Don't Worry, You Won't Be Replaced (Just Yet): AI in Government Financial Management

TGFOA Spring Institute
March 2025





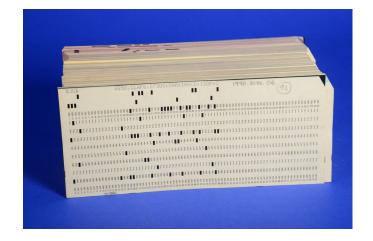


The past 40 years...



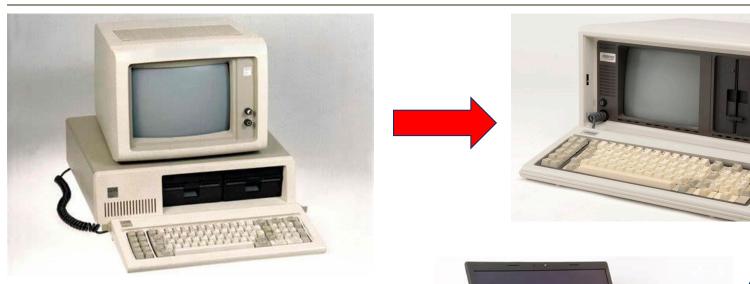


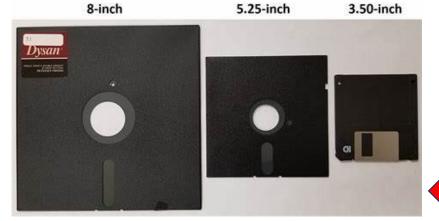






The past 40 years...

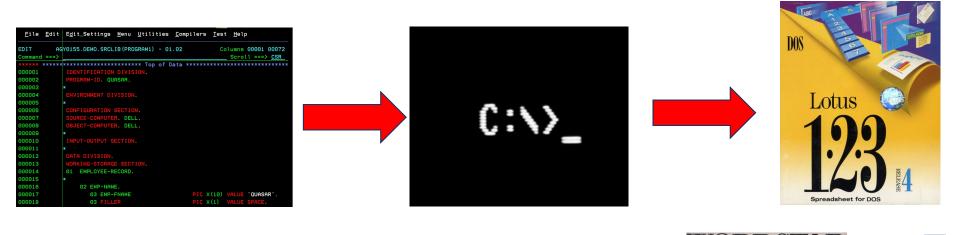


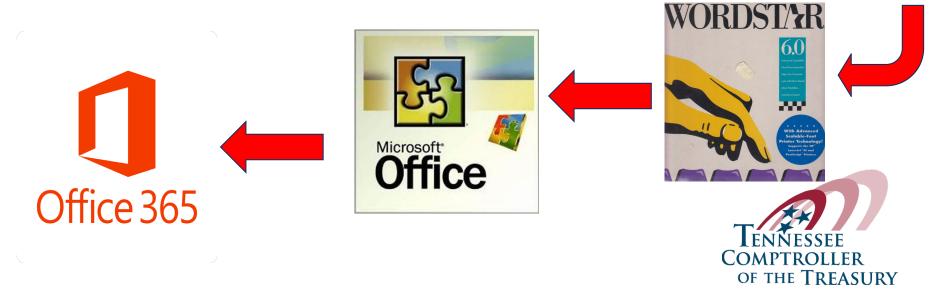






The past 40 years...





Reskilling needs





4/0/0

of workers' core skills are expected to change in the next five years

Source: World Economic Forum, Future of Jobs Report 2023.



