Application of digitalization in legal science and legal proceedings of modern Uzbekistan: Theoretical and legal analysis

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Abstract: The purpose of participation at the conference with the article is to reveal the significance and relevance of the problems of the implementation of human rights in the context of the digitalization of society and the development on this basis of evidence-based recommendations, effective mechanisms aimed at the effective protection of human rights and freedoms in modern Uzbekistan. The author paid attention to the implementation of an individual approach, real access to any Internet resources necessary for the educational process, and training in virtual laboratories, in classrooms. Having studied foreign experience, thanks to digitalization, it is possible to select and adapt the content of education and teaching methods, consolidating educational material in accordance with the needs and capabilities of students and the tasks set by a modern teacher. The author considers the legal framework that regulates this process, as well as a theoretical, historical, and legal analysis of digitalization, a comparative and scientific study of current trends in the use of digital technologies in human life based on the study of foreign and national experience.

Keywords: *Digitalization; Internet; law; resource; relations; Uzbekistan*

1. Introduction

1.1. Relevance

The new Uzbekistan has chosen the path of innovative development as part of the implementation of the development strategy. In this, new approaches and mechanisms become necessary. Most importantly, in search of an answer to the question of what hinders the innovative development of a society with human resources, many theories and concepts have been developed, but the new digitalization and analysis of its legal framework include the causes of the above problems.

The purpose of the scientific article is to provide a comparative and scientific study of current trends in the use of digital technologies in human life based on the study of foreign and national experiences. I would also like to point out that digital technologies in jurisprudence have already brought many benefits. Their value to human rights and development is enormous.

Indeed, every sector of development is important in this profession. Digitalization is the introduction of modern digital technologies in various spheres of life and production. Also, data analytics is at the heart of the digitalization of any sphere. This is the name given to the process of transforming primary data into useful knowledge that can be used. For example, if you place a child at least in kindergarten or at school, then with the connection of social networks, you can find out through monitoring systems the rating of these institutions and vacancies, and anyone can get data on workload and rating. Moreover, based on these data - choose the right one for your child. A logical continuation is distance learning. This led almost all countries to the transition to distance learning technologies, which showed excellent results in the field of education, including modern Uzbekistan.

Firstly, in digital education, each teacher can design curricula in accordance with the individual speed and abilities of each student.

Secondly, digital learning provides many benefits and develops the skills of the

child himself, even the student, for example, motor skills and decision-making, which significantly increases the overall level of knowledge and academic performance.

Thirdly, in educational institutions, thanks to the use of digital methods, they use presentations, videos, and practical demonstrations. Online learning is also an advantage of digitalization in the field of education.

Moreover, if you look at it in the field of medicine, then we can say that one of the important and key goals of the digitalization of medicine is to increase the convenience of using its services. For example, with the introduction of electronic prescriptions for the treatment of a patient, the benefits of using such documents are obvious to all participants - the doctor, the patient, and the pharmacist. Electronic prescriptions will be very convenient for patients with chronic diseases in the future. It is for them that electronic prescriptions are more beneficial since they will not have to go to prescribe the drug again. As a logical continuation, I want to note that in healthcare, digital transformation is taking place in several directions. The most popular now is the creation of gadgets that allow you to monitor the state of human health remotely. In addition, the use of special algorithms will allow faster diagnosis;

• reduce the number of medical errors;

• accelerate the development of new drugs.

1.2. Review and Comparative Analysis of Literature

Currently, against the background of well-known didactic models, new variations of their application are emerging, taking into account the development and implementation of digital technologies in real practice. The possibilities of using such technologies are reflected in the works, for example, Sh.Sh. Sadykov about the specifics of digital learning and improving higher education of the Republic of Uzbekistan in the context of digital transformation of the economy [1]. J. M. Romero-Rodriguez, I. Aznar-Diaz, F. J. Fenojo-Lucena [2] describe the positive experience of using digital technologies in universities, which increases the effectiveness of student learning.

Experience of Germany: as per the article by V. E. Gaibov, L. N. Danilov "Digitalization in higher education: new didactic concepts" who conducted a study on the digital elements and technologies used in higher education in different countries. As a result, the authors identified four "categories of digital elements and formats" (and according to domestic pedagogical terminology, methods, and forms of digital learning): 1) elements of the pedagogical process that are completely or partially digitized: lectures, teaching aids, electronic portfolio, etc.; 2) fully or to some extent digitized learning technologies: gamification, flipped classroom, mobile learning, learning in social networks, network, collaborative learning; 3) digitized reality: AR tools, VR technologies, simulation modeling; 4) online forms of education: electronic lectures, webinars, online programs, TED conferences, etc.

