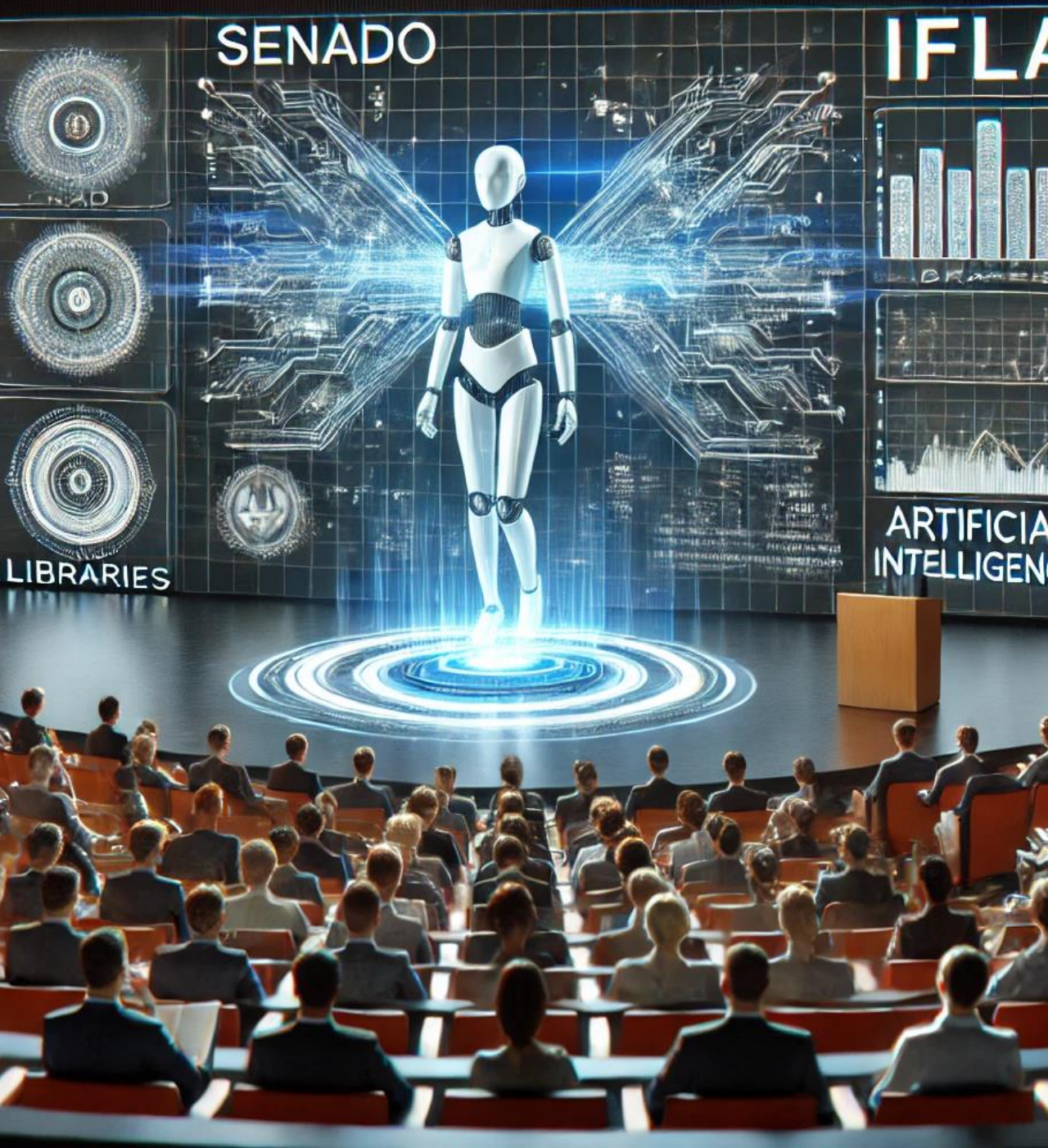




THE ROLE OF ARTIFICIAL
INTELLIGENCE IN OPEN
PARLIAMENT: ENHANCING
TRANSPARENCY, CRITICAL
THINKING, AND
COMBATING
DISINFORMATION

