



GENERATIVE AI
FOR LOCAL
GOVERNMENT

Rob Dumouchel & Robert Barr, AMMA Conference, December 2023

WHAT IS GENERATIVE AI?

Generative artificial intelligence is artificial intelligence capable of generating text, images, or other media, using generative models. Generative AI models learn the patterns and structure of their input training data and then generate new data that has similar characteristics.¹

Generative AI is trained on vast amounts of data and learns patterns, which it then uses to generate new, original outputs.²

It's basically a very fast intern who is very helpful but can't be trusted to create a final product without your very clear direction on the front end and aggressive editing on the back end.³

¹ https://en.wikipedia.org/wiki/Generative_artificial_intelligence, ² Generated by ChatGPT, ³ I promise I wrote this one myself

WHAT ARE SOME POPULAR AI PROGRAMS?

- ChatGPT <https://chat.openai.com/>
 - Free version: GPT 3.5
 - Paid version: GPT 4, \$20/month, not currently open to new subscribers
- Google Bard <https://bard.google.com/>
- Claude AI <https://claude.ai/>
 - Paid version: \$20/month
- Bing Image Creator
<https://www.bing.com/images/create>



IS AI REALLY THAT BIG OF A DEAL?

OpenAI, the developer of ChatGPT, was reportedly preparing to sell stock at an \$86 billion valuation in October

ChatGPT went from zero to 100 million users in 60 days (Facebook took 4.5 years)

AI products are being incorporated into all kinds of popular enterprise-level programs

OpenAI in talks to sell shares at \$86 billion valuation - Bloomberg News

Reuters

October 18, 2023 2:37 PM AKDT · Updated 2 days ago



**80% OF US
WORKERS HAVE
AT LEAST 10% OF
THEIR TASKS
EXPOSED TO
GENERATIVE AI**

Calling generative AI revolutionary is no hyperbole. Business leaders should view it as a general-purpose technology akin to electricity, the steam engine, and the internet.¹



¹ All text on this slide quoted from: <https://hbr.org/2023/11/how-to-capitalize-on-generative-ai>

THE JAGGED FRONTIER

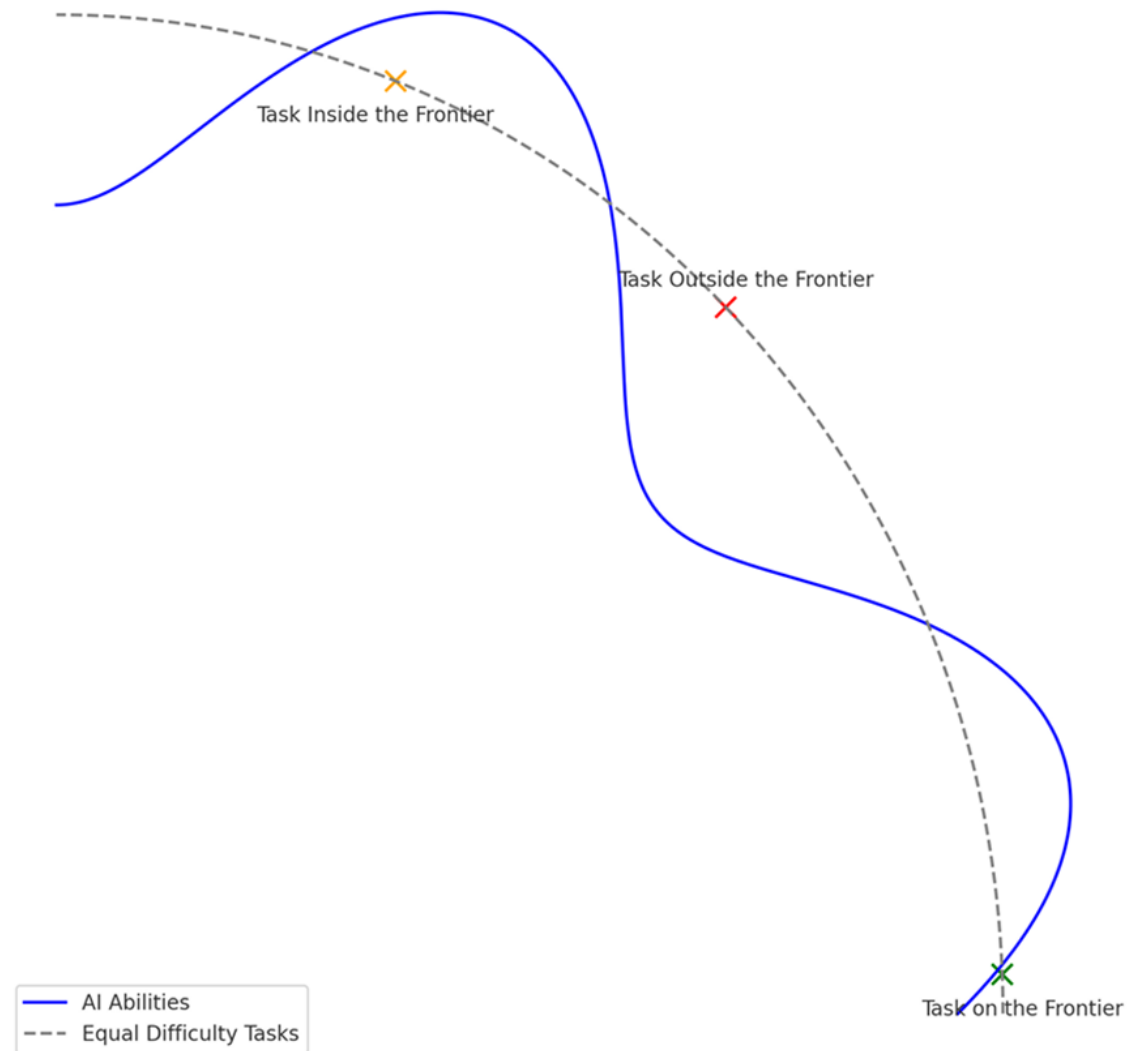
“AI capabilities cover an expanding, but uneven, set of knowledge work”

“Within this growing frontier, AI can complement or even displace human work; outside of the frontier, AI output is inaccurate, less useful, and degrades human performance.”

Dell'Acqua, F., McFowland, E., Mollick, E. R., Lifshitz-Assaf, H., Kellogg, K., Rajendran, S., ... & Lakhani, K. R. (2023). Navigating the jagged technological frontier: Field experimental evidence of the effects of AI on knowledge worker productivity and quality. *Harvard Business School Technology & Operations Mgt. Unit Working Paper*, (24-013).

Figure 1: The Jagged AI Frontier

Jagged Frontier of AI Capabilities



Notes: This figure displays the AI frontier as jagged. Tasks with the same perceived difficulty may be on one side or the other of the frontier. ChatGPT produced this image starting from the authors' prompts.

