Artificial intelligence in the process of European integration

Sokol Shurdhi[1] and Luan Bekteshi[2]

To cite this article:
Shurdhi, S., & Bekteshi, L. (2025). Artificial intelligence in the process of European integration. Romanian Journal of Economics, 60(1), pp. 132-142.

Abstract. *The digital transformation process has long started in Albania and all public and private actors are committed to digital transformation. Albania is awaiting the opening of negotiations for EU membership and therefore should harmonize its legal framework with EU law and standards presented in the EU Acquis Communautaire. Artificial Intelligence has been made possible in many aspects of improving governance in Albania. Some enterprises and public institutions are experimenting with Artificial Intelligence to improve their services and processes. Although the development of Artificial Intelligence has begun to take important steps forward, it is again not at high levels as in some countries with developed infrastructure in this field. Artificial Intelligence in Albania is still in the initial stage of development, but it has the potential to increase its impact and use in many areas of society and industry. Artificial Intelligence may have a very important role in supporting the extension of the EU Acquis in Albania. The implementation of an Artificial Intelligence system would make it possible to automate the work processes of the approximation of related legal acts, such as the assessment of the impact of the EU Acquis, the identification of gaps, analysis, and even the provision of some pre-legal (drafting) and other supporting activities. This paper presents an original work that proposes the configuration of a platform for public institutions that use Artificial Intelligence to reduce the administrative burden and speed up the process of transposition of EU legislation. To enable this, the literature has been studied as well as many cases of implementation in different sectors of economic and social activity. Simultaneously, a targeted examination of AI's component structure and its tools was conducted. To achieve this goal of the paper, some of the digital governance platforms in some countries in Europe as well as in Albania have been investigated and analyzed to understand how they work.*

Keywords*: digital transformation, artificial intelligence, automation, platform, legal acts*
JEL classification*: O33, L86, K23*

1. Introduction

The Internet has been utilized more and more since the 1960s, when it was first used to share documents and information, mostly in the scientific community. Today, practically everyone in developed nations has access to the Internet. Several states have begun implementing digital governance in response to the population's high rate of information and communication technology use. During this period, there have been extraordinary changes related to the processes of globalization, technological processes, and the appearance of technologies in the network. These developments have enabled the government to focus on what is known as "Digital Government," which involves using information and communication technology, particularly the Internet, to enhance governance procedures, facilitate communication, and offer services.

[1] Barleti University, Tirana, Albania; s.shurdhi@umb.edu.al
[2] Barleti University, Tirana, Albania; l.bekteshi@umb.edu.al

The governments of many countries are facing a series of important challenges related to the use of AI, related to the use of information technology in the public sector, budgetary expenditures in this area, the level of services that are intended to improve, etc.

Numerous nations are using artificial intelligence to increase the effectiveness of government services and make it simpler and more effective to get information and services. The implementation of artificial intelligence tools to facilitate citizens' use of the e-Albania digital governance portal's services, including a "chatbox" that facilitates user navigation of the e-Albania platform, was the first successful instance of artificial intelligence being used in digital governance in Albania.

In Albania, the process of digital transformation has been on for a while, and all public and commercial actors are making great efforts to achieve this goal. The "Albania Digital Agenda 2022-2026" seeks to encourage investments in the critical fields of cybersecurity, artificial intelligence (AI), advanced computing and data processing, and the advanced digital skills required to advance them.

Enhancing the quality of services, forecasting investments in the integration of new technologies in electronic government systems, developing digital skills, and creating a work plan to optimize the economic and social potential of information and communication technology are the main goals of the new digital agenda 2022–2026. Using ICT tools to boost effectiveness and efficiency and continuously enhance public services, Albania aims for flexibility and interactivity in its interactions with enterprises and citizens.

Albania, a candidate nation, must align its legal system with EU law and standards as outlined in the EU's Acquis Communautaire since it is currently getting ready to negotiate to join the EU. The EU-Albania Stabilization and Association Agreement, which was concluded on June 12, 2006, imposes a duty on the Republic of Albania to align its laws with the EU acquis (AKSHI, 2022).

Over the past few years, with the implementation of ICT systems and solutions, the government has collected a very large amount of data from service transactions. A High-Performance Computing Center (HPC) must be established in order to analyze and process the vast amount of data and develop predictive models that will improve the lives of inhabitants.

The government is changing how it develops its policies and strategic goals as a result of technological advancements and the proliferation of information. As digital information expands and becomes more complex, so does management, processing, storage, and security. New tools for capture, discovery, and analysis will help the government gain insights from unstructured data. As governments strive to evolve their policies, in turn, data-driven organizations are building the foundations to connect dependencies between events, people, processes, and information. One of the main goals of the Albanian government is to enable the use of artificial intelligence in public sector projects, services, and solutions in order to provide proactive services to citizens and businesses through the implementation of AI-powered platforms.

