

# AI and the Future of Job Architecture: From Static Frameworks to Living Systems

**How organizations can redesign job architecture for speed,  
scale, and skills in an AI-enabled world**

# 01 Evolution of Job Architecture due to AI

Artificial intelligence is transforming how organizations define work, value roles, and manage workforces. AI is embedded in how jobs are created, priced, and maintained, exposing fundamental limitations in traditional job architecture (JA) models. Static role definitions, rigid structures, and slow update cycles are increasingly misaligned with the pace of work change, pushing job architecture toward an inflection point where it must become nimble to remain relevant.

Deloitte Human Resources (HR) Strategy and Technology Leader, Greg Vert, stated that in the next 3–5 years, job descriptions, skills, and even compensation inputs stop being ‘set-and-forget’—they become a moving target as more work becomes AI-enabled or autonomous.

With 39% of existing skills expected to be disrupted by 2030 and generative AI potentially affecting 40% of tasks, organizations are moving toward large-scale work redesign. Yet fewer than 30% have fully linked skills to job architecture.

Organizations face mounting pressure to modernize job architecture as work becomes more fluid and skills-based. The gap between documented structures and work reality continues to widen, creating challenges for workforce planning, mobility, compensation equity, and cost management.

AI is already transforming compensation and job architecture activities. Some vendors, including Deloitte, now use machine learning and generative AI to automate job matching, generate descriptions, and provide continuously updated market insights, compressing weeks or months of work into days or hours.

Commercial realities accelerate this shift. Cost pressure and pricing sensitivity make traditional labor-intensive approaches harder to

sustain. Organizational leaders expect faster benchmarking, more frequent updates, and architectures that flex as work evolves. Many organizations now experiment with generative AI to create or refresh job architectures before governance and operating models are fully defined.

## Classification & Compensation Point of View

AI will not replace job architecture—it fundamentally changes how it should be designed, maintained, and delivered. In AI-enabled organizations, job architecture should evolve into a living system: continuously data-informed, responsive to work changes, and aligned to shifting skill requirements.

Successful organizations will embed AI thoughtfully and responsibly. While AI offers unprecedented speed and analytical power, it introduces risks related to bias, transparency, compliance, and over-automation. Human judgment, strong governance, and clear accountability remain essential.

Deloitte’s Government Sector Human Capital Growth Leader, Kate Reilly, emphasizes employees and organizations must see and understand the logic behind AI outputs, if not, they fall back to spreadsheets – especially without leadership setting direction for how work should change.

The future lies at the intersection of AI-enabled efficiency and disciplined governance. Leading organizations will leverage AI to reduce cost and complexity while ensuring job architecture remains a credible foundation for talent decisions. Even in an AI-enabled future, human leadership determines how these systems are applied, governed, and aligned to enterprise priorities.



# How AI Is Reshaping Job Architecture



Artificial intelligence is not only accelerating job architecture activities—it is fundamentally reshaping the underlying structures on which job architecture is built. Some organizations are shifting from static, role-based frameworks toward more dynamic, skills-centered models that better reflect how work is actually performed. As AI enables deeper analysis of tasks, skills, and work patterns, traditional job families and leveling constructs are being reexamined for relevance, consistency, and adaptability.

## 2.1 From Static Jobs to Dynamic Skills and Attributes

Traditional job architecture has centered on stable role definitions, grouping positions into job families, sub-families, and levels based on scope, responsibility, and hierarchy. Yet research reveals that 93% of organizations believe moving away from the job construct is important to their success, while only 22% are effective at breaking down jobs into tasks. As over a third of workers' core skills are expected to change in less than four years, AI is accelerating this shift by enabling more granular analysis of tasks, activities, and skills, allowing organizations to deconstruct roles into their component capabilities.

This decomposition has meaningful implications for job families and sub-families. AI-driven insights surface overlaps and redundancies across roles, prompting organizations to reconsider rigid family boundaries in favor of skill-based structures. Skills-based architectures, supported by AI-enabled insights, allow organizations to map adjacent capabilities, identify transferable skills, and enable more dynamic

internal mobility pathways. However, market data shows the heightened focus on skills-based frameworks is subsiding as organizations recognize that mid-to senior-level jobs continue to be described in terms of capabilities, behaviors, and experiences, while skills remain useful at lower organizational levels.

However, the path forward is not without structural constraints. Most human capital management (HCM) systems are fundamentally organized around the concept of a job tied to a job code, creating a technical barrier to fully abandoning job-based frameworks. Organizations navigating this tension are exploring hybrid approaches: maintaining job codes and families for system compatibility and governance while layering skills data on top to enable mobility, development, and more granular workforce analytics. This pragmatic middle ground acknowledges that while the vision points toward skills-based organizations, the infrastructure, both technical and operational, still requires jobs as an organizing principle.

