



IMPLEMENTATION OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN THE UZBEKISTAN LEGAL SYSTEM: INTERNATIONAL EXPERIENCE AND NATIONAL PROSPECTS

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Abstract

The 21st century is bringing a technological revolution to the legal relations system. This academic article analyzes the application of artificial intelligence (AI) in the legal field through the real-world experience of three countries – Germany, Russia, and the Republic of Korea – and provides practical guidelines for Uzbekistan. The research covers a wide spectrum of issues, from document analysis automation to court decision forecasting. The scientific novelty lies in the fact that the article discusses not only technological aspects but also legal personnel training, ethical standards, and accountability mechanisms. The primary objective is to create a conceptual foundation for the safe and effective implementation of AI technologies in Uzbekistan's legal system. The results demonstrate that advanced countries' experiences cannot be directly replicated but must be adapted to the national legal environment and cultural context. The research findings can be applied in updating legal education curricula, improving legislation, and developing policies to support LegalTech startups.

Keywords: artificial intelligence, LegalTech, legal document analysis, automation, digital transformation, ethical standards, Uzbekistan legislation.

Introduction

Throughout human history, the legal system has always served as a mirror reflecting societal progress. Today, we are stepping into an era of technological revolution – artificial intelligence is fundamentally transforming not only industrial or service sectors but also the domain of legal relations.

On a global scale, law firms, judicial systems, and government agencies grapple daily with massive information flows. Contracts are signed, lawsuits are filed, court decisions are issued, and legislation is updated. This process is so intensive that traditional processing methods are no longer sufficient. The question arises: how can we enhance the quality of legal services, reduce the probability of errors, and simultaneously ensure resource efficiency?

The first layer of the problem is the constant growth of information load. In modern legal practice, a single typical project involves hundreds, even thousands, of pages of documents. Lawyers must manually review these materials each time, which requires not only time but also significant intellectual effort. In court cases,





analyzing 50-60 pages of materials for a single proceeding has become routine – representing several days of work.

The second aspect is the natural limitation of human capabilities. As psychologists have proven, the ability to maintain focus over extended periods is limited. No matter how experienced a lawyer may be, there is always a risk of missing important details when reading lengthy contracts or reviewing complex documents. Statistical data shows that a 10-15% margin of error persists in manual reviews.

The third issue is the financial aspect. The cost of professional legal services continues to rise year after year. Contract review or due diligence processes can cost clients thousands of dollars. This price barrier makes quality legal assistance nearly inaccessible for small businesses and ordinary citizens.

The fourth factor is time pressure. The business environment demands quick decisions. In commercial transactions, approaching court deadlines, or emergency situations, lawyers are forced to work under high stress. In such circumstances, quality is often sacrificed for time.

The Development Strategy of New Uzbekistan for 2022-2026, approved by Decree PF-60 of the President of the Republic of Uzbekistan dated January 28, 2022, established a concept for large-scale digitalization of the country. In parallel, under the "Digital Uzbekistan - 2030" strategy, serious attention is being paid to AI industry development – with plans for the sector to reach a value of \$1.5 billion by 2030¹.

These strategic documents set new tasks for our country's legal system – connecting theoretical knowledge with practical solutions and adapting advanced technologies to the national context.