MIGUEL ANGEL GONZALO

October 18, 2024

2024 ANNUAL CONFERENCE of The IFLA Library
and Research Services for Parliaments Section

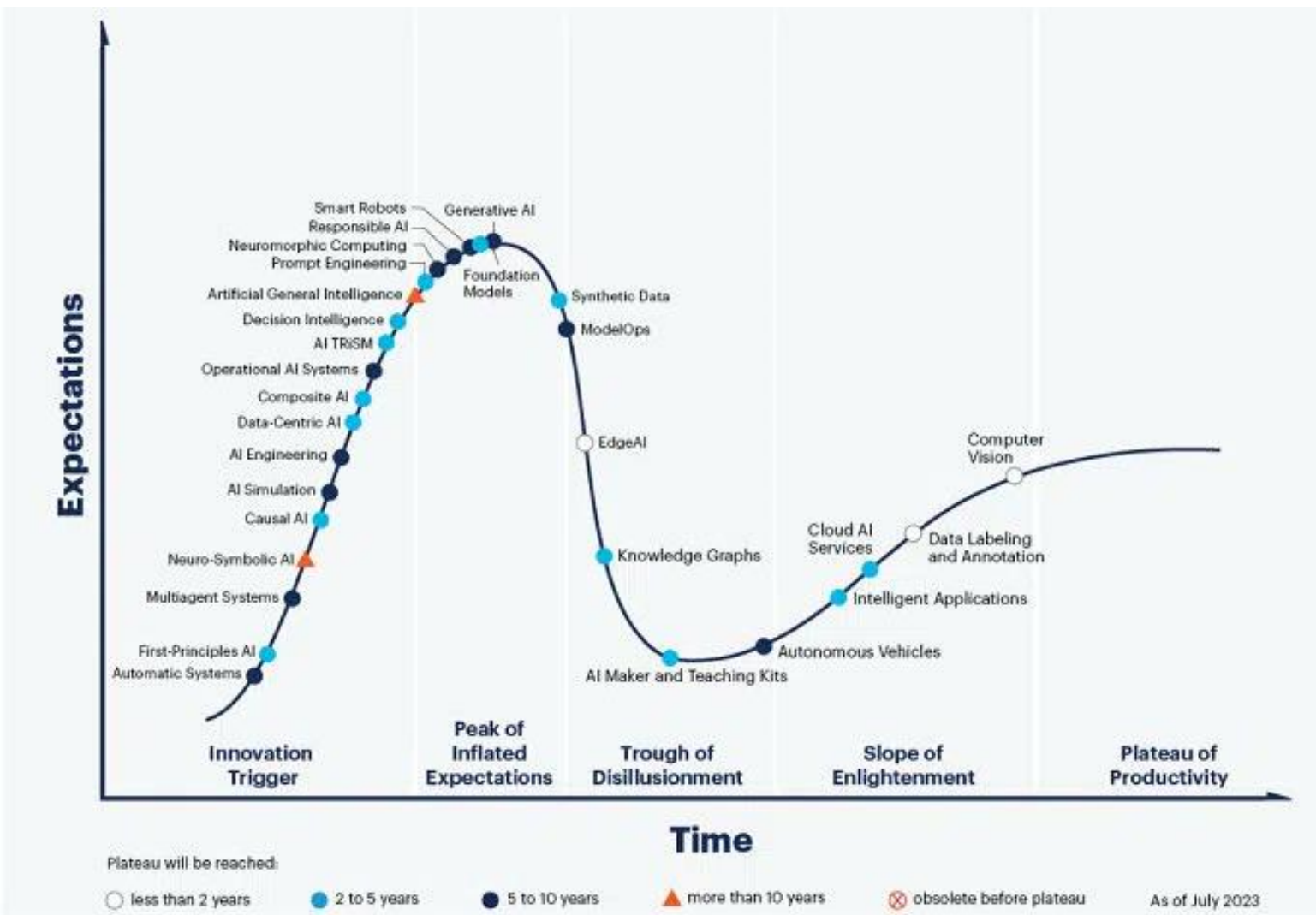
*Leveraging Collective Expertise for Innovation and Impact
in Parliamentary Libraries and Research Services*



OBJECTIVES OF THE PRESENTATION

- Explore how AI is transforming parliamentary transparency by automating key processes, such as publishing open data and improving information accessibility.
- Demonstrate how AI fosters critical thinking by facilitating advanced research and providing annotated bibliographies for policymakers, enabling deeper reflection on complex issues.“
- Illustrate how AI combats disinformation through fact-checking systems and detecting false narratives, thus protecting information integrity.
- Relate the role of AI to the key principles of the Open Parliament: transparency, citizen participation, ethics, and accountability

AI AT A PEAK OF EXPECTATIONS



Hype Cycle is a graphical representation of how expectations and adoption of various artificial intelligence (AI) technologies evolve over time.



The technology has generated a lot of enthusiasm and high expectations, but we still do not have a sufficient critical mass of real applications in the parliamentary field.



This spike is a normal phase in their journey toward widespread adoption and maturity.



The key is to manage expectations and continue to advance the development and practical application of these technologies.

GENERAL CONTEXT OF THE ROLE OF AI IN PARLIAMENTS

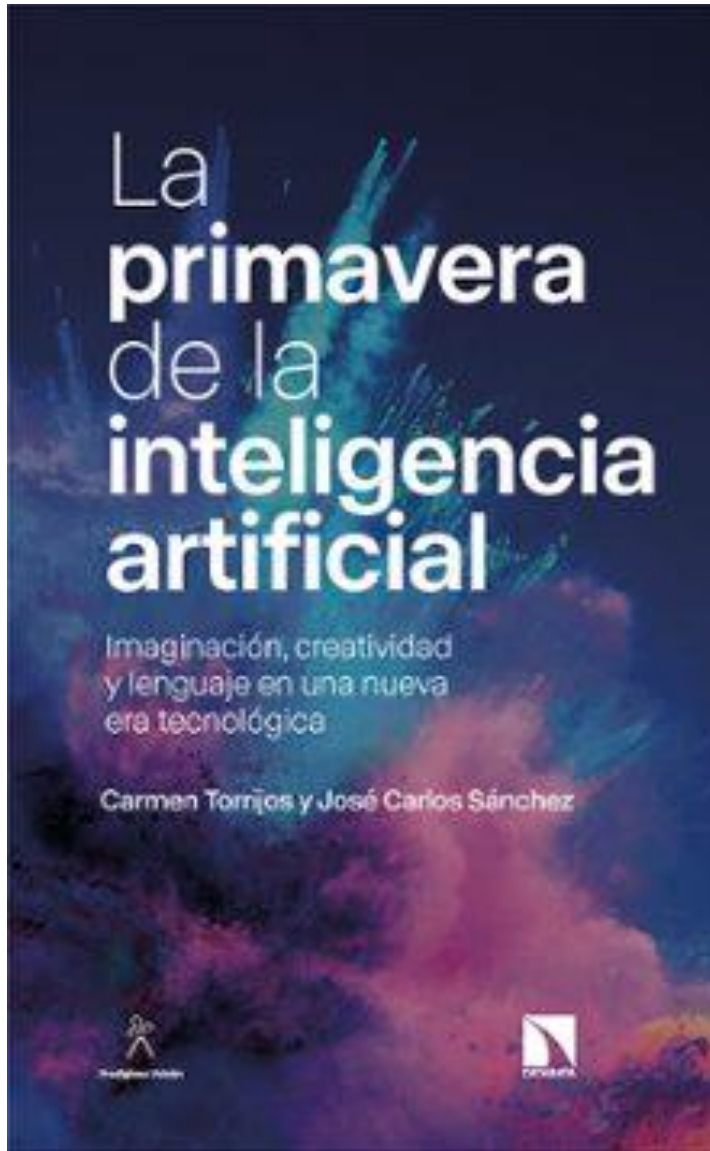


Artificial intelligence is redefining information management in parliaments.

