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Legaltech and Lawtech: Global Prospects, Challenges, and Opportunities

Kalandarova Gavhar Sulaymanovna¹, Nematov Dilshodbek²

1. Associate Professor, Tashkent State Agrarian University
2. First-Year Student, Tashkent State University of Law (TSUL)

*Correspondence: gavharqalandarova86@gmail.com¹, nematovdilshodbek975@gmail.com²

Abstract: This article examines the concepts of LegalTech and LawTech, their role in the digital transformation of legal systems, and their growing significance in modern legal practice. The study analyzes global experiences in the implementation of legal technologies, particularly in countries such as the United States, the United Kingdom, Estonia, Singapore, and Uzbekistan. Special attention is given to the application of artificial intelligence, blockchain, big data, and online legal platforms in judicial and legal services. The paper also discusses the major opportunities, challenges, and future prospects associated with the adoption of LegalTech and LawTech, highlighting their potential to improve efficiency, transparency, accessibility, and quality within the legal sector.

Keywords: LegalTech, LawTech, digital transformation, artificial intelligence, legal services, e-justice, blockchain, legal innovation, digital courts, Uzbekistan.

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Introduction

One of the most significant characteristics of the 21st century has been the profound penetration of digital technologies into all areas of human activity. Today, not only the economy but also the legal field is undergoing fundamental changes under the influence of modern digital technologies. In this process, terms like LegalTech and LawTech emerged, ushering in a new phase of legal practice worldwide[1].

The term LegalTech generally refers to systems that use information technology in the operations of law firms and attorneys to improve service quality, save time, and reduce costs. At the same time, it accelerates the work of lawyers, attorneys, the judiciary, and other organizations, automates processes, and enables remote work. The goal of LegalTech is to reduce errors when working with documents, make legal services fast, affordable, and convenient, and increase efficiency in the legal system[2].

LawTech is a relatively broader concept. Because it encompasses the entire legal system, for example: digitizing the courts, the prosecutor's office, the judiciary, the notary public, civil services, and legislative processes. The goal of LawTech is to streamline court processes, increase transparency, reduce costs, and so on. Such technologies are currently one of the fastest-growing segments of the global economy. According to international analyses, by 2024 the value of LegalTech companies worldwide exceeded \$50 billion. In developed countries, these technologies have increased the efficiency of legal services by 40–60 percent. LegalTech and LawTech are not just technologies; they now assist the majority of legal professionals[3]. The purpose of this article is to analyze the essence and content of LegalTech and LawTech, their global development processes, global challenges, as well as future opportunities.

Research Methodology

This article employs several methodological approaches to analyze the future, challenges, and opportunities of LegalTech and LawTech. First, the normative-legal analysis method is used to examine international and national legal acts, state strategies, and digital economy policies. This provides the regulatory basis for regulating legal technologies, determining their legal status, and implementing them.

The research method primarily relies on qualitative and comparative analysis. The aim is to compare the experience of implementing legal technologies in different countries and to identify the factors behind their success.

In the next stage, content analysis methods will be used to examine scientific articles, reports from international organizations, and practical studies published by major companies. Using these sources, data on the global size of the LegalTech market, its growth rates, investment activity, and number of users are analyzed.

Additionally, the comparative method is also used. This aims to identify the distinctive features and development prospects of other countries by conducting in-depth studies and comparisons of LegalTech and LawTech technologies in Russia, the United States, Estonia, Singapore, and other European countries. This comparison helps expand experiences in the LegalTech field and gain international benefits. SWOT analysis is also used as an important element of the methodology. Through it, the strengths and weaknesses of the LegalTech sector, as well as existing opportunities and threats, are assessed.

During the research process, using a mixed-methods approach, In the study by Tim Miller and Atif Ahmad, qualitative interviews are conducted with 26 in-house counsel, and a broader quantitative survey identifies key issues such as complex legislation, ambiguous regulatory systems, and ethical concerns in the use of data. As a result, the study highlights a significant gap in technological literacy within the legal profession and emphasizes the need to enhance knowledge, skills, and ethical awareness. This study provides a roadmap for preparing legal professionals for responsible leadership in a technology-driven future and offers key insights for policymakers and regulators.