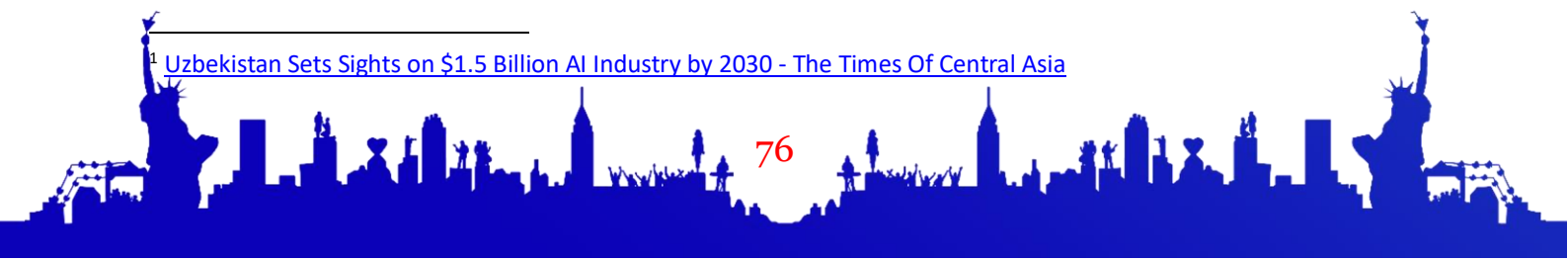
Materials and Methods

In preparing this academic article, methods such as historical, systemic-structural, logical, induction, deduction, comparative-legal, and comprehensive research of scientific sources were employed.

Research Object: The system of legal relations arising in the implementation of AI technologies in legal activities in the Republic of Uzbekistan.

Research Subject: Normative legal acts concerning the application of AI in legal activities in the Republic of Uzbekistan, law enforcement practice, legislation of developed foreign countries, as well as scientific-theoretical conceptual approaches and legal categories.

¹ [Uzbekistan Sets Sights on \\$1.5 Billion AI Industry by 2030 - The Times Of Central Asia](#)





Research Methodology:

The research was conducted using the following methods: comparative-legal analysis method (studying international and national legislation, analyzing foreign experience); systemic approach method (comprehensive assessment of AI technologies' impact on the legal system); empirical research method (studying the practical effectiveness of existing platforms and software); expert analysis method (studying opinions of legal specialists and IT specialists).

Throughout the article, the operational processes of artificial intelligence technologies used for document analysis, including machine learning, deep learning, and natural language processing (NLP) models, were examined.

Research Results

Within the framework of this academic article, the following promising trends in the application of AI technologies in legal activities were proposed and scientifically substantiated:

First direction: Accelerating document analysis processes, automation, and increasing efficiency through widespread implementation of AI technologies in legal activities;

Second direction: Updating the legal education system and training personnel through the introduction of new disciplines such as LegalTech, Data law, and Algorithmic justice;

Third direction: Adapting AI-based legal platforms to the national legal system, developing local solutions, and expanding international cooperation;

Fourth direction: Developing accountability, ethical standards, and legal regulation mechanisms in the use of AI technologies.

Analysis of Research Results

Several key challenges in improving the effectiveness of AI technology application in the legal field, particularly technological infrastructure, legal personnel preparedness, accountability mechanisms, and ethical standards, have become important research subjects even in developed countries today.

German Experience

Germany possesses one of the most developed LegalTech markets in the European Union. AI technologies are widely applied in the legal field in the country, and this process is carried out based on strict legal regulations. The distinctive feature of German experience is maintaining balance between technology and legal ethics. In this article, we examine and analyze several of them.





Smartlaw platform provides automated legal document creation services for small and medium-sized business owners. The system offers a wide range of services from simple contracts to complex corporate documents².

Legal OS is comprehensive software for automating and managing legal processes. This platform is designed for corporate legal departments and enables complete control over document circulation³.

Leverton AI is a high-tech platform that enables deep contract analysis and automatic data extraction. The system uses NLP and machine learning algorithms to find key terms, dates, prices, and liability clauses from complex contracts within seconds⁴.

Lexalyze is a platform that uses AI technology to analyze legal documents and identify errors. This system identifies not grammatical errors, but legal contradictions, ambiguous formulas, and potentially risky terms⁵.

Contractbook is a cloud platform for managing and storing contracts, enabling tracking of documents throughout their entire lifecycle⁶.

Janolaw is an online constructor for various legal documents and contracts. Some services are offered free of charge, making it attractive for small business owners⁷.

Jurato is a platform that facilitates communication between lawyers and clients, with functions for remote consultation, document exchange, and payment management⁸.