2. Discussion

It is important to establish a clear distinction: remote learning and the digitization of education represent distinct concepts. Digitalization is a more comprehensive concept, encompassing the utilization of various applications, programs, and other digital resources for e-learning within educational institutions, whether conducted in-person or virtually (e.g., completing tasks on a computer or tablet in a classroom).

Furthermore, the impact of digitalization extends beyond educational aspects to organizational procedures. This includes the implementation of electronic journals, diaries, and the option to communicate with teachers via email rather than traditional methods of contacting or visiting the school in person.

The onset of the coronavirus epidemic significantly accelerated the digitalization of education. The compulsory shift to online learning affected various stakeholders, including parents, students, faculty, and staff. However, it is essential to recognize that the processes of digitalization had already commenced well before the pandemic. The widespread use of digital media in education is indicative of this trend. The expansive market for educational digital technology, known as EdTech, serves as a key indicator, with the World Economic Forum projecting its growth to reach 342 billion US dollars by 2025. Notably, the Coursera platform alone witnessed 100 million participants completing their online education in the past year.

The digitalization of all spheres of human activity leads to the fact that education in higher education also needs digital modernization; electronic ones supplement the traditional pedagogical process. In fact, the first category in the German study is digital tools, the third is digital practical teaching methods, and the fourth is forms of learning organization.

So on June 29, 2021, a resolution of the President of the Republic of Uzbekistan "On measures to further improve the activities of the legal services of state bodies and organizations" was adopted.

According to the resolution, the creation of legal service centers in all districts (cities) of the republic was envisaged. At the moment, the centers that have begun their activities are fulfilling their tasks one by one.

The Center for Legal Services has set itself a number of goals, such as providing high-quality and qualified legal assistance to state organizations and increasing the legal literacy and legal culture of employees working in them, as well as ensuring legal and comprehensive thoroughness and high-quality documents adopted by state bodies. Government organizations today use the opportunities of digitalization.

The e-lawyer electronic system makes it easy to perform such work as introducing samples of internal regulations, contracts, and other legal documents into the electronic system and free use of samples of existing draft documents, access to a personal account by organizations using the electronic system, preparation of any project document and analytical materials to it, processing

In particular, the preparation of the relevant conclusions by the responsible employees of the Centers, the attachment of documents to the electronic system with an electronic digital signature and the mutual exchange of documents, the issuance and electronic acceptance of a special number that cannot be repeated after receiving a positive conclusion from the centers by organizations using the electronic system, automatic numbering of these documents in sequential order, confirmation [3].

The decree "On additional measures to radically improve legal education and science in the Republic of Uzbekistan", signed by the President, serves to bring the activities of our university to a new level in the direction of scientific work and innovation, as well as in all areas.

It should be noted that today, the education system, especially legal education, needs to adapt quickly to the new challenges that society and the economy face in the era of globalization.

Features of the educational process in higher education institutions, as well as the importance of universities in society and the economy, are changing rapidly. All over the world, universities compete with each other in attracting students, faculty, and finance. In such competition, universities that keep up with the times and use new digital opportunities gain an advantage over others.

In an ethos, digitalization has provided new opportunities for education and

management, facilitating data collection and analysis, interaction, and communication. The benefits of digitization include increased efficiency, student engagement, student-centered education, and the use of new teaching methods. It also facilitates the management of universities, curricula, professors, staff, and resources.

One of the main advantages of digitalization is the ability to increase students' activity. Using digital tools such as online education platforms, social media, and mobile apps, universities can create interactive and engaging educational experiences that keep students motivated and moving in the right direction. Digitization is also enabling universities to embrace new teaching methods, such as games and virtual reality [4].

The priorities for the further development of legal education and science have also been identified, among which are an educational environment that is open, transparent, and free from subjectivity and abuse and the introduction of the "Electronic University" (E-University) system.

In accordance with this, a number of electronic systems have been developed and implemented at the Tashkent State Law University (TSUL). In particular, an electronic application for students on any issue was launched, a special student service center was introduced, which operates on the principle of a "single window", and an electronic system was created for defending final qualification works and master's theses and selecting supervisors, a mechanism for electronic receipt of a payment agreement and was launched online control of debt on payments. Let us consider a couple of examples of automation and digitalization: Automation in the education environment involves the use of digital textbooks, video tutorials, and other tools that simplify the learning process. Digitalization, on the other hand, involves the construction of a new interactive educational system with feedback when a person has the opportunity to choose the pace and program of his training in accordance with the availability of free time and the initial level.