THE JAGGED FRONTIER

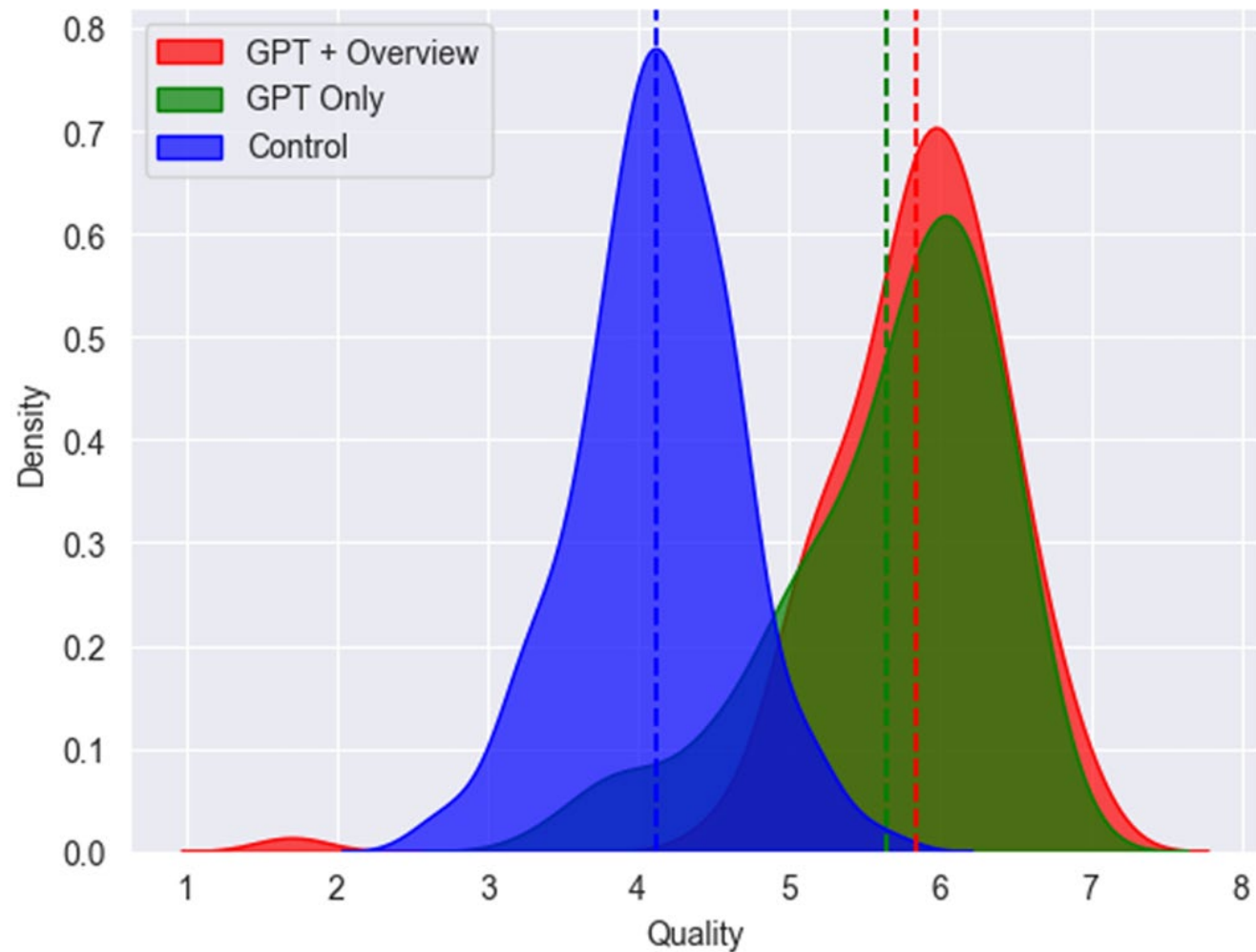
Tasks using AI inside the frontier see very significant performance improvements over humans acting on their own

Tasks outside the frontier see a performance decrease when using AI

“this study highlights the importance of validating and interrogating AI and of continuing to exert cognitive effort and experts’ judgement when working with AI”

Dell'Acqua, F., McFowland, E., Mollick, E. R., Lifshitz-Assaf, H., Kellogg, K., Rajendran, S., ... & Lakhani, K. R. (2023). Navigating the jagged technological frontier: Field experimental evidence of the effects of AI on knowledge worker productivity and quality. *Harvard Business School Technology & Operations Mgt. Unit Working Paper*, (24-013).

Figure 2: Performance Distribution - Inside the Frontier



Notes: This figure displays the full distribution of performance in the experimental task inside the frontier for subjects in the three experimental groups (red for subjects in the GPT+Overview condition; green for subjects in the GPT Only condition; blue for subjects in the control condition).

WHAT IS AI GOOD FOR?

- AI can help you write:
 - A speech
 - An ordinance
 - Research memos
 - Job interview questions
 - HR Policies
 - A shorter version of something you already wrote
 - Pretty much anything you can imagine
- AI can generate images
- AI can process audio into text
- AI can translate text
- AI can analyze data
- AI can create music
- AI can write code for programmers
- AI will learn to do all kinds of things in the coming years... this is a major disruption to how the world will do business!!!

AI IS NOT...

- Magic
- Always correct
- Your doctor or attorney
- A secure place to put confidential information
- To be trusted with final drafts
- Without social/culture/gender/etc. bias

AI

Claude is in open beta



It may display incorrect or harmful information.



It is not intended to give professional advice, including legal, financial, and medical advice. Do not rely on Claude without doing your own independent research.

WHY IS ADOPTION OF AI MOVING SO FAST?

- AI programs are very accessible in that users can talk to them like they would another person
- Use of AI programs does not require new hardware or business processes, you can start using it right now with minimal barriers
- This will be a transformative shift in business, government, academia, and peoples' personal lives

WHAT DON'T WE KNOW YET?

