/issn.2183-2705(31)2022.ic-09; Yuriy Prytyka and Iryna Izarova (eds), *Access to Justice in Conditions of Sustainable Development: to the 30th Anniversary of Ukraine's Independence* (Dakor 2021); *Judicial Reform in Ukraine: Current Results and Nearest Prospects: Information and Analytical Materials for the Expert Discussion on the topic "Judicial Reform of 2010: does it bring justice in Ukraine closer to European norms and standards?"* 4 April 2013 (Razumkov Centre 2013); 'Judicial Reform in Ukraine: A Short Overview' (*DEJURE (Democracy, Justice, Reforms)*, 7 March 2023) <<https://dejure.foundation/post/vrjydyipz1-sudova-reforma-v-ukran-korotkii-oglyad>> accessed 4 November 2023.

This underscores the urgent need to search for innovative tools and technologies, which, in particular, can be used to analyse an extensive array of court decisions. Ensuring equal access to justice for all necessitates a constant transformation of the national model of justice to identify and eliminate shortcomings in a timely manner and introduce the most cost-effective dispute resolution procedures – in state courts or out-of-court conciliation procedures. Based on the analysis of a large array of data on court decisions, it is possible to develop a system that assesses the risks of achieving the desired outcome of court proceedings in civil cases. This system aims to increase the percentage of decisions on awarding money, promote the efficiency of the use of budget funds for the maintenance of the judiciary in the state, and establish a foundation for bolstering societal trust in the judicial system.

Based on the above, the proposed project is based on the following hypothesis: employing both hardware and software to analyse extensive amounts of data from state registers of court decisions and judicial statistics to identify persistent patterns and causes of inefficient functioning of the judicial system. This approach forecasts changes in the number of cases, the composition of participants, the number of court costs and other circumstances that directly affect the proper functioning of the judicial system, with the ultimate goal of ensuring equal access to justice for all.

As a result of the study, software with functionality was developed that provides marking of the text of court decisions for further use in deep algorithms of Natural Language Processing.⁶ In addition, the need to develop an algorithm for forecasting risks and outcomes of court proceedings, as well as a methodology for processing large amounts of data from the Unified State Register of Court Decisions based on certain indicators of efficiency of dispute resolution, is substantiated.

This article also substantiates the need to use machine learning algorithms for summarising large data sets of court decision registers as an innovative tool, which, in particular, will help to obtain objective data of large volumes. The article also examines the prerequisites for the formation of the Institute of National Judicial Practice and the features of its functioning at the present stage of judicial reform.

2 JUDICIAL PRACTICE IN UKRAINE: FROM JUDICIAL GENERALISATIONS TO AN OPEN DATABASE OF COURT DECISIONS⁷

A retrospective analysis of the decision-monitoring system in Ukraine allows us to comprehensively present the issues surrounding the formation and functioning of the Institute of Judicial Practice and Regulation over several stages since Ukraine's proclamation of independence.

6 For software and intermediate results of text labeling, see: Vitalii Golomozyi, Yuliya Mishura, Iryna Izarova and Tetiana Ianevych, 'Processing Big Data of Court Decisions' (2023) 11(4) *Baltic Journal of Modern Computing* 580, doi:10.22364/bjmc.2023.11.4.04.

7 Students of Ivan Franko National University of Lviv Andriy Balkovyi, Vadym Katchyk, Yaryna Nechyporuk, Yuriy Magey, Marta Parasiuk (specialization "Justice and Court Administration") took part in the preparation of materials on judicial practice for this article.

The initial stage in the development of the Institute of Judicial Practice can be conditionally identified between 1991 and 2002. At this stage of state formation, Soviet normative legal acts were temporarily used. This practice persisted until the adoption of pertinent legislation in Ukraine. In instances where Ukrainian legislation did not address certain matters, legislation of the USSR was applied on the territory of the republic, provided that such application did not contradict the Constitution and laws of Ukraine.⁸ One of these regulations was the Law of the Ukrainian SSR 'On the Judicial System of Ukraine' No. 2022-X of 5 June 1981.⁹ Until 2022, this law defined the legal basis for the activities of courts and the organisation of the judicial system in Ukraine. Additionally, this act did not bypass the generalisation of judicial practice.

Until 1994, the Ministry of Justice of Ukraine and the justice departments of the executive committees of regional and Kyiv City Councils of People's Deputies held the authority to study and summarise judicial practice (para. 4, Part 2 of Art. 19 of the Law of the Ukrainian SSR No. 2022-X as amended in 1992). Subsequently, only the judiciary was engaged in such activities.

During this period, the Supreme Court of Ukraine was vested with special powers. In addition to summarising judicial practice, it guided the courts on the application of republican legislation. Under para. 2, Part 1 of Art. 40 of the Law of the Ukrainian SSR No. 2022-X, the guidelines issued by the Plenum of the Supreme Court of Ukraine were mandatory for courts, as well as other bodies and officials interpreting the relevant law. That is, the legislator directly determined the legal force of the explanations of the Plenum of the Supreme Court of Ukraine.

A systematic analysis of the provisions of the Law of the Ukrainian SSR 'On the Judicial System of Ukraine' No. 2022-X (as amended before 2001) reveals the bodies responsible for generalising judicial practices. These include the district (city) court (Art. 25), the regional Kyiv City Court (Art. 31), the Supreme Court of the Republic of Crimea, the Sevastopol City Court (Art. 31, since 1994), and the Plenum of the Supreme Court of Ukraine (para. 2, Part 1 of Art. 45).

Separately, it is worth noting the existence of military courts in Ukraine during this period, administering justice within the Armed Forces of Ukraine and other military formations provided for by the legislation of Ukraine.¹⁰ These military courts, including those of garrisons, regions and the Navy, were actively involved in studying and generalising judicial practices.

Significant changes to the provisions of the legislation on the judiciary took place following the adoption of the Constitution of Ukraine, a requirement formulated in para. 12 of the

8 Resolution of the Verkhovna Rada of Ukraine No 1545-XII 'On the procedure for the temporary effect on the territory of Ukraine of certain acts of the legislation of the Union of SSR' of 12 September 1991 [1991] Vidomosti of the Verkhovna Rada of Ukraine 46/621.