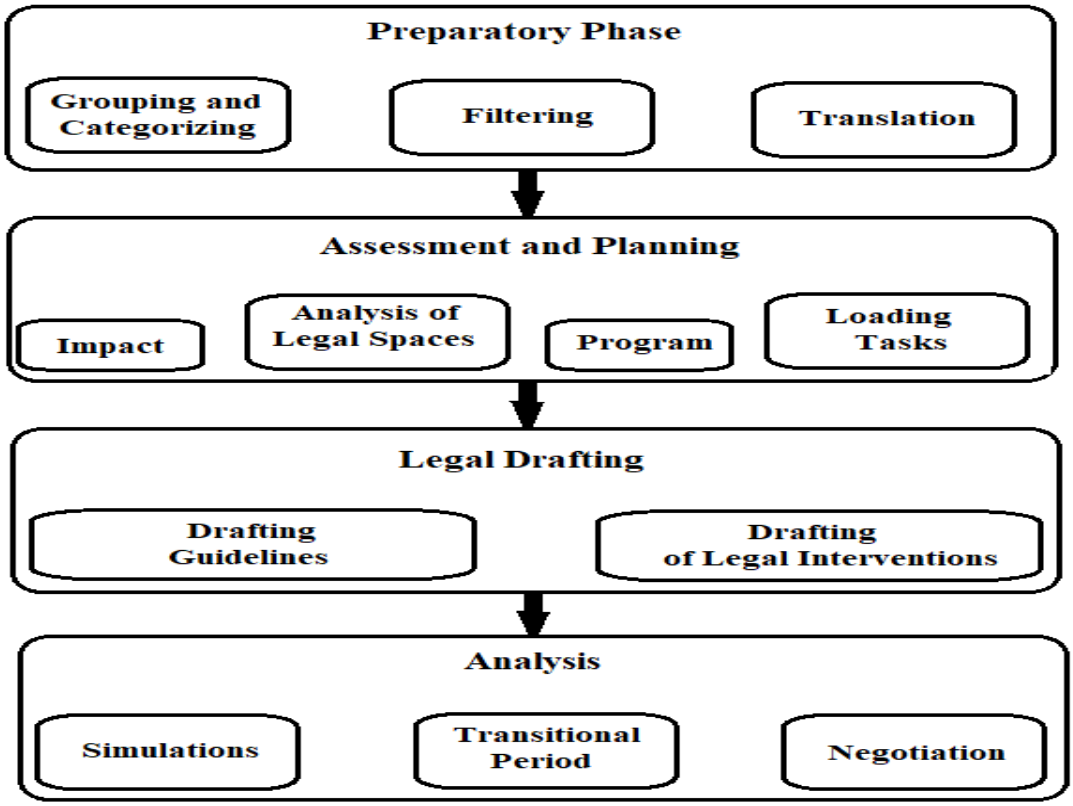
Albania needs to hasten its integration into the EU, which can be accomplished by optimizing time and resources throughout the negotiations. Artificial intelligence (AI) has the potential to play a significant role in extending the EU acquis in Albania. The implementation of an AI system would allow for the automation of work processes associated with the approximation of related legal acts, such as assessing the impact of the EU Acquis, identifying gaps, conducting analyses, and even providing some paralegal activities (drafting) and other support.

The European integration process of Albania requires the transposition of more than 4300 laws and by-laws into Albanian legislation. This process, if developed traditionally, would require many years and this problematic situation has been passed by some of the countries that have been integrated into the EU, which have passed this process at high costs, paying a lot of money to pay expert translators and wasting a lot of time. We are already in another era, where thanks to artificial intelligence we can make this process faster and at much lower costs. The alignment process goes through several stages and requires state institutions to be empowered with analytical capacities.

In this instance, artificial intelligence is being used to assist the government, state institutions, and all parties involved in the collection and organization of EU acts and laws in achieving strategic goals, such as lowering unit costs and improving services, as well as assisting in the reduction of expenses for services

to the government, citizens, organizations, and any stakeholders involved. The solution architecture should be built to provide the best value in security, performance, accuracy, and low infrastructure cost.

Figure 1. Approximation process



Source*:* developed by the author.

2. Literature review

Computers and digital technology have been responsible for some of the most significant changes in our lives over the past fifty years. The computerized "e-" versions of the tools, gadgets, and services we created and built centuries ago have gradually supplanted them, and we have been constantly adjusting to this new digital world (Alpaydin, 2016).

