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AI-Driven Skills Taxonomy Checklist:

An Evidence-Based Guide

ONETEN RESEARCH SNAPSHOT

Developing a skills taxonomy using generative AI tools like SkillsGPT or WorkforceGPT requires a structured, evidence-based approach for effective implementation. Here are best practices to support your organization's skills transformation journey:

Best Practice	Example
Begin with a Proof of Concept (POC) or Pilot Test AI's ability to assess and map skills by focusing on a core skillset, allowing for adjustments before expanding to additional skill categories	In Johnson & Johnson's partnership with IBM, a pilot project focused on a specific skillset enabled them to make critical adjustments before deploying their MySkills platform on a larger scale. A proof of concept determines data needs, assesses AI readiness and identifies initial gaps ensuring a smoother expansion
Analyze Market Data and Validated Skills Frameworks Identify relevant, in-demand skills using validated databases and frameworks such as O*Net and the Standard Occupational Classification (SOC) System	The Department of Labor's O*Net covers over 900 occupations mapped to the Standard Occupational Classification (SOC) system and is built on data from statistically valid samples of workers, ensuring precise skill identification for various roles
Implement a Dynamic Model for Continuous Updates Ensure your taxonomy evolves with new technologies, emerging roles, and evolving skill requirements, helping the organization remain adaptable and responsive to future demands	IBM and Amazon utilize AI-driven, dynamic skills taxonomies as part of their talent strategies. IBM offers personalized learning paths to stay aligned with emerging technologies, while Amazon fosters continuous learning and skill development to enhance employee agility and mobility
Tailor the Skills Taxonomy to Your Organization's Context Ensure relevance by customizing the taxonomy to reflect the specific needs and nuances of your organization or industry	Research has shown that taxonomies tailored to organizational needs are more sustainable and reflective of ongoing market shifts
Involve Human Subject Matter Experts Use human expertise to validate AI-generated taxonomies, checking for accuracy, context, and potential biases in AI outputs	Studies show that human intervention is critical to mitigate errors and biases in AI systems. As AI becomes central to HR systems and workforce planning, the need for human AI collaboration remains paramount.
Capture a Comprehensive Range of Skills Purpose: Build a taxonomy that includes both technical (core and adjacent) and durable (soft) skills, creating a holistic picture of role requirements and facilitating better talent matching and career development	Research shows that organizations that map a broad spectrum of skills gain a competitive edge by adapting quickly to shifting demands, as shown in workforce studies

Best Practice	Example
Align the Skills Taxonomy with Development Initiatives Purpose: Use the taxonomy to guide learning and development programs, mapping identified skills to targeted upskilling and career paths. This alignment clarifies growth opportunities for employees and supports effective reskilling	Research highlights that aligning taxonomies with learning initiatives improves skills gap resolution by linking employee development directly to skill demands
Recredential Job Descriptions for Skills-Based Hiring Purpose: Shift from traditional degree requirements to skills-focused job descriptions, increasing inclusivity and better matching candidates to roles	OneTen's research indicates that skills-first job descriptions outperform traditional, degree-focused descriptions by improving candidate understanding of qualifications, application likelihood, and perceived fit
Set Ethical Guidelines and Ensure AI Transparency Purpose: Establish clear ethical guidelines to ensure transparent, fair, and trustworthy AI outputs	Johnson & Johnson introduced AI ethics guidelines for their MySkills platform and transparency measures to build trust and foster buy-in while allowing employees to opt-out or challenge skill inferences
Integrate Proactive Communication and Change Management Purpose: Engage stakeholders with clear, proactive communication about the benefits of AI-driven skills taxonomies, driving acceptance and broader adoption	OneTen's skills-first change management research snapshot underscores that successful change management often relies on well-executed communication strategies, which can significantly increase stakeholder engagement and adoption rates

This checklist provides a comprehensive, evidence-based guide for implementing an AI-driven skills taxonomy. Ultimately, combining AI technology with human oversight is essential in enabling organizations to develop a future-ready, skills-first workforce that is both adaptable and responsive to evolving market demands.

For more detailed findings

Read OneTen's Research Snapshot: Skills-First Transformation: Building Skills Taxonomy Leveraging AI.

AI for Skills Taxonomy Snapshot