The shift toward dynamic skills also challenges conventional approaches to leveling and progression. Rather than relying solely on tenure or title-based progression, forward-looking job architectures increasingly incorporate capability depth, skill scarcity, and business impact into leveling considerations. While AI can provide data-driven insights to inform these decisions, human judgment remains critical to ensure fairness and contextual alignment with organizational strategy

## 2.2 Rethinking Job Families and Levels

As organizations adopt skills-oriented approaches and deploy AI-enabled workforce analytics, traditional job family structures are being reassessed. Job families were originally designed around functional silos and relatively stable scopes of responsibility. However, research highlights increasing role fluidity, cross-functional work, and hybrid responsibilities that blur historical boundaries. As automation reshapes certain tasks and augments others, adjacent roles often share overlapping skill requirements, creating ambiguity in how positions are grouped and differentiated.

AI-driven analysis makes these overlaps more visible. Workforce analytics platforms use pattern recognition to assess tasks, skills, reporting relationships, and spans of control at scale, surfacing redundancies and inconsistencies that may have accumulated over time. This capability enables organizations to identify duplicated roles, misaligned leveling decisions, or fragmented job structures that no longer reflect how work is executed.

These shifts also influence how organizations approach leveling. Traditional leveling guides, built on experience, hierarchy, and narrow scope definitions, struggle to accommodate evolving responsibilities and AI-augmented work. Organizations are incorporating broader indicators of impact, skill depth, and business contribution into their progression models. Skills intelligence platforms can provide foundations for skills-based workforce planning, though outcomes depend on data quality, governance, and implementation. While AI can support this evolution by identifying patterns and benchmarking role attributes dynamically, it does not eliminate the need for disciplined governance and contextual judgment. The move is toward more adaptive, evidence-informed leveling frameworks that balance consistency with flexibility.

## 2.3 The Continued Role of Human Judgment

While AI can significantly enhance the speed and analytical depth of job architecture activities, it does not replace experienced human judgment. AI systems excel at processing large volumes of data, identifying patterns across roles, highlighting inconsistencies in leveling, and surfacing potential redundancies. These capabilities allow organizations to accelerate diagnostics and generate data-informed insights that would be difficult to produce manually.

However, the interpretation of those insights and the decisions that follow remain inherently human responsibilities. Job architecture decisions are not purely technical exercises—they are strategic choices that reflect an organization's culture, operating model, talent philosophy, and risk tolerance. Research on responsible AI underscores the importance of human oversight, explainability, and accountability in employment-related contexts. Determining appropriate leveling distinctions, defining meaningful career pathways, and aligning roles to compensation frameworks require contextual understanding that extends beyond pattern recognition.

Leading organizations are adopting “human-in-the-loop” models for AI-enabled job architecture. In these models, AI accelerates analysis, drafts recommendations, and surfaces alternative structural options, while experienced HR, Total Rewards (TR), and business leaders validate assumptions, interpret trade-offs, and make final determinations. This balance preserves speed and scalability without compromising fairness, transparency, or strategic alignment. In an AI-enabled future, human judgment does not diminish—it becomes more essential, serving as the governance layer that ensures job architecture remains credible and aligned to enterprise objectives.

# AI as an Accelerator of Faster, More Cost-Effective Job Architecture

The business case for integrating AI into job architecture is supported by significant efficiency gains and the ability to scale complex structural changes across large organizations. Evidence suggests that AI-enabled platforms can transform weeks of manual work into near real-time insights, allowing compensation and talent professionals to act with greater confidence and precision.

### 3.1 Accelerating Job Architecture Activities

The acceleration of core activities such as job mapping, matching, and attribute assignment is a primary benefit of AI adoption.

Greg Stoskopf, the Deloitte Commercial Compensation Leader has found where clients experience the impact of AI first is in the baseline activities – drafting leveling guides, building job title glossaries, mapping and consolidating roles and generating job descriptions faster.

A large waste and recycling service provider with multi-state operations utilized AI-enabled platforms to replace thousands of outdated job descriptions, cutting approval times from two weeks to under 48 hours. Similarly, AI-powered market pricing tools use agentic AI to walk users through streamlined steps to price jobs, including defining markets and reviewing AI-generated job matches, which significantly reduces time spent on manual market pricing.

Precision pricing and AI-enabled cut selection can enable organizations to make consistent and defensible pay decisions across their entire job catalogue. By automating repetitive processes and file imports, organizations can mitigate security risks associated with manual spreadsheets and focus on strategic conversations with key stakeholders.