Innovations in computer science, robotics, and artificial intelligence that reinforce one another define the most recent stage of the ongoing "digital revolution." One of the most potent and revolutionary technologies ever made available to humanity is artificial intelligence. Computer algorithms that are capable of accurately simulating human cognitive functions such as learning, decision-making, and problem-solving are referred to as artificial intelligence (AI). The cutting edge of the cutting edge, GenAI is a revolutionary subset of AI that can produce new content by using patterns and structures it has discovered in existing data (Pagallo et al., 2018; Marr, 2024).

For decades, artificial intelligence (AI) researchers have sought to enable computers to perform a wide range of tasks once thought to be reserved for humans. In recent years, technology has moved from science fiction into real life: AI systems are capable of learning, playing games, recognizing speech and faces, and making defensible decisions. Over several decades of research, the definition of AI has changed. While AI's applications have evolved, its fundamental ideas have remained constant. The way AI is used today differs greatly from how it was viewed in the 1950s (Eggers et al., 2017; Pathak & Bhandari, 2018).

Artificial intelligence applications across a range of domains have advanced quickly in recent years. Artificial intelligence technologies have found applications in image classification, object detection, voice control, machine translation, and more complex domains like drug composition analysis, thanks to their high performance, high availability, and high intelligence. These include brain circuit reconstruction, particle accelerator data analysis, DNA mutation impact analysis, and more (Ma et al., 2015; Ciodaro et al., 2012; Adam-Bourdarios et al., 2015).

In contrast to the natural intelligence exhibited by humans, such as "learning" and "problem-solving," artificial intelligence (AI), also known as machine intelligence, refers to the intelligence displayed by machines. Machine-learning algorithms enable the processing of vast amounts of data and produce extremely accurate predictions that surpass human performance in comparable tasks. The ability of a computer to behave like a single entity is known as artificial intelligence (AI), and it has several uses, including robots and software simulators (Wikipedia, 2024).

Governments' role in closing the digital divide has often been viewed as a combination of encouraging investment and changing laws to improve connectivity infrastructure and make internet access more affordable. But the emergence of artificial intelligence (AI), especially large language models (LLMs), adds a nuanced dimension to the problem. The effectiveness of these AI systems depends on the quality and availability of data; in order to guarantee their application across a broad range of languages and contexts, datasets (corpora) must be not only large but also diverse and representative. Governments are the primary enablers of technology and market simulators of general activities in our society (Peixoto et al., 2024; Jimenez-Gomez et al., 2020).

AI comprises a broad range of technologies intended to mimic human cognitive capacities by enabling robots to see, interpret, act, and learn. By learning from vast amounts of training data, generative artificial intelligence (GenAI) encompasses systems such as complex big language models that can produce new content, including text and images (Cazzaniga et al., 2024).

For the government, AI is nothing new. Although its employment has been most common in intelligence and defense, it has also been employed to lighten laborious jobs. AI undoubtedly plays a part in providing services and assisting with triage tasks. AI is a potent instrument to boost government efficiency, but it is not a panacea for all issues facing the government (Mehr et al., 2017).

Three factors are taken into consideration while examining the effects of AI on public management. First, there is a classic risk of labor substitution in the public sector workforce if decision-making is left to AI. Second, because AI applications often include non-diagnostic elements by decreasing the ability of non-experts to audit the mechanisms leading to decision outcomes, it is important to address the heightened dynamics of AI-supported public decision-making. As AI algorithms tend to imply that the degree of transparency, tractability, and explainability is inversely related to their complexity, the third is a reduction in opacity issues surrounding AI performance and affordability with the population (Dwivedi et al., 2019).

Artificial intelligence is generating a lot of hype and excitement about the possibilities of it enabling governments to provide enhanced services and to engage with the public, particularly in complex policy and service domains (Henman, 2020).

Artificial intelligence is a hot topic these days. AI has not been limited to popular and enterprise software applications. AI is not just found in well-known and business software programs; it is also essential for improving administrative work, scientific understanding, communication, and information, as well as for personalizing educational experiences (Pathak & Bhandari, 2018; Bekteshi, 2025). The use of artificial intelligence (AI) applications in government is receiving increasing attention from global research and practice communities. AI has the potential to change the way we live and work. The potential uses for AI in the public sector are significant (Medaglia et al., 2023; Government Data Service & Office of Artificial Intelligence, 2019). AI presents multiple challenges for governments, ranging from the emergence of a new language-based digital divide to shifts in public job structures and revenue mobilization, culminating in potential impacts on government responsiveness and democratic institutions (Peixoto et al., 2024).