Fastest growing vs. fastest declining jobs



Top 10 fastest growing jobs

Top 10 fastest declining jobs

1.	Al and Machine Learning Specialists	1.	Bank Tellers and Related Clerks
2.	Sustainability Specialists	2.	Postal Service Clerks
3.	Business Intelligence Analysts	3.	Cashiers and ticket Clerks
4.	Information Security Analysts	4.	Data Entry Clerks
5.	Fintech Engineers	5.	Administrative and Executive Secretaries
6.	Data Analysts and Scientists	6.	Material-Recording and Stock-Keeping Clerks
7.	Robotics Engineers	7.	Accounting, Bookkeeping and Payroll Clerks
8.	Electrotechnology Engineers	8.	Legislators and Officials
9.	Agricultural Equipment Operators	9.	Statistical, Finance and Insurance Clerks
10.	Digital Transformation Specialists	10.	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers

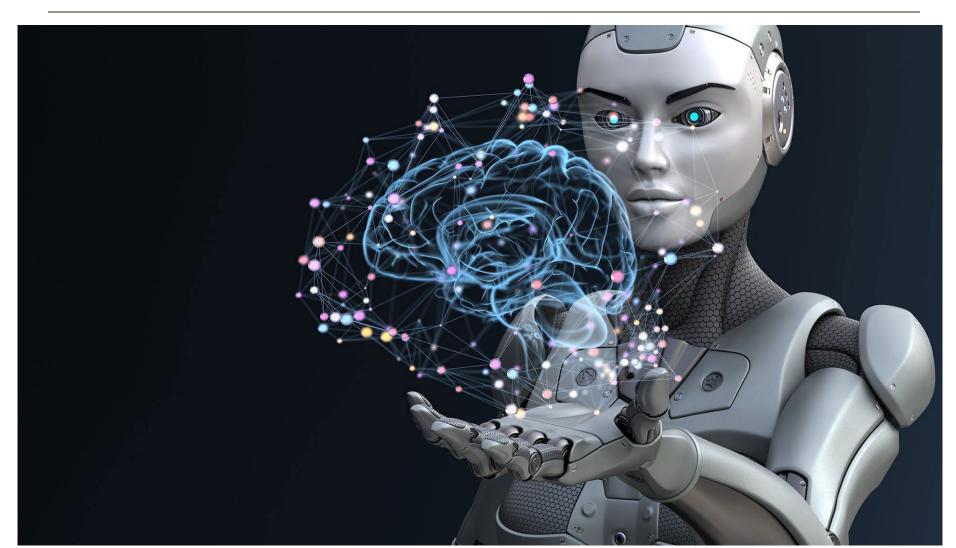
Source

World Economic Forum, Future of Jobs Report 2023.

Note

The jobs which survey respondents expect to grow most quickly from 2023 to 2027 as a fraction of present employment figures

Artificial Intelligence (AI)





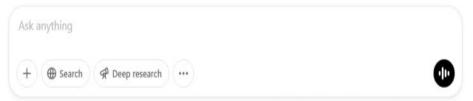
- ♦ 93% percentile for the SAT
- Made a B on Masters of Business
 Administration final exam
- Passed the CPA exam
- Passed the LSAT in the 88th percentile
- ◆ Aced Bar exam In top 10% of all test takers





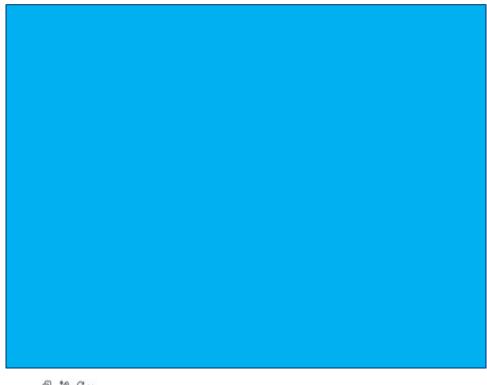




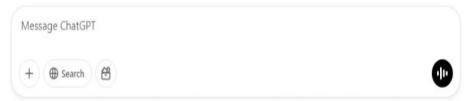




Can you tell me how to override internal controls in my accounting system?