It is no longer just about managing large volumes of information but about doing so efficiently and in a way that is accessible to all stakeholders: legislators, citizens, journalists, and researchers.



Parliamentary libraries and research services are adapting to meet these challenges, using automated tools that enhance human work.



THE SPRING OF ARTIFICIAL INTELLIGENCE

- Artificial intelligence (AI) is perceived as a combination of creativity and technical innovation. In this context, the similarities and differences between the human capacity to imagine and the creativity that AI can have are explored.
- The concept of the 'uncanny valley' is mentioned to illustrate how humans tend to distrust machines that look too much like them, which can generate both fascination and fear.

1. HOW DOES AI FACILITATE GREATER TRANSPARENCY FOR CITIZENS AND LEGISLATORS?



- automatic cataloging , and has also implemented a publicly accessible open legislative data platform.
- AI can enhance the speed and accuracy with which legislative documents are accessed.

AI FOR PARLIAMENTARY DATA MANAGEMENT

AI not only classifies large volumes of information, but improves data quality through information cleaning and validation techniques.



Example from the Dutch Parliament: In addition to breaking down minutes, AI can automatically generate graphs showing the evolution of legislative debates, creating interactive reports that are easily understandable by the public.



Impact on active transparency: This advanced data organisation can be used to generate periodic reports on parliamentary activities without human intervention.

FACILITATING ACCESS TO COMPLEX INFORMATION

Citizens and journalists can access more organized parliamentary databases thanks to AI.

This includes the ability to perform keyword searches on documents that were previously only accessible through extensive manual searches (for example, via Perplexity).  perplexity



Example from the Luxembourg Parliament: AI integration not only improves search speed, but also the quality of results, allowing for more intuitive navigation through AI-based systems that predict users' search intentions.



DATA VISUALIZATION AND ACTIVE TRANSPARENCY

- AI makes it easier to create dynamic visualizations of legislative data, allowing citizens to explore and understand how legislative processes unfold through interactive diagrams and bar graphs.
- Active transparency through AI:
 - Parliamentary data can be updated in real time and automatically published on open data platforms, simplifying the procedures for citizen requests for access to information.

SWISS PARLIAMENT

The Swiss Parliament is collaborating with the Bern University of Applied Sciences on a pilot project using open language models (LLMs).

This project aims to improve parliamentary research by optimising information retrieval and documentation creation, using public parliamentary data and legal databases to create more accurate and useful reports and documentation.

FINNISH PARLIAMENT

- The Finnish Parliament applies AI in several projects such as **Power Watchbot Voitto** , **Lawradar** , and **Parliament Sampo** .
- These initiatives monitor activities of parliamentarians, track legislative processes and publish open linked data.
- Future developments focus on improving accessibility and real-time access to data.
- In addition, they are integrating AI to analyze large volumes of data and provide analytical search interfaces and results visualizations.



OPEN AND PARTICIPATORY PLATFORMS

- chatbots can enable citizens to interact directly with parliamentary databases to ask questions about the status of bills, understand complex legislative terms and receive real-time updates.
- Additional impact: These chatbots can also collect feedback from citizens on legislative issues, helping parliamentarians better understand public concerns and encouraging active and ongoing citizen engagement.



2. FOSTERING CRITICAL THINKING WITH AI

- AI not only automates information management, but also offers tools for creating new knowledge through access to detailed data and complex analysis.
- This allows for a more reflective and critical analysis.

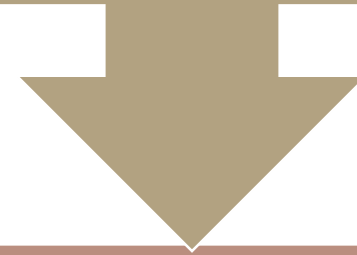


ACCESS TO ADVANCED STUDIES AND ANALYSIS

- AI tools enable comparative analysis between legislations in different countries, providing legislators with a solid basis for developing more effective and coherent laws.
- Annotated bibliographies and comparative studies automatically generated by AI not only enable faster legislative analysis, but also improve the quality of legislative work by providing accurate data in real time.

CONTENT GENERATION AND ANALYSIS WITH AI

Generative AI systems, such as GPT-4o or o1 preview, not only help with writing speeches and preparing reports, but can also offer critiques and suggestions to improve consistency and persuasiveness in the content.



Example: Simulating complex parliamentary negotiations using AI, allowing lawmakers to anticipate the potential impacts of legislative decisions from multiple perspectives.

VISUALIZATION OF CONCEPT NETWORKS FOR CRITICAL ANALYSIS

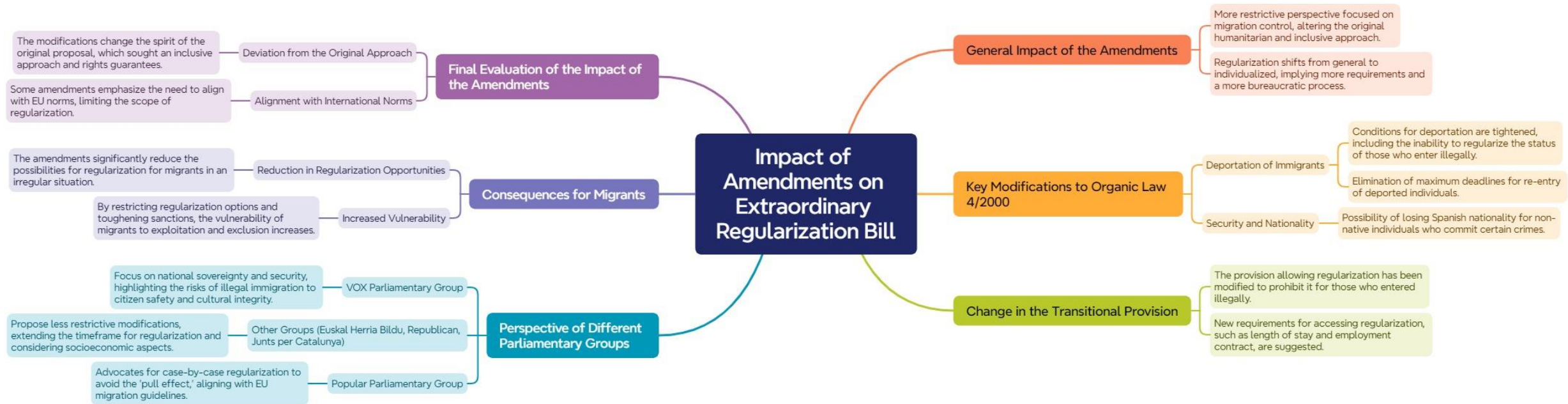
- AI makes it possible to visualize networks of interconnected concepts and laws, facilitating the identification of hidden connections between different regulations and helping legislators anticipate unintended consequences.
- These visualizations are especially useful in complex legislative issues where multiple laws are interrelated, such as in human rights or international trade issues.





