



# The Impact of Artificial Intelligence on the Accounting Profession: What Educators Need to Know and Do

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The Gemini logo is displayed on a black rectangular background. The word "Gemini" is written in a sans-serif font, with a color gradient from blue to purple to pink. A small, four-pointed star is positioned above the dot of the letter 'i'.

**Copilot**



**ChatGPT**





From a Generative AI perspective, what **opportunities** arise from its **implementation** in the accounting industry?

# Gemini's Response:



Increased efficiency and accuracy



Improved decision-making



Enhanced audit capabilities



New service offerings



Increased accessibility of accounting services



# AI APPLICATION IN THE ACCOUNTING INDUSTRY

# AI Application in Accounting



Content generation



Email drafting and summarization



Client communication



Recommendations



Translation

# AI Application in Accounting



Predictive analytics



Audit capabilities



Tax compliance and research



Client insights



Bookkeeping automation



Data analysis

# AI Application in Accounting

 Predictive analytics

 Audit capabilities

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 Data analysis

“

IT MEANS THAT YOU HAVEN'T **SPENT**  
**TIME** ON AREAS THAT DON'T **MERIT** IT.

- Danielle Supkis Cheek, CPA

”

“

WE'VE **REDUCED** TESTING AND  
TRAINING TIME AND **IMPROVED**  
QUALITY, ALL QUITE **SUBSTANTIALY.**

- Patricia Willhite, CPA

”

“

AI CAN GIVE YOU **100%** OF THE  
POPULATION, WHICH MAKES ANOMALY  
DETECTION **EXTREMELY RELIABLE**  
WHEN IT'S BASED ON PROPER  
PARAMETERS SET BY THE AUDITORS.


- Alan Anderson, CPA

”

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CHATGPT IS **WONDERFUL** IN MY OPINION,  
BECAUSE IT BRINGS UP A LOT OF THINGS  
YOU MAYBE **HAVEN'T THOUGHT ABOUT**. WE  
ASKED IT WHAT A GOOD CHECKLIST FOR  
ONBOARDING A CLIENT WAS...IT CAME UP  
WITH SOME **REALLY GOOD THOUGHTS**.

- Rusty Hale, CPA

”


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# Who is using AI:

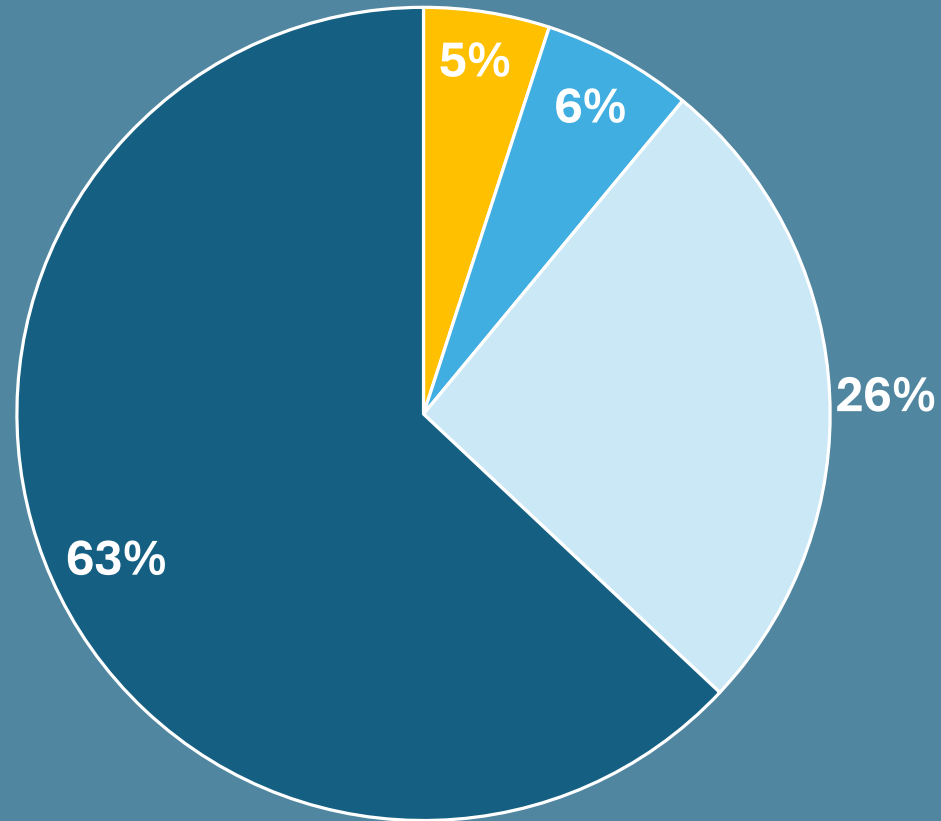
## C-Suite and Senior Executives:

**60%** say they are **1-2 years away** from implementing their first generative AI solution

**65%** believe generative AI will have **high or extremely high impact** on their organization in the **next 3-5 years**

## Plans to Integrate Generative AI into Firm's and Department's Operations

# Who is using AI:

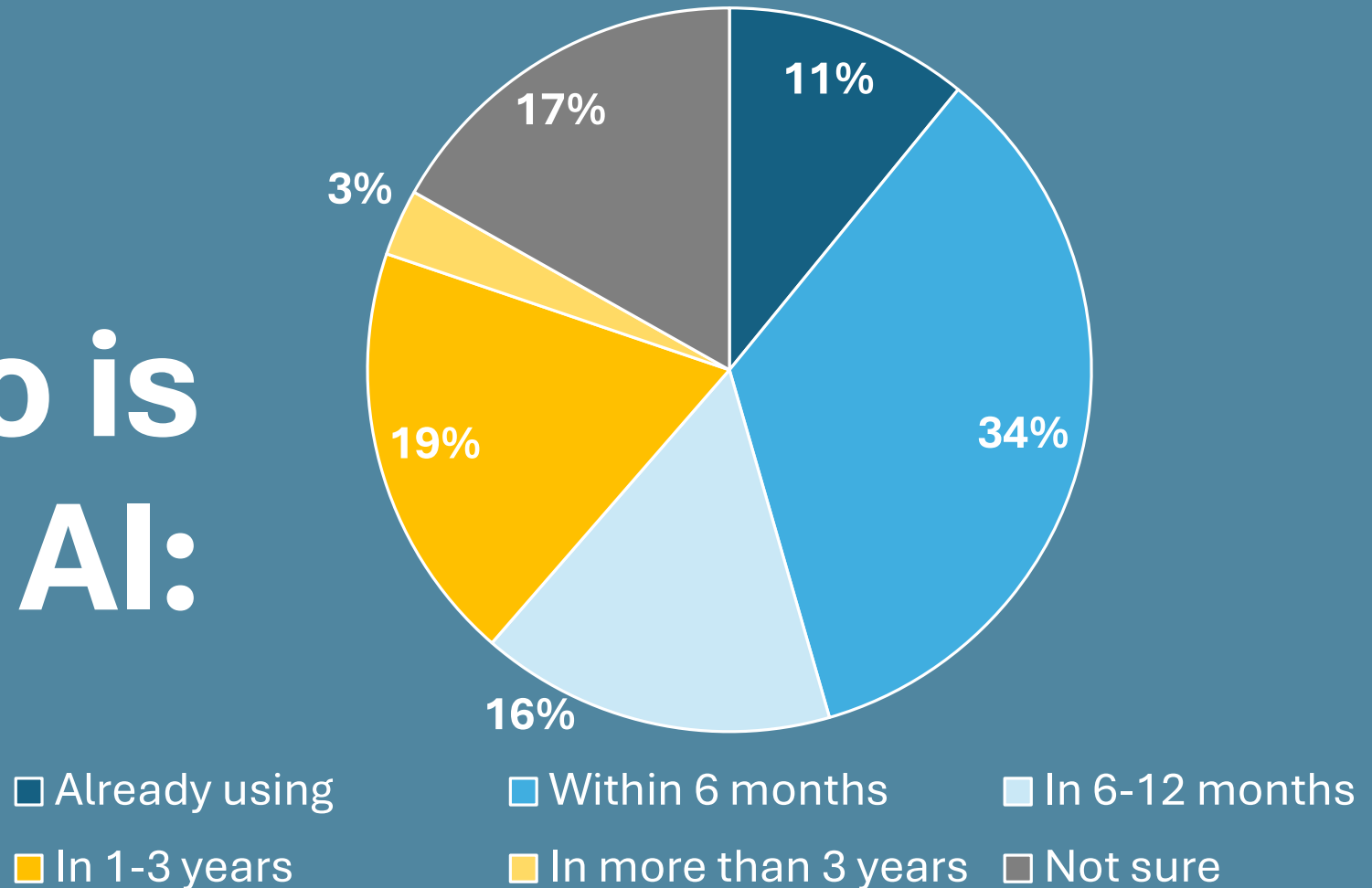


■ Already Using ■ Planning to Use ■ Still Considering ■ No Plans

Source: Thomson Reuters 2023

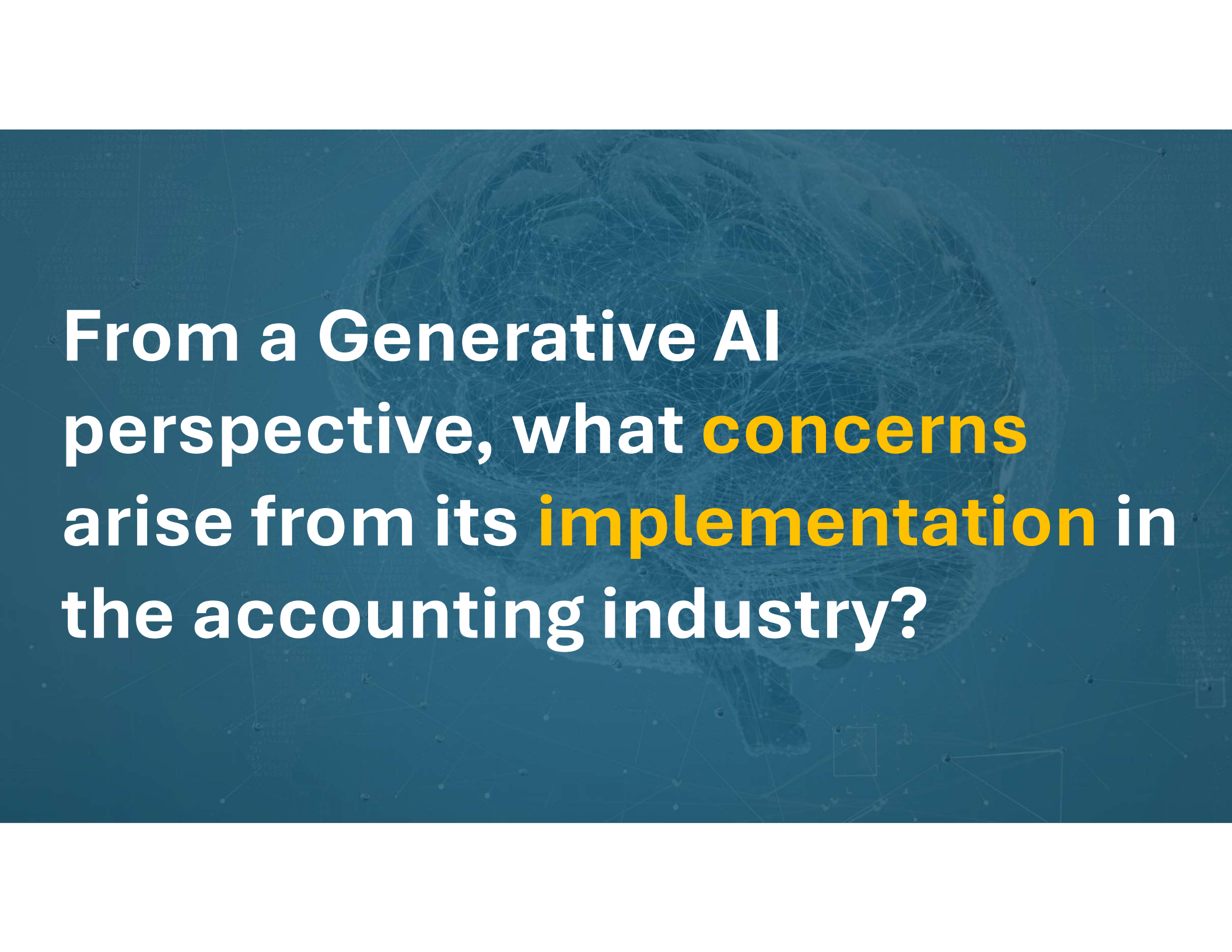
# Who is using AI:

## Time Frame to Roll Out AI Usage



Source: Thomson Reuters 2023





From a Generative AI perspective, what **concerns** arise from its **implementation** in the accounting industry?

# Gemini's Response:



Job displacement



Bias and fairness



Explainability and auditability



Security and control



Regulatory compliance



WHAT ARE  
ACCOUNTING  
PROFESSIONALS  
SAYING?

# Barriers



Awareness



Lack of training



Technology is too expensive



Technology is not useful



Technology is too difficult to use



Concerns and skepticism

“

I PERSONALLY WILL **NOT USE** IT UNTIL I  
HAVE **MORE INFORMATION** AND A **BETTER**  
**UNDERSTANDING** OF HOW IT WORKS. IT  
WON'T BECOME PART OF MY WORK  
ROUTINE ANYTIME SOON.

- Melissa Inman, senior tax manager

”

# Opportunity and Concern

- 73% of professionals agree generative AI **can** be applied to tax, accounting, or auditing work.
- 51% of professionals agree generative AI **should** be applied to tax, accounting, or auditing work.
- 67% report their departments or firms have **risk concerns** surrounding the use of generative AI.



Source: Thomson Reuters 2023

# Concerns

 Accuracy and reliability

 Transparency and bias

 Data security and privacy

 Regulatory compliance

 Elimination of human element

 Uncertainty

“


MY AREA IS **TOO SPECIALIZED**, AND THE RULES ARE **TOO COMPLICATED TO TRUST** CHATGPT OR AI TO PROVIDE ADVISORY SERVICES. I DO BELIEVE CHATGPT / AI COULD BE USED FOR **SIMPLE**, REPETITIVE, COMPLIANCE-BASED TASKS, BUT ONLY **AFTER RIGOROUS TESTING.**

”

Source: Thomson Reuters 2023

# Concerns

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# Concerns

 Accuracy and reliability

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“

ANY DATA OR INFORMATION  
COMMUNICATED WITH...GENERATIVE AI  
MODELS IS STORED AND TYPICALLY USED  
TO IMPROVE FUTURE RESPONSES. THAT IS  
A HUGE SECURITY RISK, ESPECIALLY IN AN  
OPEN SOURCE MODEL.

”

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# Human Connection

39% executives believe that generative AI could lead to **decreased social interactions** and human connections with coworkers that may have **negative impacts** on the workforce.



Source: KPMG 2023

“

I DON'T WANT AI TO REPLACE OUR **HUMAN PROFESSIONALS**. I AM NOT SUPPORTIVE OF AUTOMATING THE ADVISORY FUNCTION AND ELIMINATING OUR **RELATIONSHIPS** OR THE APPLICATION OF **HUMAN PROFESSIONAL JUDGMENT**.

”

# Concerns


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 **Uncertainty**

# Uncertainty

32% executives report a concern that they will see increased **mental health issues** among their workforce due to the **stress of job loss and uncertainty** about the future.



Source: KPMG 2023

“

IT'S KIND OF **SCARY** TO THINK ABOUT HOW A COMPUTER COULD BE TRAINED AND THEN YOU ARE **NO LONGER NEEDED**...IF THE COMPUTER PERFORMS AT SUCH A HIGH LEVEL, IT MIGHT ADD TO PEOPLE'S **STRESS** IF THEY FEEL LIKE THEY HAVE TO **PERFORM EVEN BETTER** AS AN EMPLOYEE.”