Designing, developing, utilizing, and assessing cognitive computing and machine learning to enhance public agency management, policymakers' choices, and related governance processes are all part

of artificial intelligence (AI) in government. The public sector has started investigating the application of AI in a variety of fields. Through artificial intelligence (AI) and cognitive computing, government organizations will be able to enhance the skills of their employees by using natural language processing to communicate with people and processing and learning from vast volumes of different data across heterogeneous systems in almost real-time. Through the reordering of work between humans and computers, AI systems will also allow agencies to conduct transactions at a faster pace. AI can also speed up innovation in frameworks used to make decisions about public policy. Because cognitive systems can deal with larger amounts of data and connect dots at a considerably higher rate of efficacy and efficiency, they facilitate complicated decision-making situations in real-time (Desouza, 2019).

The process of EU integration is not only legislative but also structural, requiring modernization of institutions, education, and governance through technology. Smart environments powered by AI are essential for speeding up this transformation. The recent labs represent an important stimulus towards the digitalization of the country but a new digital agenda to stimulate the diffusion of smart labs in academic institutions is more than urgent because it can pave the way towards more ambitious goals such as the transition towards smart academic institutions. (Shurdhi and Shtylla, 2024). By aligning its digital education agenda with EU priorities, Albania strengthens its capacity to meet integration standards in a sustainable and forward-looking manner.

By automating and enhancing repetitive operations, artificial intelligence aims to increase government efficiency overall. This will free up public sector workers to focus more on innovation and less on non-essential work. The use of AI technologies will benefit citizens by making their experiences more efficient and customized. Public sector employees will have more time to devote to creative ways of enhancing services since they will be spending less time on routine duties (Hashmi et al., 2019).

The enormous potential that artificial intelligence (AI) offers to enhance services is the main topic of this article. In particular, it can assist in expediting the process of enacting laws, saving time and money. The main goal of this study is to suggest using AI technology in government agencies to speed up the process of implementing EU laws. The automation, collecting, and selection of all EU-introduced acts and legislation, as well as the availability of these codes from any device at any time, will be made possible by the use of NLP (Natural Language Processing) capabilities to provide this service.

In particular, this automation entails the integration of artificial intelligence (AI) technology into public institutions to handle requests and provide all platform users with their required information, as obtained by EU acts.

3. Data and methodology

This paper's primary goal is to suggest the setup of an artificial intelligence-based platform for public institutions that would lessen administrative load and expedite the implementation of EU laws.

This has been made possible via the study of the literature and numerous implementation examples in various spheres of social and economic activity. Simultaneously, a targeted examination of AI's component structure and its tools was conducted. In order to accomplish this purpose, the article has examined and studied the functioning of several digital governance systems in Albania and several European nations.

This paper's goal is to suggest a useful platform that would expedite and simplify the transposition of EU legislation, shortening the timeframes and allowing Albania to join the EU sooner.

4. Research results and comments

The establishment of a system for public institutions to use Artificial Intelligence (AI) to lessen the administrative burden of transposing EU legislation is advised as a very suitable solution to speed up Albania's EU accession process. This system would allow for the aggregation and approximation of EU

laws as well as the comparison of Albanian and Acquis legislation to find similarities, gaps, and inconsistencies.

The main goal of this project is to use AI technology in public institutions to speed up the process of EU legislation transposition. Thanks to the automation, collection, and selection of all EU-introduced acts and legislation made possible by the use of NLP (natural language processing) capabilities, all parties involved in these processes will be able to access these codes at any time and from any device.

In particular, this automation entails integrating AI technology into public institutions to handle requests and provide needed information to all platform users throughout the project, as obtained by EU acts.

Such a project is assumed to be successful if certain conditions are met, such as the availability of all documents, regulations, and laws, the commitment and full cooperation of all actors involved in such a project, the configuration of appropriate technology to receive the data of the EU acts using Artificial Intelligence and serve them raw, setting up and properly configuring the virtual infrastructure in the cloud of the Government Datacenters.

The system must provide secure access for all its users. The security of the system must be based on user roles that correspond to the functional and institutional roles of the users of this system.

The system needs to be dependable and robust, offer constant control over the accuracy and completeness of the data, and be protected from unwanted access. It must be designed such that only authorized individuals can enter, with the rights outlined in this system. The ability to define rights at the module level should be provided by the system.

The system must be accessed by authorized institutional users through their Active Directory accounts. Users' rights to the modules they have access to will be based on the role each user has in the system. Only after his identification as a user with fully defined rights, he (the user) can enter the system and work only on those functions and tasks based on the rights (access) defined by the administrator.

To increase the level of information security, the system that will be built needs the database administered in the latter to be encrypted. Database encryption must be of AES (Advanced Encryption Standard) 256-bit specification. The database must be encrypted even during communication with users. Also, data transmission must be encrypted. The purpose of data encryption within the database and transmission is to protect against malicious intent.