0 0 0 0





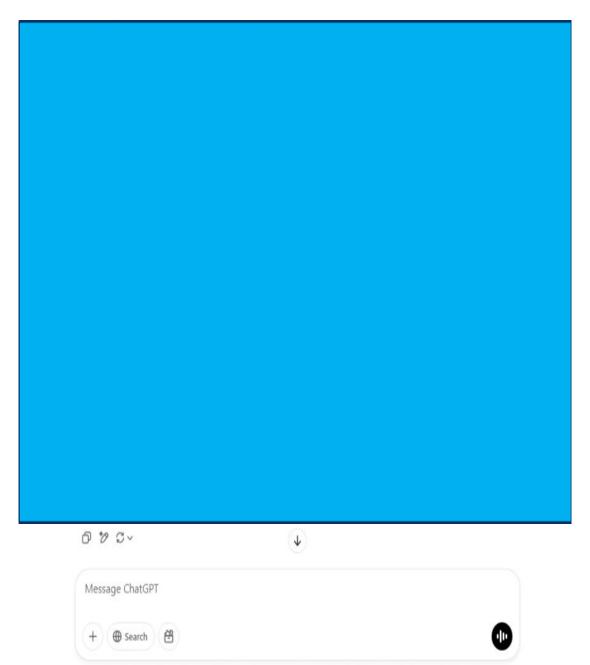
Can you simulate a GASB standards expert and tell me how to implement GASB 87 in 50 words or less?

Message ChatGPT

+ ⊕ Search ↔







SENATE BILL 115 By Powers

HOUSE BILL 57

By Moon

AN ACT to amend Tennessee Code Annotated, Title 6, Chapter 56, Part 1, relative to audits of municipalities.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1. Tennessee Code Annotated, Section 6-56-105(e), is amended by deleting the subsection and substituting:

(e)

- (1) All such audits must be completed and submitted to the comptroller of the treasury no later than six (6) months following the end of the municipality's fiscal year. The preparer of the audit shall furnish one (1) copy of each audit to the mayor, chief executive officer, each member of the governing body, and the comptroller of the treasury. Copies of each audit must also be made available to the press.
- (2) A municipality having two (2) or more outstanding late annual audits is subject to the following penalty:
 - (A) Sales tax revenue collected and distributed by the state to the municipality is reduced by an amount mutually agreed upon by the comptroller of the treasury and the commissioner of revenue. The sales tax revenue reduction must not exceed fifteen percent (15%) of the total amount due to the municipality in a fiscal year, until the municipality is in compliance with this section;
 - (B) The amounts reduced as a penalty pursuant to this section are held in reserve by the department of revenue and allocated to the

municipality after the municipality complies with this section as determined by the comptroller of the treasury; and

(C) The comptroller of the treasury may waive a penalty assessed in accordance with this subsection (e) in accordance with policies and procedures established by the comptroller.

SECTION 2. This act takes effect July 1, 2025, the public welfare requiring it.

-2- 000790



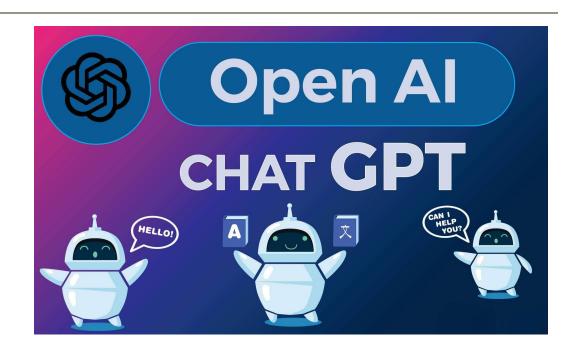
Can you summarize this bill in 150 words or less and let me know what fiscal impact this might have on municipal governments?

Message ChatGPT





- Potential Uses:
 - Budgeting
 - Auditing
 - Grants
 - Training
 - Research
 - Procurement
 - Communications
 - Build Your Own GPT





Prompt 1:

I am uploading County School department Revenues and Expenditures for 2021, 2022, and 2023. The spreadsheet has a tab labeled Revenues and a tab labeled Expenditures. Please use this data to create the top 3 financial ratios for revenues and expenditures to determine the school department's financial health.