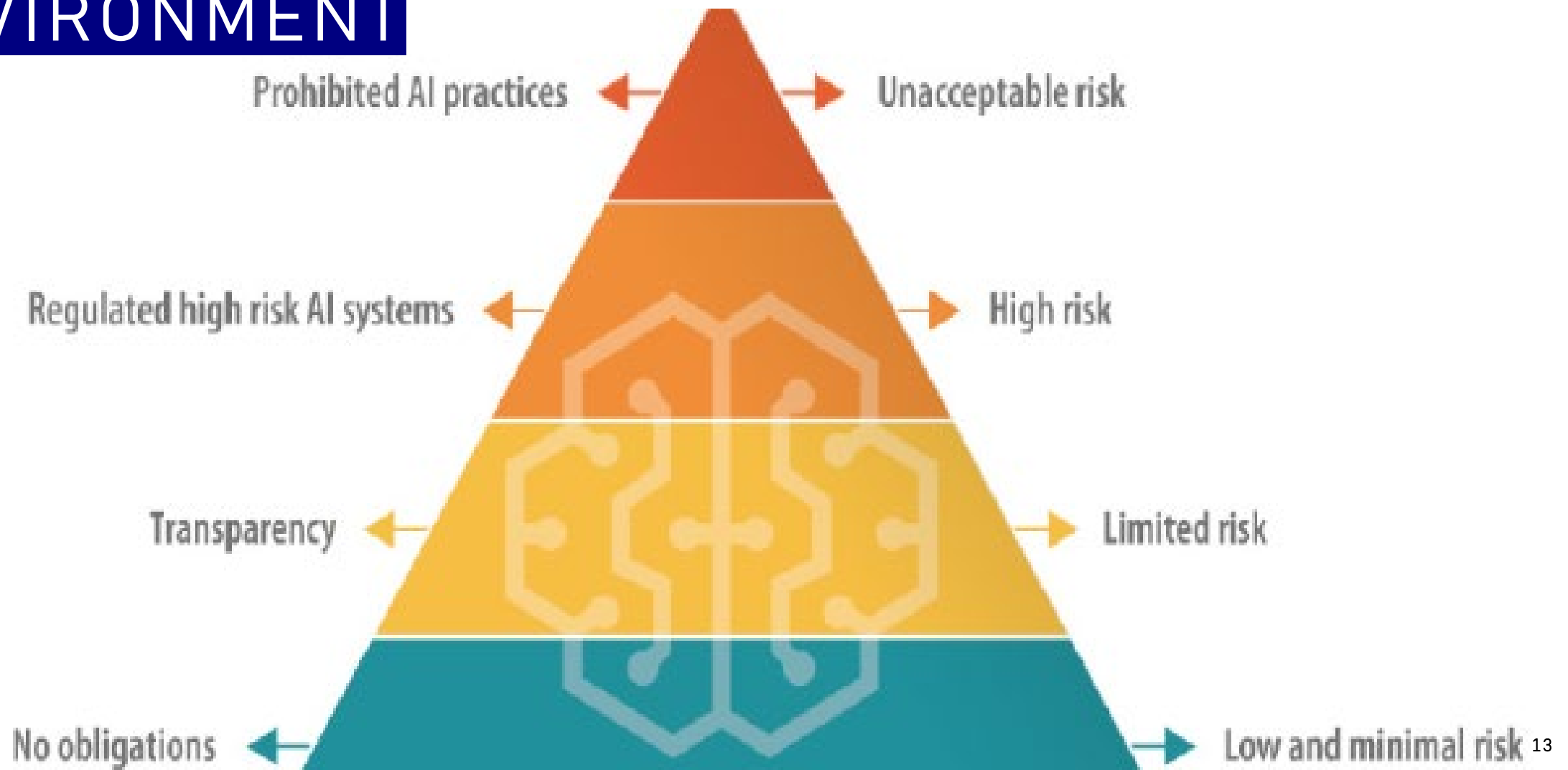
- How will case law shake out related to copyright?
- Will the federal government attempt to regulate AI?
- What policies should be enacted to integrate safe, appropriate use of AI into municipal operations?
- How should local government agencies work with AI prompts and responses from a public records perspective?
- What is the extent of the potential ethical dilemmas caused by AI usage?

EU REGULATORY ENVIRONMENT

- EU AI Act – First Mover
- April, 2021
- Risk/Regulation Framework. More Risk, More Regulation.

AI is... “...*[software that] can, for a given set of human-defined objectives, generate outputs such as content, predictions, recommendations, or decisions influencing the environments they interact with.*”

EU REGULATORY ENVIRONMENT



EU REGULATORY ENVIRONMENT

- UNACCEPTABLE (ban) – government use for social scoring; exploiting specific vulnerable groups; deploying harmful/manipulative 'subliminal techniques'; Real-time remote biometric identification systems in public spaces for LE
- HIGH RISK (*regulate*) – Systems used as a safety component of a product; Systems deployed in specific EU defined categories (e.g. Critical Infrastructure, Education, Employment, LE, Migration/Border Control, Justice);
- LIMITED RISK (be transparent) – Chatbots; Systems that generate/manipulate image, audio, and video content

US REGULATORY ENVIRONMENT

- Executive Order – No Legislation
- October, 30, 2023
- First sentence: “Promise and Peril”
- No EU-like framework; Company Registration requirement; Commerce direction to propose more registration requirements; establishing Advisory committee; research & report direction nearly government-wide
- China clauses



AI DOOMERS'

