

The Power & Perils of AI's Role in King County Government

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Bringing the (Non)Sparkle to AI

- Use cases – operational focus to reduce repetitive tasks
- King County structure and tools
- Recommendations & Resources



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3 Use Cases for AI and Machine Learning

Customer Service and Language Support

Department:
Elections Office

Usage:
Customer Service FAQs
multi-language chatbots

Automated Redaction

Department:
Assessors Office

Usage:
Senior Property Tax
Exemption applications

Automated Reporting

Department:
Public Health Medical
Examiner's Office

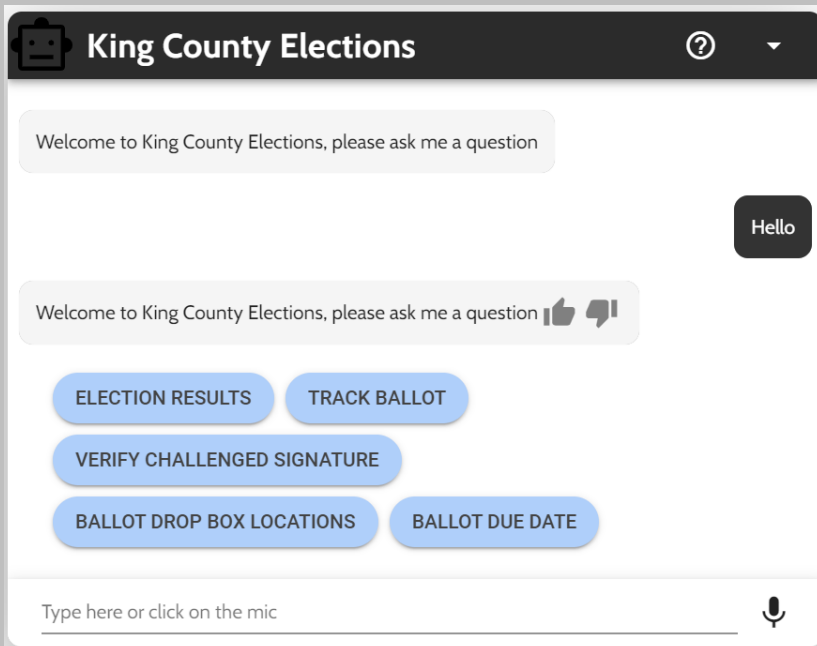
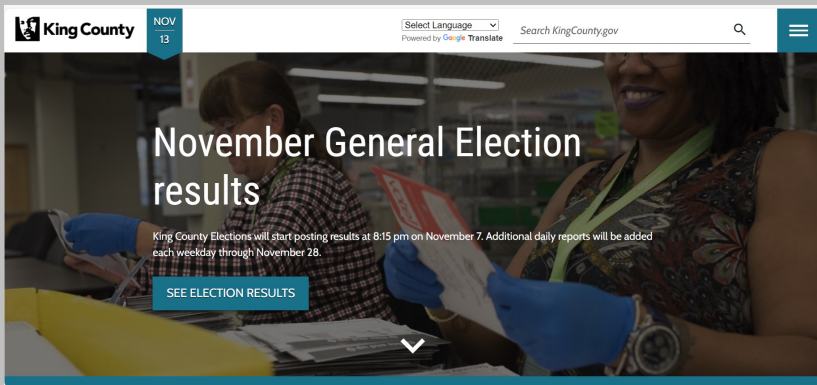
Usage:
WA State Unintentional
Drug Overdose
Reporting System



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Customer Service Chatbots: Elections



- We deployed omni-channel chatbots that serve customers 24/7. 1,082 questions were asked in the leadup to the 2022 General Election. The AI's response matching rate successfully answered 86% of questions.
- The county Elections office saw 65% fewer calls after chatbots were implemented, reducing the number of temps needed to answer phones.
- About 33% of questions the chatbots fielded were asked in other languages; AI automatically detected users' languages and answered accordingly, resulting in a better overall customer experience.



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Automated Redaction: Property Tax Exemptions

- King County's online Senior Property Tax Exemption application offers a convenient digital submission process, but County Assessor's staff typically spend 30 minutes per application manually redacting PII.
- KCIT is automating PII redaction by leveraging a unique combination of low-code AWS cognitive services tools and cloud computing services, reducing staff time to just 5 seconds per application.
- This innovation is expected to save 4,000 hours annually (equivalent to two full-time employees) while retaining privacy and security protocols.



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Form **1040** Department of the Treasury—Internal Revenue Service (99) **2020** U.S. Individual Income Tax Return OMB No. 1545-0074 IRS Use Only—Do not write or staple in this space.