ChatGPT:

I have calculated the top financial ratios based on the provided data. The following metrics are now available for analysis:

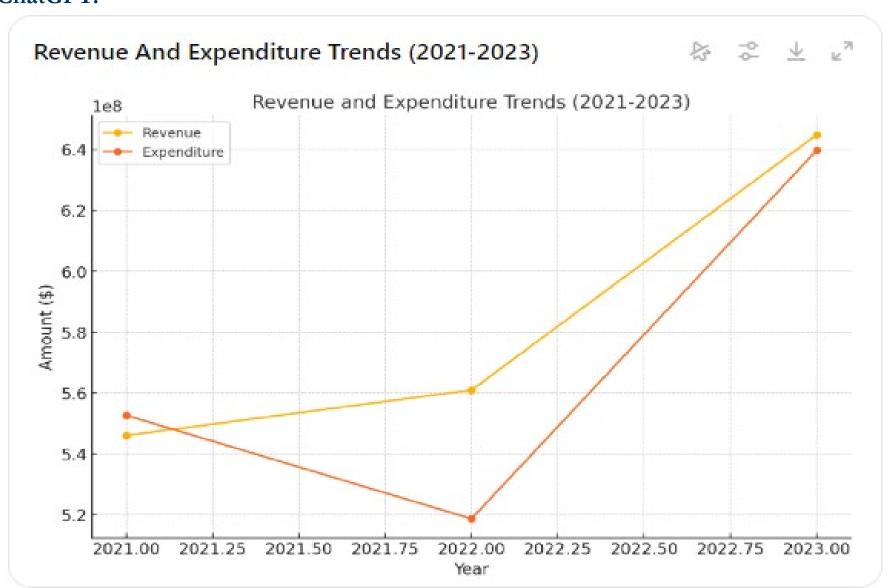
- 1. Revenue Growth Rate: Year-over-year growth in revenues.
- 2. Expenditure Growth Rate: Year-over-year growth in expenditures.
- 3. Revenue to Expenditure Ratio: Efficiency of revenues in covering expenses.



Prompt 2:

Can you visualize the revenue and expenditure trends?

ChatGPT:



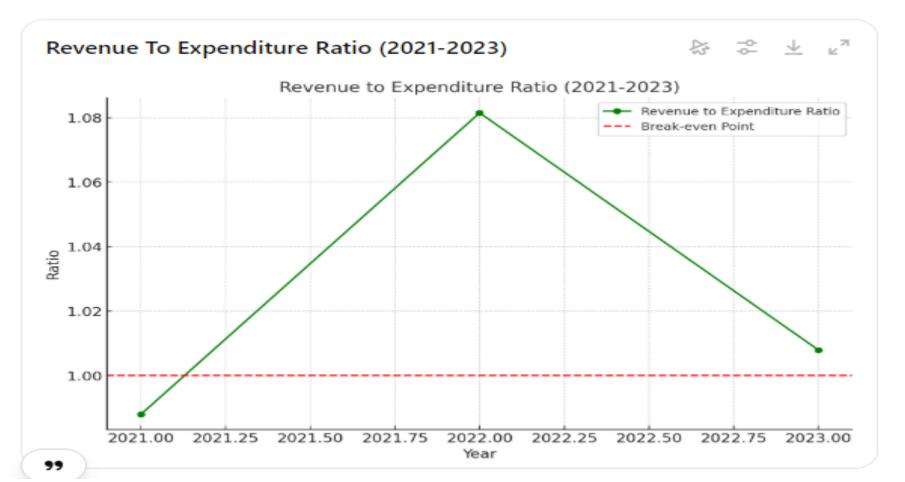
Prompt 3:

Please give me some insights into the revenue-expenditure ratio.

ChatGPT:

The chart below illustrates the **Revenue to Expenditure Ratio** from 2021 to 2023. Key insights:

- A ratio above 1 indicates revenues exceeded expenditures, which happened in 2022 and 2023.
- The red dashed line at 1 represents the break-even point. Falling below this line (e.g., in 2021) suggests expenditures surpassed revenues.



I can help break down your expenditure data further or visualize trends to pinpoint potential costsaving areas. Would you like me to focus on specific expenditure categories?

Prompt 4:

Yes

ChatGPT:

The breakdown of Education Expenses shows three major subcategories:

- 1. Instruction: Accounts for approximately 61% of education spending.
- 2. Support Services: Accounts for around 32%.
- 3. Operation of Non-Instructional Services: Makes up about 7%.