9 Law of the Ukrainian SSR No 2022-X 'On the Judicial System of Ukraine' of 5 June 1981 [1981] Vidomosti of the Verkhovna Rada of the Ukrainian SSR 24/357.

10 *ibid*, ch 3-1.

Transitional Provisions of the Constitution of Ukraine.¹¹ The Law of Ukraine 'On Amendments to the Law of Ukraine 'On the Judicial System of Ukraine' of 21 June 2001, No. 2531-III introduced the system of courts of Ukraine under the requirements of Article 125 of the Constitution.¹²

In line with these amendments, the entrustment of studying and generalising judicial practice was granted to local courts, courts of appeal, high specialised courts, and the Supreme Court of Ukraine. Based on the results of this work, these courts provided advisory clarifications on the application of the law.¹³ In this context, the tasks of the Plenum of the Supreme Court of Ukraine to consider the materials of generalisation of judicial practice and judicial statistics and provide explanations to the courts on the application of legislation remained unchanged. The same applied to the chambers of the Supreme Court of Ukraine.

A noteworthy aspect of this legislative act was the empowerment of the Presidium of the Supreme Court of Ukraine, which, previously focused on organising the work of judicial panels and court personnel, acquired the competence to consider materials for the study of judicial practice and analysis of judicial statistics. However, systematic work of the Presidium only commenced in 2003, spanning between 2003-2009. During this time, the Presidium of the Supreme Court of Ukraine considered several issues, including the results of the generalisation of judicial practice in cases of certain categories and the analysis of judicial statistics on the organisation of the work of the Court Chamber for Civil Cases and strategies for its improvement, the establishment of the Scientific Advisory Council at the Supreme Court of Ukraine, approval of its composition and regulations, the introduction of comprehensive familiarisation with the organisation and provision of activities of lower courts, and the evaluation of the administration of justice by individual courts, etc.¹⁴

It should be added that during this period, the annual cases considered by the courts grew rapidly. Between 1996 and 2001, the number of cases increased by more than 1 million, reaching 2.73 million. At the same time, there was a steady trend towards an increase in the share of civil cases in the total volume of court cases – by more than 600,000 during the period under review, and administrative cases showed a rise of 700,000.¹⁵ By 2002, the total number of cases under consideration by courts of general jurisdiction exceeded 4 million,

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- 11 Constitution of Ukraine No 254 k/96-BP of 28 June 1996 (as amended of 01 January 2020) <<https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text>> accessed 4 November 2023.
 - 12 Law of Ukraine No 2531-III 'On Amendments to the Law of Ukraine "On the Judicial System of Ukraine"' of 21 June 2001 [2001] Vidomosti of the Verkhovna Rada of Ukraine 40/191.
 - 13 Explanation of the Supreme Commercial Court of Ukraine No 04-5/563 'About Some Issues of the Practice of Reviewing Decisions, Resolutions, and Resolutions Based on Newly Discovered Circumstances' of 21 May 2002 <https://zakon.rada.gov.ua/laws/show/v_563600-02#Text> accessed 4 November 2023; VS Moskalenko and VP Selivanenko, *Collection of Explanations of the Supreme Commercial Court of Ukraine* (DM Prytyka ed, 2nd edn, In-Jure 2003).
 - 14 Examples of resolutions of the Presidium can be found on the website of the Supreme Court of Ukraine, which was in force until 2017: *Supreme Court of Ukraine* <<https://www.viaduk.net/clients/vs.nsf/0/56BFC627FF8E56A5C2256CE10051B54A?OpenDocument>> accessed 4 November 2023.
 - 15 'Materials of the V Congress of Judges of Ukraine' (*Ukrainian Judiciary*, 24 October 2002) <<https://court.gov.ua/sudova-vlada/969076/67856767>> accessed 4 November 2023.

with a remarkably swift increase in civil cases. In 1992, there were 518,000 cases; by 2002, this number had risen to 1.6 million.¹⁶

As of 22 October 2002, the total number of local courts, which was legally envisaged in Ukraine then, was approximately 700 courts of first instance,¹⁷ where about 21.8% of judicial positions remained vacant. The persistent staff shortages and several other systemic problems adversely affected the state of administration of justice by local courts. This is evidenced by statistics indicating that 19.5% of civil cases in 2002 were handled in violation of procedural deadlines.¹⁸

Accordingly, the above clearly underscores the significant rise in the volume of information and cases considered by the courts, juxtaposed against the unchanging number of courts up to the present day. As of the beginning of 2022, there are 674 courts of appeal and local courts in Ukraine,¹⁹ and this has had a notably adverse impact on the quality of their administration of justice.

The second stage of the Institute of Judicial Practice development occurred between 2002 and 2010. In February 2002, the Law of Ukraine 'On the Judicial System of Ukraine' was adopted.²⁰ This law incorporated the Court of Cassation of Ukraine in the system of courts of general jurisdiction, granting it the authority to maintain and analyse judicial statistics and study and generalise judicial practice. However, a significant development occurred with the Constitutional Court of Ukraine's decision on 11 December 2003 regarding the constitutionality of the provisions establishing the Court of Cassation of Ukraine within the general jurisdiction court system.²¹ This decision rendered those provisions unconstitutional in Ukraine, excluding one subject from the process of analysis of judicial practice and judicial statistics.

The new law also deprived local courts of general jurisdiction and the authority to generalise case law, a move attributed to the overwhelming caseload of the courts of the first instance. Notably, as of 2002, cases arising from administrative-legal relations were considered in civil proceedings by local general courts. In this regard, there arose a need to establish a separate link of courts of administrative jurisdiction.

16 Resolution of the Presidium of the Supreme Court of Ukraine, the Presidium of the Council of Judges of Ukraine and the Collegium of the State Judicial Administration of Ukraine No 17 'On the state of administration of justice in 2002 and tasks for the current year' of 12 March 2003 <<https://zakon.rada.gov.ua/laws/show/v0017700-03#Text>> accessed 4 November 2023.

17 Decree of the President of Ukraine No 641/2001 'On the Network and Quantitative Composition of Judges of Local Courts' of 20 August 2001 (as amended of 22 October 2002) <<https://zakon.rada.gov.ua/laws/show/641/2001/ed20011018/conv#Text>> accessed 4 November 2023.

