

Model Selection Platform

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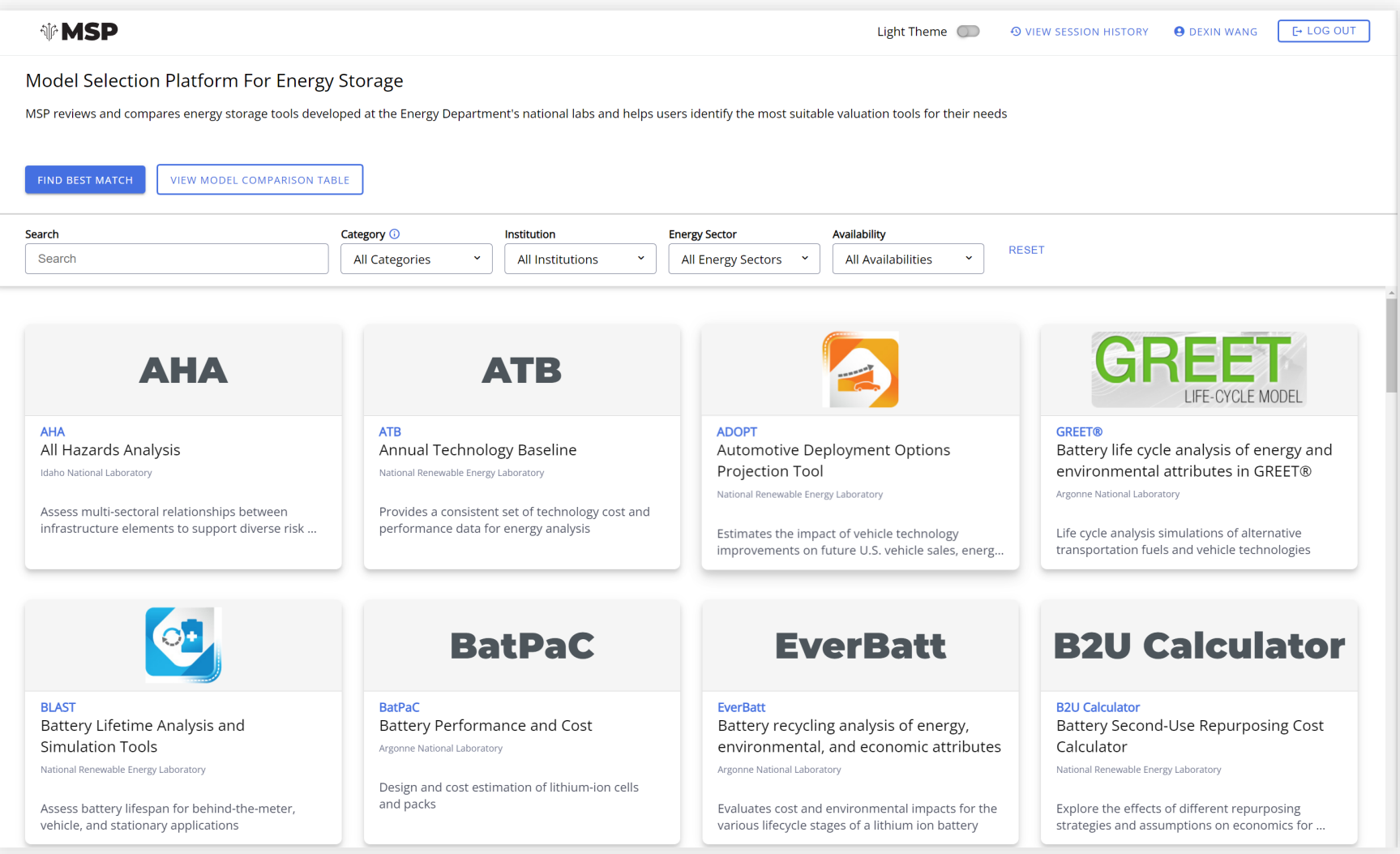
PROJECT PROFILE
Topic: Analytics & Tools
Vertical: Grid Integration and Field Validation
Strategic Pathway: Optimize and Grow
Project start and finish: FY24-present