In conclusion, German experience demonstrates the widespread application of AI technologies in the legal field while simultaneously adhering to strict ethical standards.

Russian Experience

In Russia, AI technologies are actively developing in the legal field, and local solutions are being created taking into account the country's unique legal system. The distinctive feature of Russian experience is the development of LegalTech systems through collaboration between the state and private sector.

Legalysis is an AI system capable of analyzing international documents in accordance with Russian legislation⁹.

² [Sichere Verträge & Dokumente günstig erstellen: Smartlaw](#)

³ <https://www.legalos.com/>

⁴ [MRI Contract Intelligence Software | Easy Data Extraction](#)

⁵ [The domain name lexalyze.de is for sale.](#)

⁶ [Contractbook: Contract Management Software](#)

⁷ [janolaw Rechtsportal Muster-Vorlagen & Verträge zum Download](#)

⁸ [Anwalt suchen und finden bei anwalt.de](#)





Pravoved.ru is one of Russia’s largest online legal consultation platforms, providing automatic analysis of legal questions and answers based on AI technologies. The platform serves over 50,000 lawyers and 7 million users¹⁰.

Consultant Plus AI is an AI assistant developed based on Russia’s most popular legal database, Consultant Plus, helping to quickly find and analyze necessary information from legislative documents. The platform covers Russian Federal legislation, regional and local normative acts¹¹.

SudAkt AI is a Russian platform specially developed for analyzing and forecasting court decisions. The system has a database of millions of court decisions and analyzes court practice in similar cases using artificial intelligence¹².

Garant AI is an AI assistant created based on the Garant legal information system, used for processing Russian Federal legislation, court practice, and normative documents¹³.

Amtto.ai is a modern AI system used for categorizing documents, analyzing legal texts, and conducting legal research in the country¹⁴.

In conclusion, Russian experience demonstrates the adaptation of AI technologies to local legal system needs. Platforms created in the country are optimized to work with Russian-language documents and take into account the unique characteristics of Russian legislation.

Republic of Korea Experience

The Republic of Korea is one of the world’s leading countries in the field of AI technologies. The application of AI in the legal field in the country is supported at the state policy level, and high-quality local solutions are being developed.

SuperLawyer, developed by Law&Company, has functions for analyzing legal documents, providing conclusions, writing initial drafts, and searching relevant court practice¹⁵.

Intellicon U-Lex is artificial intelligence for legal document analysis that independently identifies terms and regulations and assists in analyzing relevant documents¹⁶.

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¹² ["КонсультантПлюс" - законодательство РФ: кодексы, законы, указы, постановления Правительства Российской Федерации, нормативные акты](#)

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¹⁴ [GARANT AI - интеллектуальный помощник \(кодексы, законы, указы, постановления\) РФ, аналитика, комментарии, практика.](#)

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¹⁶ [https://www.bing.com/ck/a?!&&p=d6294cd1f458b24836f502324623be3fa00889d6c020a431b0ed55a20252f8caJmltdM9MTc2OTlxMjgwMA&ptn=3&ver=2&hsh=4&fclid=3217fa6f-0fd2-63c8-2a8e-](https://www.bing.com/ck/a?!&&p=d6294cd1f458b24836f502324623be3fa00889d6c020a431b0ed55a20252f8caJmltdM9MTc2OTlxMjgwMA&ptn=3&ver=2&hsh=4&fclid=3217fa6f-0fd2-63c8-2a8e-ec870e9a627f&psq=superlawyer+co+kr&u=a1aHR0cHM6Ly9zdXB1cmxhd3llci5jby5rci8)

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¹⁶ <https://intellicon.co.kr/>





Help Me is an automated service for creating contracts and other legal documents, providing a user-friendly interface not only for lawyers but also for ordinary citizens¹⁷.

Law & Company AI Solutions provides specialized artificial intelligence services for large organizations and government agencies in legal document analysis¹⁸.