18 Resolution of the Presidium of the Supreme Court of Ukraine and others No 17 (n 16).

19 'Report on the Activities of the State Judicial Administration of Ukraine for 2022' (State Judicial Administration of Ukraine, March 2023) <https://dsa.court.gov.ua/dsa/pokaznikidiyalnosti/1233/zvit_dsa_22> accessed 4 November 2023.

20 Law of Ukraine No 3018-III 'On the Judicial System of Ukraine' of 7 February 2002 [2002] Vidomosti of the Verkhovna Rada of Ukraine 27-28/180.

21 Case No 1-38/2003 *On the Court of Cassation of Ukraine* (Constitutional Court of Ukraine, 11 December 2003) [2003] Official Gazette of Ukraine 51/ 2705.

On 16 November 2004, the Decree of the President of Ukraine 'On the Establishment of Local and Appellate Administrative Courts, Approval of Their Network and Number of Judges'²² was issued. Subsequently, on 1 September 2005, the Code of Administrative Procedure of Ukraine came into force, marking the commencement of human rights protection in the sphere of public relations through administrative proceedings.²³ In practical terms, the administrative courts officially began their work in 2007. The number of administrative cases considered witnessed a substantial increase from 132,239 in 2006 to 196,403 in 2007. That is, in one year, the number of considered administrative cases increased by 48.52% – the highest figure compared to other jurisdictions.²⁴

The establishment of administrative courts significantly reduced the burden not only on local general courts but also on general courts of appeal by almost two-thirds.²⁵ According to the 2008 statistics, each judge in the general court of appeal received 9.6 cases and materials per month (compared to 11.3 cases in 2007).²⁶ During this period, the courts of appeal retained the authority to generalise judicial practice.

The law in question additionally empowered the higher specialised courts to provide methodological assistance to the lower courts for the uniform application of the provisions of the Constitution of Ukraine and laws in judicial practice based on their generalisations and analysis of judicial statistics. Additionally, the higher specialised courts provide lower-level courts with advisory explanations on the application of legislation in resolving cases of the relevant judicial jurisdiction. The Presidium of the High Specialized Court was also empowered to adopt relevant recommendations based on the results of the generalisation of judicial practice.

The third stage of the development of the Institute of Judicial Practice in Ukraine is associated with the period from 2010 to 2016. On 7 July 2010, the Law of Ukraine 'On the Judiciary and the Status of Judges' was adopted²⁷, abolishing the authority of the Plenum of the Supreme Court of Ukraine to generalise judicial practice. Instead, the Plenary Sessions of High Specialized Courts acquired broad powers in this domain.

22 Decree of the President of Ukraine No 1417/2004 'On the Establishment of Local and Appellate Administrative Courts, Approval of their Network and the Quantitative Composition of Judges' of 16 November 2004 <<https://zakon.rada.gov.ua/laws/show/1417/2004#Text>> accessed 4 November 2023.

23 Code of Administrative Legal Proceedings of Ukraine No 2747-IV of 6 July 2005 [2005] Official Gazette of Ukraine 32/1918.

24 Review of Data on the State of Administration of Justice by Local and Appellate Courts in 2007' (*Ukrainian Judiciary*, 2008) <https://court.gov.ua/inshe/sudova_statystyka/166666> accessed 4 November 2023.

25 *ibid.*

26 "Review of Data on the State of Administration of Justice in 2008' (*Ukrainian Judiciary*, 2009) <https://court.gov.ua/inshe/sudova_statystyka/345345457> accessed 4 November 2023.

27 Law of Ukraine No 2453-VI 'On the Judicial System and the Status of Judges' of 7 July 2010 [2010] Official Gazette of Ukraine 55-1/1900.

In accordance with para. 2 and 6, Part 2 of Art. 36 of the said Law, the Plenum of the High Specialized Court is mandated to:

- ensure the uniform application of the rules of law in the resolution of certain categories of cases of the relevant judicial specialisation, generalise the practice of application of substantive and procedural laws, systematise and ensure the publication of legal positions of the high specialised court regarding the court decisions in which they were formulated;
- offer advisory explanations on the application of legislation by specialised courts in resolving cases of relevant judicial specialisation based on the analysis of judicial statistics and the generalisation of judicial practice.²⁸

In the preceding Law of Ukraine 'On the Judicial System of Ukraine' of 2002, the Plenum of the Supreme Court of Ukraine had the authority not only to provide explanations to courts of general jurisdiction but also, if necessary, invalidate the relevant explanations of higher specialised courts.²⁹ The Law of Ukraine 'On the Judiciary and the Status of Judges' of 2010 entirely removed such powers and transferred them to high specialised courts.

It should be noted that during this period, the burden on the judicial system increased significantly. In 2010, local courts of general jurisdiction received 2.4 million applications in civil cases – 30.1% more than in 2009.³⁰

At the end of this period, the situation looked somewhat more optimistic, as evidenced by the number of cases submitted to local courts of general jurisdiction in 2016. This amounted to 1.2 million materials of civil proceedings and 669,000 cases of administrative offences.³¹ Notably, a portion of these cases can be linked to the emergence in 2014 of territories temporarily not controlled by Ukraine and, accordingly, a certain decrease in litigation due to this. Nevertheless, the critical workload on judges persisted, averaging around 36 new cases and materials per judge per month, encompassing civil, administrative, and cases on administrative offences.³²

During this period, a significant development was the creation of the Unified State Register of Court Decisions in Ukraine – an automated system for collecting, storing, protecting, recording, searching and providing electronic copies of court decisions. These decisions are openly accessible for free around the clock on the official web portal of the judiciary of Ukraine.

28 *ibid.*

29 Law of Ukraine No 3018-III (n 20).

30 'Analysis of the State of Judicial Proceedings by Courts of General Jurisdiction in 2010 (according to judicial statistics)' (*Supreme Court of Ukraine, 2011*) <[https://www.viaduk.net/clients/vsu/vsu.nsf/\(documents\)/7E0CBF357826A9DDC2257B7B00510448](https://www.viaduk.net/clients/vsu/vsu.nsf/(documents)/7E0CBF357826A9DDC2257B7B00510448)> accessed 4 November 2023.

