Generative AI in the Workplace

- Defining "Generative AI"
 - What it is/what came before (by IBM definition):
 - Artificial intelligence (AI): Human intelligence exhibited by machines
 - Machine learning: Al systems that learn from historical data
 - Deep learning: Machine learning models that mimic human brain function
 - Generative AI (Gen AI): Deep learning models (foundation models) that create original content
- Compare to what might come next
 - Weak/Narrow AI: Systems designed to perform a specific task or set of tasks. All current AI fall here, including autonomous vehicles and generative AI.
 - Strong AI: Also known as "artificial general intelligence" (AGI) or "general AI," possess the ability to understand, learn and apply knowledge across a wide range of tasks at a level equal to or surpassing human intelligence. This level of AI is currently theoretical and no known AI systems approach this level of sophistication. Researchers argue that if AGI is even possible, it requires major increases in computing power. Despite recent advances in AI development, self-aware AI systems of science fiction remain firmly in that realm.

- o Why bother training on AI?
 - Benefits of Al
 - Automation of repetitive tasks
 - More and faster insight from data
 - Enhanced decision-making
 - Fewer human errors
 - 24×7 availability
 - Reduced physical risks
 - Al-driven recruitment platforms can streamline hiring by screening resumes, matching candidates with job descriptions, and even conducting preliminary interviews using video analysis. These and other tools can dramatically reduce the mountain of administrative paperwork associated with fielding a large volume of candidates. It can also reduce response times and timeto-hire, improving the experience for candidates whether they get the job or not.
- o Competitors will be using it
 - Microsoft's 2024 Work Trend Index says 66% of leaders wouldn't hire someone new without AI skills.
- o Creating an effective AI program for your workforce
 - Finding the right AI tool or tools
 - Creating an AI policy
 - Training, training, training

- Who can use tools?
 - Do all employees need access?
 - Are there any particularly secure areas where we don't want it at all?
 - What about when working remotely on their own devices?
- What can we use?
 - Is there one program that everyone is to use?
 - Can they use other tools?
- Who reviews and approves?
 - Define who in the company is responsible for making decisions about new Al uses
 - May require a team of IT, management, and legal
- Data confidentiality
 - Reinforce that free AI like ChatGPT are third parties, so proprietary and confidential data should not be shared
 - If using a private system, let employees know so they can use as effectively as possible

- For the accuracy of the response...
 - Making it clear that no matter whether they drafted it and the AI edited, or if AI drafted first (or entirely!), they are responsible for their work product.
 - Responsibility for the results
- ... and for disclosing its use
 - At minimum, should be transparent internally with regards to its use. Both to accurately judge performance and because it may be useful for other aspects of the business.
 - Consider whether disclosure to your customer is also appropriate or necessary.
 Think of email signatures with "sent from my iPhone" or disclosures about whether the customer is talking to a human.

Al Bias and Discrimination

- Federal Agencies Will Jointly Look for Bias and Discrimination in Al
 - DOJ, FTC, CFPB, and EEOC Announce Joint Commitment to Use Existing Consumer Protection and Employment Authority to Oversee Use of Artificial Intelligence.

- On April 25, 2023, the Federal Trade Commission (FTC), the Civil Rights Division of the U.S. Department of Justice (DOJ), the Consumer Financial Protection Bureau (CFPB), and the U.S. Equal Employment Opportunity Commission (EEOC) released a joint statement highlighting their commitment to "vigorously use [their] collective authorities to protect individuals" with respect to artificial intelligence and automated systems (AI), which have the potential to negatively impact civil rights, fair competition consumer protection, and equal opportunity.
- These regulators intend to use their existing authority to enforce consumer protection and employment laws, which apply regardless of the technology used for making decisions or delivering products and services. The joint statement outlines several key areas of focus for the agencies - ensuring that AI does not result in discriminatory outcomes, protecting consumers from unfair, deceptive, or abusive acts or practices (UDAAP), preventing anticompetitive practices that may be facilitated or exacerbated by AI, and promoting responsible and transparent development of AI systems. Rather than operate as if AI is unregulated, business should be ensure their use of AI complies with existing laws and regulations.

Laws and regulations for AI

- Equal Employment Opportunity Commission (EEOC)
 - The EEOC has launched the Artificial Intelligence and Algorithmic Fairness Initiative to ensure that AI and other emerging technologies used in employment decisions comply with federal civil rights laws. This initiative aims to guide employers and employees on the fair use of AI in hiring, promotions, and other employment-related decisions.
- Blueprint for an AI Bill of Rights
 - The Biden-Harris Administration has published a
 Blueprint for an AI Bill of Rights, which outlines principles
 to protect individuals from algorithmic discrimination.
 This includes ensuring that AI systems are designed and
 used in ways that are fair and non-discriminatory.
- Executive Orders
 - There have been executive orders directing federal agencies to combat algorithmic discrimination and enforce existing laws to protect people's rights and safety.
- o State-Level Regulations
 - Some states, like New York and California, have introduced or proposed regulations specifically targeting Al discrimination in various sectors, including employment and healthcare. These efforts reflect a growing recognition of the potential for Al systems to perpetuate or exacerbate biases, and the need for regulatory frameworks to ensure fairness and equity.

Data Privacy

- Federal regulations
 - Cyber Incident Reporting for Critical Infrastructure Act of 2022 (CIRCIA): This law requires organizations in critical infrastructure sectors to report substantial cybersecurity incidents to the Department of Homeland Security within 72 hours. It also mandates reporting ransomware payments within 24 hours.
 - Federal Trade Commission (FTC) Regulations: The FTC enforces various laws that require businesses to protect consumer data and notify affected individuals in the event of a data breach. The FTC provides guidelines and resources for businesses on how to respond to data breaches.
 - Health Insurance Portability and Accountability Act (HIPAA): HIPAA requires healthcare providers and their business associates to notify affected individuals, the Secretary of Health and Human Services, and sometimes the media

Remote work/cyber security

- o Crowdstrike incident
 - The CrowdStrike incident on July 19, 2024, was a significant event where a faulty update to the Falcon Sensor security software caused widespread issues with Microsoft Windows computers.

- Summary of what happened:
 - Faulty Update: CrowdStrike released an update to its Falcon Sensor software, which led to crashes (Blue Screen of Death) on millions of Windows systems worldwide.
 - Impact: Approximately 8.5 million computers were affected, causing disruptions across various sectors, including airlines, banks, hospitals, and government services.
 - Cause: The issue was traced back to a defect in the update that caused an out of bounds memory read, leading to system crashes. The financial damage from this incident was estimated to be at least \$10 billion.
 - Response: CrowdStrike quickly identified the problem and released a fix. However, many systems required manual intervention to recover, prolonging the outages.
 - Aftermath: The incident highlighted the need for improved testing and deployment strategies.
 CrowdStrike has since implemented enhanced testing procedures and a staggered deployment strategy to prevent similar issues in the future.

- o Continued remote work causing security stresses
 - The rise in remote work requires additional data protections.
 - Remote and hybrid work arrangements continue to be popular options in the United States. According to the US Bureau of Labor Statistics, 11.1 percent of companies offer a fully remote work environment, while 27.5 percent of companies offer a hybrid work environment.
 - With many employees now working from home (or another offsite location) some portion of the time, the chance of a data breach increases. Cybersecurity professionals must work to ensure that their company's data stays safe with the use of additional measures, like VPNs and anti-virus software. They must also stay informed about unique threats, including phishing attempts and ransomware.