

# The 2018 Upper Midwest Employment Law Institute

## Artificial Intelligence, Wearable Technology, and the Future of Work: Benefits and Legal Risks

May 21, 2018

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- What is Artificial Intelligence (AI)
- How are Companies Using AI
  - Robotics and Automation of HR Practices
  - Wearable Technology
  - Telepresence and Telemanipulation
  - Cognitive Computer Systems
- Legal and Practical Risks of Using AI
  - Job dislocation
  - Anti-discrimination
  - Privacy and Data breach
  - Workers Compensation and Disability Laws
  - OSHA
  - Wage and Hour
- Regulatory Updates from the Federal Trade Commission (FTC)
- Recommended Best Practices

**What Is Artificial Intelligence**  
**How Are Companies Using AI**  
**Legal and Practical Risks**  
**Regulatory Updates From the FTC**  
**Recommended Best Practices**

## ar·ti·fi·cial in·tel·li·gence (AI)

*noun*

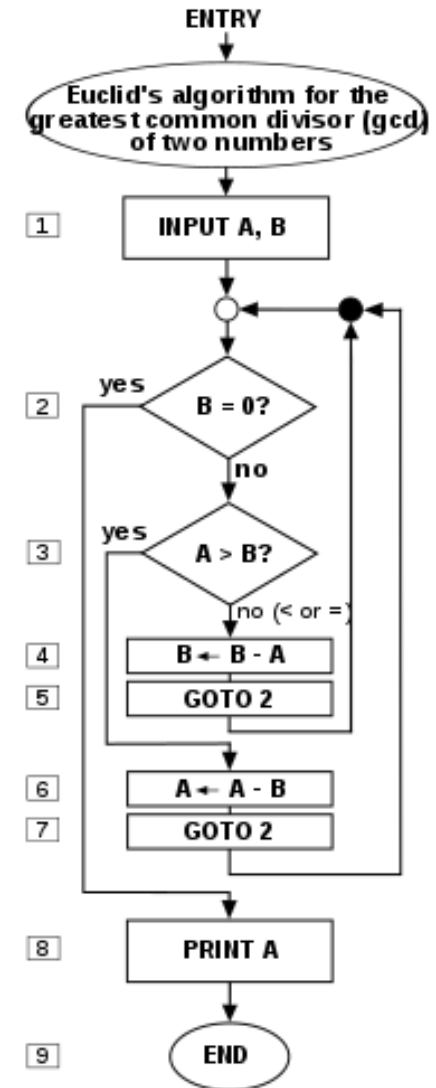
- the theory and development of computer systems able to perform tasks that normally require human intelligence, such as *visual perception*, *speech recognition*, *decision-making*, and translation between languages.
- also known as: “machine intelligence.” Humans, in contrast, use “natural intelligence” (except in some opposing counsel).
- “AI” makes it possible for machines – mainly using **algorithms** – to learn from experience, adjust to new inputs and perform human-like tasks through **deep learning**.



## al-go-rithm

*noun*

- a process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.



