

# AI in Compensation

Promises, Pitfalls, and Practical Guardrails

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# Our Presenters



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# DCI: Data Driven – Client Focused

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## Our Mission

Advancing non-discrimination and fairness in the workplace by implementing merit-based and skill-focused employment practices.

## Our Vision

We believe every person deserves equal opportunity and fair treatment in the workplace and beyond.

# How DCI Can Help



## Compliance

- VEVRAA and Section 503 AAPs
- Mandatory job listings
- State affirmative action and non-discrimination
- EEO-1 and VETS-4212 reports
- DOL compliance review support
- State pay reporting
- Pay transparency
- Proactive guidance on regulatory change



## Selection and Assessment

- Job analysis
- Selection procedure development and validation
- Expert evaluation/bias audit of HR systems, including artificial intelligence



## Workforce Analytics

- DEI risk mitigation
- EEO disparity analyses
- Damage calculations
- Non-discrimination in employment plans
- Reduction-in-force analyses
- Barrier analyses



## Pay Equity and Compensation

- Pay equity studies
- EU Pay Transparency
- Pay compression studies
- Wage gap studies
- Job architecture development
- Market benchmarking
- Pay band creation
- Executive compensation reviews
- Bonus program reviews



## Litigation Support

- Consulting expert in applied research in class action litigation
- Testifying expert in case strategy, expert reports, & sworn testimony
- Expert reviews of AI-based hiring procedures

# Webinar Format

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- Participant phone lines are **muted**
- **Submit questions** by sending an email to [questions@dciconsult.com](mailto:questions@dciconsult.com)
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# Agenda

**01**

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**AI and Compensation  
Landscape**

**02**

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**Possible Uses**

**03**

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**Key Takeaways**

# AI and Compensation Landscape

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# What are we talking about when we say AI?



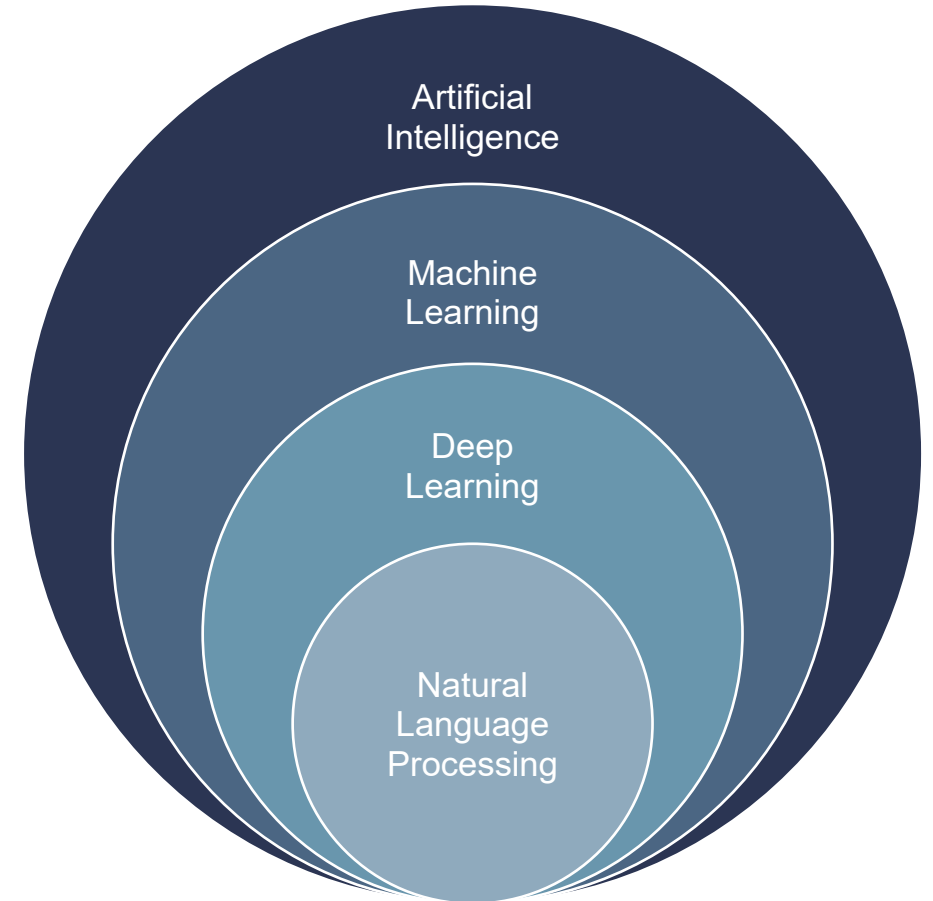
“Use of computers to simulate human intelligence in various ways.”