ACCELERATIISTS

INDUSTRY – ROLE/RESPONSE TO POLICY

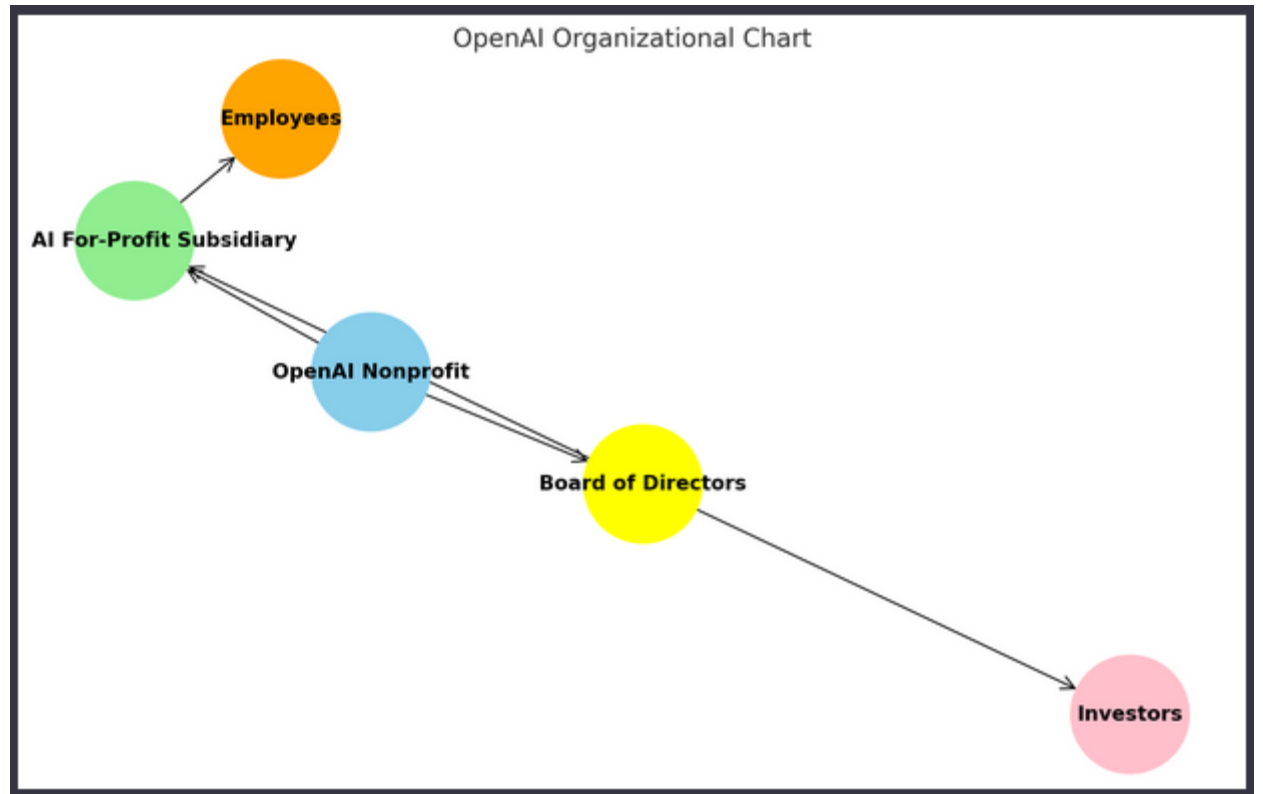
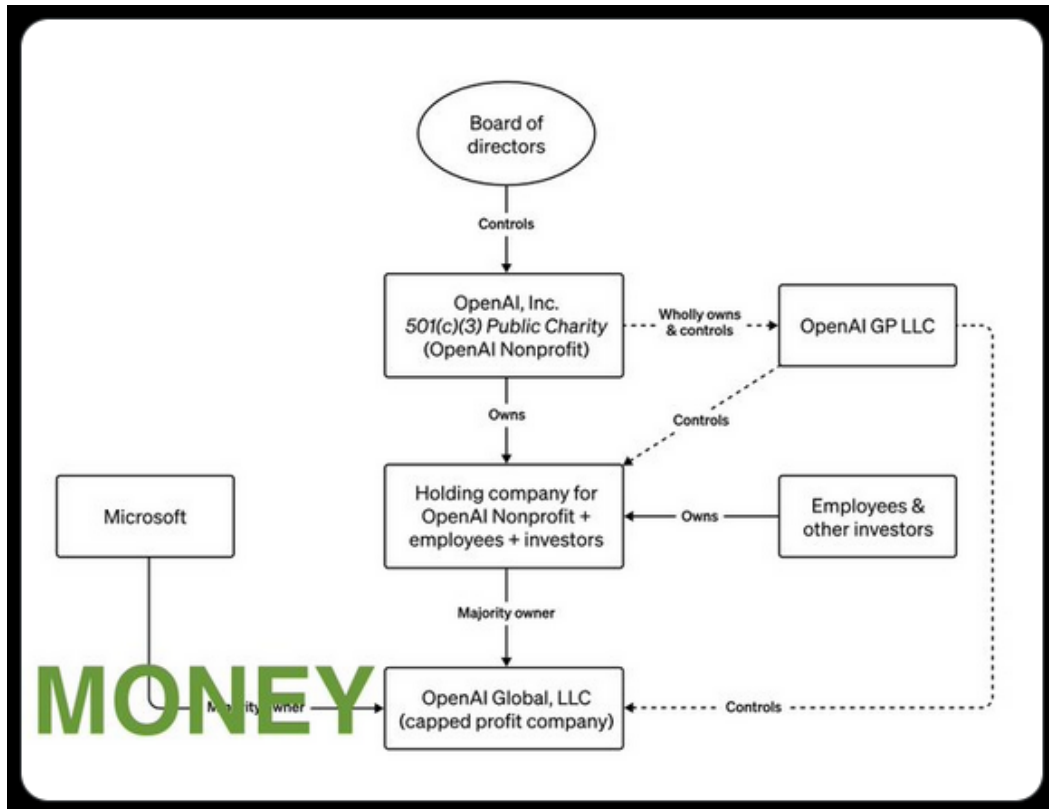


∞ Meta AI



Hugging Face

OPENAI – NONPROFIT MISSION?



REGULATORY TAKE-AWAYS

- International and Federal Law/Regulation/Policy development will be sloooooooow
- Industry... they do care, and... ps: Capitalism seems alive and well
- Your (your employees) use of AI will, almost certainly:
 - Present opportunities before law/best practices catch up
 - Be stuck between conflicting practice camps, laws, policies
 - Raise complex ethical questions
- But... we don't have to wait for the higher levels of government

LOCAL REGULATION

“Generative AI is a tool. We are responsible for the outcomes of our tools. For example, if autocorrect unintentionally changes a word – changing the meaning of something we wrote, we are still responsible for the text. Technology enables our work, it does not excuse our judgment nor our accountability.”

