Peer Organizational Structure & Design Mapping

A Big-Data Talent Intelligence Approach by Draup

Executive Summary

Organizations today are restructuring at unprecedented speed as AI, digital transformation, and new scientific capabilities reshape how work is done. Yet leaders lack a clear, data-driven view of how their peers are organizing talent to compete effectively. Traditional public sources reveal individuals—but not hierarchies; postings—but not structure; trends—but not execution.

Draup's External Organizational Structure Mapping solves this intelligence gap. By combining large-scale public profile data, proprietary golden datasets (Mapped Titles in Draup Profiles Database), semantic AI models, and expert analyst validation, Draup reconstructs competitor organizational structures with precision at a global scale. This enables leadership teams to benchmark, design, and future-proof their own talent systems with unprecedented accuracy.

What this delivers for CHROs, SWP, and TA leadership:

- A big data view of competitor org design—spans & layers, capability maturity, team composition, and how emerging functions (AI/ML, Omics, Digital, Field Medical, etc.) are structured in the real world.
- Clear visibility into talent density and capability hotspots, informing location strategy, build-vs-buy decisions, and long-term workforce planning.
- Sharper, faster, more targeted Talent Acquisition, driven by an understanding of exact feeder roles, reporting lines, and competitor maturity.
- Market-aligned job architecture and skills frameworks, helping organizations identify emerging roles early, build internal pathways, and strengthen retention.

  Draup's methodology blends automation scale with human judgment—ensuring the most accurate and actionable external org maps available today. For enterprises navigating digital and AI transformation, this intelligence becomes a foundational asset for strategic workforce design, competitive differentiation, and long-horizon planning.

Strategic Context

Why Organizations Need External Org Mapping

Enterprise leaders today operate in an environment where competitive structures, capability models, and workforce designs evolve faster than traditional intelligence systems can keep up with. As organizations scale new capabilities—from AI/ML and Omics to Digital Commercial, Cell & Gene Therapy, Regulatory, and Field Medical—the fundamental question remains:

How are our peers truly organizing their talent to win?

Public information provides only fragments:

- Job postings reveal intent, not structure.
- LinkedIn shows individuals, not hierarchies.
- Industry reports discuss trends, not execution.

What CEOs, CHROs, and Boards lack is a trusted, data-driven external view of how competitors structure, layer, and mature their teams.

Draup fills this visibility gap.
Using AI-driven external organizational mapping—supported by large-scale profile data, proprietary golden datasets (Mapped Titles in profiles), and hierarchical modeling—Draup reconstructs competitor organizational structures with unmatched accuracy and scale.

This intelligence becomes foundational for Talent Acquisition, Workforce Planning, Job Architecture, Skills Strategy, and enterprise transformation.

Enterprise Use Cases for External Org Mapping

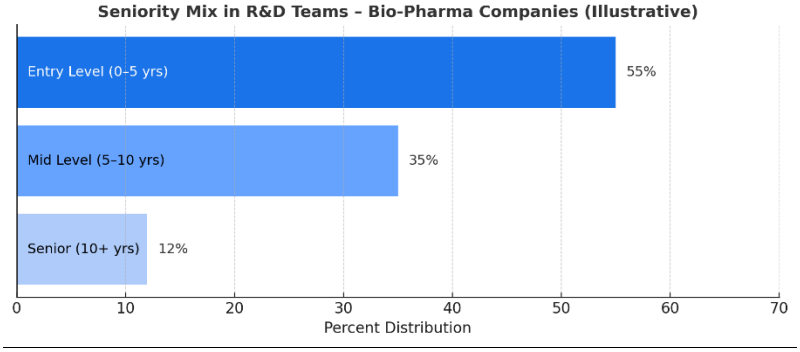
Executives increasingly require precise, market-validated transparency into how peers build, deploy, and evolve talent. External org mapping directly supports four enterprise-critical use cases

1. Benchmarking Role Design, Team Composition & Capability Maturity

Leadership teams seek clarity on:

- How many layers exist within competitor organizations
- How capability heads design and deploy their teams
- Whether peers combine or separate adjacent functions (e.g., Omics within Translational Medicine; Digital inside R&D; Market Access under Commercial)
- Talent seniority distribution across teams
- Growth rates for emerging or innovation-oriented capabilities