- Sagnik Bakshi, tax and audit specialist

”



WHAT DOES  
THE FUTURE  
LOOK LIKE?

# Pipeline and Staffing Shortage Issues



## **Burnout**

- Too much work to do and not enough staff to assist
- 300,000 (17%) accountants and auditors quit the profession from 2019-2021



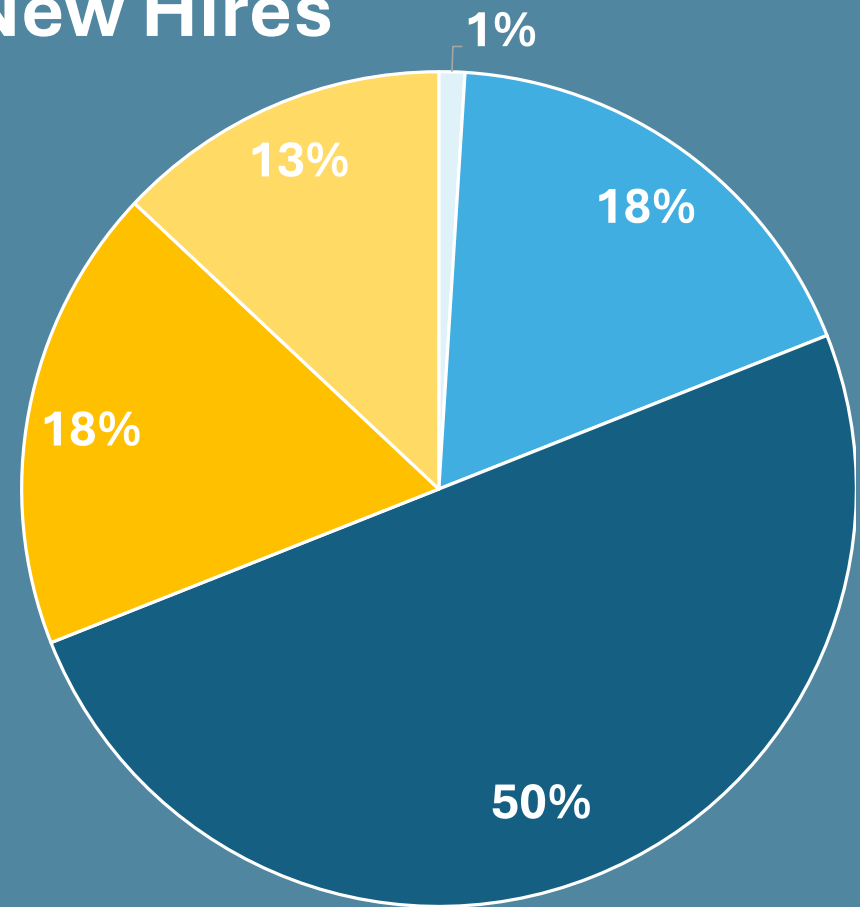
## **2022-2032 Job Outlook**

- Accountants and Auditors: 4% growth rate
- Bookkeeping, Accounting, and Auditing Clerks: 6% rate of decline
- Tax Examiners and Collectors, and Revenue Agents: 1% growth rate

Source: US Bureau of Labor and Statistics

## ChatGPT and Generative AI Skills Requirement for New Hires

- Yes, it will be a requirement
- Yes, but it is a "nice to have" skill and not a requirement.
- No, we are not planning to target applicants with these skills.
- Don't know.
- Not planning to hire any new staff.





# Recommendations



Practice using it yourself



Reach out to business professionals



Understand the impacts and changes



Be aware of the risks



Educate students on proper use

# Risks



Hallucinations



Bias risks



Privacy risks



Instructional risks

# Assigning AI: Seven Approaches for Students



AI as Mentor: providing feedback



AI as Tutor: providing direct instruction



AI as Coach: increasing metacognition



AI as Teammate: increasing collaborative intelligence

# Assigning AI: Seven Approaches for Students



AI as Student: the power of teaching others



AI as Simulator: creating opportunities for practice



AI as Tool

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# Thank you

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