Utilizing the data from all the entities in charge of the nation's EU integration process is essential because the jobs this system is supposed to accomplish are tied to the availability of vast volumes of data. This refers to how each accountable institution's systems are interconnected. Such a system's block diagram ought to consist of multiple modules.

1. The module for managing users, roles, and rights, as the system must be able to create users with identification data and the position that this user holds in the organization.

2. The base module of Albanian legislation, as the platform, must contain a complete digital overview and archive of the entire base of Albanian legislation. The module must offer the possibility of searching, updating, and adding laws/articles by users through graphical interfaces. All this basis should serve as the source for comparison and processing of all acts coming from the European Union.

3. Management of all processed EU documents. The system should keep a complete history of every document it handles, along with the results the process has produced. This module should also serve to validate a newly uploaded document, and if it has been processed before, notify the user of this. All these records must be kept in the history of this document and sent for approval with the relevant notes. The module must offer the possibility of searching, filtering, updating, and the addition of directives, regulations, and communiqués, as well as their categorization.

4. "Chatbot" module, which should enable user communication with the system's information and knowledge. The main functionalities should include answers to questions and instructions (for the implementation of the Acquis) as well as guidance to websites and information sources.

5. The Draft Processing, Modification, and Generation Module, which should allow the version derived from the EU legislation, translated into Albanian, to be read visibly and comparatively, with the respective parts identified in the Albanian legislation.

6. The Approvals Module, which should allow the definition of processes (workflows) that require the approval of another operator located in a specific position in the hierarchy.

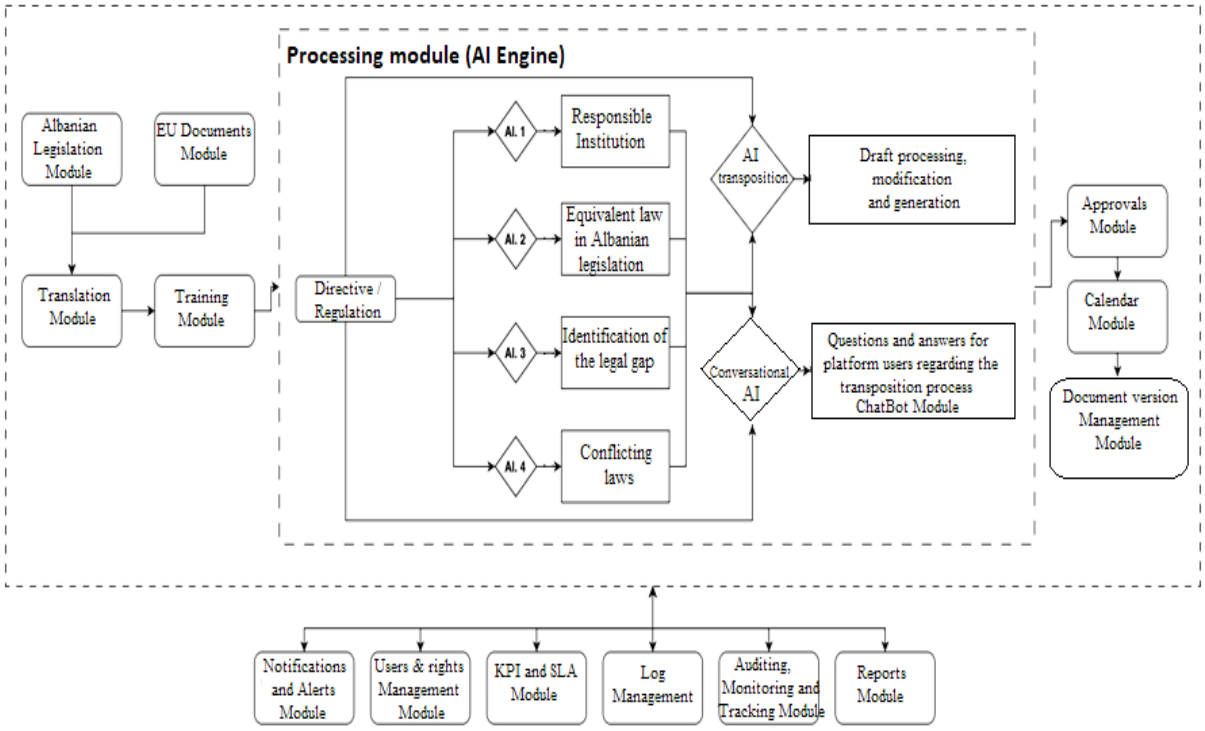
7. Transposition management module. This module, linked to the membership and criteria chapters configured in the KPI module, will present real-time progress on them and keep all actors coordinated in a common process.