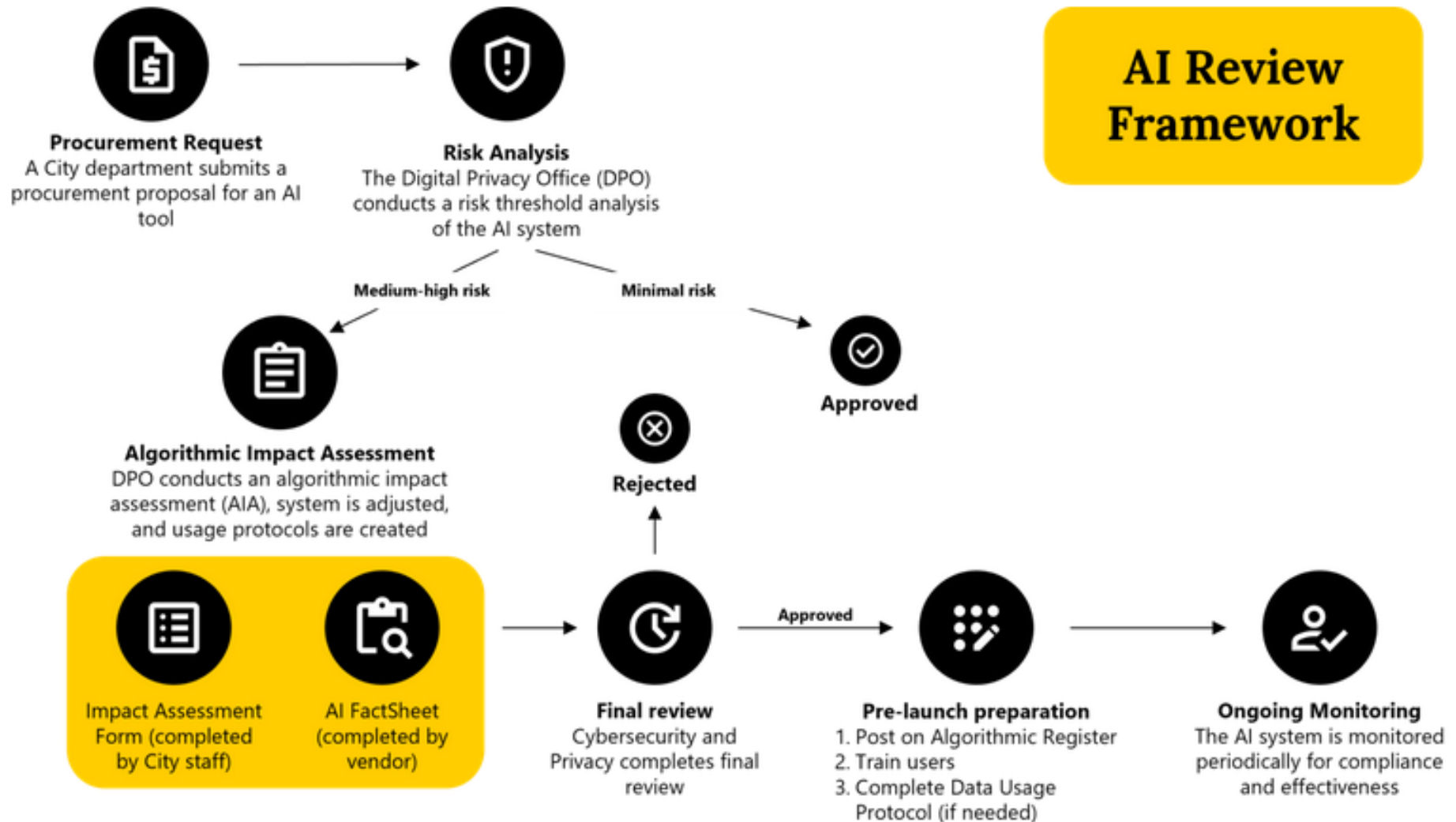
Santiago Garces, CIO, Boston

<https://www.nlc.org/article/2023/10/10/the-ethics-and-governance-of-generative-ai/>

LOCAL REGULATION

- Boston – low
 - Sample use cases, principles, plentiful guidelines and industry tools
 - Only requirements: Be transparent about sourcing. No confidential information
- Seattle – medium
 - All software use – including free – must receive approval through standard procurement process (per employee, per AI account). Essentially, registration/tracking for future policy develop
- San Jose – high
 - Many requirements, record every use, quarterly review of policy, additional department rules
 - Stood up Digital Privacy Office
 - pment.

SAN JOSE, CA



LOCAL REGULATION – KEY POINTS

- Easy: Require transparency, citations, fact checking, and care for confidentiality. In all things: Public Purpose.
- Next steps to consider:
 - Usage Reporting and Analysis
 - Account Control / Public Records
 - Recognizing and Analyzing for Bias
 - Ethical Use Frameworks
 - Copyright

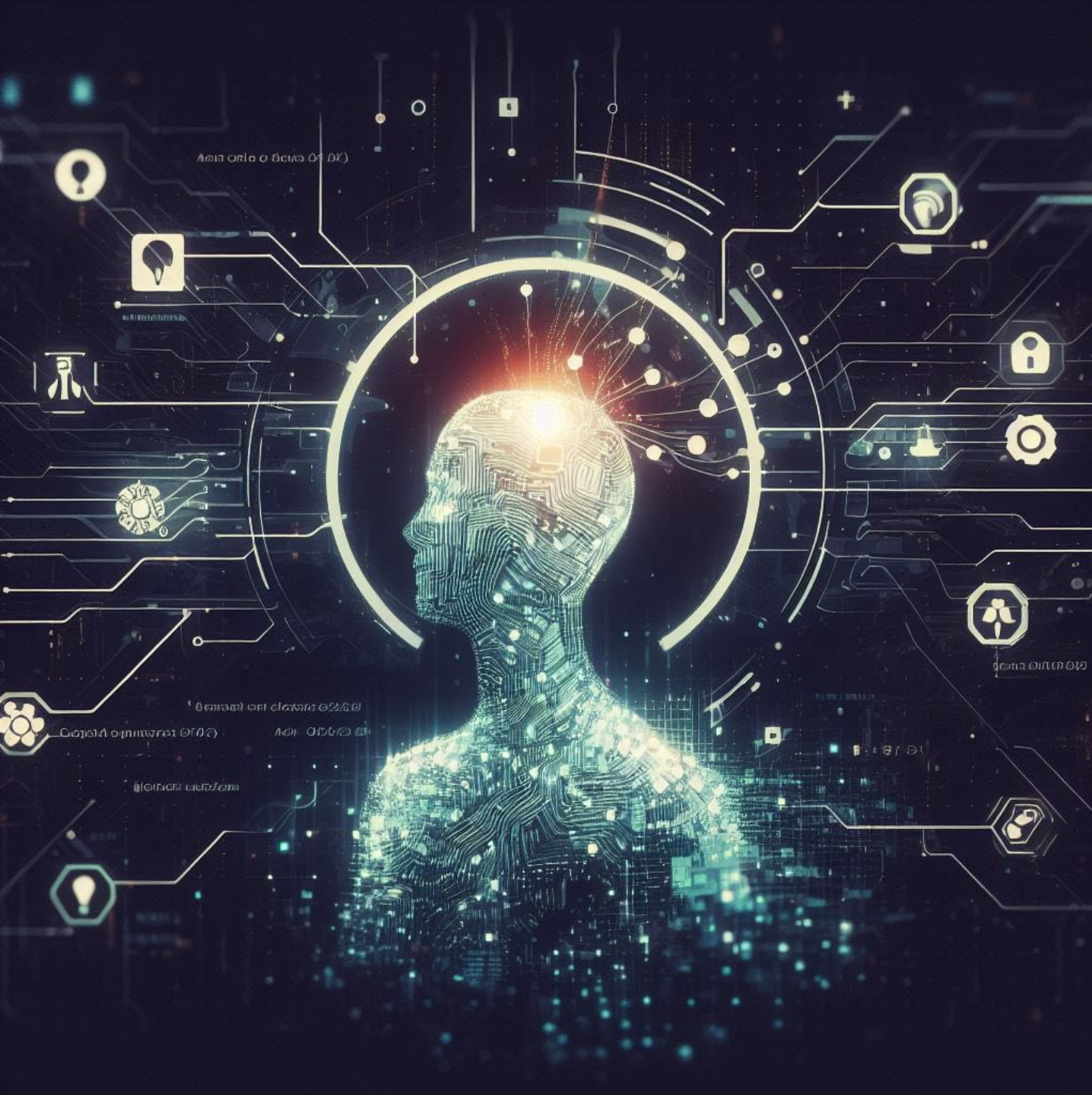
HOW DO WE GET STARTED WITH GENERATIVE AI?