CONGRESS.GOV  
H.R.6216 – National  
Artificial Intelligence  
Initiative Act of 2020

“Machine based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions.”



“The simulation of human intelligence processes by machines, especially computer systems.”



# Different Types of AI

## DETERMINISTIC AI

**Rule-based logic:** Follows fixed, predefined rules and decision trees

**Predictable output:** Same input always produces the same output

**Narrow scope:** Designed for a specific, well-defined task

**Explainable:** Decisions can be fully traced and audited (the rules are the explanation)

**Examples:** Spam filters, fraud detection rules, document classifiers, structured search

VS

## GENERATIVE AI

**Probabilistic logic:** Learns statistical patterns from vast training data

**Creative output:** Produces novel text, code, images, or analysis

**Broad capability:** Can handle open-ended, ambiguous tasks

**Less explainable:** Reasoning may not be fully traceable

**Examples:** ChatGPT, Claude, Copilot, Gemini, Midjourney, DALL-E

# Why Sensitive Data + Generative AI Requires Care



## Training Data Exposure

Many cloud-based GenAI tools may use submitted data to improve future models, potentially exposing confidential information.



## Privilege & Confidentiality

Attorney-client privilege, trade secrets, HIPAA/PHI, PII, and financial data can be inadvertently disclosed via third-party AI platforms.



## Hallucination Risk

GenAI can confidently produce inaccurate outputs. Relying on AI-generated analysis for legal or compliance decisions creates liability.



## Cloud vs. On-Premise

Cloud GenAI tools route data through vendor servers. On-premise or local deployments keep data inside your security perimeter.

# AI Tool Guide: Sensitive & Privileged Data

Tool / Platform	Type	Data Leaves Org?	Risk Level	Recommended For
Cloud GenAI (ChatGPT, Claude.ai, Gemini, Copilot)	Generative	Yes — cloud servers	<b>HIGH</b> ⚠️	Non-sensitive work only: drafting, research, coding, public content
Enterprise GenAI (Azure OpenAI, AWS Bedrock — contracted)	Generative	Yes, but w/ data protection clauses	<b>MEDIUM</b> ⚡	Internal business use with proper DPA & access controls
On-Prem / Local GenAI (Ollama, private LLM deploy)	Generative	No — stays local	<b>LOW</b> ✓	Sensitive internal data, PII, draft legal docs
Traditional Search / Document AI (eDiscovery, OCR)	Deterministic	Varies by vendor	<b>LOW-MED</b>	Legal review, structured doc processing, compliance workflows
Rules-Based Automation (RPA, decision trees, classifiers)	Deterministic	Depends on config	<b>LOW</b> ✓	High-stakes decisions, regulated data, financial/compliance
<b>NEW</b> xAI (Grok — cloud & enterprise tiers)	Generative	Yes — cloud servers; enterprise contracts available	<b>HIGH</b> ⚠️	Non-sensitive work, real-time web research; enterprise tier w/ DPA

# Possible Uses

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# AI in Compensation Programs

- AI is already making pay decisions — the question is whether your team is steering it or just along for the ride.
- Regulatory considerations including EEOC guidance on algorithmic employment tools and the wave of state-level pay transparency laws incorporate AI accountability requirements.
- Speed vs. defensibility. AI can benchmark 500 roles overnight, or even faster — but do you know what assumptions are baked into that output?
- Today we're not debating whether to use AI. We're talking about how to use it without creating new liability for your organization.