31 'Analysis of the State of Judicial Proceedings in 2016 (according to judicial statistics)' (*Supreme Court of Ukraine, 2017*) <[https://www.viaduk.net/clients/vsu/vsu.nsf/\(documents\)/FC0243F91293BFEE C22580E400478576](https://www.viaduk.net/clients/vsu/vsu.nsf/(documents)/FC0243F91293BFEE C22580E400478576)> accessed 4 November 2023.

32 Supreme Court of Ukraine, *The State of the Administration of Justice in Ukraine in 2016 (Processed Statistical Data of the State Judicial Administration of Ukraine, Higher Specialized Courts, the Supreme Court of Ukraine): Statistical Collection* (Supreme Court 2017).

Under the Law of Ukraine 'On Access to Court Decisions' of 22 December 2005, No. 3262-IV, the procedure for access to court decisions was determined to ensure the transparency of the activities of courts of general jurisdiction, the predictability of court decisions and the promotion of uniform application of legislation. This was particularly facilitated through the introduction of the Unified State Register of Court Decisions.³³

The Register includes court decisions from various levels of the judiciary, including the Supreme Court of Ukraine, high specialised, appellate and local courts. These decisions comprise verdicts, resolutions, orders, rulings, and separate court rulings (rulings) adopted (ruling) by courts in criminal, civil, and economic cases, in cases of administrative jurisdiction, and cases of administrative offences. However, court decisions containing information classified as state secrets are excluded from the Register.

In the initial years of the Register's operation, 340,000 decisions were recorded in 2006, surpassing more than 1 million in 2007. Currently, the Register contains more than 106 million court decisions.³⁴

The next period marks the contemporary period in the development of the Institute of Judicial Practice, commencing in 2016. This pivotal year saw the Verkhovna Rada of Ukraine adopt the new Law of Ukraine titled 'On the Judiciary and the Status of Judges'.³⁵ According to the provisions of this Law, the generalisation of judicial practice is now carried out by the Grand Chamber of the Supreme Court (in Art. 45) alongside the high specialised courts (in Art. 32(1)(2)) and the courts of appeal (in Art. 27(1)(2)) with the mandatory notification of the Supreme Court. Notably, the Plenum of the Supreme Court no longer possess the authority to provide generalisations of judicial practice (in Art. 46). The court chambers of the Court of Cassation are now tasked solely with analysing judicial statistics and studying judicial practice, as per sub-para. 2, para. 1 of Century. 44 of the Law.

Therefore, with the enactment of this Law, the courts of cassation (CAP, CCC, CCC, CCC) compared to their 'predecessors' (the High Commercial Court of Ukraine, the High Specialized Court of Ukraine, the High Administrative Court of Ukraine) lost the authority to generalise judicial practice. Instead, such powers were transferred to the Grand Chamber of the Supreme Court.

On 3 October 2017, the Verkhovna Rada of Ukraine adopted the Law of Ukraine No. 2147-VIII, which, among other things, introduced amendments to the Law of Ukraine 'On the Judiciary and the Status of Judges'.³⁶ The changes included the addition of Part 2 of Art. 46 para. 10-1,

33 Law of Ukraine No 3262-IV 'On Access to Court Decisions' of 22 December 2005 [2006] Vidomosti of the Verkhovna Rada of Ukraine 15/128.

34 'State judicial administration of Ukraine: Data Sets' (*Open Data Portal*, 2023) <https://data.gov.ua/organization/b5ee25dd-1516-4a2a-a9cb-7afb5e8ec61a?license_id=cc-by&tags_limit=0> accessed 4 November 2023.

35 Law of Ukraine No 1402-VIII 'On the Judicial System and the Status of Judges' of 2 June 2016 [2016] Vidomosti of the Verkhovna Rada of Ukraine 31/545.

36 Law of Ukraine No 2147-VIII 'On Amendments to the Commercial Procedural Code of Ukraine, the Civil Procedural Code of Ukraine, the Code of Administrative Legal Proceedings of Ukraine, and other legislative acts' of 3 October 2017 [2017] Vidomosti of the Verkhovna Rada of Ukraine 48/436.

which states that the Plenum of the Supreme Court, in order to ensure the uniform application of the rules of law in resolving certain categories of cases, generalises the practice of applying substantive and procedural laws, systemises and ensures the publication of legal positions of the Supreme Court with reference to the court decisions in which they were formulated. Despite this legislative change explicitly providing for the authority of the Plenum of the Supreme Court to summarise judicial practice, it has never utilised this tool. The Grand Chamber of the Supreme Court, high specialised courts, and appellate courts retained the authority to generalise judicial practice.

In 2018, the Supreme Court initiated the issuance of summaries of its practice through Digests³⁷ and Judicial Practice Reviews.³⁸

The primary difference between these two forms lies in the subject of their publication: the authorship of the Digests belongs to the Grand Chamber of the Supreme Court, while all Cassation Courts conduct the Reviews of Judicial Practice. Under para. 3, Part 2 of Art. 45 of the Law of Ukraine ‘On the Judiciary and the Status of Judges’, the Grand Chamber of the Supreme Court, among other responsibilities, analyses judicial statistics, studies judicial practice, and generalises judicial practice. Since 2018, this legally enshrined authority of the Grand Chamber has been implemented in the form of two types of generalisations of judicial practice – thematic and periodic.

Let us consider the generalisations published from 2018 to the present day.

As of now, the Supreme Court’s website features digests of judicial practice compiled by the Grand Chamber of the Supreme Court, collected since the fall of 2018. These digests are typically published at an approximate frequency of publication of one per month. Also, in addition to the monthly digests, the Grand Chamber compiles a consolidated digest of its practice for each year and every six months.