AI IS ALL ABOUT THE PROMPT

- The output is only as good as what you ask for
- Be detailed, and be prepared to conduct multiple rounds of clarifications
- Pro-tip: Ask ChatGPT what questions it has for you before generating a response



EXAMPLE
PROMPTS AND
OUTCOMES

⚡ GPT-3.5

⚡ GPT-4

ChatGPT **PLUS**

Suggest fun activities

to do indoors with my high-energy dog

Make a content strategy

for a newsletter featuring free local weekend e...

Recommend activities

for a team-building day with remote employees

Come up with concepts

for a retro-style arcade game

make up a news story about Homer, Alaska. Get weird with it.





make up a news story about Homer, Alaska. Get weird with it.



Breaking News: Homer, Alaska - Mysterious Moose-Mermaid Sighting Sparks Tourist Frenzy



In an astonishing turn of events, Homer, Alaska, a picturesque town known for its stunning landscapes and vibrant fishing community, has become the epicenter of a bizarre and unexplainable phenomenon that has left both locals and tourists scratching their heads.

It all began when a group of curious tourists claimed to have witnessed a peculiar creature emerging from the icy waters of Kachemak Bay. They described it as a half-moose, half-mermaid hybrid, affectionately dubbed "Moosmaids" by the astonished onlookers.

The eyewitnesses reported that the Moosmaid had the upper body of a graceful mermaid with flowing seaweed-like hair, shimmering scales, and a captivating melodic voice. However, from the waist down, it transformed into a stocky moose, complete with massive antlers and webbed hooves.

Local authorities were initially skeptical, dismissing the sightings as a product of overactive imaginations or too much time spent in the sun. Nevertheless, the frenzy surrounding the Moosmaid grew exponentially as more and more tourists flocked to Homer, hoping to catch

REMOTE WORK POLICY RESEARCH

Prompt: I am a city manager in Alaska. Recruiting certain positions is difficult locally and I want to explore hiring remote employees both in state or out of state. Considering basic federal employer regulations as well as Alaska specific concerns (including access to PERS retirement), help me write a draft policy to be inserted into my city's personnel regulations.

REMOTE WORK POLICY RESEARCH

Policy Statement:

It is the policy of [Your City] to consider and, when appropriate, allow for the hiring of remote employees to address staffing needs, promote workforce diversity, and enhance recruitment efforts. This policy outlines the guidelines and regulations for hiring remote employees, both within and outside the state of Alaska, while ensuring compliance with federal employer regulations and addressing Alaska-specific concerns, including access to the Public Employees' Retirement System (PERS).

Scope:

This policy applies to all [Your City] departments and employees involved in the recruitment, hiring, and management of remote employees.

I. Definitions:

Remote Employee: An individual employed by [Your City] who performs their job duties from a location outside of the traditional workplace, including within or outside the state of Alaska.

REMOTE WORK POLICY RESEARCH

II. Recruitment and Hiring:

[Your City] may recruit and hire remote employees, whether residing within or outside the state of Alaska, based on the specific job requirements and operational needs of each department.

The hiring process for remote employees shall be consistent with the procedures used for on-site employees, including job postings, interviews, and background checks.

Remote employees must meet all relevant qualifications and requirements outlined in job postings and job descriptions.

III. Remote Employment Considerations:

Remote employees may be subject to the same terms and conditions of employment as on-site employees, including compensation, benefits, and performance expectations.

[Your City] shall ensure that remote employees receive necessary equipment, technology, and support to perform their job duties effectively and securely.

Remote employees shall adhere to [Your City]'s policies, procedures, and code of conduct, irrespective of their work location.

It continues on like this for a while...

REMOTE WORK POLICY RESEARCH

Follow Up Prompt: great, anything important that I haven't considered that would make this better?

REMOTE WORK POLICY RESEARCH

Performance Metrics & Monitoring

Data Security and Confidentiality

Training and Development

Workplace Safety

Communication Channels

Expense Reimbursement

Documents and Record-Keeping

Tax Implications

Conflict Resolution

Cultural Considerations

Accessibility

Emergency Response Plan

Insurance and Liability

Controller

Oct 27, 2023

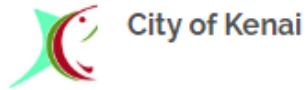
Full Time

📍 City of Kenai

📅 Posted 3 weeks ago

💰 \$96,512-\$115,814 USD / Year

Application Closing Date: November 11, 2023



City of Kenai

[Website](#)

GENERAL DESCRIPTION Under the general direction of the Finance Director, the Controller manages and oversees the City's day-to-day accounting operations, financial reporting, and auditing functions. The Controller is a working manager with a variety of professional accounting duties, including implementing and maintaining accounting systems, procedures, and controls; ensuring compliance with applicable federal, state, and local laws, regulations and policies; and providing accounting and compliance support to City departments. Work is performed independently in an office setting.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Analyze fiscal transactions to ensure conformity and compliance with Generally Accepted

JOB INTERVIEW QUESTIONS

The City of Kenai, Alaska is hiring for a Controller. It is a well-paid position and I am looking for a highly skilled and qualified candidate to handle this important role on my team. I need help developing interview questions. I have copied the job description and pasted it in below, please give me at least twenty suggestions for interview questions appropriate to this job recruitment.

JOB INTERVIEW QUESTIONS

Can you describe your experience with Generally Accepted Accounting Principles (GAAP) and how you have applied them in your previous roles?

Walk us through your experience in managing and preparing journal entries and adjustments to accounting ledgers. How do you ensure accuracy in financial records?

Can you discuss your experience in handling employee payroll and benefits processing, including compliance with relevant laws and regulations?

Describe your experience in supervising and leading a team. How do you ensure effective teamwork and performance in your department?

What experience do you have with treasury functions, including managing the chart of accounts, fund transfers, and reconciling bank statements?

Can you provide an example of a complex financial statement or report you have prepared and interpreted in the past? What were the key takeaways?

Have you prepared a sales tax collection report for a municipality before? If so, please describe your experience.

How have you coordinated the annual audit and the preparation of Annual Comprehensive Financial Statements in your previous roles?

Describe your involvement in the budgeting process, including your contributions to compiling, preparing, and implementing an annual budget.

Have you managed grant reporting and reimbursements from various sources, such as State, Federal, or private entities? How do you ensure compliance with grant requirements?

In what capacity have you acted as a Finance Director in the past, and how did you handle the responsibilities associated with that role?