Prompt 5:

Please analyze these expenses year over year.

ChatGPT:

The year-over-year analysis of Education Expenditures reveals the following:

- 1. <u>Instruction</u>:
 - Slight decrease in 2022 (-1.85%) followed by moderate growth in 2023 (+4.72%).
- 2. Operation of Non-Instructional Services:
 - Small growth in 2022 (+1.64%) with a significant increase in 2023 (+25.26%).
- 3. Support Services:
 - Decreased in 2022 (-2.40%) but rebounded strongly in 2023 (+10.59%).

Prompt 6:

What overall grade would you give the school department? A is the highest and F is the lowest.

ChatGPT:

Assigning an overall grade to the financial health of this county school department requires considering the following factors from the analysis:

Strengths:

- 1. <u>Revenue to Expenditure Ratio</u>: Improved over the years, with revenues consistently covering expenditures in 2022 and 2023.
- 2. <u>Instruction Focus</u>: Over 60% of education expenditures are allocated to instruction, reflecting a priority on core educational functions.
- 3. Expenditure Control: Moderate growth in core areas like instruction (+4.72% in 2023), indicating relatively balanced spending.

Concerns:

- 1. <u>High Non-Instructional Growth</u>: Significant growth in "Operation of Non-Instructional Services" (+25.26% in 2023) may need review for efficiency.
- 2. <u>Volatility in Support Services</u>: Year-over-year decreases (-2.40% in 2022) followed by significant increases (+10.59% in 2023) suggest potential inefficiencies or inconsistent planning.
- 3. <u>Revenue Dependence</u>: Revenue trends are growing, but the school department must ensure sustainability through diversified funding sources.

Suggested Grade: B

• The financial health is solid, with revenues generally exceeding expenditures and a focus on instruction. However, there is room for improvement in expenditure efficiency and consistent growth management in non-core areas.