As for the thematic structuring of such generalisations, for the convenience of using digests, the Grand Chamber has opted for a criterion based on the rationale for considering cases in which the position of the Supreme Court was formulated. Notably, the content of these digests includes the following categories:

- 1) cases considered on the grounds of the existence of an exclusive legal problem;
- 2) cases considered on the grounds of the need to deviate from the legal opinion of the Supreme Court of Ukraine;

37 Supreme Court of Ukraine, *Digest of Judicial Practice of the Grand Chamber of the Supreme Court: Decisions Entered in the Unified State Register of Court Decisions from 29/10/2018 to 02/11/2018* (Supreme Court 2018); Supreme Court of Ukraine, *Digest of the Legal Positions of the Grand Chamber of the Supreme Court on the right, in which the GCh SCU came as a result of the reinstatement of the rules of law in similar legal positions, presented in previously praised decisions to the SCU or the GCh SCU, which confirmed their 2018–2020 fates: Decisions Entered in the USRCD from 01/01/2018 to 10/03/2020* (Supreme Court 2020).

38 Supreme Court of Ukraine, *Review of the Judicial Practice of the Civil Court of Cassation as part of the Supreme Court: Decisions Entered in the USRCD for January 2020* (Supreme Court 2020); Supreme Court of Ukraine, *Review of the Judicial Practice of the Civil Court of Cassation as part of the Supreme Court in Cases of Compensation for Material Damage Caused by an Employee to an Enterprise, Institution, or Organization: Decisions Entered in the USRCD from 2018 to July 2023* (Supreme Court 2023).

- 3) cases considered on the grounds of the need to deviate from the previously expressed legal opinion of the Supreme Court;
- 4) cases considered on the grounds of the need to determine jurisdiction;
- 5) claims that are not subject to judicial review.³⁹

Each of these groups consists of subdivisions that depend on the type of judicial jurisdiction – administrative, commercial, criminal or civil.

Continuing the review of the generalisations by the Grand Chamber of the Supreme Court, it is noteworthy to consider digests formed not by the temporal criterion but by thematic focus. These include the Digest of the Grand Chamber of the Supreme Court in Criminal Proceedings (Cases), cases of disputes arising from land relations, and cases in which the Grand Chamber of the Supreme Court deviated from the conclusions on the application of the rules of law in similar legal relations set out in previously adopted decisions of the Supreme Court of Ukraine or the Grand Chamber of the Supreme Court.

In addition to the Grand Chamber's digests, reviews are also formed by the Administrative, Civil, Commercial and Criminal Courts of Cassation within the Supreme Court. Such reviews, akin to the Grand Chamber digests, are periodic and thematic. The criterion for dividing judicial practice in reviews is the case category. For example, analysing the monthly reviews of the Civil Court of Cassation within the Supreme Court, one can find content related to defamation disputes, matters concerning dignity and business reputation, disputes arising from transactions (including contracts) and disputes arising from labour relations, etc.⁴⁰

Some thematic reviews are also typical for cassation courts within the Supreme Court. Examples include a review of the case law of the Civil Court of Cassation within the Supreme Court concerning compensation for material damage caused by an employee to an enterprise, institution, organisation; a review of the case law of the Civil Court of Cassation within the Supreme Court regarding cases in disputes arising from inheritance legal relations; and a review of the case law of the Civil Court of Cassation within the Supreme Court in cases of appealing against decisions of arbitration courts and granting permission to enforce decisions of arbitration courts. Notably, these thematic reviews primarily cover decisions from 2018 to the present day, indicating a fairly thorough approach and a significant review of the material from a temporal perspective, providing a high-quality sample of the legal positions of the Supreme Court.

To ensure the unity and consistency of judicial practice of the Civil Cassation Court in the first half of 2023, ten reviews of judicial practice were published – six monthly, two consolidated and two thematic.⁴¹ These reviews possess a peculiarity as they contain only brief descriptions of legal opinions with reference to the Unified State Register of Court

39 Supreme Court of Ukraine, *Digest of Judicial Practice of the Grand Chamber of the Supreme Court for the first half of 2023: Decisions Entered in the USRCD from 01/01/2023 to 30/06/2023* (Supreme Court 2023).

40 Supreme Court of Ukraine, *Review of the Judicial Practice of the Civil Court of Cassation as part of the Supreme Court (current practice): Decisions Entered in the USRCD for July 2023* (Supreme Court 2023).

41 'Reviews of Judicial Practice of Cassation Courts' (*Ukrainian Judiciary, Supreme Court, 2023*) <<https://supreme.court.gov.ua/supreme/pokazniki-diyalnosti/analiz/>> accessed 4 November 2023.

Decisions. This allows a quick and easy familiarisation with the most current judicial practice of the Grand Chamber of the Supreme Court. It is important to note that such digests do not serve as standalone legal acts of the supreme body of the judiciary that can be cited in the enforcement of law but rather as a means to aggregate all positions of the Grand Chamber of the Supreme Court or each court of cassation within the Supreme Court for a certain period or in a particular thematic direction. This aims to facilitate a more convenient search by law enforcement officers for this practice. Modern generalisations are not a source of law and do not claim to be a foundation for forming new legal conclusions by the highest court of Ukraine.

Most recently, the Supreme Court has unveiled its development strategy for 2023-2027 online. One of the problems highlighted in the strategy addresses the 'inconvenient ways of bringing legal opinions to the attention of judges, other lawyers, and the public – the release of digests and reviews is chaotic, difficult to find on the website, not everyone takes the time to get acquainted with them; Not all practice is included in the specialised digests, at the time of the digest's publication it is already outdated because it does not cover new positions, there is no analytics in the digest – only legal positions.'⁴²

It should be noted that compared to the above data from 2016, local courts of general jurisdiction received 648,000 civil cases, 702,000 cases of administrative offences, and 21,000 administrative cases in 2022.⁴³ Moreover, the administration of justice has become more complicated as a result of the full-scale invasion of the Russian Federation on the territory of Ukraine. By the end of 2022, the jurisdiction of 169 local and appellate courts (including 84 local courts, the jurisdiction of which was transferred from 2014 to 2022) was changed, constituting more than 22% of the total number of local and appellate courts. As a result, over one-fifth of local and appellate courts have not submitted annual statistical reports, complicating the derivation of objective indicators.⁴⁴

The retrospective analysis demonstrates the necessity for a systematic search for new tools to ensure the effective study and generalisation of judicial practice in Ukraine. One potential tool, in particular, could be automated services for processing court decisions, namely large databases of court decisions from the Unified State Register of Court Decisions.