Background and Motivations

- Rich Landscape of Storage Tools
 - Diverse scopes, data needs, capabilities, platforms, and license terms
 - Many options—but selection is challenging and time-consuming
- Static Comparison Tables Are Insufficient
 - Tools must be organized by purpose to reveal strengths
 - Each category requires tailored attributes
 - Generic matrices leave stakeholders unsure of best fit

Landing Page

Overview and explore 70+ energy storage tools



Comparison Table

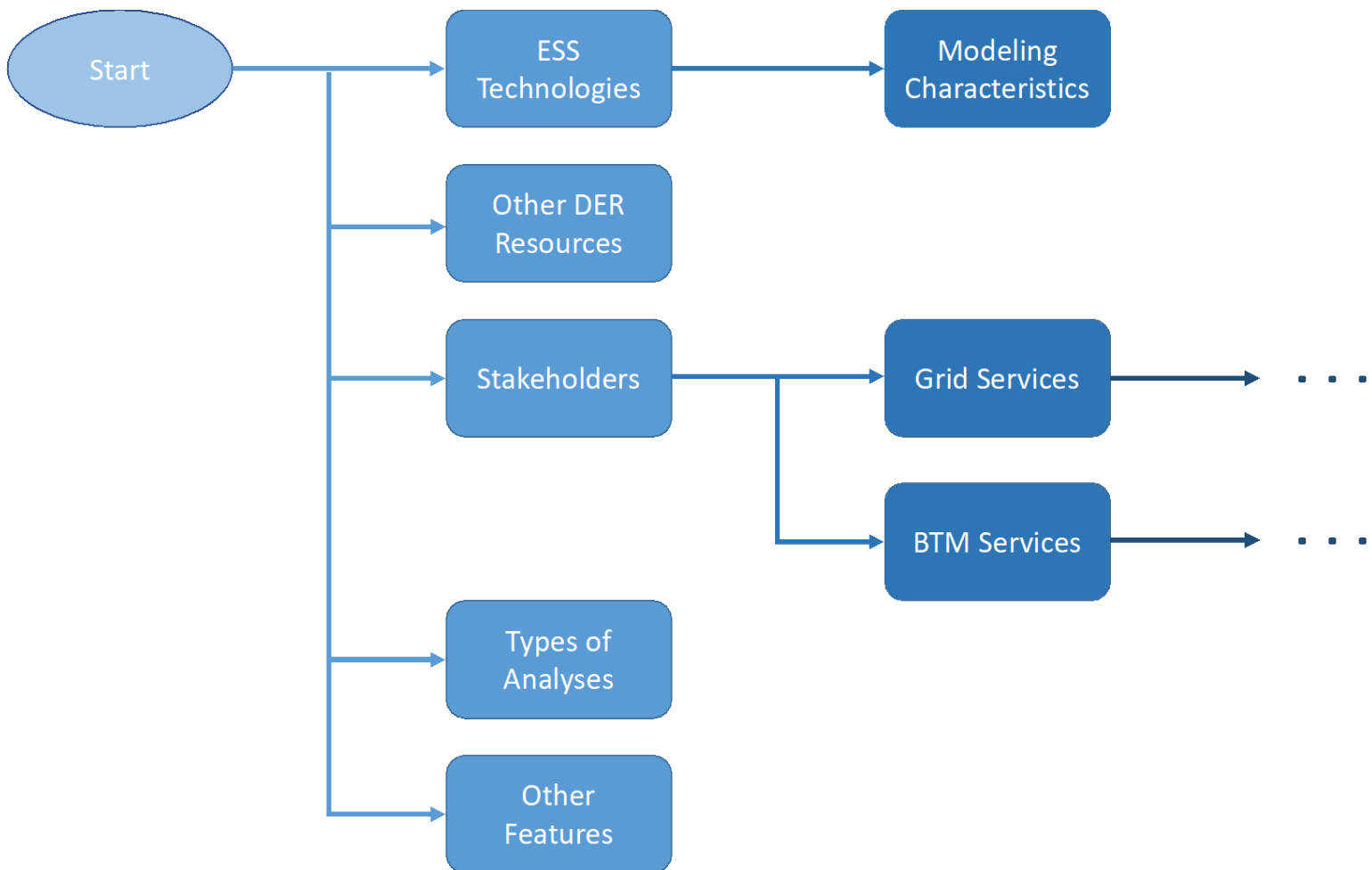
- Quick and high-level comparisons for generic needs
- Available for price-taker and production cost modeling tools