8. The Translation Module, which must implement machine learning and use neural network models to provide the most correct results against the Albanian language, the quality and continuous configuration of which must be ensured by leading companies in the industry, such as Microsoft, Google, etc.

9. Processing module (AI Engine). The entire transposition process should be driven by an Artificial Intelligence engine. This engine must coordinate all other modules that will serve as a data source, text processing, result generation, and intervention requests that will be displayed to the user. This module will be the answer to the translation, filtering, and categorization of acts and other data.

10. Data model training module. The models to be utilized must be regularly trained because the level of the data model has a direct impact on how efficiently this automation process works. Data and information obtained from human interaction must be combined with pre-trained models in this process.

Figure 2. AI platform modules used for EU transposition



Source*:* developed by the author.

11. Document version management module. This module should also contribute to the display of alerts if a document coming from the EU that modifies or references it is later handled.

12. Reports module. The system should support analytical reports for all users according to the assigned role and the rights they should have in the process. As such, it should allow the creation of statistical and qualitative summaries to help each user and actor of the system have the appropriate visibility

into this process. Also, the possibility of scheduling reports to be automatically generated by the system and automatically sent to the configured emails should be allowed.

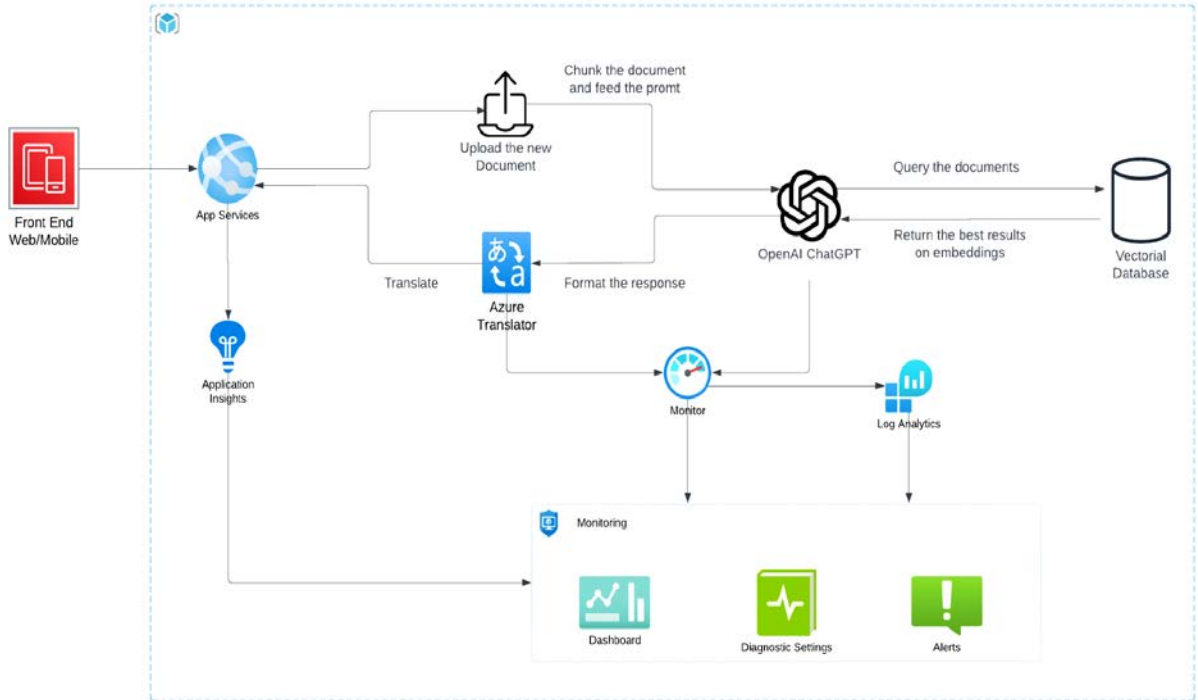
13. Notifications and Alerts Module.

14. Auditing, Monitoring, and Tracking Module. The system should provide opportunities for monitoring and auditing by specific users to guarantee success at different levels of the entire process. In this module, it should also be allowed to configure and process logs in an easily readable way from which decisions can be made.

15. Calendar Module. The process of transposition can also be accompanied by key dates and steps to achieve the full implementation of a legal change. These dates should be recorded in a calendar that will keep all the actors involved informed, so that there is a continuous work process. This module should also allow the generation of agendas for selected periods. These retrieved records should be available in the Reports module.