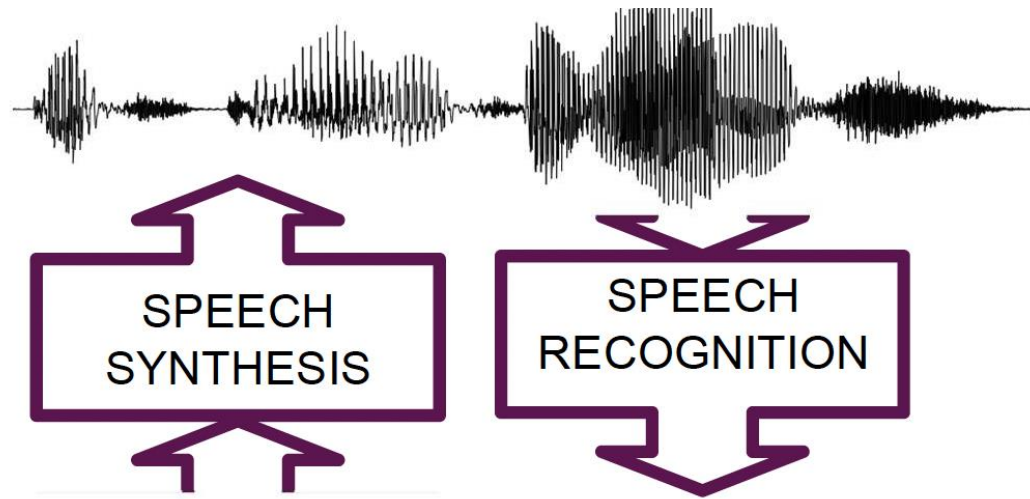
Presented with xmind AI

Mind map on the Bill for an extraordinary regularization for foreign persons in Spain
(corresponds to the file number)



Presented with xmind AI

Mind map on the impact on the initial text of the amendments presented to the Bill for an extraordinary regularization for foreign persons in Spain (corresponds to the file number)



It's time for lunch!