	DER-CAM	ESETM	QUEST	REoptB	SAM	PMAT	RODO
ESS Technologies							
Battery							
Linear Model							
Component-level Modeling							
Nonlinear Model and Dynamic Operating Range							
Degradation							
Hydrogen							
Pumped Hydro							
Compressed Air							
Flywheel							

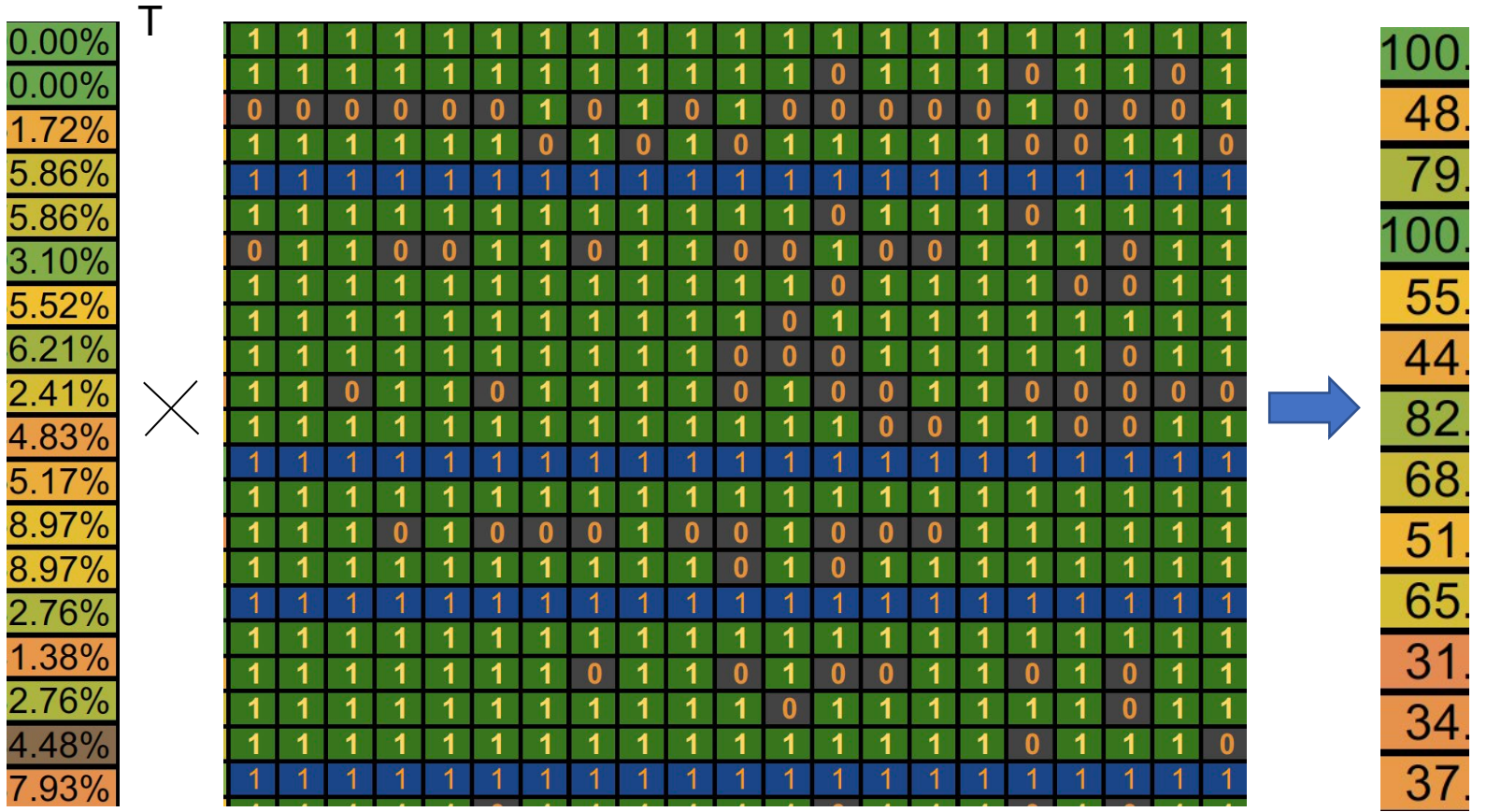
Selection Wizard