## Deep learn-ing

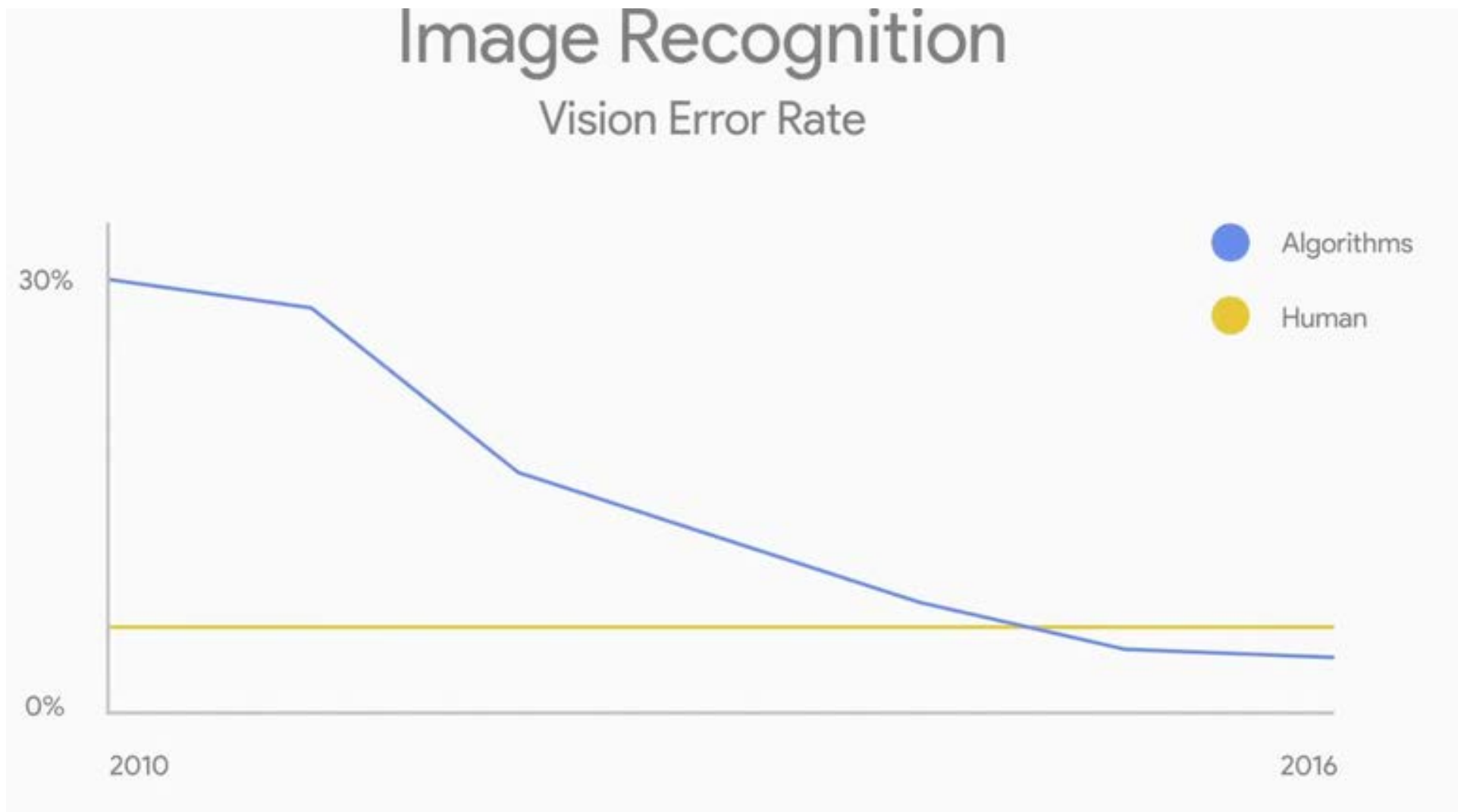
*noun*

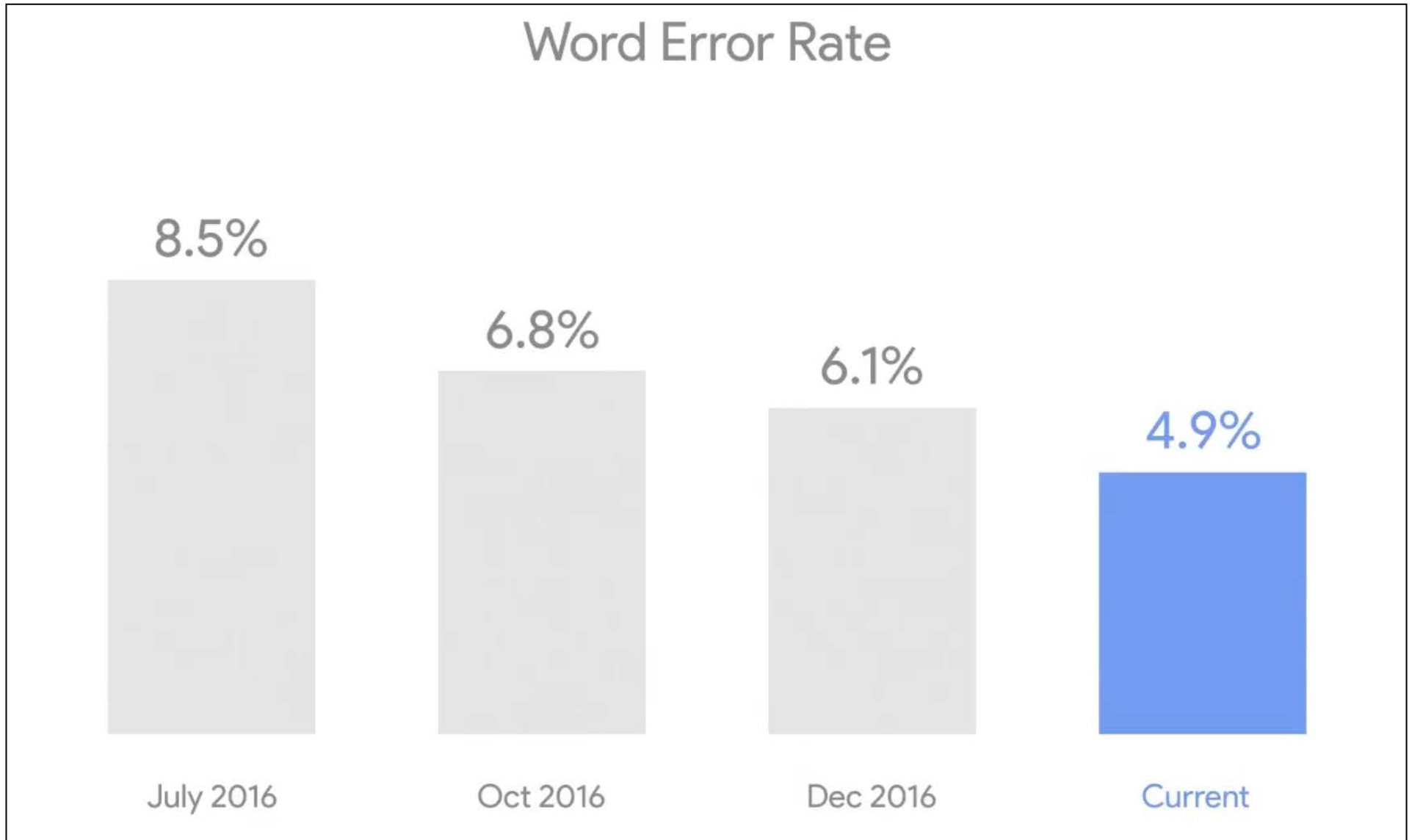
- a subset of machine learning in AI that has networks capable of **learning**, unsupervised, from data that is otherwise unstructured or unlabeled.
- *deep learning* is unlike task-based algorithms (such as a tool that performs multiplication calculations) in that deep learning involves learning based on all previous data inputs. In other words, in “deep learning,” the computer learns and improves based on the new information it receives. (Example: driverless cars are improving with every mile they *collectively* spend on the road)