The most important result related to the educational process was the introduction of a distance-learning platform and an electronic assessment system. University platform of distance learning (http://distant.tsul.uz) while in the world-renowned system "Moodle" (object-oriented dynamic learning environment), this system has been significantly improved. In particular, they use the Zoom software tool for conducting lectures, submitting test papers, and transferring them from the Anti-Plagiarism system; more than 21 thousand electronic content (video recording, audio, electronic abstracts, Kazus materials) are posted on the site. educational platform.

3. Digitalization in the field of international cooperation

Today, Tashkent State University of Law has more than 40 foreign partners, 31 of which are prestigious universities in the international rankings. Within the framework of this international cooperation, issues of academic exchange of students, interaction of professors and teaching staff in the field of legal science and education, and internships are defined.

To this end, an agreement was reached with the Regensburg University of the Federal Republic of Germany to open a center for German law and comparative law studies in 2020, aimed at training highly qualified legal personnel with knowledge of the German language and law at TSUL. Graduates of law universities go to work in the judiciary, advocacy, and notary offices, but most of all, I am interested in digitalization after graduating from the use of graduates in legal proceedings.

Firstly, it is of great importance for ensuring openness and transparency in the work of the courts, special attention is paid

to the introduction of the latest information technologies, where the human factor is little used. Secondly, electronic appeals of citizens to the judicial system or vice versa through the system of electronic legal proceedings and court cases are considered remotely [5].

The legal basis in this area can be the Decree of the President of the Republic of Uzbekistan dated July 13, 2018 "On measures to improve the judicial and legal system further and increase confidence in the judiciary", pursuant to which the practice of systematic publication of judicial decisions on the website of the Supreme Court of the Republic has been introduced Uzbekistan, an explanation of the content of the adopted judicial document to the participants in the trial after its announcement has been introduced into judicial practice.

What has digitalization led to in the judiciary? Firstly, after applying the appeals of citizens through the systems of electronic courts of the Republic of Uzbekistan, the courts are equipped with modern means of information and communication technologies. It occupies a special place in the judiciary, where citizens living in different regions of the republic can simultaneously participate through (Online videoconferencing communication) embedded in a single electronic database, which makes it possible to hold open court hearings, ensuring the participation of parties and participants in the process. What are the benefits of such digitalization in the judiciary? This system is convenient in that participation in court hearings without the need for participants to leave their region;

Secondly, such an introduction made it possible to consider cases in a short time, save money from the financial side, as well as time to ensure presence in the courtroom.

Thirdly, since October 2018, the first instance courts have fully implemented software that automatically evenly distributes cases among judges based on the principles of fairness and impartiality [6].

A logical continuation from April 2018 was the introduction of the practice of sending court-issued enforcement documents signed by the judge's digital signature to the enforcement authorities in electronic form by integrating the information systems of the Supreme Court and the Bureau of Compulsory Enforcement.

Also, since January 2019, the practice of forming cases in electronic form in economic courts has been launched in order to store case documents exclusively in electronic form and create an electronic archive.

Accordingly, in contemporary society, individuals opt to exercise their rights by electronically submitting applications to the courts from the convenience of their residences. President Shavkat Mirziyoyev of Uzbekistan, known for consistently advocating for the people and ensuring the protection of human rights in the country, has implemented a legal framework in this realm. In his Address to the Oliy Majlis of the Republic of Uzbekistan on December 29, 2020, he underscored the imperative of enhancing the digitalization of the judicial system. This advancement aims to facilitate citizens in submitting applications conveniently online, eliminating the necessity of physically visiting courthouses. Moreover, individuals will have the capacity to remotely monitor the progress of their applications.

Additionally, commencing from June 1, 2020, an electronic repository has been instituted within the information system to archive court cases in diverse electronic formats.

Another point worth mentioning is a testing system for the universities, which has already been digitalized. Now, tests for admission to higher education institutions are held every 15 days, in two shifts every day. The average number of applicants

taking the daily test is 57,000-60,000. The results are published on the official website of the State Test Center the day after the test. The applicant is admitted to the building through a personal identification device, video fixation devices, and a metal detector. The test process takes place under continuous video surveillance. Parents of applicants will have the opportunity to monitor the test process regularly.

The best part is that right from the application process, to finding out the results, even the results of all the mandates have been made electronically. In addition, platforms that allow applicants to choose up to 5 universities and forms of education at the same time are successfully working.

Furthermore, digitalizing is now in each phase of education, including pre-school education. Bureaucratic hassles and red tape are disappearing from Pre-school education. Pre-school education agencies are regularly working on the digitalization of the field, expanding the scope of electronic services and introducing new services.