### Potential Impact of AI on Job Architecture Operations

Process Metric	Traditional Manual Process	AI Enabled Process
<b>Job Description Approval Time</b>	Up to 14 Days	Under 48 Hours
<b>Data Refresh Cycle (Compensation)</b>	Annual or Semi-annual	Average age under 5 months
<b>Role Clustering Effort</b>	Weeks or Months	Minutes
<b>Market Pricing Confidence</b>	Subjective/Varied	AI-Powered Match Suggestions

### 3.2 Shifting the Consulting Value Proposition

The role of human capital consulting firms is evolving as AI handles some traditional transactional and analytical work. Major firms are shifting their value proposition from delivering static reports to providing strategic guidance on work redesign and AI transformation. Consultants are now expected to be experts in organization and job redesign for AI, helping senior HR teams learn how to apply these skills within their own organizations.

There is growing emphasis on outcome-focused functions that enable transformation at scale. HR operating models are being reassessed, with targets to transfer routine work to automated, agented, or botted service providers over the next two years. This elevation of the HR function allows HR Business Partners to focus on strategy development and executive advisory, acting as brokers for specialized services from Centers of Excellence and HR operations.

# Moving Forward: Building a Living, AI-Enabled Job Architecture

## 4.1 What Organizations Should Do Now

Traditional job architecture was designed for stability—not speed. In today's environment where adaptability is a competitive requirement, that design creates a growing mismatch. By 2030, generative AI may reshape roughly 40% of work tasks. Organizations are planning work redesign at scale, yet fewer than 30% have fully linked skills to their job architecture. To keep pace, job architecture

must evolve from a periodically updated reference to a continuously refreshed system of record.

Deloitte Higher Education Human Capital Leader, Kat Ladd, indicates AI can be used for the groundwork and communication accelerators—then spend human time where it matters: decisions, trade-offs, and adoption.

### Near-Term (0–6 Months): Prove Value and Build the Foundation



#### Pilot AI-enabled job mapping

Start with 2–3 job families where change is most visible. Use AI to translate role profiles into emerging tasks and skills, then validate outputs with managers to reduce automation bias. This produces updated content and a repeatable refresh method.



#### Align system integrations

Prioritize a minimum viable skills data backbone across HCM, learning platforms, and skills libraries. Without clean integrations, AI-driven recommendations won't be trusted or auditable.



#### Define governance standards

Establish decision rights for changes to the job catalogue such as job family design, leveling, and exceptions. This makes accountability explicit and keeps updates controlled.



#### Upskill HR and Total Rewards teams

Treat AI fluency as a core capability, covering prompt writing, data literacy, and interpretation of AI-suggested mappings. This improves speed and quality while strengthening governance.

### Medium-Term (6–18 Months): Industrialize Continuous Updating



#### Redesign the operating model

Move from annual reviews to quarterly or event-driven refresh cadences, with AI-assisted detection of role drift. As AI-assisted workflows advance, continuous refresh becomes both practical and necessary.

AI isn't just changing jobs—it's increasing the velocity of job change, which forces more frequent updates to job architecture components and job descriptions; the operational burden becomes the constraint, Franz Gilbert, Deloitte Human Capital Leadership.



#### Integrate skills across talent processes

Embed skills into learning, performance, and career pathways as connective tissue. Job architecture should be the authoritative structure these processes reference.



#### Pinpoint disruption hotspots

Use analytics to identify where AI will automate or augment significant task volumes and where human expertise remains differentiating. Redesign roles for effective human-AI collaboration.

### Long-Term (18+ Months): Move to an Enterprise Steering System



#### Create a dynamic system

Build an evergreen “job + skills” catalogue with a continuously governed skills taxonomy reflecting real work. Standardized definitions enable consistent AI-driven updates.



#### Connect architecture to enterprise decisions

Use AI to link evolving tasks, skills, forecasts, design decisions, pay structures, and career pathways. This transforms job architecture into an enterprise steering mechanism as 59% of the workforce will require upskilling by 2030.



#### Bottom Line

Prove value first, stabilize the foundation, enable continuous refresh, then connect to enterprise decisions. Start small but be intentional—pilot with validation, strengthen data and governance, then scale into continuous operations. Done well, AI-enabled job architecture becomes a living system that earns confidence through transparency, governance, and continuous refresh.

# Risk, Governance, and Trust in AI-Enabled Job Architecture

## 5.1 Legal and compliance considerations

AI-enabled JA sits close to employment-related decisions (e.g., leveling, pay-relevant attributes, career pathways). Organizations should treat AI outputs as decision support that must remain consistent with internal policies, regulatory expectations, and documentation standards for employment practices. Research on governed AI highlights the need for human oversight, explainability, and accountability in these contexts.

