VelocityEHS®

EHS SOFTWARE AI CAPABILITIES & VENDOR EVALUATION CHECKLIST

Artificial Intelligence (AI) is rapidly transforming how businesses operate. But for many EHS professionals, integrating AI can still feel dicey. With increasing pressure to manage risks, improve safety, and do more with less, EHS professionals can't afford to overlook how AI can help meet these challenges.

Designed with input and expertise from machine learning scientists and EHS professionals like you, VelocityEHS has developed Vēlo (powered by VelocityAI) to give you strategic AI capabilities that will drive the efficiency, precision, and impact of your EHS program to new levels. **This checklist is designed to help you evaluate AI capabilities and the vendors who provide them, so you can identify the greatest short and long-term value for your business.**

EVALUATING AI-ENABLED EHS SOFTWARE CAPABILITIES

When evaluating how AI can enhance your EHS program, the essential question is: "What can it actually do?"

What features should I look for in an AI-enabled EHS software system? Vēlo offers users the following capabilities, specifically designed to increase the speed and simplicity of EHS professionals' most critical, complex, and time-consuming tasks.

PREDICTIVE RISK MANAGEMENT & HAZARD FORECASTING

- ☐ PSIF (Potential Serious Injury or Fatality) risk detection
- ☐ Pattern recognition from incidents, near-misses, and field observations
- ☐ High-speed scanning of incident records to pinpoint emergent risks
- ☐ Dynamic risk prioritization based on exposure and consequence modeling

AI-AUGMENTED INCIDENT MANAGEMENT

- ☐ Automated incident description quality scoring and improvement recommendations
- ☐ Automated identification of hazards based on incident description
- ☐ Root cause analysis with AI-recommended corrective actions
- ☐ AI hazard control recommendations based on historical control data and integrated EHS expertise

JOB SAFETY ANALYSIS (JSA) ENHANCEMENTS

- ☐ JSA description analyzer, with strength rating and improvement prompts
- ☐ Automated hazard evaluation and ranked control matching
- ☐ Detection of missing control measures based on task descriptions

INDUSTRIAL ERGONOMICS SUPPORT

- ☐ 3D motion capture AI to automate and enhance accuracy of MSD risk analysis
- ☐ AI-assisted root cause insights for MSDs
- ☐ Ergonomic control recommendations tailored to job and 3D motion capture data

EHS SOFTWARE VENDOR EVALUATION CRITERIA FOR AI READINESS

As you consider the AI software features and capabilities available in the marketplace, also remember that it's not just about buying the flashiest features. It's equally important to choose a partner who has the people, processes, and policies in place to help you build a safer, smarter EHS program for the future. Look for a vendor like VelocityEHS who offers:

PURPOSE-BUILT EHS AI VS. GENERIC AI

- ☐ AI models are purpose-built and trained on EHS-specific datasets
- ☐ Demonstrated superiority of models in safety-specific contexts
- ☐ Built-in understanding of domain terminology, operational logic, and best practices

EMBEDDED HUMAN EHS SUBJECT MATTER EXPERTISE

- ☐ AI development teams include certified EHS professionals
- ☐ SME knowledge is directly integrated into AI model training and tuning
- ☐ AI outputs reflect validated expertise, not just web-sourced information
- ☐ Active collaboration between technical and applied safety domains

COMMITMENT TO CONTINUOUS AI INNOVATION

- ☐ Proven record of AI leadership including registered patents, published research, and peer recognition
- ☐ Participation in academic/technical communities for emerging AI
- ☐ Use of AI accelerators (i.e. hardware built to speed AI neural networks, deep learning and machine learning) to speed up software development and release cycles, deliver new features and enhancements faster
- ☐ Product development roadmap includes continuous AI feature releases and performance improvements

ETHICAL AI PRACTICES & DATA PRIVACY

- ☐ Transparent justifications for AI outputs (risk scores, control recommendations, etc.)
- ☐ Human-in-the-loop override functionality
- ☐ Explicit data governance and user consent for model training
- ☐ Responsible AI frameworks to safeguard data integrity and transparency
- ☐ Tools and workflows to prevent bias and protect sensitive personally identifiable information (PII)
- ☐ Corporate mission and values aligned with continuous safety improvement, not automation for automation's sake

AI BECAUSE SAFETY DEMANDED IT. TESTED IN THE LAB. PROVEN IN THE FIELD.

VELOCITYAI

THE ENGINE POWERING EHS PERFORMANCE

Vēlo is the AI brain that powers the VelocityEHS Accelerate® Platform. It brings together our team of PhDs, data scientists, and seasoned EHS professionals — all working to build and govern the AI models that deliver deep insights into your EHS program performance.

It's our strategic investment in AI done right: built by real experts, trained on real EHS problems, and designed to help real EHS pros like you make faster, smarter decisions. It's not a bolt-on, rather it's the AI infrastructure of our award-winning EHS software. It's how we bring speed with purpose to the work of keeping people safe.

INTELLIGENCE ENGINEERED BY EHS EXPERTS

ENABLING THE RIGHT DECISIONS, AT THE RIGHT MOMENT

SEAMLESSLY INTEGRATED ACROSS THE ACCELERATE PLATFORM TO HELP YOU DO MORE, FASTER.

Find Vēlo across Velocity's portfolio of solutions:

+ Incident Management: AI PSIF Insights
+ Industrial Ergonomics: 3D Motion Capture
+ Contractor Safety: Auto-Read COIs & OSHA Logs
+ Chemical Management: Ingredient Indexing

Reach out to us today to learn more about Vēlo and the VelocityEHS Accelerate® Platform, or schedule a meeting so you can see it in action for yourself. We're excited to partner with you on your EHS and AI journey.

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