Aegis Network Legal AI is a powerful AI system that assists in analyzing complex contracts and forecasting court decisions¹⁹.

Lexify is a comprehensive solution designed for contract management, verification, and automated document creation²⁰.

In conclusion, the Republic of Korea's experience demonstrates the most advanced application of AI technologies in the legal field. Innovative solutions and traditional legal practice have been successfully integrated in the country.

Uzbekistan Experience

Although the process of implementing AI technologies in legal activities in Uzbekistan is in its initial stage, significant changes have been observed in recent years. Existing platforms in the Republic mainly perform functions of providing information and offering simple document templates, and there are currently plans to expand their functionality and automate more government services.

Yurxizmat.uz is an information portal containing all document templates in legal activities and transactions in the field²¹.

Public.sud.uz is an open database of decisions, fines, and sentences issued in court proceedings. This platform ensures transparency in court practice²².

¹⁷ <https://help-me.co.kr/>

¹⁸ <http://lawcompany.co.kr/>

¹⁹ <https://www.bing.com/ck/a?!&&p=de2acced1499787a016a5d889e02272e529c5d35daa7f86b08d708496083b80cJmItldHM9MTc2OTIxMjgwMA&ptn=3&ver=2&hsh=4&fclid=3217fa6f-0fd2-63c8-2a8e-ec870e9a627f&psq=aegisnetwork+kr&u=a1aHR0cHM6Ly9taW5lbGlzdC5rci9zZXJ2ZXJzL21jc2t5Lmty>

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<https://www.bing.com/ck/a?!&&p=529c9056f834e58e03f6539bb5ce90e5847a18639628a57ede5d6ece2fb68fc9JmltdHM9MTc2OTIxMjgwMA&ptn=3&ver=2&hsh=4&fclid=3217fa6f-0fd2-63c8-2a8e-ec870e9a627f&psq=lexify+kr&u=a1aHR0cHM6Ly9sZXhpZnI0cmFuc2xhdG9yLmNvbS9rbw>

²¹ <https://www.bing.com/ck/a?!&&p=da014cd43bb80c9ff0b99ded9e45dbc47571289f5b3568e9ccd5690c71340761JmltdHM9MTc2OTIxMjgwMA&ptn=3&ver=2&hsh=4&fclid=3217fa6f-0fd2-63c8-2a8e-ec870e9a627f&psq=www.yurxizmat.uz&u=a1aHR0cHM6Ly95dXJ4aXptYXQuXovdXo>

²² <https://www.bing.com/ck/a?!&&p=c7ba5665c96097e72df9a700498953c5500ce15a0ab9695f83467492aece1af2JmltdHM9MTc2OTIxMjgwMA&ptn=3&ver=2&hsh=4&fclid=3217fa6f-0fd2-63c8-2a8e-ec870e9a627f&psq=public+sud+uz&u=a1aHR0cHM6Ly9wdWJsaWMuc3VklmV6Lw>





AI.soliq.uz is an artificial intelligence system that can answer questions and issues related to tax law. This is one of the first legal platforms operating on AI in Uzbekistan, working in chatbot format²³.

E-sud.uz is an electronic platform performing functions such as electronic payment systems, court session schedules, compilations of court decisions, document templates, and electronic appeals to court²⁴.

E-notarius.uz is a platform providing statistics on the results of electronically registered transactions²⁵.

Kontrakt.edu.uz is a platform based on fast artificial intelligence that creates smart contracts²⁶.

In conclusion, we can see that Uzbekistan’s experience is in the initial stage of implementing AI technologies in the legal field. Existing platforms mainly perform information dissemination and simple digitalization functions, and concrete actions are being taken to expand the scope in the future.