In AI-enabled roles, it's not enough to define what people do and what AI does—you also have to define the control points and decision rights, or governance breaks when you scale, Reem Janho, Deloitte Risk and Governance Leader.

Deloitte's TrustID® shows customer trust drops 46% on average when AI enters an experience. Yet when trust is high, customers are 1.9x more likely to engage with AI tools and 2.8x more likely to buy new products/services.

### Use Of External Survey Data

Many AI-enabled compensation and JA workflows rely on external market data and surveys (e.g., AI-powered pricing, job matching, and continuously refreshed market insights). When incorporating that data, leaders will expect clarity on:

- Permitted use (which teams and tools may access the data and how it may be applied)
- Limitations on reuse (e.g., redistribution, derivative outputs, or use in model training)
- Retention and audit expectations (how long data and outputs are stored, and how decisions can be reconstructed)
- Regulatory alignment where outputs influence pay decisions, particularly in the context of emerging pay transparency requirements.

### Vendor Permissions And Data Rights

Because vendor platforms may ingest sensitive job and employee data and generate AI-assisted recommendations (e.g., AI-driven job matching and pricing workflows), organizations should confirm, contractually and operationally:

- Ownership and usage rights for customer-provided inputs and system-generated outputs

- Restrictions on vendor reuse of customer data (including for model improvement)
- Audit support (ability to evidence how outputs were produced and approved)
- Data governance features that support controlled updates—e.g., version tracking and audit-ready approvals to maintain a clear history of job data changes.

These matters become more important as market tools expand AI-enabled job matching and guided pricing workflows.

## 5.2 Risks of over-automation

Efficiency is a key value driver, but over-automation can erode trust if organizations treat AI outputs as authoritative rather than probabilistic recommendations. The most credible approach is to target automation to the steps AI does well (pattern detection, clustering, first-draft mappings) while preserving expert judgment for decisions that require context, considerations, and risk trade-offs.

### Bias, Explainability, And Auditability

Executives will consistently ask three questions: Is it fair? Can we explain it? Can we prove it?

#### Bias

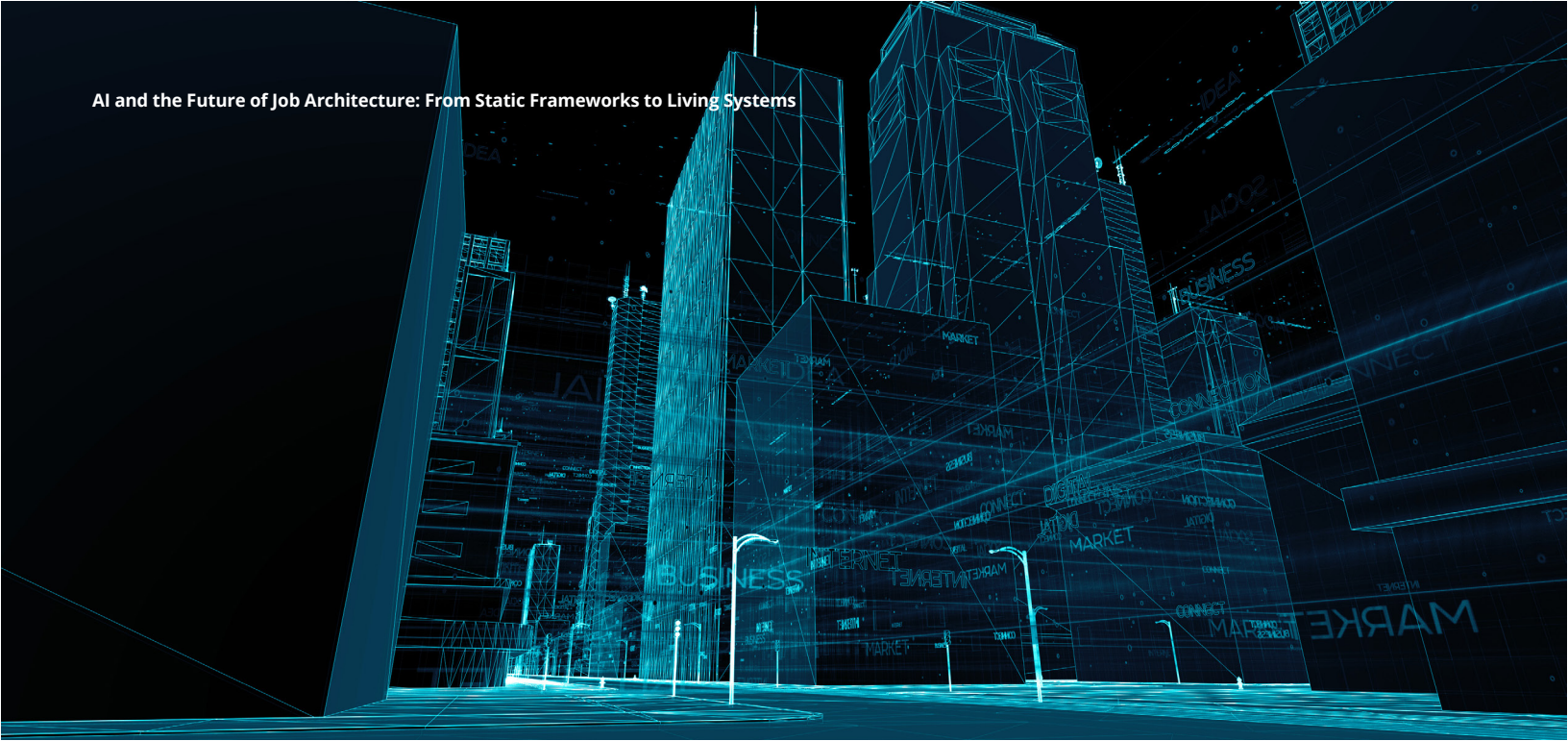
AI can amplify historical inequities or encode bias through training data or proxy variables. In employment-related contexts, the ability to audit for bias and demonstrate defensible practices is critical.