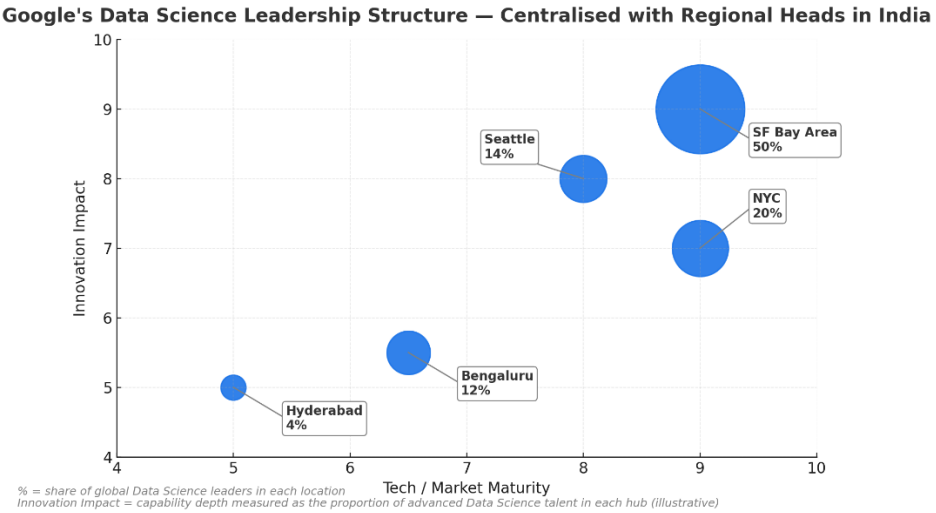
This intelligence empowers organizations to realign structures, modernize operating models, and maintain competitive agility.



2. Identifying Talent Density & Capability Hotspots Across Competitors

Draup's mapping highlights:

- Where critical talent and capability clusters concentrate
- Team sizes reporting into specific leaders
- Emerging capability growth (e.g., real-world data, bioinformatics, HEOR, clinical operations innovation)
- Hidden teams not visible through postings or public sources



This informs strategic decisions on:

- Location strategy
- Build vs. buy capability development
- Long-term skills investment and talent pipeline design
- Internal capability investment and Future-ready workforce pipeline creation

3. Precision Talent Acquisition Strategy

For CHRO and TA organizations, external org structures enable:

- Identification of precise teams and individuals to target
- Deep understanding of reporting lines and feeder roles
- Target passive candidates with unprecedented accuracy
- More accurate shortlisting aligned to true functional work—not keyword matches
- Stronger recruitment narratives built on competitor structural maturity

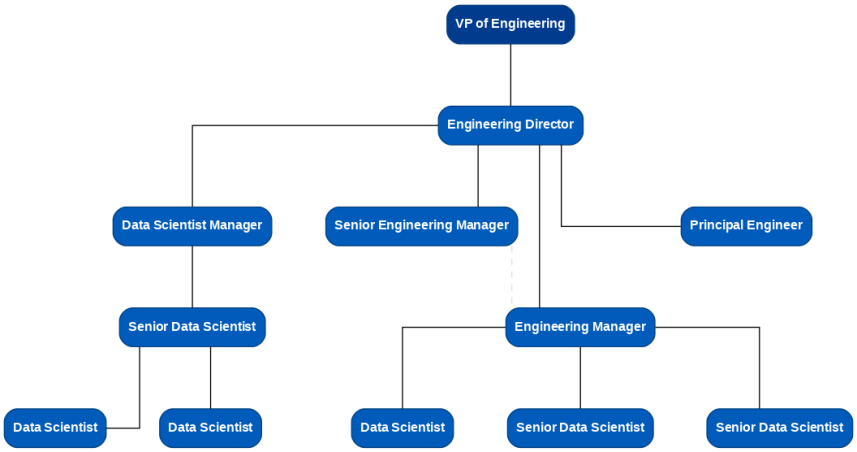
Outcome:
Reduced time-to-source and better quality-of-hire across critical roles.

4. **Building Competitive Job Architecture, Skills Taxonomies, and Career Pathing**

   Peer org structures guide:

   - Real-world alignment of titles, levels, and work distribution
   - Future-back identification of emerging roles and skills
   - Robust internal career ladders and succession pipelines
   - Market-aligned compensation frameworks

   This elevates retention, improves mobility, and strengthens long-term workforce design.



Sample Data Science Reporting Structure at Google

Draup's Methodology for External Org Structure Mapping

Our approach blends big data, semantic AI, hierarchical modeling, and expert analyst validation. While our automation delivers scale; human reasoning ensures accuracy (in interpreting functional nuance and industry-specific hierarchy patterns).

Below are the sequential layers of Draup's methodology.

1. **Data Ingestion and Standardization**

   Draup consolidates three core datasets:

   - External Peer Profile Data (across 1.6M+ companies)
   - Draup Profile Dataset (rich metadata on titles, seniority, functions, skills, locations)

- Golden Title–Manager Dataset (Combination of big data and human-validated reporting-line patterns across enterprises, capturing reliable ”employee → manager” title relationships)

These datasets are normalized across formats, titles, and identifiers to ensure clean, consistent inputs for downstream modeling.

