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Why your organization needs a skills ontology framework

Learning how skills relate to one another is essential. Here's why:

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Now that 40% of CEOs fear their companies won't be economically viable within the next decade, transformation is undoubtedly a business imperative. Yet, many executives are running into the same challenge as they embark on their transformation journeys: uncertainty about the skills their workforce currently has and the knowledge they need to acquire.

Rather than looking for a quick fix to drive organizational change, the most impactful transformation initiatives start from within a company. They're rooted in an understanding of the business's shifting skill needs and the ability to identify how talent can be redeployed to meet emerging challenges.

Since both in-demand competencies and internal talent pools are ever-changing, leaders can't rely on familiar mindsets and static technologies to push their transformation agendas forward. Instead, they must harness a new generation of AI-powered tools that can adapt to shifting skills needs in real-time—which is where skills ontology frameworks come into play.

What is a skills ontology?

A skills ontology refers to a structured representation of skills that organizes and categorizes them to understand each skill's definition and the relationship between skills. This framework allows

companies to identify how skills are organized across their business, where skills sit today and the skills that are required for any project or role within their organization. This also provides clarity around what skills exist within the organization and possible skill gaps that need to be addressed.

How do skills ontologies work?

With the latest AI-driven technological innovations, building a skills ontology is easier than it has ever been. Many companies are harnessing skills infrastructure technology, such as Gloat's Skills Foundation, to map millions of skills based on both public and proprietary data on jobs, resumes, performance reviews, and job descriptions to understand and infer skills for an existing workforce.

The best ontologies are made up of multiple layers of market, internal, and talent marketplace data, which constantly evolve as more employees use the platform to find projects and opportunities.

As more job and skill data is added, the ontology should connect and harmonize these data sources to create a richer and more personalized view of workforce capabilities and how they relate to one another. Companies can then harness this skills ontology framework to prioritize critical skills, update job design, efficiently deploy talent, and match employees to projects and roles based on their capabilities and expertise.

What are the differences between skills ontologies and skills taxonomies?

While the terms "skills ontology" and "skill taxonomy" might sound similar, these phrases can't be used interchangeably. One of the key differences between them is that an ontology is a more formal and detailed way of representing skills. While a taxonomy simply lists and organizes skills in a hierarchy, an ontology specifies the relationship between skills and the properties that they possess. For example, an ontology might specify that the skill of "Programming" is a subcategory of "Computer Science" and that it has the property of being applicable to the creation of software.

Another difference is that a skills ontology is typically designed to be more comprehensive and inclusive than a taxonomy. While a taxonomy may only feature a limited set of capabilities that are relevant to a particular domain, an ontology is designed to cover the full breadth of skills related to this function. This allows an ontology to be more flexible and adaptable to different situations and creates a more complete picture of all of the capabilities an individual or organization possesses. Thanks to recent AI innovations, many ontologies are now dynamic and updated continuously as relationships between skills and jobs change.

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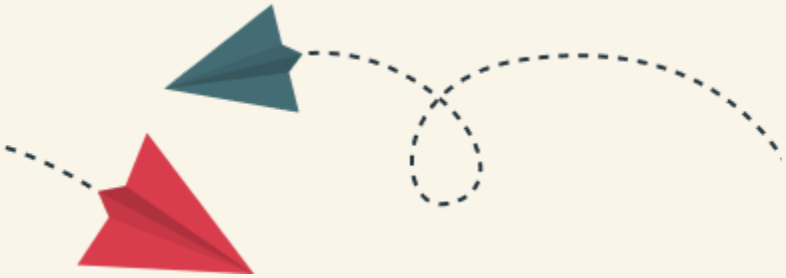

The benefits of using a skills ontology framework

As companies strive to transform into skills-based organizations, skill ontologies equip them with a few decisive advantages, including:

#1. Improve talent acquisition decisions
Skills ontologies give leaders clearer insights into the types of skills they already have, and in turn, the capabilities they will either need to hire or upskill and reskill for. Rather than guessing what skills an organization needs to hire for, skills ontologies help executives clearly define the knowledge a candidate must possess in order to be successful in a given role.

#2. Find in-demand skills on-demand
A skills ontology creates an internal database for skills sourcing and identification, which allows managers and leaders to quickly pinpoint and call upon the talent that possesses the specific expertise they're looking for.

#3. Make data-driven upskilling and reskilling investments
Once leaders gain insight into the skills their people have and the competencies they need to hone, they can begin devising and implementing skill-building initiatives that align with these priorities. Skills ontologies give visibility into emerging trends, or where gaps sit to inform where to invest in development and upskilling and plan for future-fit roles.

#4. Streamline talent redeployments
Sometimes leaders may be unaware that an employee with a certain skill could use the same knowledge and apply it in a slightly different way to complete a project for another department or functional group. Rather than staying in the dark about how employees' skills can be applied across the organization, a skills ontology sheds light on how skills relate to one another and identifies the adjacencies that might help employees move into new roles.

3 reasons why every organization needs a skills ontology

Given the benefits associated with using a skills ontology, it's easy to understand why so many organizations are eager to begin taking advantage of them. Here are a few reasons why they deserve a spot at the top of your priority list:

#1. Understand how skills relate to jobs
Skill ontologies don't just map out how skills relate to one another; they also show how skills relate to various jobs. Once leaders have an understanding of how different skills and jobs intersect, they

can make workforce planning and talent redeployment decisions using the insights their skills ontology provides—in turn, ensuring they're tapping into all of the capabilities their people have to offer.

#2. Identify transferable skills

By shedding light on how various expertise relates to different roles, skills ontologies can identify employees with transferable skills that will make them strong candidates for open opportunities—even if no one has the exact skill a hiring manager was originally looking for. As a result, skills ontologies enable leaders to broaden their talent pools and tap into qualified internal talent that may have otherwise gone overlooked.

#3. Keep skills insights up to date

The best skills ontologies are self-evolving, which means that the more information you collect about workforce skills and job needs, the more accurate and updated your ontology will become. There's no need to manually update these frameworks; instead, leaders can feel confident that the depth of their skills information is going to continue to grow with their organization.

To learn more about the role skills ontologies will play in the future of work, check out our guide to becoming a skills-based organization.