42 Development Strategy of the Supreme Court for 2023–2027 (draft as of May 2023) <<https://drive.google.com/file/d/1pFBjyBAfrCCoopnHEOS5WFFq0ANSBk-t/view>> accessed 4 November 2023.

43 'Judicial Statistics, 2022' (*Ukrainian Judiciary*, 2023) <https://court.gov.ua/inshe/sudova_statystyka/zvit_dsau_2022> accessed 4 November 2023.

44 'The State Judicial Administration of Ukraine Published Statistics on the State of Justice in 2022 under Martial Law' (*Ukrainian Judiciary*, 17 February 2023) <<https://court.gov.ua/press/news/1384043/>> accessed 4 November 2023.

3 DATABASES OF COURT DECISIONS OF THE UNIFIED STATE REGISTER OF COURT DECISIONS OF UKRAINE: PROBLEM OR SOLUTION?

The Law of Ukraine of 21 November 2002 approved the Concept of the National Programme for the Adaptation of Ukrainian Legislation to the Legislation of the European Union. Section III of this concept outlined establishing a national information network of court decisions to ensure access to examples of judicial practice and the possibility of public discussion.⁴⁵

Subsequently, by Resolution No. 2 of the Presidium of the Supreme Court of Ukraine, the Presidium of the Council of Judges of Ukraine and the Collegium of the State Judicial Administration of Ukraine of 18 February 2005, the State Judicial Administration was instructed to introduce a register of court decisions with the creation of an appropriate database in the computer network and to provide access to it in accordance with the procedure established by law.⁴⁶

On 22 December 2005, the Law of Ukraine 'On Access to Court Decisions' was adopted.⁴⁷ In compliance with this law, the State Judicial Administration opened the Unified State Register of Court Decisions (hereinafter referred to as the USRCD or the Register) for access to court decisions of courts of general jurisdiction on 1 June 2006. The Unified State Register of Court Decisions is an automated system for collecting, storing, protecting, recording, searching and providing electronic copies of court decisions.

By its Resolution No. 740 of 25 May 2006, the Cabinet of Ministers of Ukraine approved the Procedure for maintaining the USRCD.⁴⁸ This procedure, in particular, outlined the process of forming and maintaining the USRCD, including the entry of all court decisions from general jurisdiction courts and individual opinions of judges set out in writing into the Register. Control over sending electronic copies of court decisions to the Register's administrator was the responsibility of the head of the court, who was entrusted with personal accountability established by law.

The legal basis determining the procedure for the formation and maintenance of the Register has undergone changes. On 19 April 2018, the High Council of Justice adopted Decision No. 1200/0/15-18, which approved, as of today, the Procedure for maintaining the Unified State Register of Court Decisions, sub-para. 3, para. 1 of which of the state enterprise

45 Law of Ukraine No 228-IV 'On the Concept of the National Program for the Adaptation of the Legislation of Ukraine to the Legislation of the European Union' of 21 November 2002 [2003] Vidomosti of the Verkhovna Rada of Ukraine 3/12.

46 Resolution of the Presidium of the Supreme Court of Ukraine, the Presidium of the Council of Judges of Ukraine and the Collegium of the State Judicial Administration of Ukraine No 2 'On the State of Administration of Justice in 2004 and Tasks for 2005' of 18 February 2005 <<https://www.viaduk.net/clients/vs.nsf/0/2FEC892F873B73FEC3256FE2001EF898?OpenDocument&CollapseView&RestrictToCategory=2FEC892F873B73FEC3256FE2001EF898&Count=500&>> accessed 4 November 2023.

47 Law of Ukraine No 3262-IV (n 33).

48 Resolution of the Cabinet of Ministers of Ukraine No 740 'On the Approval of the Procedure for Maintaining the Unified State Register of Court Decisions' of 25 May 2006 [2006] Official Gazette of Ukraine 22/1623.

'Information Judicial Systems', referred to the sphere of management of the State Judicial Administration of Ukraine, is determined by the administrator of the register.⁴⁹

In addition, it should be noted that the order of the SJA of Ukraine dated 14 June 2022, No. 178, approved the sectoral Program for Informatization of Local and Appellate Courts and the project for building the Unified Judicial Information and Telecommunication System for 2022-2024. Annex No. 1 to this document is the Concept for Building the Unified Judicial Information and Telecommunication System (UJITS) in a new edition (hereinafter referred to as the Concept).⁵⁰ The UJITS has several modules, one of which is the USRCDC, designed for convenient search of court decisions.

As stated in the Concept, the USRCDC is one of the functional subsystems (modules) within the UJITS. USRCDC serves as a software product designed to replace the outdated accumulation, storage, protection, search and review of electronic copies of court decisions and individual opinions of judges. Its purpose is to process electronic copies of court decisions entered in the register, allowing for the storage of full texts as well as impersonal electronic copies of court decisions, automatically masking information that cannot be disclosed in accordance with the law.

It should also be noted that the implementation of transparency and publicity of the work of state bodies, including the judiciary, is facilitated by the creation and support of open public registers by the state, in particular the Open Data Portal,⁵¹ a project aimed at providing free and free access to data received by state bodies, in particular, the State Judicial Administration of Ukraine. Analysis, processing and use of information from the Open Data Portal is the basis for the functioning of many services and applications: YouControl, Opendatabot, PravoSud and many others for various purposes.⁵²

The legal basis that made it possible to launch and operate the Open Data Portal was the Regulation on Data Sets to be Published in the Form of Open Data, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 835 of 21 October 2015. This regulation defines the requirements for the format and structure of data sets to be published in the form of open data, including the frequency of updates and the procedure for their publication. It also includes the list of data sets to be published as open data,⁵³ specifying the

49 Decision of the High Council of Justice No 1200/0/15-18 'On the Approval of the Procedure for Maintaining the Unified State Register of Court Decisions' of 19 April 2018 <<https://zakon.rada.gov.ua/rada/show/v1200910-18#Text>> accessed 4 November 2023.

50 Order of the State Judicial Administration of Ukraine No 178 'On Approval of the Sectoral Program for the Informatization of Local and Appellate Courts and the Project for the Construction of the Unified Judicial Information and Telecommunication System for 2022-2024' of 14 June 2022 <https://zakon.rada.gov.ua/rada/show/v0178750-22#doc_info> accessed 4 November 2023.