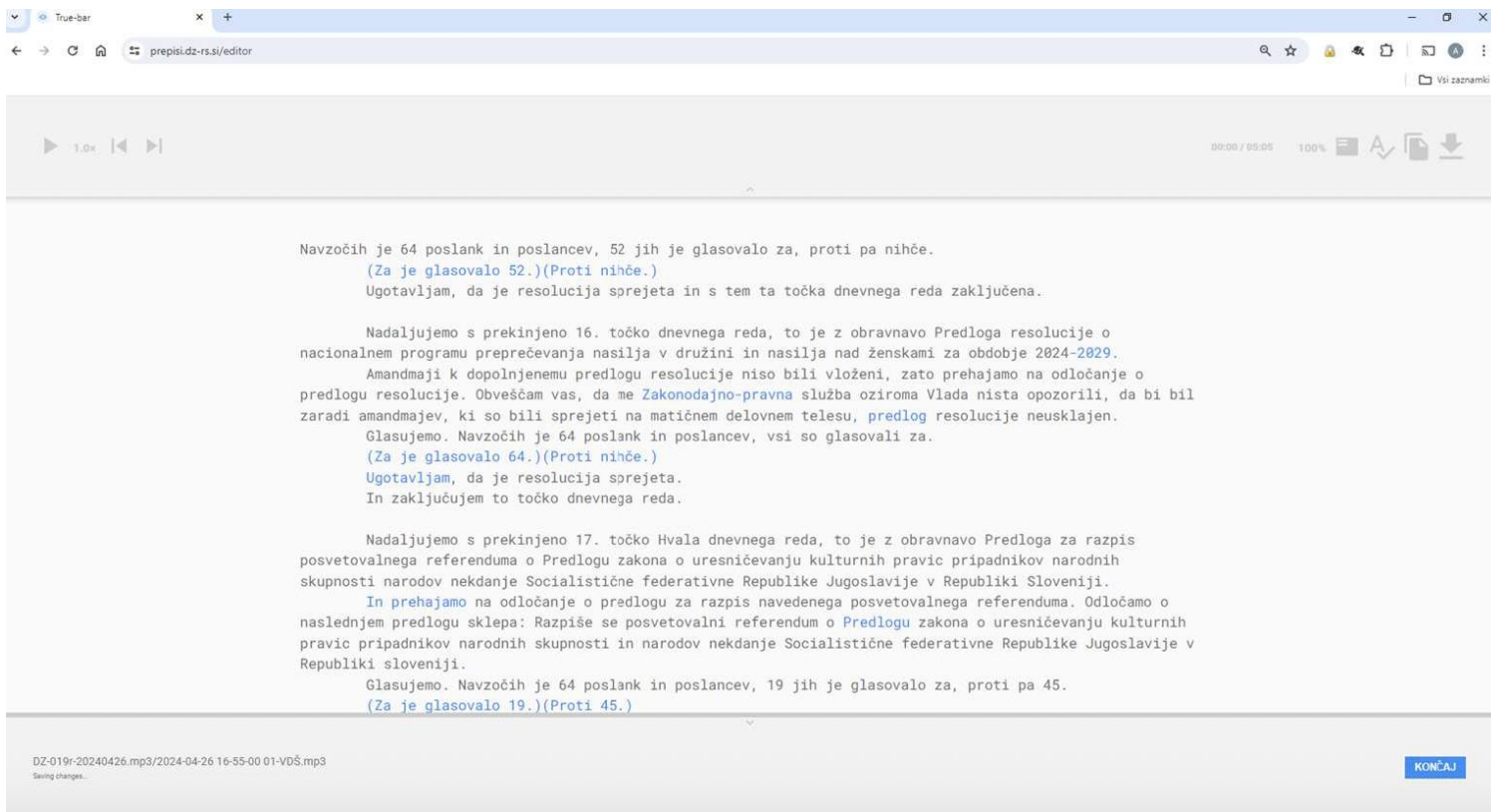
SWEDISH PARLIAMENT

- The Swedish Parliament works with the Swedish National Laboratory (KB Lab) to develop Swedish speech recognition models, such as **RixVox**, using recordings of parliamentary debates.
- These AI models create accurate and searchable transcripts, improving public access to parliamentary proceedings. They also collaborate on open linked data projects to enrich the quality and accessibility of parliamentary information.

Model	Company	Total dataset [h]	Only Swedish [h]
Wav2vec2.0 (XLS-R)	Meta	436 000	16 325
Whisper	OpenAI	680 000	2119

NATIONAL ASSEMBLY OF SLOVENIA

- Slovenia's National Assembly uses AI for speech-to-text recognition in its parliamentary sessions.
- **Razpoznavnik** tool **slovenskega govora** converts speech into text and plans to implement automatic speaker name recognition and time stamping. This optimizes the documentation and accessibility of debates, facilitating their analysis and consultation by interested citizens and professionals.



NORWEGIAN PARLIAMENT

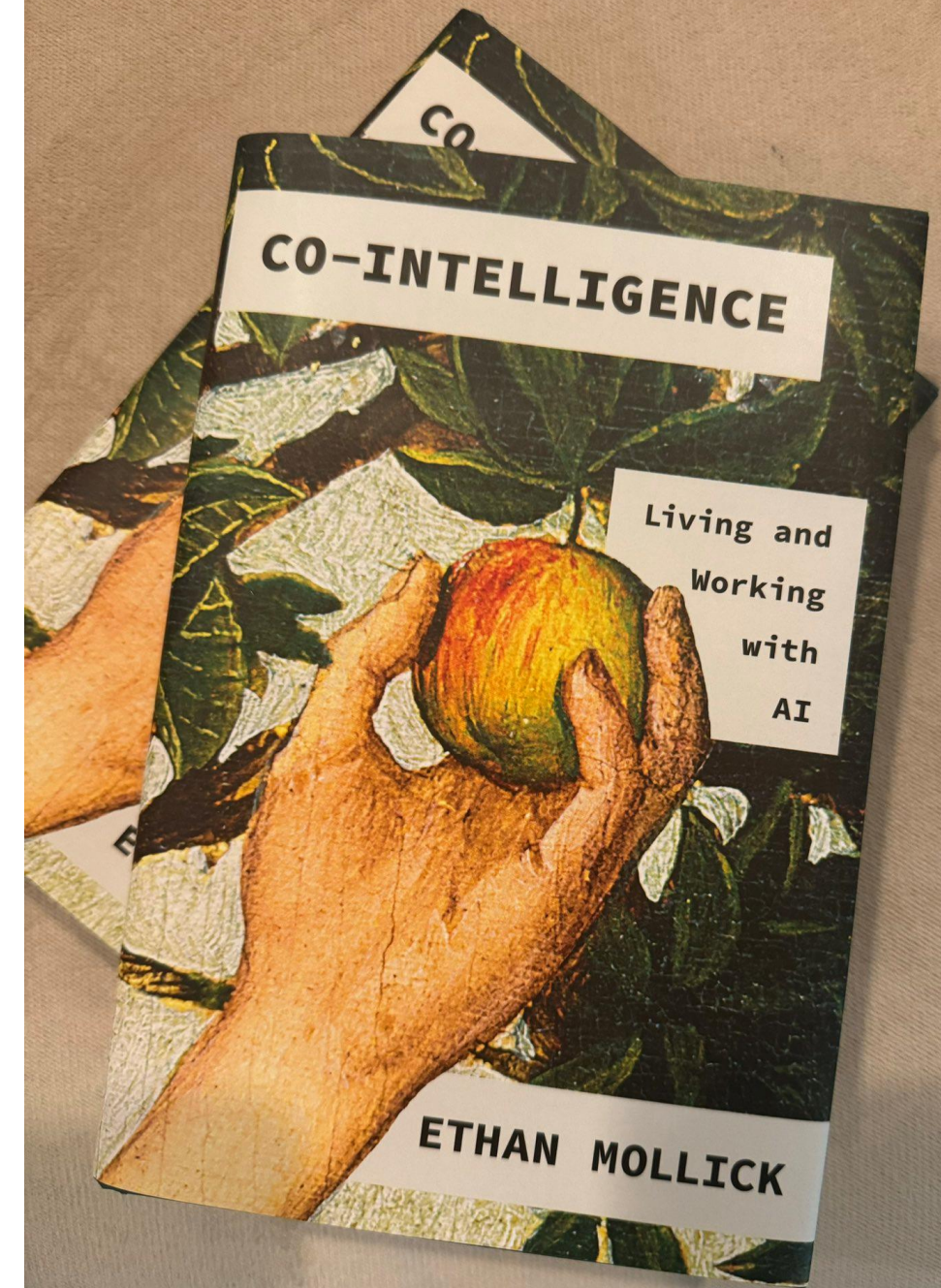
The Norwegian Parliament implements AI in its StorSak project to automate information retrieval and structuring, as well as the creation of document metadata.