In particular, the pre-school education organization passport module, which includes a single database of pre-school education organization organizations and initial data of pre-school education organizations (power, territory, building, area of facilities, etc.), was developed, and the work of forming all data electronically began.

Electronic calculation of food costs based on the attendance of children based on the "Unique Seasonal Menu" was put into practice in pre-school education organizations.

An electronic accounting system of parental payment for child support was introduced, and a module was developed to present a document confirming the receipt of payments (cheque, invoice) to the payer.

The authenticity of the images of pre-school education organization employees and trainees who passed attendance was checked using the "deep learning inference" method of artificial intelligence.

On the basis of the decision No. 426 of the Cabinet of Ministers of the Republic of Uzbekistan of August 2, 2022 "On measures to simplify public-private partnership relations in the field of pre-school education using modern digital technologies", from September 1, 2022, pre-school education organizations operating on the basis of PPP, including , in family non-governmental pre-school education organizations, it was determined that subsidies from the state budget funds would be automatically calculated in the Non-State Pre-school Educational Organization Management Information System (NSPEOMIS) based on the attendance of employees and pupils. is conducted.

The system automatically calculates the amounts of subsidies and compensations from the state budget funds every month based on the attendance of employees and pupils. It sends electronic payment documents for their financing to the information systems of the Ministry of Economy and Finance.

As a result of the automatic calculation of subsidies and compensation amounts, bureaucratic hassles and red tape in submitting monthly order reports by entrepreneurs have disappeared.

Last but not least, I would like to give an example of my student's mentions who is studying in the European Union, Poland. My student, Abdulaziz Ravshanov, shared his thoughts and experiences about digitalization in Poland, and he notes that in Uzbekistan, many fields of social life, including finance, entrepreneurship, education, and public health, are being up-to-date and can catch up with European Standards on digitalizing. For example, he discussed the e-university systems, which are already set up at the Tashkent State University of Law. Moreover, one factor the student mentions is an e-government

system that allows citizens to use public services electronically and without any difficulties.

E-government is a continuous optimization of the process of providing public services based on digital technologies, the Internet, and modern media, and the participation of citizens and management in internal and external interactions through changes [7]. E-government facilitates the provision of public services to citizens, entrepreneurs, and state bodies, creates additional opportunities for citizens' self-management, increases their awareness of technological innovations, and facilitates their participation in public administration.

After the introduction of "Electronic Government", the transparency and openness of the activities of state bodies will increase significantly, the use of services of state bodies will be expanded, and it will be possible to present them to individual citizens, it will be possible to involve citizens in political processes and state management, use and exchange of information accelerates, optimizes the provision of public services to citizens and business representatives, enables citizens to self-serve while providing all users with other advantages and conveniences related to the provision of public services.

Electronic government is a system of organizational, legal measures, and technical tools aimed at ensuring the activities of state bodies to provide public services to individuals and legal entities, as well as interdepartmental electronic cooperation.

4. Conclusion

There are disputes and discussions in the field of digitalization, as many consider digitalization to be a controversial process. It is clear that not every digital tool is a boon for learning and that sometimes failures in the process of implementing technology cancel out good intentions.

Nonetheless, from a scientific perspective, I maintain the viewpoint that electronic devices are generally deemed satisfactory. Moreover, in the contemporary era of artificial intelligence (AI), developers are harnessing technology to execute tasks that would typically require manual labor with heightened efficiency. This includes engaging with clients, discerning patterns, and resolving issues, thereby augmenting the business's value through the incorporation of the following features:

- Facilitating the utilization of the complete capacity of data.
- Enabling precise predictions and streamlining intricate operations.

However, it's crucial to acknowledge that artificial intelligence (AI) remains a relatively recent and intricate technology. Attaining a proficient level of expertise is imperative to fully leverage the capabilities of AI and effectively implement its solutions. Mere recruitment of data scientists is insufficient for achieving success; it is essential to employ appropriate tools, processes, and management methods.

Therefore, our current objective is to promote the digitalization process across all societal sectors as a strategic means to combat corruption and external influence.

The programs and projects implemented by state bodies in the field of digitalization and the field of education are focused on the transformation of the entire technological process of education and the training of highly qualified specialists in innovative formation that meet the new requirements of the digital economy.

If I compare this with the Tashkent State Law University, then I would like to note that the university is doing tremendous work to teach students English, and Chinese law using smart contracts and international electronic agreements, which are the basis for the development of international trade and international private legal relations of our time. In this, I see the importance of digitalization in jurisprudence.

In conclusion, it should be noted that in the near future, the legal science and education of modern Uzbekistan, deeply integrated with the advanced world legal education and the use of digitalization, will contribute to the legal support of all spheres of our country.

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