2. Semantic Title Embedding (AI Layer)

Using MiniLM-L6-v2 embeddings, Draup interprets titles by meaning, not text alone.

Examples:

- "Scientist II," "Research Associate," and "Senior Associate Scientist" → appear different but map to adjacent rungs in hierarchy
- "Field Medical Director" vs. "MSL Lead" → lexically different but functionally proximate

Semantic embeddings remove ambiguity and anchor hierarchy reconstruction.

3. Mapping Profiles to Canonical (Golden) Titles

Using cosine similarity, each profile is mapped to a canonical title. This enables:

- Consistent leveling
- Reliable identification of reporting-line patterns
- Comparability across companies and sectors

Canonical roles become the backbone of accurate org modeling and are essential for determining who can reasonably manage whom.

4. Geometric Mean (GM) Relationship Scoring

To determine probable manager titles, Draup calculates a GM score using:

- Reporter Count (how often an employee title reports into a manager title)
- Company Spread (how many companies display this relationship)

High GM = stable, validated reporting pattern across the market. This becomes a critical layer of statistical confidence.

5. Multi-Factor Manager Prediction

For each employee, Draup ranks potential managers (top ten GM-ranked titles) using weighted criteria:

- Semantic Similarity – 70% — ensures functional logic

- GM Confidence Score – 10% — ensures pattern reliability
- Geographic/Functional Proximity – 20% — improves applicability

The result:
A highly reliable list of probable reporting relationships and a ranked list of highly probable manager candidates.

6. Organizational Reconstruction & Talent-Oriented Structuring

Draup's hybrid model reconstructs the org using both AI and human interpretation.

AI Performs:

- Capability grouping
- Span and Layer identification
- Preliminary org structure generation
- Adjacency and pipeline inference

Human Analysts Validate:

- Functional nuance including cross-functional roles
- Ambiguous matrix reporting
- Industry-specific hierarchy conventions
- Anomalies driven by title inflation and hybrid role adjustments

This ensures both scale and interpretive precision.

7. Final Talent-Ready Org Map Output

Each reconstructed org map provides:

- Function heads and reporting trees
- True span of control
- Team composition & capability clusters
- Seniority layering
- Capability maturity indicators
- Feeder roles and talent pipelines
- Regional distribution of talent

This is formatted specifically for TA, SWP, Job Architecture, and Skills Strategy teams—not merely for visualization.

Tools & Data Sources

- Data: External Peer Data Signals, Golden Title–Manager Map, Draup Profile Dataset
- Technology: Python, Pandas, NumPy, PyTorch
- AI Model: Sentence Transformer (MiniLM-L6-v2)
- Compute: AWS SageMaker GPU instances

Expected Benefits for Talent Teams

Talent Acquisition:

- Targeted sourcing
- Shorter cycle times
- Higher quality-of-hire

Workforce Planning:

- Capability maturity insights
- Scaled benchmarking
- Future-ready capacity planning

Job Architecture:

- Market-aligned structure
- Accurate leveling
- Role clarity

Skills Frameworks:

- Early detection of emerging capabilities
- Modernized skills taxonomies

Retention & Culture:

- Detection of structural failure points
- Stronger internal mobility pathways

This transforms Talent Intelligence from reactive to strategic and predictive.

Challenges & Assumptions

As with all external data-driven modeling, challenges include inconsistent titles, low-quality profiles, limited geographic metadata, and atypical matrix structures.

This methodology assumes:

- Generalizability of golden-dataset patterns across organizations
- Sufficient completeness of org metadata
- Semantic modeling accuracy for title interpretation

Despite these constraints, Draup delivers a statistically grounded, market-validated, executive-ready view of peer organizational design.

Conclusion

Winning in today's market requires more than strong internal talent practices—it requires strategic visibility into how competitors are actually organizing, deploying, and scaling their workforce capabilities. Without this intelligence, organizations operate with structural blind spots that directly impact competitiveness, speed, and long-term resilience.

Draup's External Org Structure Mapping closes this visibility gap.
By combining semantic AI, geometric scoring, golden relationship maps, and expert analyst validation, Draup delivers the most accurate, scalable reconstruction of peer organizations' structures available today. This equips leadership teams with a fact-based foundation for:

- Designing future-ready organizational models
- Accelerating capability build-out in AI, Digital, R&D, and emerging functions
- Reducing risk in workforce planning, hiring, and succession
- Strengthening internal job architecture and mobility pathways
- Making smarter investments in talent, structure, and location strategy

For CEOs, CHROs, and Boards, this intelligence is no longer optional—it is a strategic advantage in an environment where capabilities are shifting, and structural innovations are reshaping industries at speed.

Organizations that understand how their peers truly operate will out-innovate, out-hire, and out-scale those that don't.

While there is no precise way to map Organization Structures and Design, Draup provides the clarity required to compete with confidence.