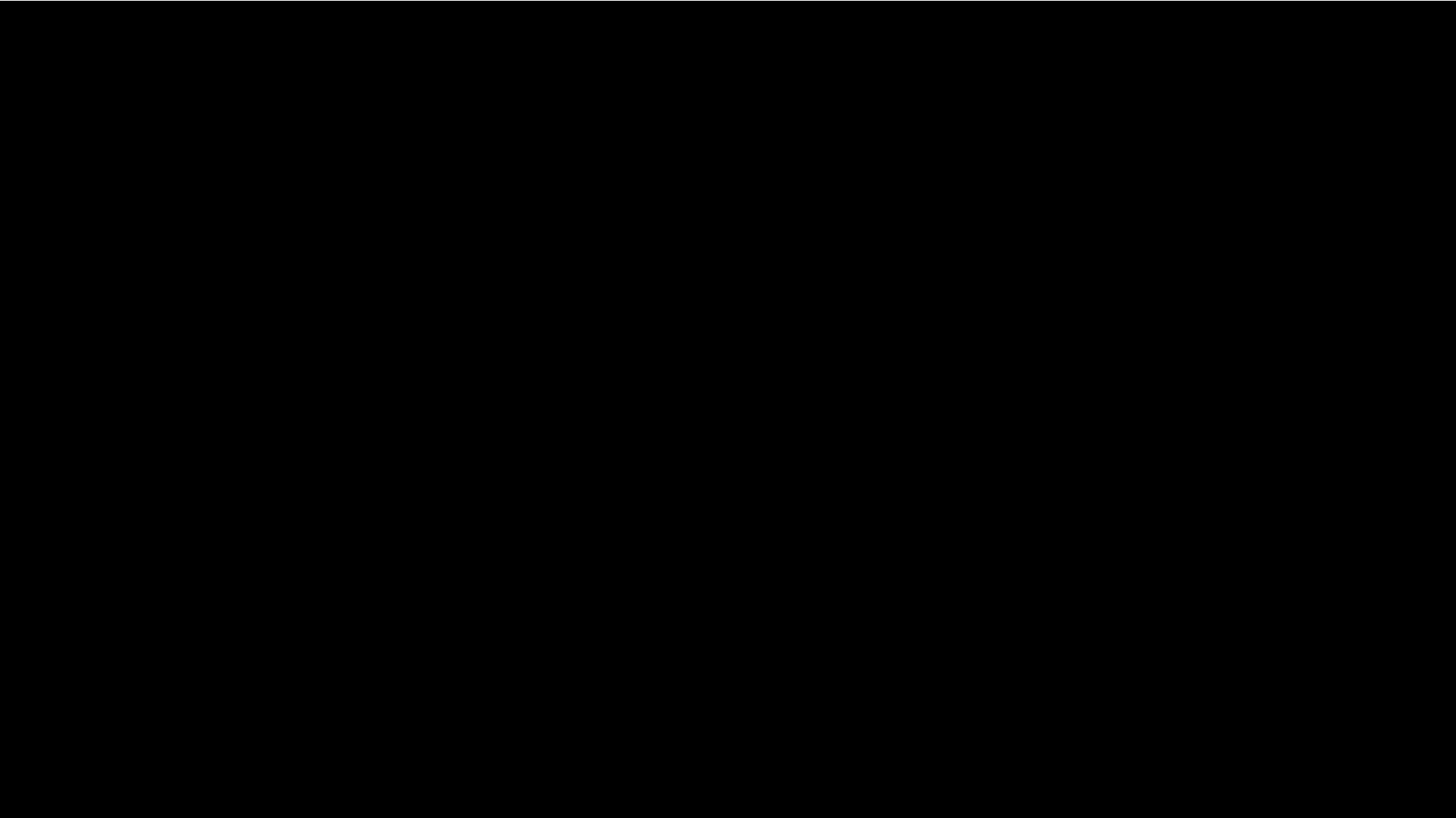
# Computers See Better Than We Do: Chihuahua or Muffin?



# Image Recognition Has *Dramatically* Improved Over Time







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- It's the inevitable future of HR:
  - Deloitte's 2017 Global Human Capital Trends report found in survey of 10,000 businesses and HR Leaders from 140 countries:
    - 41% of HR functions of internal companies are currently using AI applications
    - Worldwide 50% will invest in data analytics to find and develop talent
    - 39% considering its impact on future skill needs
    - 63% rethinking the role of HR because of AI
  - According to the ServiceNow survey:
    - 92% of HR leaders agree that the future of providing an enhanced level of employee service will include chatbots
    - 60% believe employees are comfortable accessing chatbots to get the information they need