51 *Open Data Portal* <<https://data.gov.ua>> accessed 4 November 2023.

52 'Services' (*Dija. Open Data*, 2023) <<https://diia.data.gov.ua/services>> accessed 4 November 2023.

53 Resolution of the Cabinet of Ministers of Ukraine No 835 'On the Approval of the Regulation on Data Sets to be Made Public in the form of Open Data' of 21 October 2015 [2015] Official Gazette of Ukraine 85/2850.

composition and type of such data for each information administrator according to their competence. For example, the State Judicial Administration is obliged to publish in the form of open data information on the details for the payment of court fees, judicial statistics, a list of courts with details, information on the stage of consideration of court cases, a list of court cases scheduled for consideration, information on bankruptcy cases, protocols of automated distribution of court cases among judges, as well as entering information into the Unified State Register of Court Decisions.

The project's rapid development and continuous improvement have positioned Ukraine as a leader in the pace of development of open data. Thus, in 2020, Ukraine took 17th place in the European Open Data Maturity ranking, surpassing several European countries with an open data maturity figure of 84%, compared to the European average of 78%.⁵⁴ Subsequently, in 2021, Ukraine was ranked 6th, and in 2022, it secured 2nd place. This impressive progression underscores the country's rapid and sustainable growth in the field of open data, even amid challenging security and political-economic conditions.

The 'Court in the Palm' stands out as an analytical tool for searching, researching and visualising court decisions. Developed as a legal startup by the private company MA Promedia Consulting LLC, this service utilises public data to offer a range of functionalities.⁵⁵ Users can view court decisions conveniently, study certain categories of cases, and apply filters not inherent in the Unified Register of Court Decisions. These filters enable users to choose the desired characteristics of a court decision, not only to search for a certain cost of the claim, a specific party or participant in the case, etc. Additionally, 'Court in the Palm' includes the WINCOUR Court Document Analyzer, allowing users to predict potential case outcomes.

The innovative approach of 'Court in the Palm'service was recognised as one of the top three winners in the Open Data Challenge 2017. The competition was held by the USAID/UK aid project 'Transparency and Accountability in Public Administration and Services/TAPAS' of the Eurasia Foundation, contributing to the official launch of the service at the end of 2018.⁵⁶

54 'The Center of Competences "Dija. Open Data" Started Working in Ukraine' (*Government Portal*, 18 May 2021) <<https://www.kmu.gov.ua/news/v-ukrayini-zapracyuvav-centr-kompetencij-diya-vidkriti-dani>> accessed 4 November 2023.

55 *Court on the Palm* <<https://conp.com.ua>> accessed 4 November 2023.

56 USAID and UK aid, 'Court on the Palm: Analyze Court Rulings in Just a Few Clicks' (*Transparency and Accountability in Public Administration and Services/TAPAS*, 18 December 2019) <<https://tapas.org.ua/all-uk/blogs-uk/sud-na-doloni-analiz-sudovykh-rishen-u-kilka-klikiv/>> accessed 4 November 2023.

4 AI FOR LITIGATION RESEARCH NEEDS

The effective functioning of the judiciary is the basis of the modern rule of law, necessitating Ukraine to fulfil its international obligations following the signing of the Association Agreement with the EU⁵⁷ and the establishment of a comprehensive Free Trade Area.⁵⁸ Economic development hinges on the stable and proper functioning of judicial and law enforcement agencies, which is crucial for ensuring effective protection of the rights of participants in these relations. Ukrainian society holds hope for the restoration of trust in the judiciary, responsibility for law enforcement and the proper functioning of mechanisms for resolving private law disputes.

Artificial intelligence has the potential for application across various fields of human activity. With a consistent and moderate strategic course, its introduction to data collection and analysis of large amounts of data provides unique opportunities for generalising experiences and predicting future circumstances. In recent years, Ukraine has been gradually introducing some aspects of artificial intelligence, modern information and communication technologies into the circulation of state bodies (e.g., Diia, unified state registers).⁵⁹ A broader introduction of e-justice and communication between state bodies, as well as between bodies of different states, is expected (the program of digitalisation of justice in the EU).⁶⁰

In our opinion, the need to analyse large data sets of the State Register of Court Decisions necessitates the introduction of such mechanisms that will ensure the transparency of the functioning of the justice system and the openness of information about the course of the case and the execution of the court decision. This approach will equip the systems with enhanced functionality, enabling more effective strategies for effective dispute resolution.

The collection and analysis of data from the State Register of Court Decisions should be based on certain objective principles indicators that will be used to assess the judicial activity and behaviour of participants in the process for efficiency, proportionality of costs and time, as well as risks of enforcement of the court decision and/or achievement of the expected result.

57 Association Agreement between the European Union and its Member States, of the one part, and Ukraine, of the other part of 27 June 2014 <http://data.europa.eu/eli/agree_international/2014/295/oj> accessed 4 November 2023.

58 'Implementation of a Deep and Comprehensive Free Trade Area with the European Union: New Opportunities for Business and Investors' (*Embassy of Ukraine in the Republic of Serbia*, 16 June 2014) <<https://serbia.mfa.gov.ua/news/1663-zaprovadzhennya-pogliblenoji-ta-vseohoplyujuchoji-zoni-vilynoji-torgivli-z-jevropejsykim-sojuzom-novi-mozhливosti-dlya-biznesu-ta-investoriv>> accessed 4 November 2023.

59 *Dija. Open Data* (n 52); 'Unified and State Registers' (*Ministry of Justice of Ukraine*, 2023) <<https://minjust.gov.ua/m/edini-ta-derjavni-reestri>> accessed 4 November 2023.

60 Roman Smalyuk and Tetjana Ruda, 'Accessibility, Digitalization, Trust: 3D Ukrainian Justice on the Way to the EU' (*Centre of Policy and Legal Reform*, 2 December 2022) <<https://pravo.org.ua/blogs/dostupnist-didzhytalizatsiya-dovira-3d-ukrayinskogo-pravosuddya-na-shlyahu-do-yes/>> accessed 4 November 2023.