# What AI is Doing in Compensation Programs

- Market pricing & salary benchmarking (matching jobs to survey data at scale)
- Job description generation
- Salary Structure Design
- Pay equity analysis and anomaly detection
- Offer recommendation
- Total rewards modeling

# Market Pricing & Salary Benchmarking

- Automated benchmarking tools match internal job descriptions to survey benchmarks using Natural Language Processing (NLP). The match is only as good as the job description and the survey's job architecture.
- Common failure modes: matching a hybrid role to a single-function benchmark, using outdated survey cuts, applying national data to a hyper-local labor market.
- AI will find a match. It won't reliably tell you the match is wrong.
- External market data reflects the pay inequities already embedded in the labor market

# Salary Structure Design

- Development of grade levels, band widths and pay ranges can be automated with AI
- AI models can unintentionally reinforce existing pay disparities if trained on biased datasets
- AI provides the *mathematically defensible* answer, but organizational history, union agreements, and other factors may require additional consideration

# Job Description Generation

- Job description creation is one of the most time-consuming and inconsistently executed tasks in compensation work. AI can take the title, level, function and SME inputs to produce a first draft nearly instantaneously.
- AI can keep the job description sections and tone consistent across the organization.
- AI job descriptions are starting points, and the finished product requires validation from humans.

# Offer Recommendation and Total Rewards Modeling

AI tools offer decision support capability quickly, however, be aware of the following trade-offs:

- AI tools don't replicate the instinct of an experienced compensation professional
- Compliance exposure
- Accountability gaps

# AI-Powered Pay Equity

*An option provided by Claude when asked where can AI be useful related to Compensation practices*

1

## **Data Processing & Cleaning**

Pulls HRIS, payroll, and performance data; standardizes job families, levels, tenure, and location variables.

2

## **Regression Modeling**

Multivariate regression isolates unexplained pay differences after controlling for legitimate factors (level, tenure, performance rating, geo).

3

## **Gap Identification**

Flags statistically significant disparities by gender, race/ethnicity, age, and other protected classes with confidence intervals.

4

## **Remediation Costing**

Instantly models the cost to close gaps under multiple scenarios — full remediation, partial, phased — supporting budget planning.

# AI-Powered Pay Equity: Risks



## Legal & Compliance Risks

Attorney-client privilege exposure  
Self-incrimination  
Regulatory scrutiny



## Data Privacy & Security Risks

Sensitive employee data exposure  
Vendor data use policies  
Cross-border data transfer



## Methodological Risks

Flawed statistical analysis  
Misclassification of comparators  
Garbage in, garbage out.  
False confidence



## Organizational & Governance Risks

No audit trail or defensible methodology  
Acting (or not acting) on findings without guidance  
Scope creep and inconsistency

# Key Takeaways

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# Using AI and XAI for Compensation Decisions

While Compensation Professionals can use AI to validate pay recommendations, and audit compensation programs there are still risks to be aware of:

- False confidence (output viewed as more authoritative than it is)
- Inconsistent interpretation of “explainable AI” (XAI) results
- Metric Gaming (skewing the model)
- Explanations may be moot as soon as model evolves
- May undervalue unique situations
- Potential increased liability when expose internal equity gaps at a large scale

XAI is a force multiplier in compensation programs, amplifying whatever is already happening in your pay system. Requires infrastructure to handle issues more quickly than traditional analytical methods.

# Before You Use an AI Tool, Ask These Questions

1

**Is the data sensitive, privileged, or regulated?**



YES → Use on-prem/local AI or deterministic tools only



NO → Cloud GenAI tools may be appropriate

2

**Does the vendor have a signed DPA / data processing agreement?**



YES → Proceed with caution — review data retention terms



NO → Do not submit any confidential information

3

**Is a human reviewing and validating the AI output?**



YES → Acceptable for drafting / research support



NO → Not appropriate for legal, compliance, or high-stakes decisions

*When in doubt, consult your IT Security or Legal/Compliance team before using any AI tool with sensitive data.*

# Final Thoughts

- Understand your organization's AI policies and practices
- Understand what AI tools are available within your organization and how it handles data
- Form a committee to identify areas where AI may be useful to include Compensation, IT, Legal
- For each use case, ensure that the inputs will be handled appropriately by the AI tools you will use
- Create protocols for each use case
- Test and refine as necessary
- Always include a human in the loop

# Thank you for your attention!

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