#### Explainability

JA decisions must be understandable to HR, Total Rewards, leaders, and impacted employees; responsible AI guidance emphasizes explainability and accountability as core requirements.

#### Auditability

Trust requires a clear chain from input → model output → human review → final decision. Platforms that support version history and approval workflows make it easier to evidence how (and when) JA content changed over time.



### 5.3 Principles for responsible AI in JA

Organizations that succeed will embed AI into JA thoughtfully and responsibly, capturing speed and scale benefits while maintaining governance discipline and clear accountability.

#### Human-In-The-Loop Review

Leading organizations adopt human-in-the-loop models for AI-enabled job architecture. AI accelerates analysis and drafts recommendations, while HR, Total Rewards, and business leaders validate assumptions, interpret trade-offs, and make final determinations. This balance preserves scalability without compromising fairness, transparency, or strategic alignment.

#### Clear Governance And Documentation

To reduce risk and improve adoption, establish and document decision rights for all aspects of the job structure including job family design, leveling, and pay-relevant attributes; review standards for what must be validated by humans versus what can be auto-applied; evidence requirements for minimum documentation of rationale, inputs, and approvals; and audit-ready controls supported by tooling where available. Responsible AI guidance reinforces that governance is not optional—it is the mechanism that preserves trust while enabling innovation.

#### Alignment With Enterprise AI Governance

Job architecture should not create a parallel AI risk program. Instead, align use cases to the organization's broader enterprise AI governance including approved tools, model risk tiers, data handling standards, monitoring, and escalation paths. This keeps job architecture credible with Legal, Risk, and Compliance stakeholders and supports a consistent approach to accountable AI adoption.

### Closing Perspective

AI is not the end of job architecture—it is its next evolution. In an AI-enabled organization, job architecture can no longer function as a static reference updated on a fixed cadence; it should evolve into a living system continuously informed by data, responsive to changes in work, and aligned to shifting skill requirements.

Even as organizations move toward skills-based models, job architecture remains essential. Both internal skills practitioners and software vendors confirm that without a job architecture framework, it becomes significantly harder to define and operationalize a skills model. Job architecture provides the structural foundation, the job families, levels, and career pathways, that skills taxonomies must map to in order to be actionable and governable. The shift is not from jobs to skills, but toward an integrated system where both work together to create clarity, enable mobility, and support fair compensation.

Organizations that act now can gain speed, relevance, and cost advantage. AI-enabled platforms are already compressing work that historically took weeks or months into near-real-time cycles, allowing compensation and talent leaders to move faster without sacrificing rigor when paired with targeted human review.

Those that delay risk falling behind both clients and competitors. As commercial pressure increases and expectations shift toward faster benchmarking and more frequent updates, organizations dependent on slow refresh cycles and manual processes risk turning job architecture into a bottleneck—limiting their ability to respond to talent needs, manage costs, and enable transformation.

Done well, AI-enabled job architecture becomes a durable advantage: faster to update, easier to operationalize, and more trusted because it is transparent, governed, and anchored by human judgment.

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