Botvar system , part of this project, automatically updates chapters with proposals based on political factions.

Future enhancements include AI-powered visualisation tools to improve the transparency and accessibility of parliamentary data, aligning with an open data strategy.

CHALLENGES IN CONTENT GENERATION WITH AI

- Although AI makes content generation easier, there is a risk that automation can produce errors or biased content.
- Users need to maintain a critical attitude and always verify the information generated.
- Mollick's "Cointelligence" example : AI can act as a collaborator, but humans need to review and confirm the veracity of the data, especially on sensitive legislative issues.



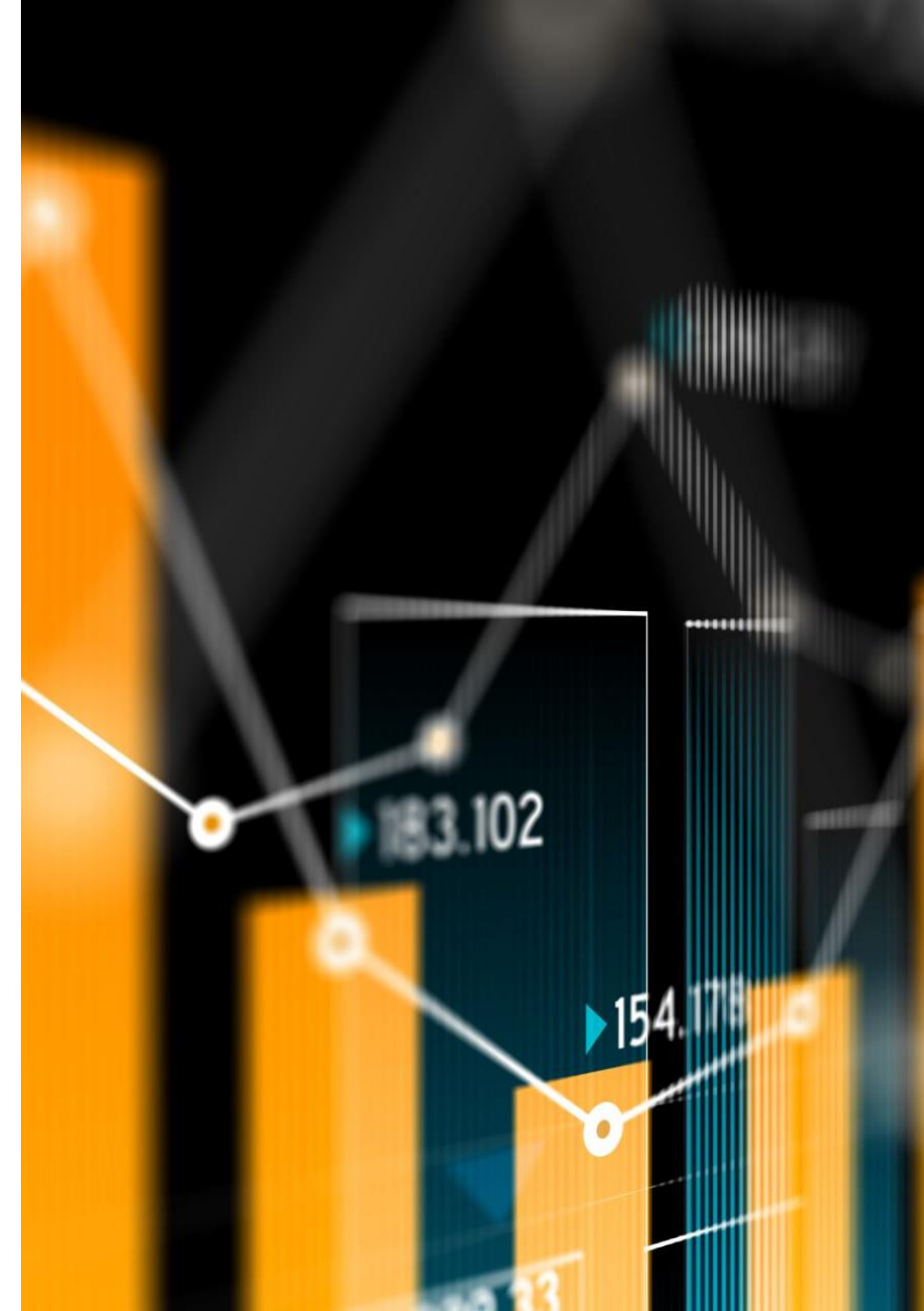
3. AI AS A BARRIER AGAINST DISINFORMATION

- AI can be a useful tool to enhance transparency, foster critical thinking, and combat disinformation.
- Its ability to process large volumes of data in real time allows it to identify disinformation patterns quickly.

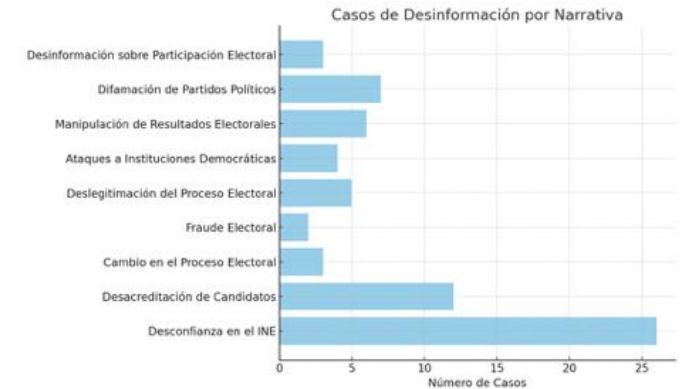
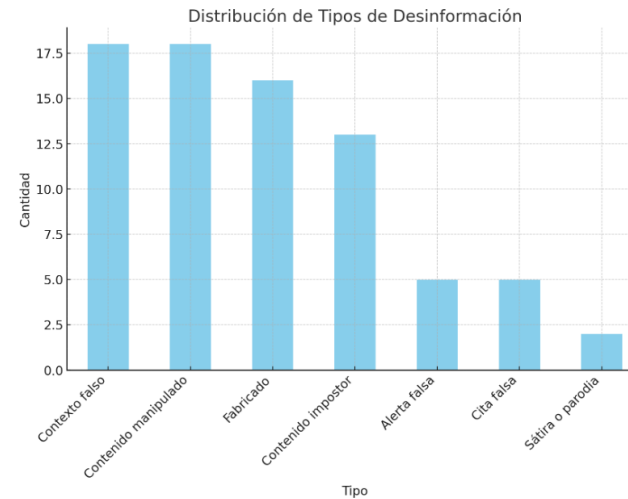


MONITORING INFORMATION DISORDERS

- AI algorithms can analyze large amounts of data from multiple sources, including social media and news outlets, to identify misinformation and rank it based on its impact.
- These systems can also identify the sources of disinformation and detect when it is spreading in a coordinated manner, allowing for a rapid response by electoral authorities.



