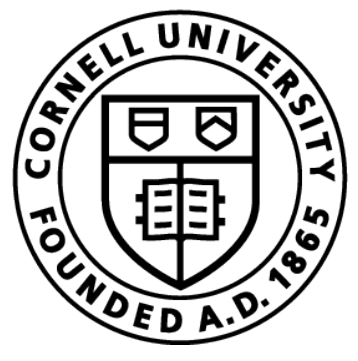




THOUGHTFUL ADOPTION OF NLP FOR CIVIC PARTICIPATION: UNDERSTANDING DIFFERENCES AMONG POLICYMAKERS

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INTRODUCTION AND BACKGROUND

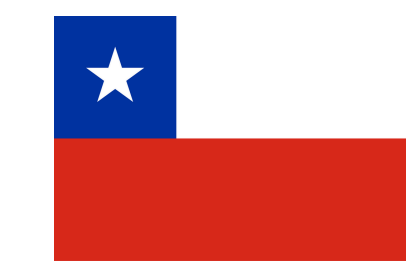
- NLP tools have the potential to boost civic participation processes by enhancing governments' capacity to gather and analyze citizens' opinions [1, 2].
- NLP tools' adoption in government remains limited, and harnessing their benefits while preventing unintended consequences remains a challenge [1].
- Prior work has focused on improving NLP performance [e.g., 3, 4], but there is a relevant gap in analyzing internal dynamics of governments around NLP tools' adoption and use [5].

RESEARCH QUESTIONS

How do politicians and public servants consider **whether** and **how** to use NLP tools to enhance civic participation, considering potential risks?

METHOD

20 semi-structured interviews
in Chile and Uruguay.



Polymaking Institution	Politician Interviewees	Public Servant Interviewees
Uruguay - Agency for Electronic Government and Information and Knowledge Society	0	3
Chile - Ministry General Secretary of the Presidency	1	3
Chile - Ministry of Economy, Development, and Tourism	2	1
Chile - Ministry of Education	1	1
Chile - Ministry General Secretary of Government	1	1
Chile - Ministry of Science, Technology, Knowledge and Innovation	2	4

- **Politicians:** Designated authorities that are usually the heads of government institutions.
- **Public Servants:** Administrators and advisors whose primary function is to design and implement policies following their institution's mandate and the government's political agenda.

FINDINGS

Prioritized building **legitimacy towards external stakeholders** and perceived that NLP could help them manage power dynamics.

Less aware of risks and **avored external-facing mechanisms** towards responsible AI.



Politician

Blamed each other for the **lack of adoption**.



Public Servant

Prioritized efficiency to build their **legitimacy towards their superiors** and their use of NLP was mediated by their perception of their role in the process.

More aware of the risks and **avored human-in-the-loop internal-facing approaches** towards responsible AI.

CONCLUSIONS

- Developers and designers should work on NLP tools for more than efficiency in civic participation processes.
- NLP tools and methods should not be designed for a single User, but for collaborative use in government.
- Failing to understand the nuances of legitimacy can lead to a lack of use of NLP tools in the right context or its use in the wrong context.

CHECK THE PAPER!



CONNECT



[1] Julia Romberg and Tobias Escher. 2023. Making Sense of Citizens' Input through Artificial Intelligence: A Review of Methods for Computational Text Analysis to Support the Evaluation of Contributions in Public Participation. Digit. Gov.: Res. Pract. (June 2023). Less aware of risks and favored external-facing mechanisms towards responsible AI.
[2] Tanja Aitamurto and Kaiping Chen. 2017. The value of crowdsourcing in public policymaking: epistemic, democratic and economic value. The Theory and Practice of Legislation 5, 1 (January 2017), 55-72.
[3] Julia Romberg and Tobias Escher. 2022. Automated Topic Categorisation of Citizens' Contributions: Reducing Manual Labelling Efforts Through Active Learning. In Electronic Government (Lecture Notes in Computer Science), 2022. Springer International Publishing, Cham, 369-385.
[4] Miguel Arana-Catania, Felix-Anselm Van Lier, Rob Procter, Nataliya Tkachenko, Yulan He, Arkaitz Zubiaga, and Maria Liakata. 2021. Citizen Participation and Machine Learning for a Better Democracy. Digit. Gov.: Res. Pract. 2, 3 (July 2021), 1-22.
[5] Anna Kawakami, Amanda Coston, Hoda Heidari, Kenneth Holstein, and Haiyi Zhu. 2024. Studying Up Public Sector AI: How Networks of Power Relations Shape Agency Decisions Around AI Design and Use.