Scores and suggests the best-suited tools to meet users' needs

- A hierarchical specification discovery procedure governs information exchange

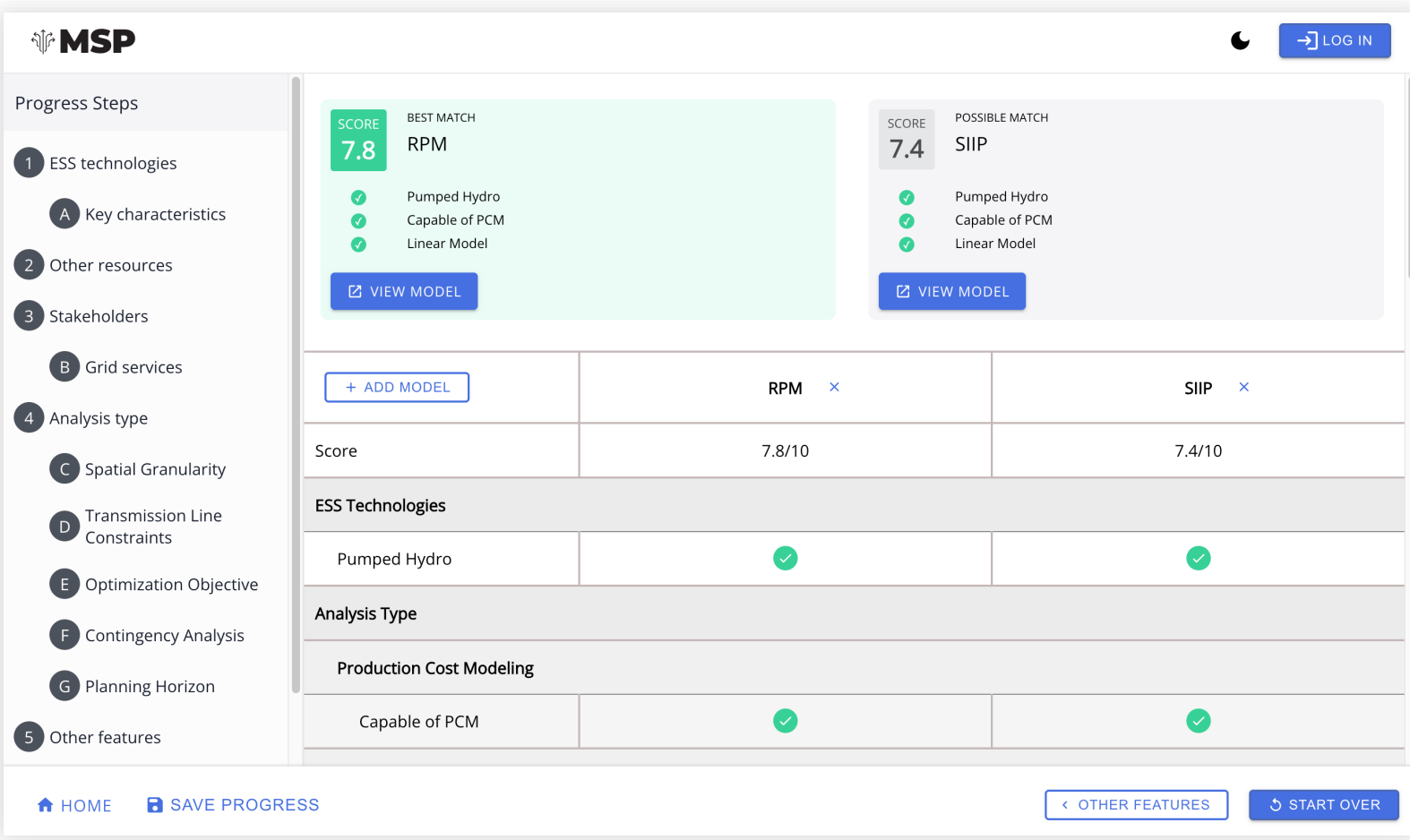


- A two-stage scoring engine integrates offline setup and online calculation



Weight Vector Attribute Matrix Score

- Dynamic in-progress ranking
- Detailed and tailored comparison