- AI transforming HR to make it more objective and efficient while overcoming ER and legal challenges:
  - **Recruiting and On-boarding**
    - Increasing efficiency and retention
      - Example of companies in this space:
        - *Textio*: Software using AI to assist with sourcing. Capital Group is piloting a program to use the software to write more effective and bias free job descriptions.
        - *MontageTalent*: Uses AI to assist with interviewing, providing predictive analytic web based video interviewing.
        - *Talla*: Uses AI to help with on-boarding employees
        - *Mobile Coach*: uses AI to help with on-going employee coaching
        - *growBot*: Uses AI for social recognition

- AI transforming HR to make it more objective and efficient while overcoming ER and legal challenges:
  - **Recruiting and On-boarding (cont'd)**
    - The *L'Oreal Case Study*
      - Result: With close to 5 million candidates globally. Using AI were able to make hiring 10 times faster and increase retention by 25% and interview 25% more candidates.
      - Method: Used 3 strategic questions on strategic competencies the company wants most in candidates. For example: Tell us about a time when you failed or made a mistake, and what happened?
        - The same question was asked for the L'Oreal team and the candidate.
        - Based on mutual input, a model was developed that feeds the algorithms with what the company expects of a candidate and what the candidate expects from his/her future. This provides a qualitative approach.
        - The human recruiter ultimately decides, but the technology is the enabler of the process.

- AI transforming HR to make it more objective and efficient while overcoming ER and legal challenges:
  - **FAQ's on company policies and improving employee engagement**
    - Improves engagement and helps companies and leaders adjust strategy to better engage their teams. Examples:
      - *ServiceNow*: Creates employee service centers
      - *Glint*: A platform with a natural language processing engine that synthesizes employee's feedback to identify core themes for management to consider. It is designed to surface perceived strengths and weaknesses of organizations, and promises to guide leader to the right course of action based on the feedback.
      - *CultureAmp*: An employee engagement platform that uses smarter algorithms to give users more actionable insights right from platform data.
      - *TINYPulse*: Another engagement platform, uses advanced sentiment analysis tools and machine learning to adapt to specific organizational cultures and highlight key feedback and trends for management.
    - Resource available to employees 24 hours a day

- AI transforming HR to make it more objective and efficient while overcoming ER and legal challenges:



- AI transforming HR to make it more objective and efficient while overcoming ER and legal challenges:
  - **Compensation**
    - *Watch for it.* ADP is developing a virtual assistant for HR built on natural language processing. Instead of needing to navigate through sites and forms, many functions will be voice-generated.
    - More accurate and real time responses
    - Easier to comply and adjust with updates and regulatory developments
    - Easier to address pay equity gaps or disparity in pay based on protected criteria

- AI transforming HR to make it more objective and efficient while overcoming ER and legal challenges:

- **Employee management and training**

- Using wearable technology to improve productivity and measure productivity

- Examples:

- **Lowe's:** Announced it has given employees a new type of robotic exoskeleton to help them lift heavy items within stores more easily. It's intended to help workers offset some of the strain on their muscles and joints, and helps transfer the energy of the wearer's movement more efficiently using carbon-fiber trusses and motors.
- **Amazon:** Has won two patents for wristbands that can: track employee movement; nudge via vibrations when it judges employee is doing something wrong; measure amount of time to complete a task. The company notes aim is to streamline "time consuming" tasks, like responding to orders and packing them for speedy delivery.