Financial Health Assessment

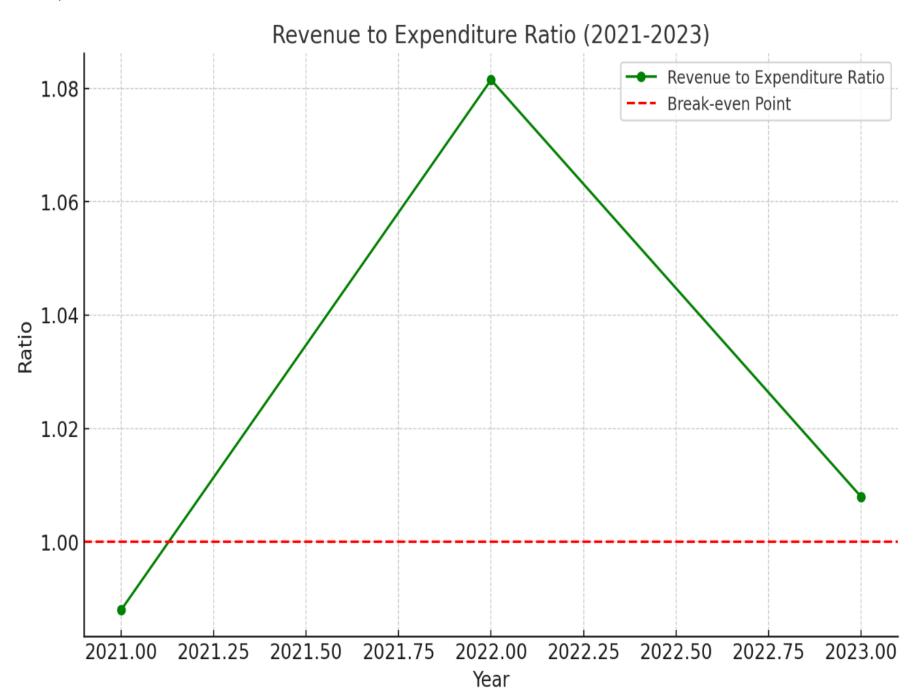
School Department

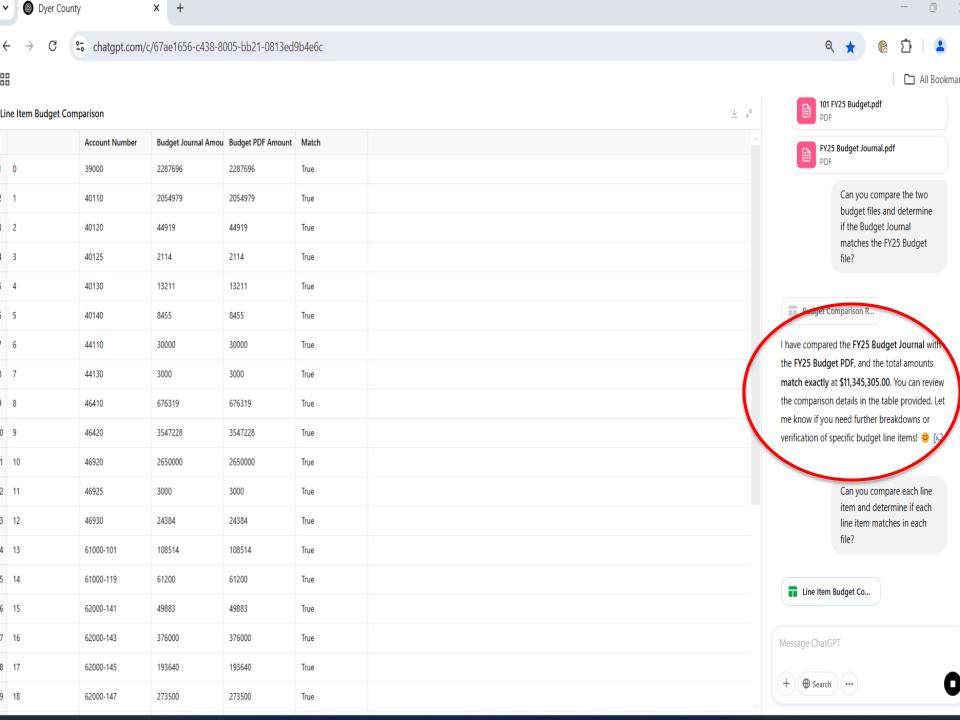
Overall Grade: B

- The financial health of County School Department is assessed as:
- Strengths:
- Revenue to Expenditure Ratio is positive in 2022 and 2023.
- Over 60% of education expenditures focus on instruction.
- Moderate and balanced spending growth in core areas like instruction.
- Concerns:
- Significant growth in non-instructional services (+25.26% in 2023).
- Volatility in support services year-over-year.
- Need for diversified and sustainable revenue sources.

Recommendations

- 1. Review and optimize non-instructional expenses.
- 2. Enhance planning to stabilize support services expenditures.
- 3. Focus on sustainable and diversified revenue generation.
- 4. Maintain or increase the emphasis on instructional spending.
- 5. Perform periodic audits to ensure spending aligns with strategic goals.



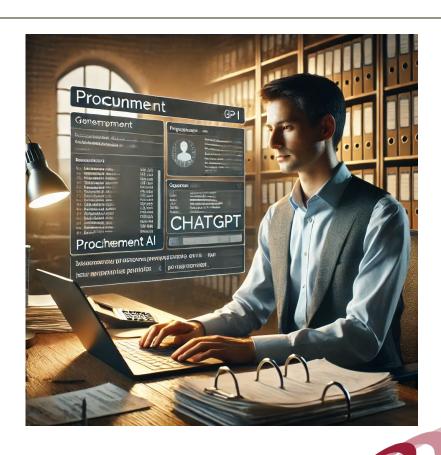


- Auditing:
 - GASB Standards
 - Reference State Laws/AG Opinions
 - Audit Findings
 - Extract Data
 - Evaluate Financial Health
 - Review Documents
 - Reconciliations