Artificial intelligence represents a higher level of automation and is keeping governments and "technology-hungry" businesses engaged with its explosive potential. Historically, automation is not a new concept, and many industries have been adopting automated processes and efficient organizational workflows over the past decades. But what makes artificial intelligence special this time? "Artificial intelligence is primarily defined as the ability of a machine to perform cognitive functions associated with human minds, such as perception, reasoning, learning, interacting with the environment, solving problems, and even being creative. Artificial Intelligence is a combination of advanced computing technologies, in various stages of development. Some of these technologies have been present in society for decades, while others are relatively new. With the arrival of "Big Data" on the scene, the technologies usually included in the so-called "AI" are evolving rapidly. However, AI is a relative technological development, sometimes based on old technologies, which are now already made possible by access to large amounts of data and new capacities for processing this massive data.

Figure 3. System framework



Source: developed by the author.

The proposed solution has the double advantage of representing a powerful tool to reduce manual work as well as a system that aims to reduce administrative and time limits for the adaptation of Albanian legislation to EU legislation. This system is expected to serve as an engine that will cut over 60% of the manual and mechanical work currently required by the process of adapting the local legal infrastructure to conform to the laws of the European Union.

Such a project is assumed to be successful if it is considered that certain conditions must be met such as the availability of all documents, regulations, and laws, the commitment and full cooperation of all actors involved in such a project, the configuration of appropriate technology to receive the data of the EU acts using Artificial Intelligence and serve them raw, setting up and properly configuring the virtual infrastructure in the cloud of the Government Datacenter, as well as to increase the level of information security, the database of the system to be built needs to be encrypted.

5. Conclusions

During the last decade, AI has become one of the most important technologies and represents the most important technological tool for data collection and management. It is now difficult to find any sector where AI systems have not been used or implemented.

The government should start thinking about AI implementation by learning from previous government transformation efforts and private sector AI implementations, keeping in mind that everything builds on existing resources and keeping security issues in consideration. The use of Artificial Intelligence (AI) in government is extensive and significant. The challenge is to shape and use AI to improve and protect social and economic objectives. Artificial intelligence, by automating and improving routine tasks, can make the entire government more efficient by spending less time on non-essential tasks and more on innovation.

The configuration of such a platform for public institutions aims to put Artificial Intelligence (AI) into use to reduce the administrative burden of transposing EU legislation, comparing the current Albanian legislation with that of the Acquis, filtering information, replacing manual work, etc. The implications of this AI application are only as good as the data that drives it. To improve algorithms and improve output accuracy and reliability, systems with learning capabilities need large amounts of high-quality data. Providing high-quality data requires sophisticated and effective data management.

References

Adam-Bourdarios, C., Cowan, G., Germain, C., Guyon, I., Kégl, B., & Rousseau, D. (2015). The Higgs boson machine learning challenge. In NIPS 2014 workshop on high-energy physics and machine learning (pp. 19-55). PMLR. https://dx.doi.org/10.1088/1742-6596/664/7/072015

AKSHI. (2022). Agjenda digjitale 2022-2026, https://akshi.gov.al/wp-content/uploads/2022/06/vendim-2022-06-01-370-Agjenda-Digjitale-e-Shqiperise-22-26-dhe-plani-i-veprimit.pdf

Alpaydin, E. (2016). Machine Learning: The New AI, pp. 19-23, MIT Press, Cambridge, Massachusetts, London, England, ISBN: 9780262529518

Bekteshi, L. (2025). Education in the Era of AI and Immersive Technologies: A Systematic Review. Journal of Research in Engineering and Computer Sciences, Vol. 3, No. 1, pp. 01-14, ISSN: 3049-7590, https://doi.org/10.63002/jrecs.31.2025

Cazzaniga, M., Jaumotte, F., Li, L., Melina, G., Panton, A.J., Pizzinelli, C., Rockall, E.J. & Tavares, M.M. (2024). Gen-AI: Artificial Intelligence and the Future of Work. International Monetary Fund, 2024 (001). https://doi.org/10.5089/9798400262548.006

Ciodaro, T., Deva, D., De Seixas, J. M., & Damazio, D. (2012). Online particle detection with neural networks based on topological calorimetry information. In Journal of Physics: conference series (Vol. 368, No. 1, p. 012030). IOP Publishing, https://dx.doi.org/10.1088/1742-6596/368/1/012030

Desouza, K. C. (2019). Delivering artificial intelligence in government: Challenges and Opportunities, pp. 11-12, IBM, Center for the Business of Government, Washington DC, USA, https://www.businessofgovernment.org/sites/default/files/Delivering%20Artificial%20Intelligence%20in%20Government.pdf