Results and Discussion

These methodological approaches are widely applied, driving the development of the LegalTech and LawTech sector and enhancing work activities and efficiency. Over the past decade, the level of automation in the legal sector has increased at an unprecedented pace. For example, while there were only 200 LegalTech companies in 2015, by 2024 that number had surpassed 400. The US is considered a leader in this field, where companies such as Clio, DocuSign, EverLaw, Relativity, LawGeex, and RocketLawyer are recognized as major startups[4]. They have automated document circulation, contract review, and client management in legal processes. Clio is a leading cloud-based legal software used by over 150,000 lawyers worldwide. The software works in collaboration with over 100 bar associations and lawyers and offers convenient services for sole practitioners, small, and medium-sized law firms in the UK[5].

There are many reasons to choose Clio: it offers high reliability, integrates with over 100 applications, and provides flexible pricing plans for users. Clio helps law firms organize their work more efficiently and systematically, strengthen collaboration with clients, and boost overall productivity. For this reason, many law firms in the UK prefer to use Clio in their operations[6].

DocuSign provides organizations with products that enable them to manage electronic contracts through electronic signatures on various devices. As of 2025, DocuSign has approximately 1.7 million customers in 180 countries. DocuSign-processed signatures fully comply with the requirements of the U.S. E-SIGN Act and the European Union's eIDAS regulation (including European Advanced and Qualified Signatures)[7].

LawGeex uses machine learning, text analysis, statistical criteria, and legal expertise to review contracts based on predefined rules with the help of artificial intelligence. If a contract does not meet the standards, the AI suggests the necessary edits and approvals. The company claims its program can reduce costs by 90% and contract review time by 80%, but detailed studies supporting these claims are not yet available. Deloitte is an international audit and consulting corporation that owns a network of companies worldwide. It is one of the “Big Four” auditing firms and is the largest by number of employees (312,000 people). In 2019, Fortune magazine ranked Deloitte among the world's 100 most admired companies for the twentieth time[8]. Headquartered in New York, Deloitte's clients include Sears.

EverLaw is an electronic evidence management system for court proceedings.

Relativity is a Big Data-based software for analyzing legal documents.

The UK government, through its “LawTechUK” program, has elevated the digitization of the legal system to a matter of state policy. Based on this program, electronic courts, virtual assemblies, and blockchain-based notary systems were developed[9].

Estonia is the first country in the world to fully implement the “E-Justice” system, where all court proceedings are conducted digitally, documents are certified with an electronic signature, and citizens can conduct their legal affairs online through the “e-Resident” platform.

As noted above, the United States, the United Kingdom, Singapore, and Estonia are recognized as leaders in the LegalTech and LawTech markets. In Europe and Asia, electronic document circulation, online court hearings, and virtual legal infrastructures are being widely implemented. Globally, the volume of investments in the LegalTech sector is increasing year after year. While this figure reached \$3.5 billion in 2023, it is expected to exceed \$5 billion by 2025. The US, the UK, Canada, and Israel are the countries that have attracted the most investment[10]. The key to their success is the government's proactive approach to innovation policy, programs for developing the digital economy, and collaboration with research institutes. In recent years, systems such as “E-Government”, “Adliya Online”, “Sud.uz”, and “Notarius.uz” have been launched in Uzbekistan. Additionally, the implementation of digital technologies has been identified as one of the key priorities of the “Digital Uzbekistan-2030” strategy.

The most active technological trends in LegalTech and LawTech:

Artificial Intelligence (AI) – automates the analysis of contracts and evidence, and forecasts decisions.

Blockchain – creates smart contracts, provides digital notarization, and offers various electronic services in the protection of intellectual property[11].

Big Data analyzes court decisions, legislation, and crime statistics.

Online platforms provide remote access to legal advice.

Cybersecurity ensures the protection of legal data.

Research shows that the LegalTech and LawTech sectors are currently emerging not only as tools for automating legal services but also as a new foundation for the entire legal system. As of 2024, these sectors are developing rapidly worldwide and are fundamentally transforming the legal services market. As we analyze the opportunities that LawTech and LegalTech create for the legal sector, it is important to look to international experience[12].