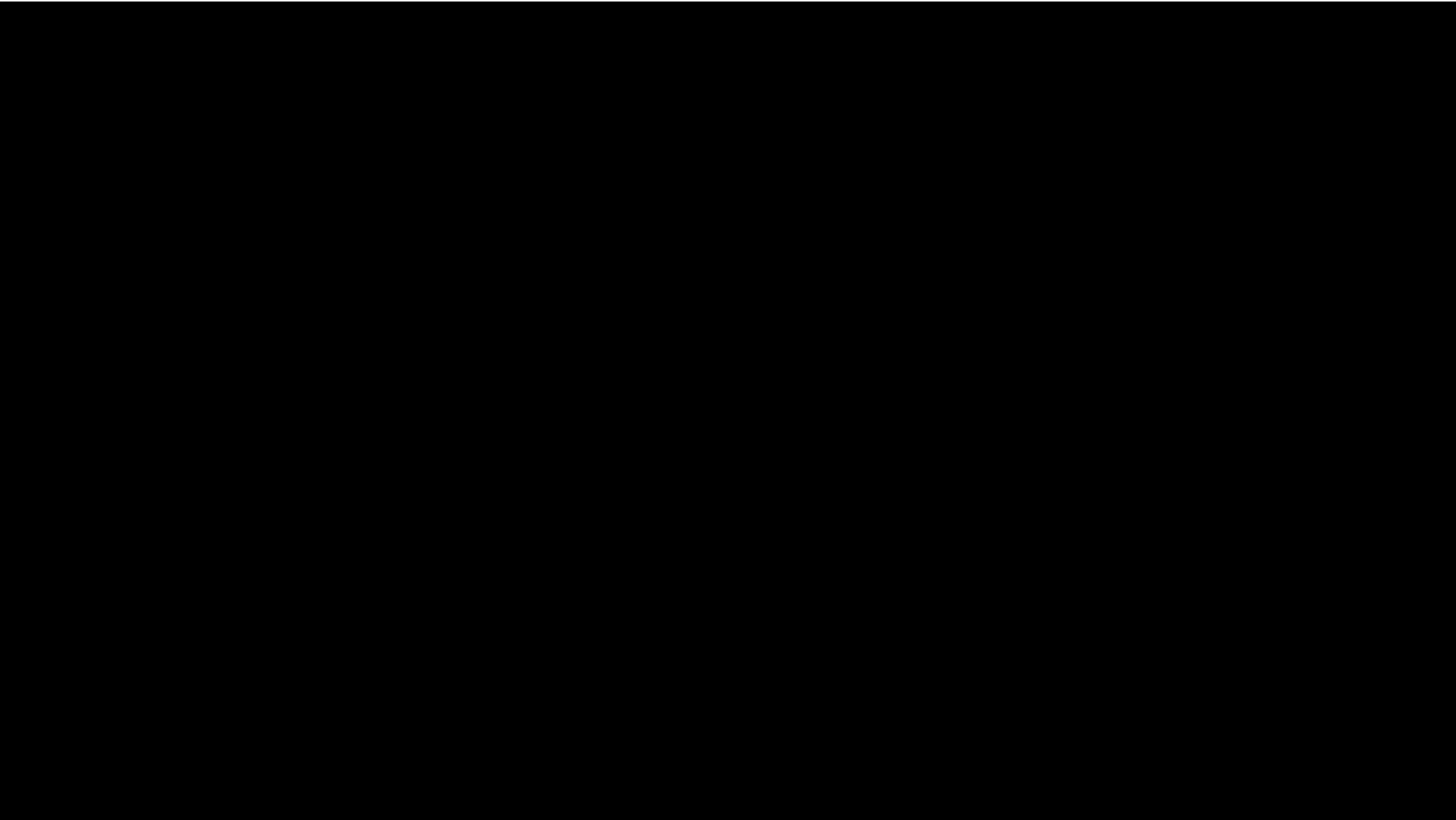


- AI transforming HR to make it more objective and efficient while overcoming ER and legal challenges:
  - **Employee management and training (cont'd)**
    - Using wearable technology to manage employees remotely
    - On-going training available at a fraction of the cost
    - On-going and personalized virtual coaching
      - Example: A product called “Compass” uses manager responses to questionnaires and feedback from direct reports or peers to make suggestions. Tool is designed to change behavior through “soft nudges” delivered to mobile devices or desktop.
    - Retention of pivotal talent
      - Example: AI can help predict and prevent loss of top talent. The AI crawls through relevant internal systems and collects data about the employee who may consider leaving, then sends a briefing document summarizing that information to the executive for a meaningful conversation, or to identify patterns that demonstrate a flight risk.
    - Protecting company assets