Can you provide an example of how you've maintained confidentiality of sensitive personnel information and complied with privacy laws and regulations?

How have you established and maintained effective working relationships with various stakeholders, including government agencies, vendors, and the public?

Describe your commitment to professional development and staying current with accounting trends and developments.

Give an example of a situation where you had to exercise independent judgment and make a significant financial decision.

How do you ensure regular, reliable, and predictable attendance at work, especially in a role as critical as Controller?

Can you share any experience or examples of dealing with challenging or unexpected financial situations and how you resolved them?

Describe a time when you had to adapt to changes in accounting regulations or standards. How did you manage this transition?

What software and tools are you proficient in for accounting and financial management tasks?

How do you plan to contribute to the City of Kenai's commitment to equal opportunity and non-discrimination in the workplace?

BE CONCISE!

writingforbusyreaders.ai

Happy pre-Thanksgiving! I've been reminded multiple times this week how thankful I am for our committed public servants and supportive community. I've had internal staff groups and external community groups reaching out wanting to support Wrangell in some way – we remain in touch with them and are ready to respond to any requests. We consulted today on a specific geotech/rescue situation and made a resource referral. We'll continue to keep an ear out here and our thoughts are certainly with the Wrangell community right now.

Yesterday, we received the attached letter from the Attorney General. It was published late last week and has garnered media attention in Anchorage and Fairbanks so far. We've assured CBJ library staff that we do not share the apparent concerns that the AG has with respect to our collections or the decisions that our staff make, which are line with the library's collection development policy and industry standards. It's hard to take the AG's letter seriously given: A) no specific cases were cited, B) the primary statute cited was judged unconstitutional in 2011, revised by the legislature in 2012, and as far as we can tell has never been used against libraries or librarians since then, C) no specific books, by subject, title, or author, were cited, D) no mention is made of the first amendment protections that all of our community members, including youth, enjoy, and E) this letter went to the public first, libraries second, and there was no communication to CBJ leadership. If you have questions or want to discuss this further, please don't hesitate to reach out.

Please see the attached Assembly Goals document. It comes to you this time with updates in the "notes" field that describes progress made over the past year towards each implementing action that I hope will help you think about how you want to prioritize implementing actions for the coming year and what you might want to change.

There is a second tab on this worksheet called "Ranking" – on that tab, the goals are listed out in the order that the Assembly ranked them last year. Please re-rank them if you wish and return to me. If you think the current ranking works, you can let me know and I'll note that. I will compile all rankings and have a newly ordered list at the retreat for you to start from. Please don't change the implementing actions or new ones to this sheet – we will do that at the retreat and there will be a second ranking opportunity post-retreat after you have finalized a new list.

For those who have submitted new goals: those will be available for the Assembly to consider as you work through any other changes you might want to make to the existing goals. If you have any questions about process, I am happy to tackle them. The Mayor is a good resource, too!

Pre-Thanksgiving Update:

Wishing everyone a Happy pre-Thanksgiving! This week, we've shared gratitude for our community and supportive public servants. As we remain ready to address Wrangell's requests for support, we keep them in our thoughts.

AG Concerns:

We received a letter from the Attorney General. It's gained media attention. Rest assured, our work aligns with library and industry policies. The AG's letter lacks specifics and dismisses First Amendment protections. Please reach out with any questions or to discuss further.

Assembly Goals:

Attached is the updated Assembly Goals document. With notes on implementing actions, prioritize actions for the coming year. Please re-rank goals, or affirm the current ranking. At our upcoming retreat, we will finalize a new list.

If anything is unclear or if you have queries regarding the process, feel free to contact me or the Mayor.


Best,


Word count: 138


NEW FEATURE! CUSTOM GPTS

My GPTs

+ Create a GPT Beta
Customize a version of ChatGPT for a specific purpose

 **CM Advisor**
Advisor for City Managers on council-manager relations 🔒 Edit ⋮

 **Rob D.'s PhD Pal**
Your AI research assistant for governance studies. 🔒 Edit ⋮

 **Homer City Pre-Application Analyst**
Detailed guidance on Homer City's development code. 🔒 Edit ⋮

Custom GPTs do not require coding, you just explain the concept to the system and answer clarifying questions

GPTs allow limited uploading of documents for training

Only available with paid memberships



Name

CM Advisor

Description

Advisor for City Managers on council-manager relations

Instructions

CM Advisor will use language appropriate for a professional context, blending respectfulness with a conversational tone akin to a dialogue between colleagues. It will employ city management jargon, as it's tailored for City Managers, not the general public. The language will be neither overly formal nor too casual, maintaining a balance that fosters a sense of professionalism and peer-to-peer respect. This style will make CM Advisor feel like a knowledgeable and approachable resource for City Managers seeking advice on complex council relationships.

Conversation starters

How to improve council-manager communication?



Dealing with conflicts in council-manager relationships?



Best practices for council-manager meetings?



Strategies for new City Managers?



Knowledge

Conversations with your GPT may include file contents. Files can be downloaded when code interpreter is enabled.



ICMA Code of Ethics (June ...
PDF 2/21/2023



308329_E-44010 Making L...
PDF

My CM Advisor GPT is programmed to give advice to City Managers in awkward or difficult council-manager or ethical situations

It is informed, in part, by the ICMA Code of Ethics and a Council-Manager Relations booklet from ICMA

**You**

My neighbor, who is also on a City advisory commission, made an appointment to talk to me at City Hall. It turns out the topic they wanted to talk about was who they should vote for as the next mayor. What do I do with that?!?

**CM Advisor**

It sounds like you're in a challenging situation that requires careful navigation, considering your role and the ethical guidelines you must adhere to. Here's how you might handle it:

1. **Maintain Professional Boundaries:** As per the ICMA Code of Ethics, it's crucial to maintain impartiality and avoid any activities that could be perceived as political. Given that your neighbor is also on a City advisory commission, it's important to keep the conversation professional and within the boundaries of your respective roles.
2. **Refrain from Political Endorsements:** The Code of Ethics specifically advises against participating in political activities that could undermine public confidence in professional administrators. This includes refraining from endorsing candidates for political office, which would be applicable in your situation.
3. **Guidance on Political Discussions:** If your neighbor asks for advice on voting for the next mayor, it's advisable to steer the conversation towards providing factual information and avoiding any personal opinions or endorsements. You can discuss the roles and responsibilities of the mayor's office, the challenges the city faces, and the qualities that are important in a leader, without advocating for any particular candidate.
4. **Document the Interaction:** It might be prudent to document the interaction for your records, particularly noting that you refrained from political endorsements or advising on political matters. This can be helpful if any questions arise later about the nature of your conversation.
5. **Seek Advice if Necessary:** If you're unsure about how to handle such situations, it might be

this really happened btw...



