Digital Transparency Initiative: An Intelligent Government Record Recommendation System for Citizen Access

Levni Apraku-Mensah
Advisors: Suvosree Chatterjee, Jenifar Selim, Sara Sevilla, Dr. Serena Hoermann, and Dr. Jason Hallstrom

BACKGROUND

The rapid expansion of surveillance technologies has transformed how governments collect, store, and use information about citizens.

Ample research has been conducted into how the abundance of personality identifiable public information has changed citizen behavior [1] and whether increased government openness has led to better governance outcomes [2]. However, there is a lack of research on the specific results of increased citizen interaction with their personally identifiable public information and those effects on governance outcomes.

PROJECT GOALS

The objectives of this project were to develop a prototype website demonstrating how such information could be presented to users. To achieve this, Python, HTML, CSS, and JavaScript were used. Features of the site included

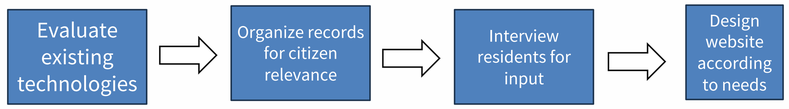
- Chatbot for conservational assistance
- Record recommendation service
- PII masking system
- And a record request filing system

RESEARCH QUESTION

How can a digital platform improve transparency and public understanding of government-held personal information while respecting legal, ethical, and technical constraints?



METHODS



RESULTS

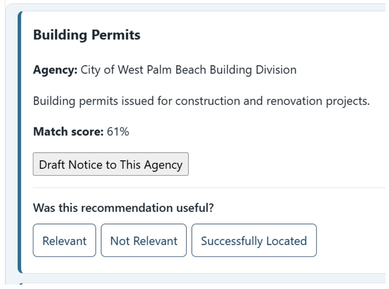
Theme	Definition	Valence	n
Indifference / no engagement	Hasn't considered the issue or has no formed view	No concern	2
Trust in authority	Disengaged stance that leans toward endorsing surveillance	Approval	3
Transparency concerns	Specific worry that a surveillance method lacks public transparency	Concern	6
Confusion	Misunderstands or misinformed on issue		

Test Case	Query	Expected result	Actual result	Outcome
1	“I replaced the roof on my house.”	Building permit	Building permit	Pass
2	“I received a parking ticket.”	Parking citation	Parking citation	Pass
3	“I want government records.”	No results found	No results found	Pass
4	“I renovated my house.”	Building permits	Building permits	Pass
5	“I bought a house and received a code enforcement notice.”	Property ownership records	Code enforcement notice	Fail

DISCUSSION

Of the five test cases, four passed and one failed.

This data suggests that the Civic Record AI search engine works best when users have a general understanding which records they need, and that users should consult all recommendations in case of error.



FUTURE WORK

Future work could include collaboration with local government agencies to improve public communication regarding existing records request processes, expanding educational resources, and evaluating additional transparency tools that comply with privacy regulations.

Additional features could include a real intent classifier and a legal RAG system.

ACKNOWLEDGMENTS

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REFERENCES

[1] J. Reidenburg, “The Transparent Citizen,” Loyola University Chicago Law Journal, vol. 47, no. 2, pp. 437-463, 2015.

[2] G. Porumbescu, A. Meijer, and S. Grimmelikhuijsen, Government Transparency: State of the Art and New Perspectives. Cambridge: Cambridge University Press, 2022.