- AI transforming HR to make it more objective and efficient while overcoming ER and legal challenges:
  - **Annual self-assessments and reviews**
    - Eliminating difficult human conversations on performance—making it more objective
  - **Employee Benefits**
    - Customer service kiosk type of interactive platforms allowing employees to manage their benefits
      - Example: Alex from Jellyvision: use AI elements to guide employee through topics like benefits enrollment, medical insurance plans, retirement savings and financial wellness. Uses interactive decision-support tools using simple language, graphics and animation.
    - Real time feedback, rather than need to navigate through websites, send emails and call
    - “Robo-advisor” that automates investment portfolio processes and advises employees on 401(k)’s and retirement planning.
  - **Retention of the “Gig” economy**
    - Increasing efficiency by using gig works and managing them remotely

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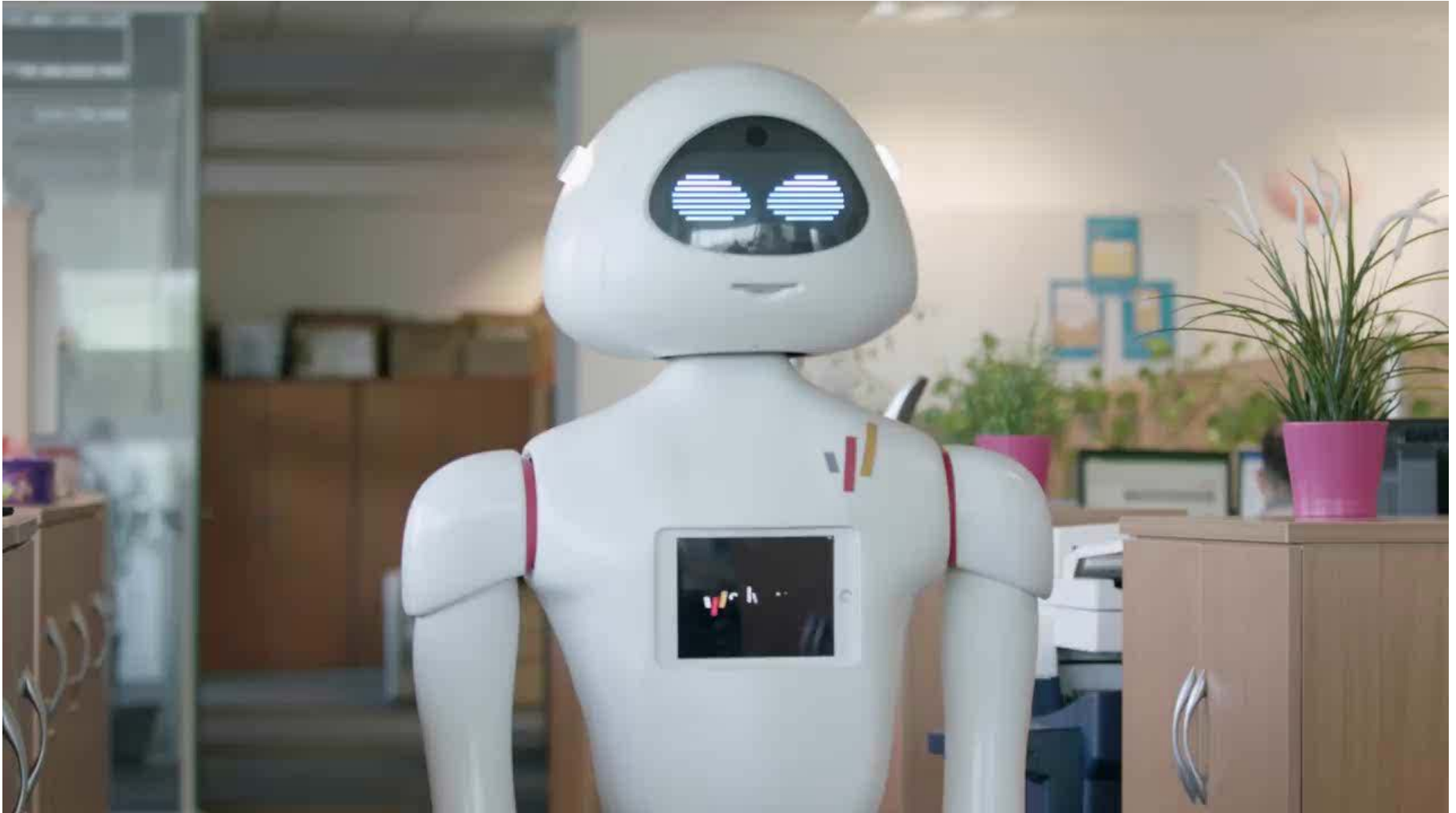
# Sometimes You Need the Human Touch!