Comparative Analysis: Germany, Russia, Republic of Korea and Uzbekistan

Parameter	Germany	Russia	Republic of Korea	Uzbekistan
Development Level	High	Medium-High	High	Initial
AI Technology Application	NLP, machine learning, forecasting	NLP, deep learning, automation	Advanced NLP, deep learning, blockchain	Simple chatbot, information databases
Primary Users	Lawyers, business representatives, citizens	Lawyers, government agencies, corporations	Lawyers, government organizations, educational institutions	Mainly lawyers and government employees

²³<https://www.bing.com/ck/a?!&&p=6d1a713d3e0e999a06ef3aa5986b92a4272f2540e28566efef4fe1fbbb954186JmltdHM9MTc2OTIxMjgwMA&ptn=3&ver=2&hsh=4&fclid=3217fa6f-0fd2-63c8-2a8e-ec870e9a627f&psq=ai+solliq+uz&u=a1aHR0cHM6Ly9haS5zb2xpcS51ei8>

²⁴<https://www.bing.com/ck/a?!&&p=9e77bfd98886a26edb80ce5a856c8d07c21d12f696a326bfb13bc0861233bf7aJmltdHM9MTc2OTIxMjgwMA&ptn=3&ver=2&hsh=4&fclid=3217fa6f-0fd2-63c8-2a8e-ec870e9a627f&psq=e-sud+uz&u=a1aHR0cHM6Ly9wdWJsaWNhdGlvbi5zdWQudXov>

²⁵ [Elektron notarius](#)

²⁶<https://www.bing.com/ck/a?!&&p=f151198ba2f955b7b45f8ae2298d46a9fb43294c3b95e0c608cee299881f26aeJmltdHM9MTc2OTIxMjgwMA&ptn=3&ver=2&hsh=4&fclid=3217fa6f-0fd2-63c8-2a8e-ec870e9a627f&psq=kontrakt+edu+uz&u=a1aHR0cHM6Ly9rb250cmFrdC5lZHUudXov>





Parameter	Germany	Russia	Republic of Korea	Uzbekistan
Legal Regulation	Strict GDPR and ethical standards	Medium level, more focus on national security	Supporting innovations	Development stage
Advantages	High quality, ethical standards, security	Wide functionality, price-quality balance	Innovative, government support	Government initiative, digitalization begun
Disadvantages	High prices, strict restrictions	System integration issues	Mainly in Korean language	Limited functionality
Language Support	German, English	Russian, English	Korean, English	Uzbek, Russian

As AI becomes more actively used in legal processes, the issue of accountability becomes increasingly complex. If AI provides incorrect advice or fails to identify a legal error in a document, who bears responsibility? This issue concerns many legal professionals today.

Internationally, the “human-in-the-loop” model has been adopted as a fundamental principle: AI makes recommendations, but the final decision is always made by a specialist²⁷. In US and Canadian practice, accountability is based on the “man-in-command” principle, meaning the person (lawyer or judge) making the decision is ultimately responsible.

Stanford University research shows that while the Westlaw AI system correctly answered 42% of questions, LexisNexis Lexis+ AI demonstrated 65% accuracy²⁸. This indicates the necessity for lawyers to carefully verify answers generated by AI.

According to Article 1.1 of the American Bar Association (ABA) Rules, lawyers must understand the advantages and risks of technologies used in serving clients²⁹. Therefore, teaching technological literacy, information security, and algorithmic ethics in legal education is of great importance in Uzbekistan.

Conclusions

²⁷ [Ethics Guidelines for AI](#)

²⁸ [Hallucination-Free? Assessing the Reliability of Leading AI Legal Research Tools](#)

²⁹ [Rule 1.1: Competence](#)





The conducted research has led to several fundamental conclusions:

Technological Potential. LawGeex's experiments have proven that AI systems perform contract analysis 200 times faster than traditional methods and achieve 94% accuracy³⁰. These figures represent high performance not only in speed but also in reliability. Lawyers now have the opportunity to dedicate more time to strategic thinking and creative work with clients instead of routine tasks.

Risk of National Lag. AI systems available in Uzbekistan remain mainly at the level of simple chatbots and databases. Comparison shows that our country lags 5-7 years behind advanced nations in this field. If comprehensive measures are not taken starting now, there is a risk of this gap widening further.