Bringing the data of the State Register of Court Decisions to a form suitable for statistical processing will make it possible to conduct an in-depth analysis of court cases, predict various indicators, identify patterns and draw conclusions based on a significant amount of data from court decisions. The fact that the most valuable information in the State Register of Court Decisions is presented as texts of court decisions makes it very difficult to process. It is impossible to process an array of more than 100 million. Court decisions use only human intellectual resources – it takes too much time and resources. Therefore, hardware and software for analysing large data sets will make it possible to study and analyse information from the state register more efficiently and quickly and based on a scientific approach.

By transferring information from a text format to a statistical format through advanced Natural Language Processing algorithms, coupled with a preliminary procedure for labelling texts, researchers, government officials, journalists, and all interested persons can effectively utilise information related to court decisions in their research and decision-making. This approach aims to improve their approach to the functioning of the judicial system.

For this purpose, within the framework of the project, a program was developed to download arrays of open data in text format from the register of court decisions. Additionally, a program was launched to form a raw sample of several thousand cases and store it on the server. Another component of the project involved preparing a program for annotating parts of the court decision texts to enable persons to independently recognise the necessary information in the text in the future and translate it into a (numerical) format suitable for analysis.⁶¹

The study utilised court decisions from the Unified State Register of Court Decisions of Ukraine, which, as of 27 June 2023, contained more than 109 million court decisions.⁶² The Law of Ukraine 'On Access to Court Decisions'⁶³ defined the procedure for accessing court decisions to ensure the transparency of general jurisdiction court activities, the predictability of court decisions, and the promotion of uniform application of legislation.⁶⁴ Accordingly, courts of general jurisdiction are obliged to input all court decisions and written dissenting opinions of judges into the Register no later than the next day after their adoption or production of the full text.

It should be noted that court decisions, in accordance with the procedural codes of Ukraine, encompass court rulings, court decisions, resolutions and court orders (Code of Civil Procedure, Article 258 and others).⁶⁵ As a result, the Register stores all court decisions in the case, from the decision to initiate proceedings to the final court decision.

61 See. For more information, see Golomozyi and others (n 6).

62 *Unified State Register of Court Decisions* <<https://reyestr.court.gov.ua>> accessed 4 November 2023.

63 Law of Ukraine No 3262-IV (n 33).

64 Taras Lesyuk, 'The Activities of the Judiciary Will Become More Transparent' *Legal Newspaper* (Kyiv, 19 January 2005) 5 <<https://pravo.org.ua/diyalnist-sudovoyi-vlady-stane-prozorishoyu/>> accessed 4 November 2023; 'The Register of Court Decisions Should Work Better' (*Centre of Policy and Legal Reform*, 3 September 2009) <<https://pravo.org.ua/reyster-sudovyh-rishen-maye-pratsyuvaty-krashhe/>> accessed 4 November 2023.

65 Code of Civil Procedure of Ukraine No 1618-IV of 18 March 2004 (as amended of 4 November 2023) <<https://zakon.rada.gov.ua/laws/show/1618-15#Text>> accessed 4 November 2023.

At the same time, in our opinion, the procedural rulings of the court hold primary interest for forecasting and analysing the effectiveness of the judicial system, as they mediate the specific circumstances influencing the case outcome.

To avoid violating Section XVI of the Criminal Code of Ukraine, which addresses crimes related to the use of electronic computers, systems, computer networks and telecommunication networks,⁶⁶ the study utilised data sets available on the Unified State Web Portal of Open Data.⁶⁷ This portal is a project aimed at providing unrestricted access to data received by government agencies, in particular, the State Judicial Administration of Ukraine. Interestingly, this data has been presented in a machine-readable format, allowing for automated data processing by electronic means. However, this potential cannot be realised due to court decisions being stored in a format unsuitable for automated processing.

The decision-selection process involved applying specific search criteria, including the year, type of proceedings (civil, commercial and administrative jurisdiction), and keywords for filtering civil, commercial and administrative jurisdiction. According to the number of proceedings, court decisions were combined into cases, significantly streamlining the data processing. This approach enabled the identification of the specific group of cases for the study.

During the experimental part of the study, the hardware and software complex designed for processing court decisions underwent training. The description of the study's methodology encompasses technical characteristics of the prepared complex, along with criteria and markers for marking information in a court case. This marking became the primary criterion for collecting information and further statistical processing. Comparing trial results with case circumstances provides us with objective data to draw conclusions about the trial opportunities, advantages and disadvantages, terms, and costs. This analysis is a prerequisite for building a successful strategy for effective dispute resolution.

5 CONCLUSIONS

In the course of the project, ideas on specific components of building trust in the judiciary have been further developed. Based on this, objective recommendations for assessing the quality of the judicial system in the state, as well as algorithms for collecting data on its functioning to strengthen trust in the justice system in society. These recommendations can follow the examples set by counterparts in the EU and the Council of Europe. Establishing indicators for the effective functioning of justice, aided by algorithms for continuous monitoring and data collection, will enable a timely and flexible response to unavoidable changes.

66 Criminal Code of Ukraine No 2341-III of 5 April 2001 (as amended of 5 October 2023) <<https://zakon.rada.gov.ua/laws/show/2341-14#top>> accessed 4 November 2023.

67 'Unified State Register of Court Decisions for 2022' (*Open Data Portal*, 2022) <https://data.gov.ua/dataset/edinyi-derzhavniy-reestr-sudovih-rishen-za-2022-rik_763> accessed 4 November 2023.

In the future, the obtained data set, suitable for statistical processing, can be utilised to identify patterns and features of court cases, assess the effectiveness of the administration of justice, predict the enforcement of court decisions, and estimate the duration of court cases. Furthermore, it can be instrumental in considering procedural and judicial legislation in the course of further reform. The development and improvement of the judicial system, ensuring its independence and proper funding, require enormous efforts to effectively implement everyone's right to a fair trial, as guaranteed by the Convention for the Protection of Rights and Fundamental Freedoms. Data collected and analysed through the developed software can provide additional, unique information, which will become the basis for more detailed studies of the conditions and causes of shortcomings in the functioning of the domestic judicial system and the execution of court decisions.

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