- Workplace safety
- Workers compensation and disability laws
  - Could productivity requirements increase rate of injury?
  - Could individuals with a disability have a difficult time complying?
  - Could it increase your obligation to accommodate?
- OSHA compliance
- Privacy
  - Over collecting information
  - Who is responsible for the data collected
  - Scope of agreement with third-parties
  - Misuse of data—outside of the scope of its intended purpose
  - Biometric data privacy risks
    - Example: Illinois Biometric Information Privacy Act (BIPA)
  - Wage and hour
    - Donning and doffing

- Job elimination and WARN Act triggers
  - Notice of job loss and state WARN triggers
  - Severance Agreements

- Anti-discrimination



- Anti-discrimination (cont'd)
  - Age discrimination, where use of robotics might present additional challenges to older applicants
  - National origin discrimination, where accents or grammatical errors could exclude a segment based on national origin
  - Race discrimination based on exclusion relying on neutral factors such as zip code, education, etc.
- Union and collective bargaining agreements

- Privacy
  - Protection of information collected
  - Risk of data breach
  - Risk of inadvertent disclosure or over-collection of private data
- Anti-discrimination laws
  - Risk of hidden bias
    - While algorithm decision making is more objective, there can be hidden bias
    - EEOC looking at this

- Anti-discrimination laws (cont'd)

- Cognitive bias and bias by programmers programing the algorithms

- Challenges: (1) biases from programmers that are part of the coding process; and (2) the failure or inability to determine how an algorithm makes a decision involving advanced self-learning or cognitive computing.
- Creates lack of transparency; provides opportunity for an illegal bias; disparate impact.
- The Wisconsin case: *State v. Loomis*
  - Loomis was sentenced to 6 years in prison following the use of proprietary, closed-source risk assessment software.
  - His counsel sought to learn the factors the software considered in making its decision. The software developer refused claiming it would destroy the value of the trade secret.
  - Loomis contended his due process rights were violated because: (1) he was prevented from challenging the scientific validity and accuracy of the algorithm, (2) gender and race taken into account, and (3) a risk-assessment instrument, whose working are protected trade secret was used by the state.
  - The court denied the appeal. U.S. Supreme Court denied writ of certiorari.

- Privacy
- Wage and hour
  - Misclassification
    - Joint Employer Issues
  - Off the clock work

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- Principles
  - Transparency
  - Accountability
  - Security
  - Frameworks



- Resources

- Big Data report
- [Business.ftc.gov](https://www.business.ftc.gov)
- Business Blog
- Alerts



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1. Keep a human review as part of the AI enabled HR decision making process.
2. Disclose AI being used as part of the decision making process.
3. Conduct audit of the AI decision making outcomes to catch and avoid bias.
4. Obtain written consent from employees on any data being collected.
5. Limit taking or using data to only that which is needed for the work performed.
6. Limit who has access to the data.
7. Carefully review agreements with third-party vendors on who owns the data and has obligation to protect it.
8. Prohibit any resell or re-use of data for other, unrelated purposes not included in your disclosures to employees
9. Enhance company governance for adherence to human rights guidelines through internal codes of conduct and incentive models.
10. Assess wider impacts of a new AI system by mapping out risks before releasing it, throughout its lifecycle, and for each new use case of a machine learning application.
11. Take an inclusive approach to design and make sure there is diversity in the development team and designers/programmers.
12. Optimize machine learning models for fairness, accountability, and transparency. Include fairness criteria and participate in Open Source data and algorithm sharing.
13. Implement on-going review and monitoring of the algorithms.