For example, artificial intelligence systems are being used in several courts in the People's Republic of China. In China, many legal matters are being resolved by artificial intelligence. Although it streamlines the process for minor claims and violations, there are concerns about automating complex cases. China continues to spend vast resources on developing artificial intelligence, which is having a greater impact on the daily life and functions of the state[13]. Now, Chinese courts are also using AI to help make legal

decisions. A court in Hangzhou, a city south of Shanghai, began deploying artificial intelligence in 2019. The court's assistant program, Xiao Zhi 3.0, or "Little Wise," initially assisted in a lawsuit against 10 people who had defaulted on bank loans. Previously, resolving this issue would have required 10 separate court proceedings, but with Xiao Zhi 3.0, all the cases were handled in a single hearing with one judge, with a decision reached in just 30 minutes.

Initially, Xiao Zhi 3.0 took on repetitive tasks such as announcing court proceedings during hearings. Now the technology is used to record testimonies through voice recognition, analyze case materials, and query databases in real time. Xiao Zhi 3.0 is primarily used in cases involving simple financial disputes. However, similar technology has been used by a court in Suzhou to resolve disputes over traffic accidents[14]. The AI saved the judge time by reviewing evidence and writing up judgments. "I see a temptation in Chinese courts to introduce artificial intelligence even in criminal cases. One of the problems in China's criminal justice system is ensuring fairness. They want the sentences to be the same in different regions of China," says Shitong Qiao, a professor at Duke Law School in the US. But the situation isn't the same everywhere in the world as it is in China.

A recent survey conducted by UNESCO revealed a serious trend: 44 percent of legal professionals, including judges, prosecutors, and lawyers, are using AI tools like ChatGPT in their work, yet only 9 percent have received relevant institutional training or guidance. The results of the survey, which included judicial bodies from 96 countries, reveal a significant gap that raises serious ethical and legal concerns. The survey shows that 93 percent of respondents are familiar with artificial intelligence technologies like ChatGPT, Google Bard, and Bing Chat. 44% are actively using them for tasks such as summarizing texts, writing emails, drafting legal documents, and conducting legal research. The high participation rate indicates a growing trust in AI within court systems worldwide[15].

A significant lack of guidance and training on the use of AI is evident, with only 9 percent of court operators reporting that their organizations have provided guidance or conducted AI training. This gap hinders the responsible and ethical application of AI within the legal context. In some countries, such as New Zealand and the United Kingdom, guidelines have been developed that emphasize concepts like reliability, confidentiality, awareness of bias, accountability, transparency, and data security.

If legal scholars become overly reliant on and attached to artificial intelligence, it will weaken legal reasoning, erode creative approaches, and leave situations confusing or with no clear solution. Therefore, to prevent such problems, proper measures must be taken to ensure the correct use of artificial intelligence in judicial proceedings and to guard against its misuse. For example, the Decree No. PF-140 of the President of the Republic of Uzbekistan dated August 21, 2025, "On additional measures to improve the technical infrastructure" -technical support to improve the material and technical base of the court system" is cited[16].

By this Decree of the President of the Republic of Uzbekistan: to introduce artificial intelligence technologies into the activities of courts and to accelerate the digitization processes, as well as, the priority goals for the coming years to create favorable conditions for citizens and business entities in the courts are outlined.

Additionally, proposals have been put forward to introduce digital prosecutor oversight within the Prosecutor General's Office and to automate the inspection and monitoring process. This will enable the early detection of legal violations, the monitoring of responsible individuals' actions, and the transparent and effective organization of prosecutorial oversight. Such measures help address these issues: legal professionals fully grasp the essence of LegalTech and LawTech, reducing shortcomings and errors and increasing work efficiency.

Conclusion

LegalTech and LawTech technologies are one of the leading trends fundamentally transforming the legal system. They serve to make legal services fast, convenient, transparent, and fair. Based on the information provided above, the following conclusions can be drawn: LegalTech and LawTech allow for the automation, acceleration, and reduction of errors in many processes within the legal field. Specifically:

- Increases work efficiency
- Reduces paperwork
- Saves time and money
- Manages legal documents and provides necessary guidance
- Most importantly, it alleviates human labor

At the same time, LegalTech and LawTech have a number of challenges: cybersecurity and confidentiality issues, and technical digital infrastructure challenges.

LegalTech and LawTech are becoming an integral part of the modern legal field. These technologies not only automate legal services but also enable the justice system to be more efficient, faster, and accurate. In this way, the phased implementation of LegalTech and LawTech systems will modernize the legal system and elevate Uzbekistan to a global innovative legal hub.

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