Accountability Dilemma. Most experts (over 80%) acknowledge that the question of who is responsible for AI errors remains open. If an algorithm recommends an incorrect decision and this results in harm, who bears responsibility – the programmer, the user lawyer, the platform owner, or another party? International practice applies the “human-in-the-loop” model: AI only provides recommendations, and decisions are always made by humans.

Insufficient Personnel Readiness. Research data is concerning: over 70% of young lawyers are not prepared to work with AI. This problem requires a two-pronged solution. On one hand, introducing specialized courses such as “LegalTech,” “Data law” and “Algorithmic justice” in educational institutions is necessary. On the other hand, organizing professional development courses for practicing lawyers is essential.

Practical Recommendations.

Reforming the education system is necessary. Special courses on “LegalTech Technologies and Practical Applications” should be established at the Center for Advanced Training of Lawyers under the Ministry of Justice of the Republic of Uzbekistan. In law faculties, courses such as “AI and Law”, “Digital Legal Services” and “LegalTech Fundamentals” should be incorporated into curricula.

Creating a legislative base is an important task. Currently, Uzbekistan lacks specific legislation regulating AI application in legal activities. Therefore, developing the following documents is necessary: a law on the fundamentals of AI use in the legal field; procedures for licensing AI platforms; accountability standards for legal documents created with AI assistance.

Expanding international cooperation channels is advisable. Implementing joint pilot projects with foreign LegalTech companies and adapting their solutions

³⁰ [AI vs Lawyers - The Ultimate Showdown - Superlegal](#)





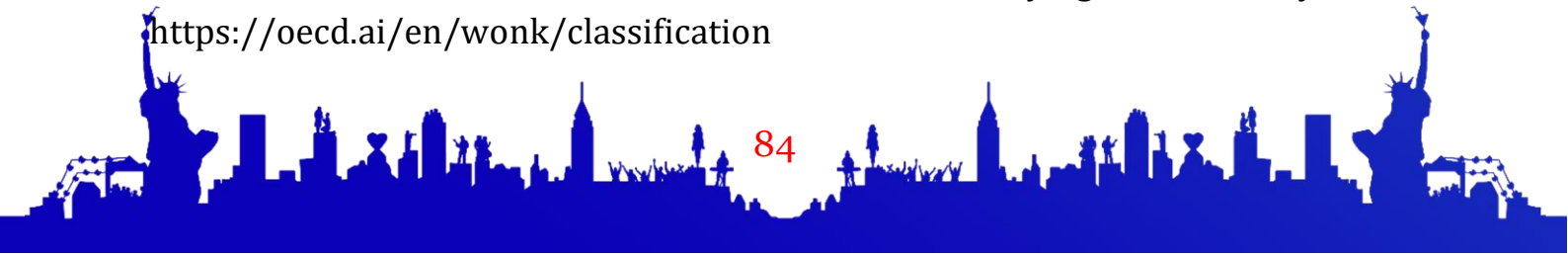
to national conditions is necessary. Law faculty professors and students should be sent abroad through international exchange programs to study advanced practices.

Establishing ethical standards and accountability mechanisms is the most crucial issue. The “human-in-the-loop” principle must be enshrined at the legislative level – this ensures lawyers’ responsibility in making final decisions. Strict standards must be implemented regarding algorithm transparency and personal data protection. This is because legal documents often contain confidential information, and their leakage or falling into third-party hands can lead to serious legal consequences.

Final Thought. Implementing AI technologies in legal activities is not merely a technical upgrade – it is a paradigm shift for the entire legal system. For Uzbekistan, this is an opportunity to build a digital justice system, make legal services accessible and affordable to the public, and create a modern legal environment meeting international standards. However, this goal cannot be achieved simply by importing technology – a phased development strategy is needed, taking into account the national context, cultural characteristics, and existing legal system needs.

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