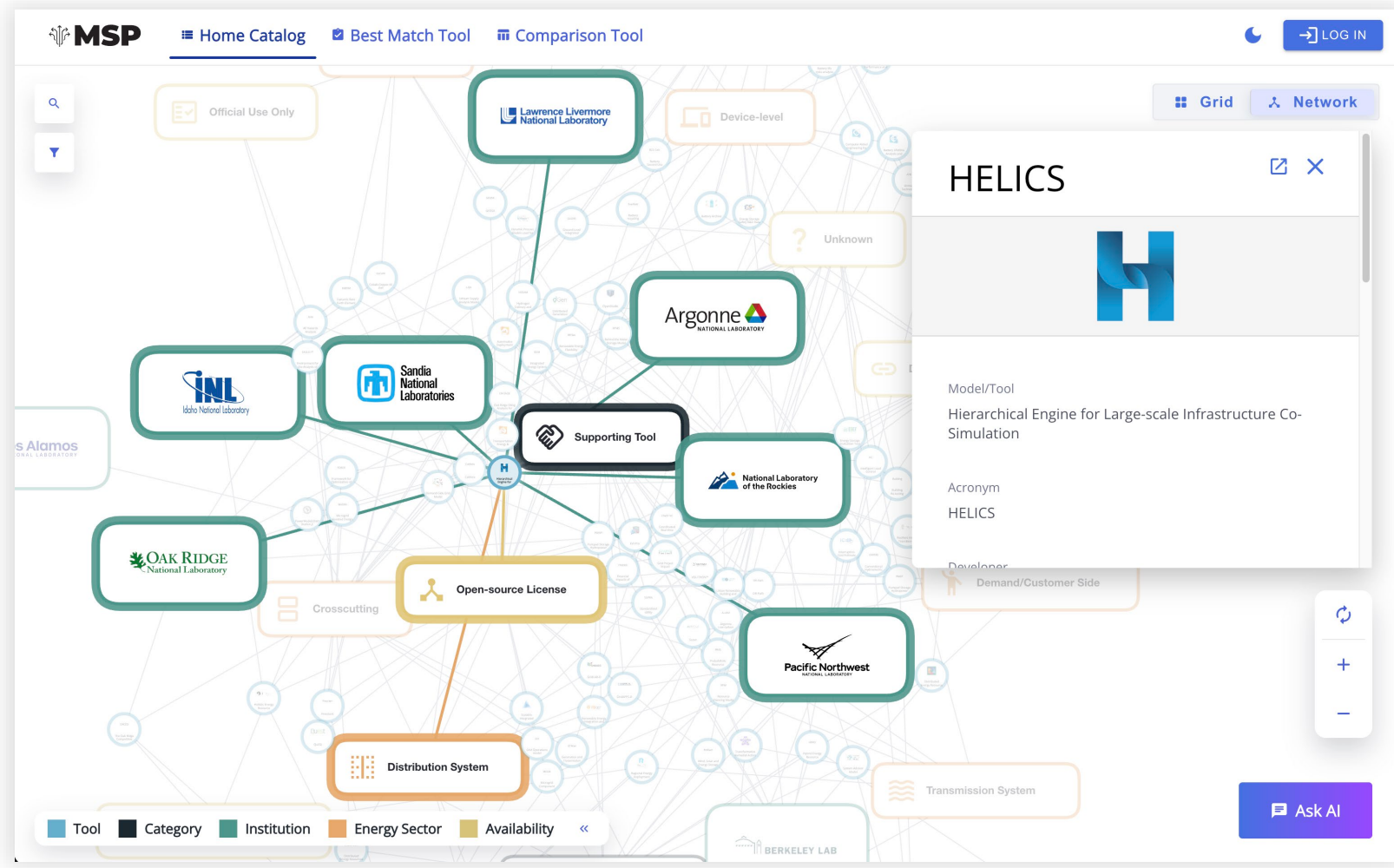


AI Assistant

- Helps users find useful information about included energy storage tools
- How It Works – Retrieval Augmented Generation (RAG)
 - Knowledge base built from curated content and official tool webpages
 - On each query, the assistant retrieves the most relevant information and uses an LLM to generate clear, grounded answers

