Ethical Al Policies & Governance

April 11, 2024



Stephanie Deitrick PhD, GISP

Chief Data & Analytics Officer Enterprise GIS & Analytics City of Tempe, Arizona



City of Tempe

- Population (2022) 185,950
- Daytime population almost doubles
- Arizona State University Main Campus
- Well established technology governance – Technology & Innovation Steering Committee (TISC -2014) and Data Governance (2014)



Ethical Al

Ethical versus responsible

- Sometimes used interchangeably, but often viewed as related but different concepts
 - ethical encompasses moral principles and values that guide development and use of AI systems and
 - responsible includes broader considerations such as overall responsibility of developers, users and organizations

What do we mean by Ethical AI?

- At a high level, ethics deals with questions about values and principles that guide individual and societal conduct.
- Key components include (but are not limited to)
 - values beliefs and principles individuals and societies consider important (such as fairness and compassion)
 - principles guidelines that help make decisions and evaluate actions
 - responsibility accountability and responsibility for both individuals and societies

Recommendations based on best practices More general versus specific **Guidelines** May be more flexible than a policy "Cookbook" to accomplish a repeatable process Detailed but not overly complicated so that it is usable Procedures/ beyond a small group Process (How) Mandatory or recommended actions or rules Indicates expected behavior Standards (What) Need enforcement to be effective Formal statements that reflecting values and objectives Supported by senior leadership. Policy (Why) Foundation meant to be in place for several years with regular review and update.

Tempe's Approach

- Policy first
- Adopt through Council Resolution
- Provides foundation and demonstrates leadership support
- Requirements
- Establish Governance
- Accountability

Purpose Scope Governance

Tempe Values

Why policy first?

Why start with a policy and not guidelines?

- Wanted to frame the conversation around Tempe values and articulate expectations for how the city would engage with AI
- Implementation through Council Resolution demonstrates leadership buy in
- Al Governance was established through the council resolution the policy included establishing the governance committee as well as processes and standards when the policy was adopted
- Sets up alignment with existing data policies and governance
- Provides ability to evolve, only needing to go back to council for significant changes

The goal was to develop processes and review mechanisms that support efficient and timely reviews so that we do not serve as a roadblock for progress or innovation

Citywide collaboration brings broad perspectives and the likelihood of buy in

Tempe's Approach: Scope

- All departments, agencies, employees, contractors and stakeholders
- Al inclusive of machine learning, automated decision making, predictive analytics, generative Al and deep learning
- All cases Al functionality is known to be included



Yigitcanlar, T., Agdas, D. & Degirmenci, K. Artificial intelligence in local governments: perceptions of city managers on prospects, constraints and choices. *Al & Soc* **38**, 1135–1150 (2023). https://doi.org/10.1007/s00146-022-01450-x

Values & Principles



Purpose & Scope Transparency & Explainability



Human Responsibility
Human-Al Collaboration
Accountability & Oversight



Data Privacy & Security
Continuous Monitoring & Ethical Improvement
Compliance & Legal Framework



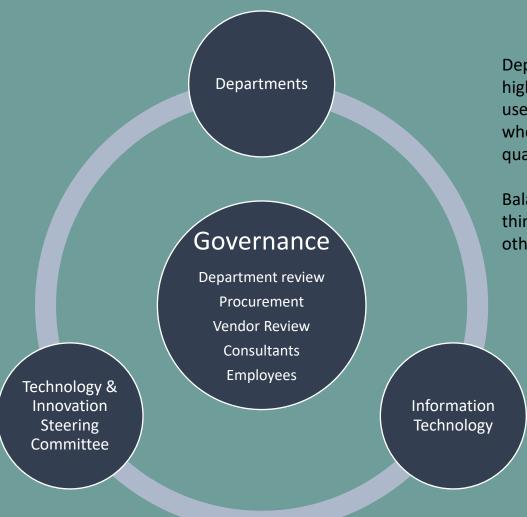
Human Centered Approach
Fairness & Avoidance of Bias
Collaboration & Public Engagement

image: Flaticon.com

Define clear objectives and goals Collaborate on Al Review Conduct reviews of Al Solutions

Governance

Ongoing monitoring & evaluation Reporting Consequences for non-compliance Communications and engagement



Departmental reviews need to be more than high level descriptions of how the tool may be used. Requires critical conversations about where risks might arise (bias, impact, data quality,...) and options to mitigate that risk.

Balance governance approach with the desire for things to move "quickly" (not unsimilar to any other IT solution goals)

Collaborate with departments to

- develop AI review process
- facilitate discussions around bias and data
- complete AI review process & ongoing reviews
- provide training and resources

Operationalizing

Al Governance Committee

- Representatives from multiple departments with variety of positions and experience/familiarity of Al
- 10 people plus chair including members from City Clerk, City Attorney and Courts
- Subcommittee of Technology & Innovation Steering Committee (similar to Data Governance Approach)

Governance

- Governance framework
- What gets reviewed? What just needs awareness?
- Bias, data quality, risk
- Conversations to determine scope of use and potential risk
- Integrate AI documentation and review into existing processes (procurement, requests for technology, others...)
- All usage and needs survey, IT reporting on use of All sites, inventory of current use
- Training identify existing training resources or create in house
- Engagement & Transparency how to gather community feedback (External AI Governance Committee? Boards and Commissions?)
- Procurement process
- Develop community of Practice (part of our larger All things Data community)

Guidelines

- Reporting requirements (new tools, new uses and department specific guidelines/restrictions
- Align with policies related to use of sensitive and regulated data
- Clear discussions of potential bias in data, tool and use
- Transparency in use
- Define public records retentions requirements up front
- Review requirements (both for new tools and new scopes of work)
- Training

Challenges

Departmental reviews require critical conversations about the tool, scope of work and risk.

- People might not have experience with these types of conversations or with the use of AI. Need to give time to work through the process
- Requires collaborative approach between City Attorney's Office, Chief Diversity Officer, the
 Department and IT. While everyone is willing, it is still a time commitment and the conversations
 may be challenging.
- Need to balance goal of having a thorough review with not delaying progress

Governance needs to be embedded "everywhere"

- Similar to Data Governance, but more challenging since AI use may not be obvious if people don't disclose
- Single products or applications can have multiple forms of AI (genertative AI + machine learning)

Governance shouldn't block Innovation

- How do we implement rigorous governance without stifling innovation? The answer can't be that things are dropped solely to make the process easier/faster.
- Balance existing approaches to IT application governance (enterprise solutions preferred, strick usage guidelines, ...) with technology solutions that are accessible online for minimal or no cost.
- We want people to actively (and willingly) participate in the governance process. How do we remove the view that governance is a barrier to progress?

Contact Info

Stephanie Deitrick stephanie_Deitrick@tempe.gov

Thank you