AUTOMATIC CLASSIFICATION OF MISINFORMATION



- During the 2024 Mexican elections, the UCM disinformation research group used AI to monitor false narratives on social media, helping to identify and counter disinformation campaigns as well as classify manipulation incidents, detecting patterns in the content and networks involved in the dissemination of false information.

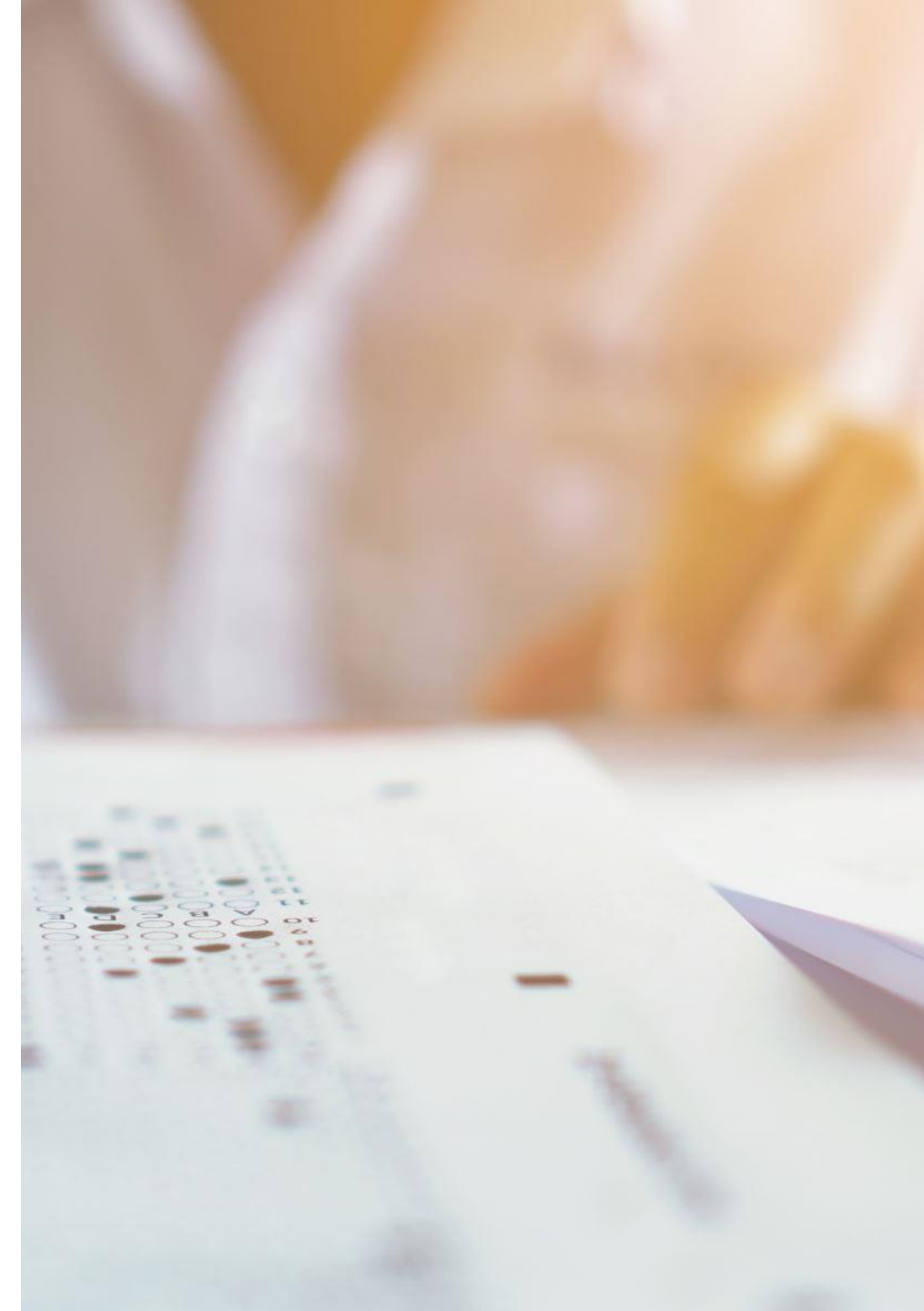
AI-POWERED FACT CHECKING TOOLS

AI tools can quickly compare information from multiple verified sources, detecting inconsistencies and falsehoods in a matter of seconds.

Automated verification not only helps detect disinformation more quickly, but also makes it easier for citizens to receive reliable and verified information during key moments such as election campaigns.

4. ROLE OF AI IN THE DEVELOPMENT OF OPEN PARLIAMENT

- The integration of AI into open parliaments presents significant ethical challenges. It is crucial that clear regulatory frameworks are put in place defining how and under what conditions AI is used.
- The European Regulation on AI classifies AI applications according to the risk they pose, from low-risk applications to high-risk ones that require strict supervision.



Luciano Floridi

Ética de la inteligencia artificial

Herder

ETHICS OF ARTIFICIAL INTELLIGENCE

- I reject both the enthusiast's vision of integrated technology and the pessimist's apocalyptic technophobe vision.
- Artificial intelligence and its algorithms raise ethical-legal challenges that require a humanistic approach to preserve human rights and dignity in an increasingly automated world.