Filing Status Single Married filing jointly Married filing separately (MFS) Head of household (HOH) Qualifying widow(er) (QW)
Check only one box. If you checked the MFS box, enter the name of your spouse. If you checked the HOH or QW box, enter the child's name if the qualifying person is a child but not your dependent ▶

Your first name and middle initial: Sally A. Lastname: Smith Your social security number: 25 6134 4268
If joint return, spouse's first name and middle initial: James T. Lastname: Smith Spouse's social security number: 908 132 0024

Home address (number and street). If you have a P.O. box, see instructions. Apt. no. Presidential Election Campaign
City, town, or post office. If you have a foreign address, also complete spaces below. State: WA ZIP code: 98456
Foreign country name Foreign province/state/county Foreign postal code

At any time during 2020, did you receive, sell, send, exchange, or otherwise acquire any financial interest in any virtual currency? Yes No

Standard Deduction Spouse itemizes on a separate return or you were a dual-status alien

Age/Blindness You: Were born before January 2, 1956 Are blind **Spouse:** Was born before January 2, 1956 Is blind

Dependents (see instructions):

(1) First name	Last name	(2) Social security number	(3) Relationship to you	(4) <input checked="" type="checkbox"/> If qualifies for (see instructions): Child tax credit	Credit for other dependents
Nancy Smith		375 33 3228	child	<input type="checkbox"/>	<input type="checkbox"/>
Terry Settles		206 34 1234	stepson	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1 Wages, salaries, tips, etc. Attach Form(s) W-2 1 1 280

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Abstraction and Automated Reporting: Medical Examiner's Office

- King County's Medical Examiner's Office partners with the WA State DOH to provide investigative data that is captured in the State Unintentional Drug Overdose reporting system and passed to the Centers for Disease Control and Prevention. This allows the collective government agencies to identify overdose trends and inform prevention and response efforts.
- In the past case reports were scanned and emailed. KCIT used AI (natural language processing and machine learning) to classify case narratives into the proper CDC labels.
- The Overdose Surveillance Data System significantly reduces labor-intensive data abstraction work, and it is expected to save up to 3,975 hours (approximately 2 full time employees) per 2,000 overdose cases submitted.

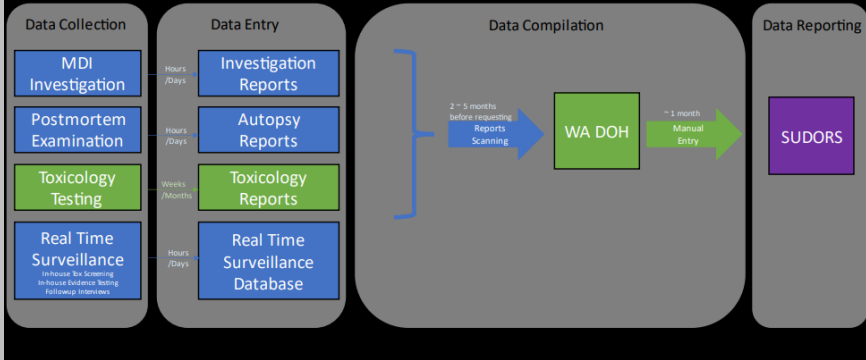


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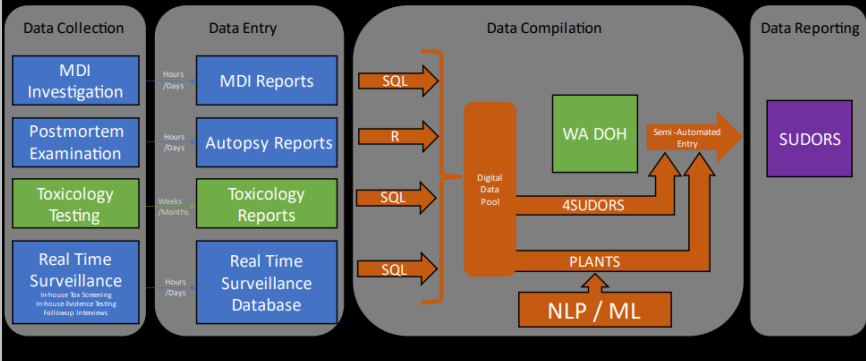
SUDORS Data Flow - Current

KCMEO → WA DOH → CDC



SUDORS Data Flow - Proposed

KCMEO → WA DOH → CDC



Structure and Tools

- Artificial Intelligence sits within the Data team
- Our job classifications now include
 - Enterprise Architect – Data
 - Solution Architect – Data
 - Data Scientist
- Only one is dedicated to AI and Machine Learning, but all work together
- Moving from pilots to systems

King County uses a set of tools that are part of our overall Data Science strategy. Some to consider:

- R Studio
- Azure ML
- AWS Sagemaker
- Databricks
- Jupyter Notebook



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Recommendations and Resources

- **Follow guidance from the National, State and County level**
 - [FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence | The White House](#)
 - [NIST AI Risk Management Framework \(AI RMF 1.0\)](#)
 - [State Agency Generative AI Guidelines 8-7-23 .pdf \(wa.gov\)](#)
 - www.naco.org : TechKnow Series, AI Exploratory Committee
- **Create “guardrails” for self-service**
 - Guidelines and policies for usage such as [City of Seattle Generative AI Policy](#)
 - A.I. Threshold Assessment (CISO-developed questionnaire used to determine whether a specific business request to utilize generative A.I. can either move ahead without further evaluation or should pass through a more rigorous technology assessment)
 - <https://opportunity.linkedin.com> provides a free certification course on AI; many academic institutions and private companies are also providing certifications and classes
- **Educate employees on impacts**
 - All data placed in public models can resurface in unexpected ways
 - Bias is not necessarily mitigated with human oversight (see [More than a Glitch](#) by Meredith Broussard)
 - Understand how threat actors are working together to use AI and the public sector must also collaborate with academic institutions and the private sector to stay ahead