Dwivedi, Y.K., Hughes, L., et al. (2021). Artificial intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice, and policy. International Journal of Information Management, Vol. 57, No. 7, pp. 1019–1034. https://doi.org/10.1016/j.ijinfomgt.2019.08.002

Eggers, W.D., Schatsky, D., & Viechnicki, P., (2017). AI-augmented government: Using cognitive technologies to redesign public sector work, A report from the Deloitte Center for Government Insights, Deloitte University Press, https://www2.deloitte.com/us/en/insights/focus/cognitive-technologies/artificial-intelligence-government.html

Government Data Service & Office of Artificial Intelligence. (2019). A guide to using artificial intelligence in the public sector: Guidance on building and using artificial intelligence in the public sector. Department for Science, Innovation and Technology, Office for Artificial Intelligence, UK, https://www.gov.uk/government/publications/understanding-artificial-intelligence/a-guide-to-using-artificial-intelligence-in-the-public-sector

Hashmi, A., Lalwani, R., Senatore, A., Perricos, C., & Clemancon, V. (2019). AI ethics: The next big thing in government – anticipating the impact of AI ethics within the public sector. World Government Summit 2019, Deloitte & Touche, https://www.worldgovernmentsummit.org/docs/default-source/default-document-library/deloitte-wgsreport-en-lq.pdf?sfvrsn=1acfc90b_0

Henman, P. (2020). Improving public services using artificial intelligence: possibilities, pitfalls, governance, Asia Pacific Journal of Public Administration, Vol. 42, No. 4, pp. 209-221, https://doi.org/10.1080/23276665.2020.1816188

Jimenez-Gomez, C.E., Cano-Carrillo, J., & Lanas, F.F. (2020). Artificial Intelligence in Government, IEEE Computer Society, Vol 53, No. 10, pp. 23-27, https://doi.org/10.1109/MC.2020.3010043

Ma, J., Sheridan, R. P., Liaw, A., Dahl, G. E., & Svetnik, V. (2015). Deep neural nets as a method for quantitative structure–activity relationships. Journal of chemical information and modelling, 55(2), 263-274. https://doi.org/10.1021/ci500747n

Marr, B. (2024). Generative AI in Practice, John Wiley & Sons Inc., ISBN: 9781394254255, New Jersey, USA, https://www.hamdoun.info/wp-content/uploads/2024/09/Generative-AI-in-Practice-100-Amazing-Ways-Generative-Artificial-Intelligence-is-Changing-Business-.pdf

Medaglia, R., Gil-Garcia, J. R., & Pardo, T. A. (2023). Artificial Intelligence in Government: Taking Stock and Moving Forward. Social Science Computer Review, 41(1), 123-140. https://doi.org/10.1177/08944393211034087

Mehr, H., Ash, H., & Fellow, D. (2017). Artificial Intelligence for Citizens Services and Government. Ash Center for Democratic Governance and Innovation, Harward Kennedy School, no. August, 1, 12. https://ash.harvard.edu/wp-content/uploads/2024/02/artificial_intelligence_for_citizen_services.pdf

Pagallo, U., Corrales, M., Fenwick, M., & Forgó, N. (2018). The Rise of Robotics & AI: Technological Advances & Normative Dilemmas. In: Corrales, M., Fenwick, M., Forgó, N. (eds) Robotics, AI and the Future of Law. Perspectives in Law, Business, and Innovation. Springer, Singapore. https://dx.doi.org/10.2139/ssrn.4140376

Pathak, N., & Bhandari, A. (2018). IoT, AI, and Blockchain for .NET: Building a Next Generation Application from the Ground Up, 1st Edition, pp. 15, Springer Science + Business Media, New York, USA, ISBN: 978-1-4842-3708-2, http://dx.doi.org/10.1007/978-1-4842-3709-0

Peixoto, T., C., Canuto, O., & Jordan, L. (2024). AI and the Future of Government: Unexpected Effects and Critical Challenges, Policy Paper, Policy Center for the New South, pp. 4, https://www.policycenter.ma/sites/default/files/2024-03/PP_02-24_C.%20Peixoto%2C%20Otaviano%20Canuto%2CLuke%20Jordan.pdf

Shurdhi, S., & Shtylla, S. (2024). Digitalization and Smart Lab Concept. In: Battisti, A., Piselli, C., Strauss, E.J., Dobjani, E., Kristo, S. (eds) Greening Our Cities: Sustainable Urbanism for a Greener Future. GU URS 2022 2022. Advances in Science, Technology & Innovation. Springer, Cham. https://doi.org/10.1007/978-3-031-49495-6_27

Wikipedia (2024). Artificial intelligence. https://sq.wikipedia.org/wiki/ARTIFICIAL_INTELLIGENCE