HOMO EX MACHINA

Ética de la inteligencia
artificial y Derecho digital
ante el horizonte de la
singularidad tecnológica

FERNANDO H. LLANO ALONSO

Prólogo de *Stefano Pietropaoli*



TRAINING OF PARLIAMENTARY STAFF

Training of parliamentary staff is essential to ensure the effective use of AI tools. Information specialists, librarians and other parliamentary professionals need to understand both the capabilities and limitations of AI.

The Congress of Deputies' 'First Open Parliament Plan' includes clear objectives regarding AI training, which will ensure the proper implementation of these tools.

INEQUALITY IN ACCESS TO AI

One of the biggest challenges is the inequality in access to AI tools.

Without adequate digital literacy, certain groups could be excluded from using these technologies.

The Open Parliament Plan includes measures to optimise the accessibility of parliamentary data and improve the usability of AI-powered digital participation platforms, with a focus on plain language.

FUTURE OF AI IN CITIZEN PARTICIPATION

The future of AI in open parliaments includes improving citizen participation platforms.

A light brown downward-pointing arrow indicating a flow from the first point to the second.

AI can facilitate direct interaction between citizens and their representatives, allowing for a more fluid and personalized dialogue.

A light brown downward-pointing arrow indicating a flow from the second point to the third.

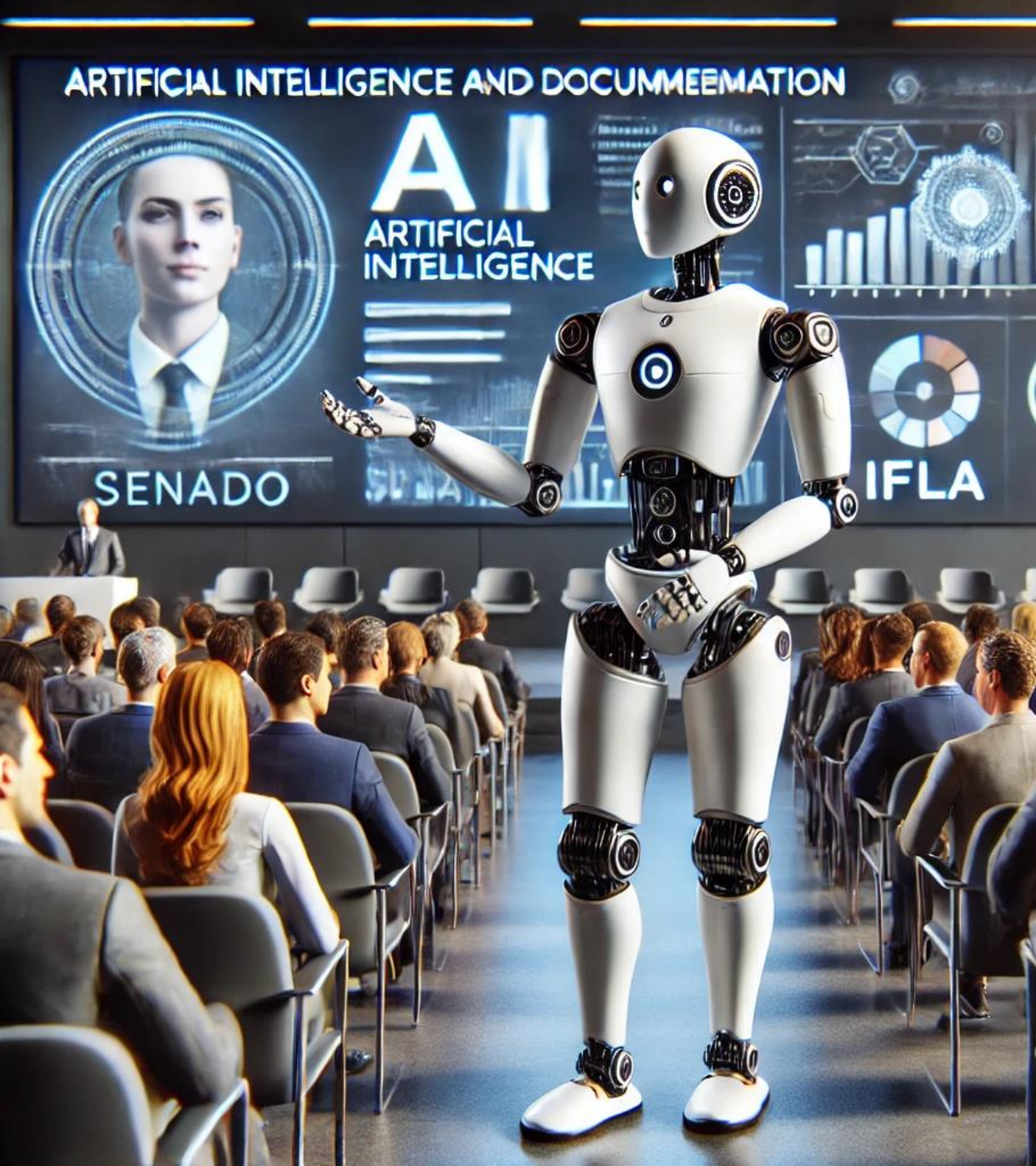
Tools such as advanced chatbots will allow citizens to receive immediate responses on legislative issues, encouraging greater citizen participation.

CONCLUSION: AI AS AN ENGINE OF OPEN PARLIAMENT

1. AI can be a useful tool to improve transparency, critical thinking and the fight against disinformation.

2. Through its implementation, parliaments can become more open, efficient and connected to citizens.

3. However, it is necessary to continue developing ethical regulatory frameworks that ensure the responsible use of these technologies, so that AI continues to be a means of strengthening democracy and not undermining it.



END

- Perhaps at future IFLA meetings we will have Artificial Intelligence assistants to help with presentations, translations, and preparation of summaries of interventions.

Thank you very much for your
attention

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