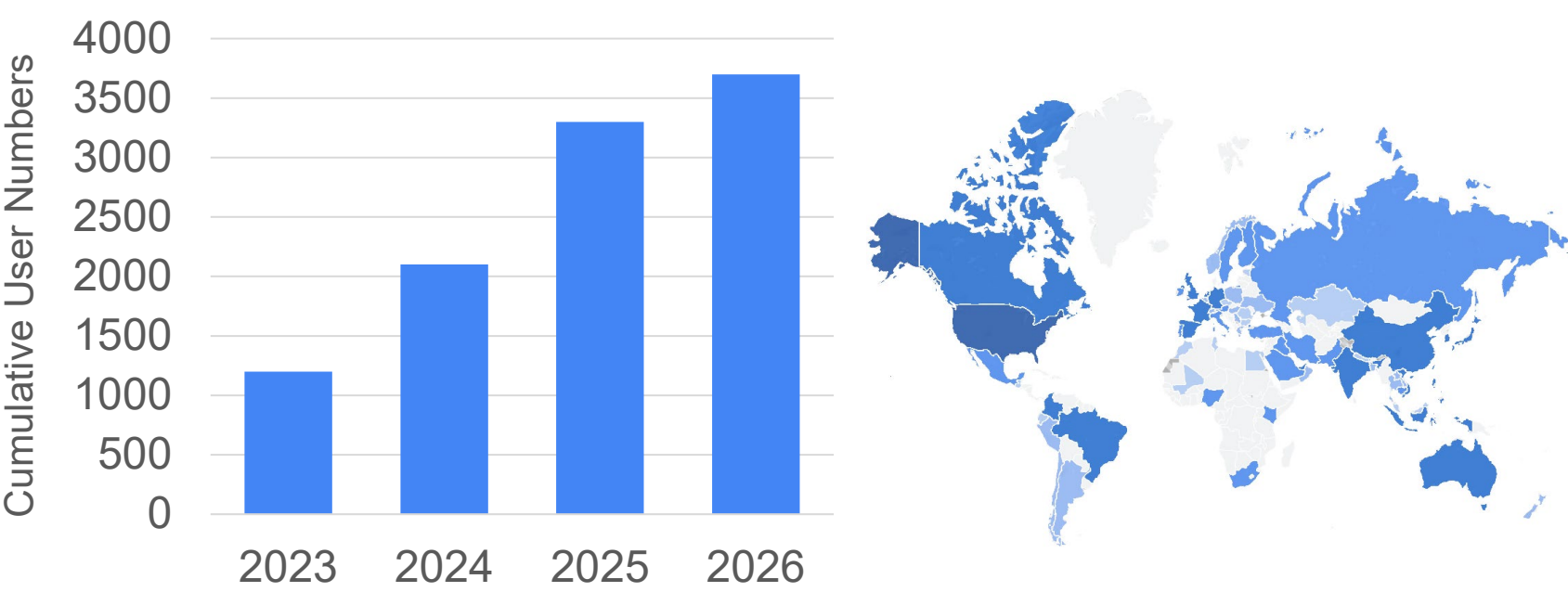
Graph Visualization

- An interactive force-directed graph to dynamically visualize relationships among tools and their metadata
- Provides an intuitive and insightful way to explore the tool landscape



Impact

- 3700+ users from around the world



- ~28,000 hours saved compared to manual research

	Sessions ¹	Time w/ MSP (min / session) ^{1,2}	Time w/o MSP (hr / session) ²	Total Time Saved (hr)
Landing Page	5107	1	5	5,022
Comparison Table	844	2	10	3,348
Selection Wizard	799	3	20	6,352
Total	6750			14,722

1. MSP Google Analytics (GA4), July 2022–April 2026
2. User feedback and team experience

Next Steps

- Developers' Portal – submit and manage metadata and screenshots
- AI Assistant Enhancements – Model Context Protocol (MCP) based knowledge and capabilities

Acknowledgment

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