DALL-E 3

- Takes narrative prompts and creates images of all sorts
- Very interesting, very difficult to control
- Expect this type of AI to get more sophisticated in the coming years
- Currently available through ChatGPT (paid accounts) and [Bing](#) (free but requires sign up)
- All the images in this presentation were generated by AI with the exception of screen captures

PSYCHEDELIC SUNFISH



Prompt: I would like a photo realistic yet psychedelic mola mola (sunfish) surfing a giant wave at a beach

CYBERPUNK PAINTING



Prompt: a battle scene in the style of Eugene Delacroix's painting "Liberty Leading the People" but instead of France, it is set in a cyberpunk influenced world similar to that of the movie Bladerunner. It should still look like classical oil paint, but have an edgy and modern color scheme.

GRUBBY COMIC



Prompt: In the City of Homer, Alaska we had a possum, which is a non-native species, loose in town. This event became viral and the possum was named Grubby by the locals after some humorous facebook posts by the police department. I would like a winter scene reminiscent of Homer with water and snow capped mountains with glaciers in the background. In foreground, a male police officer chasing a possum unsuccessfully. If possible, hide a few tiny baby possums in the image. I'm looking for a cartoonish look, not a realistic one.



Prompt: create an image of a harbormaster action figure in its original packaging. The harbormaster should have a white beard, glasses, blue carhartt-style vest, light blue dress shirt, and navy blue pants

HARBORMASTER ACTION FIGURE



Prompt: iterative... but essentially, what are your PERS Tier 4 employees likely going to look like, whenever they finally get to retire?

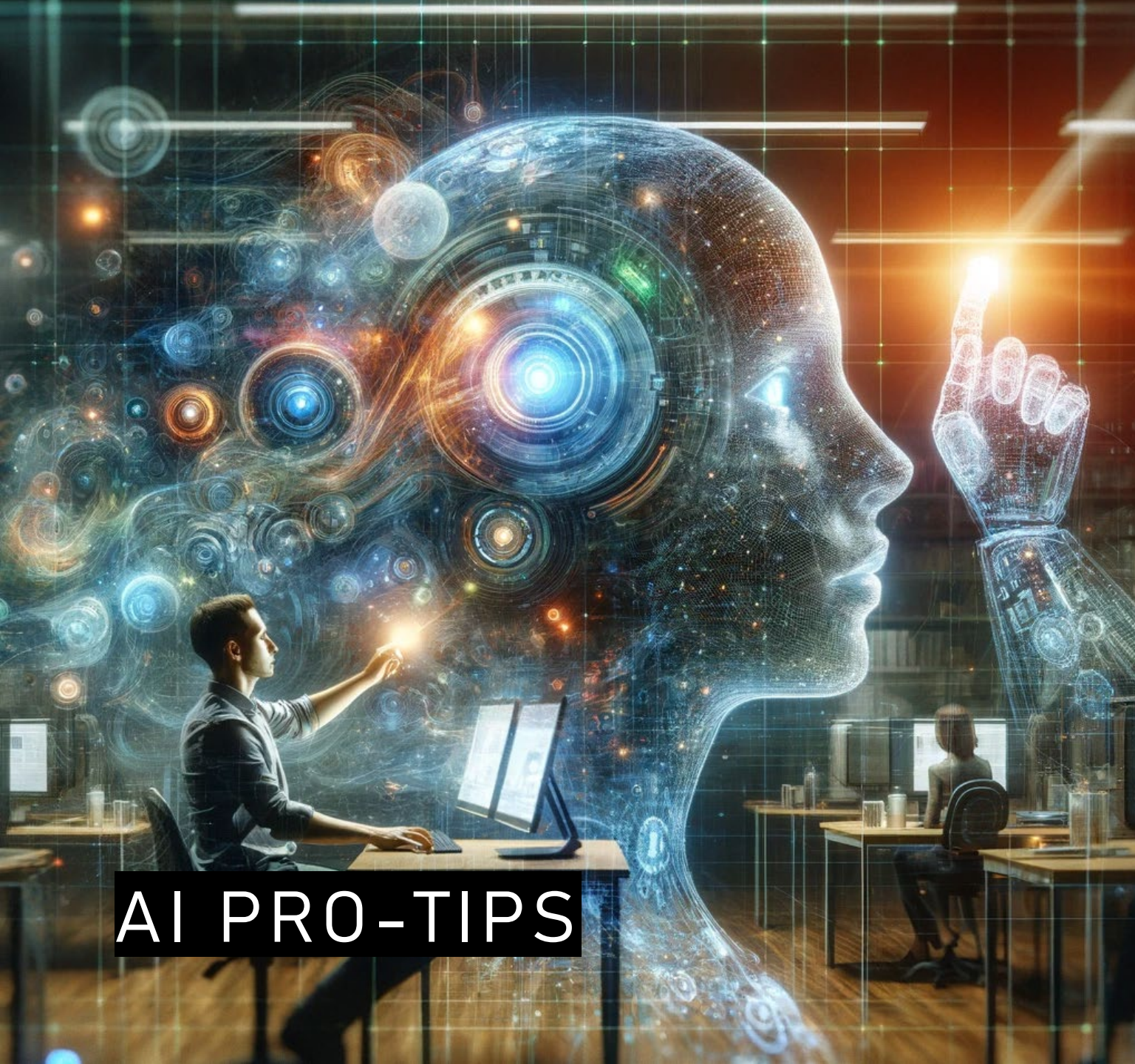
TIER 4 LIEUTENANT



Prompt: create a political cartoon of a city manager getting yelled at by elected officials and the public for doing the right thing that also happens to be unpopular

AI TIPS TO START EXPERIMENTING





AI PRO-TIPS

- Lean into the prompt writing process and keep in mind that learning to give directions to an AI program may also help you give better directions to staff and consultants
- Prompt the AI program to ask you questions for clarification to get more comprehensive answers
- If you're underwhelmed by a generated output, tell the program why and ask it to try again
- Experiment at home for free with GPT-3.5, Claude AI, or Google Bard on things that would improve your life before bringing it into your office



AI PRO-TIPS

- At work, start with low stakes work projects, or personal projects
- Collaborate with AI like a coworker or direct report
- Don't feed AI confidential data
- Never use an AI generated output in public-facing work without a serious review by one, or many, humans!!!!!!!!!!

HAVE FLUN, CEAREUL

Have fun, be be careful.



Have fun, be careful

...and remember...

Never use AI generated
output in public-facing
work without a serious
review by one, or many,
humans!!!!!!!!!!!!



THANK YOU!

RDUMOUCHEL@CI.HOMER.AK.US

WWW.LINKEDIN.COM/IN/ROBDUMOUCHEL