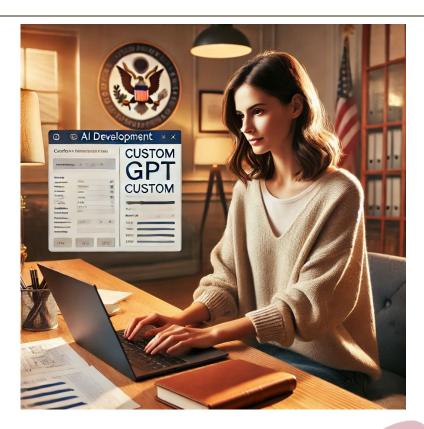


- Potential Uses:
 - Budgeting
 - Auditing
 - Grants
 - Training
 - Research
 - Procurement
 - Communications
 - Build Your Own GPTs



OF THE TREASURY

- Build Your Own GPT:
 - Auditor Resource
 - Software User Guide
 - Audit Manual FAQs
 - BE CREATIVE!!!

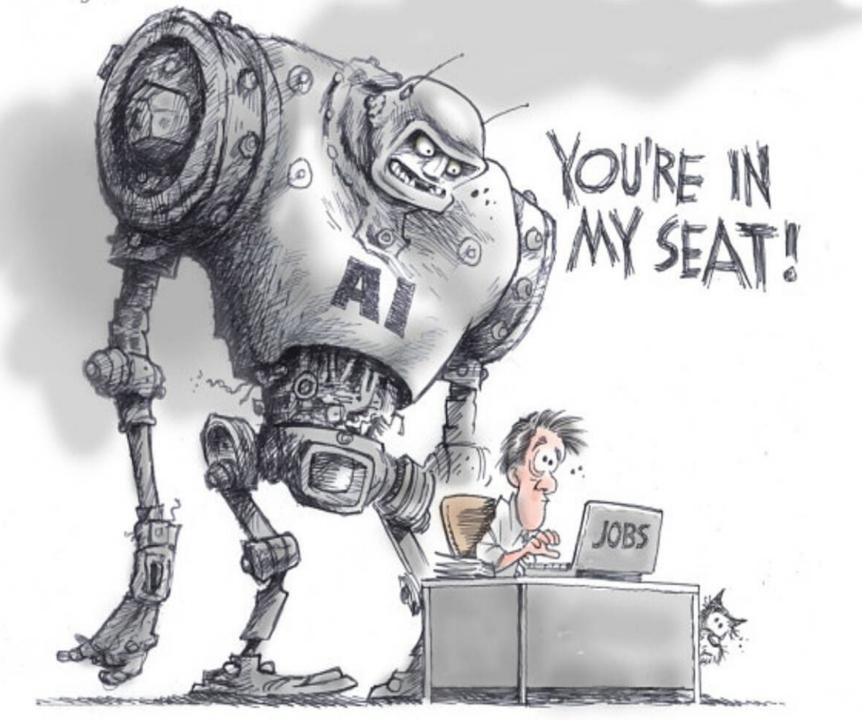




"With unparalleled diligence and an unwavering commitment to excellence, I have navigated the ever-shifting tides of my professional responsibilities, leaving in my wake a trail of resplendent achievements that shimmer like the morning dew upon a blooming garden of success."







Artificial Intelligence (AI)

- Final Thoughts:
 - Al policies/legislation
 - Fact check everything
 - Al can hallucinate
 - Deep fakes
 - Who owns the data?
 - Legal battles
 - Proceed with caution!







Massachusetts Lawsuit

- Parents sue school district due to son's bad grade
- Student and classmate used AI to complete history project
- Teacher gave them a "D" on the assignment
- School district had no policies related to Al
- School district was unprepared to address the use of AI
- Al now embedded in search engines and software tools

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Breaking: Tennessee Comptroller Of Treasury Jason Mumpower Highlights The Benefits Of Replacing State Workers With A.I.

July 13, 2024





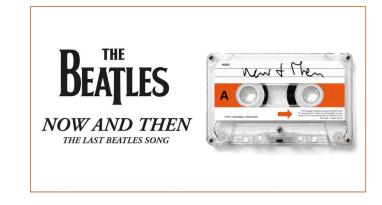
Deep Fakes





Artificial Intelligence (AI)

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Don't Worry...





Contact Information

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Mission: Make Government Work Better

