

AI/ML Bill of Materials

Model and dataset transparency for security, privacy, safety, and ethical considerations



Steve Springett

- Leader of OWASP Dependency-track
- Chair, OWASP CycloneDX Core WG
- Chair, Ecma Technical Committee 54
- Leader and co-author of OWASP SCVS
- Leader of Package URL standard
- OWASP Global Board of Directors
- Director, Product Security at ServiceNow



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CycloneDX is a Full Stack BOM Standard

Provides advanced supply chain capabilities for cyber risk reduction

Community Driven

Standardization Through



**In Production! At an
estimated 100K organizations**

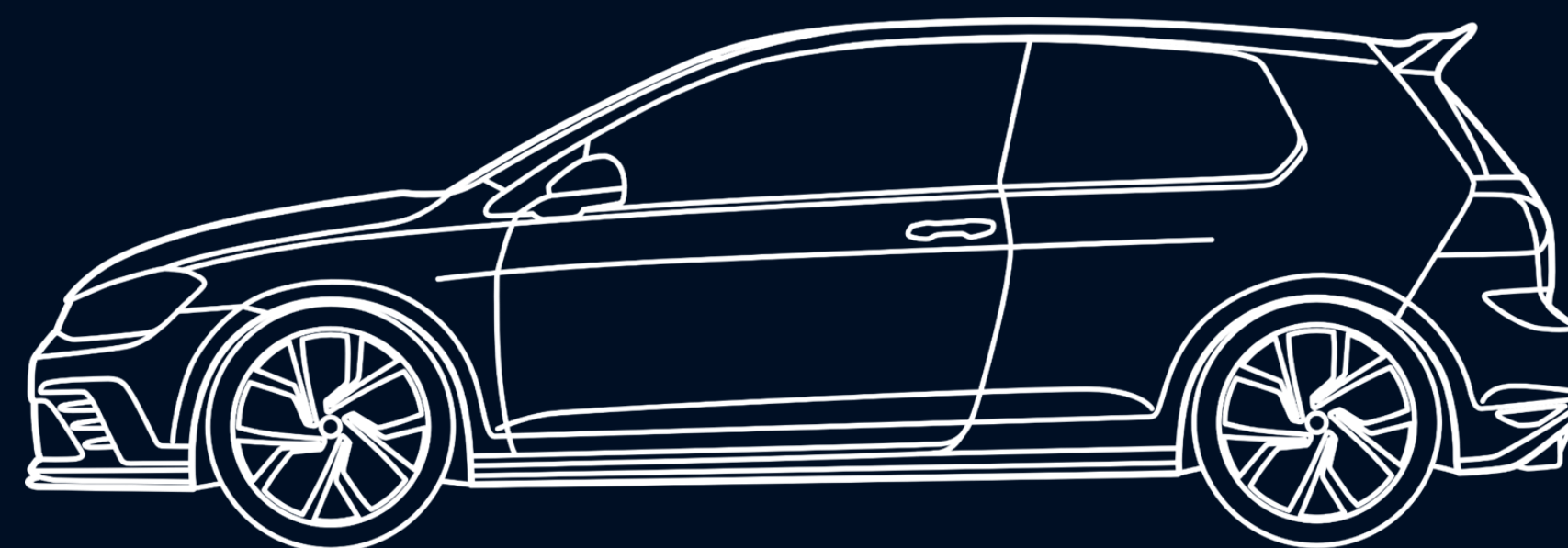
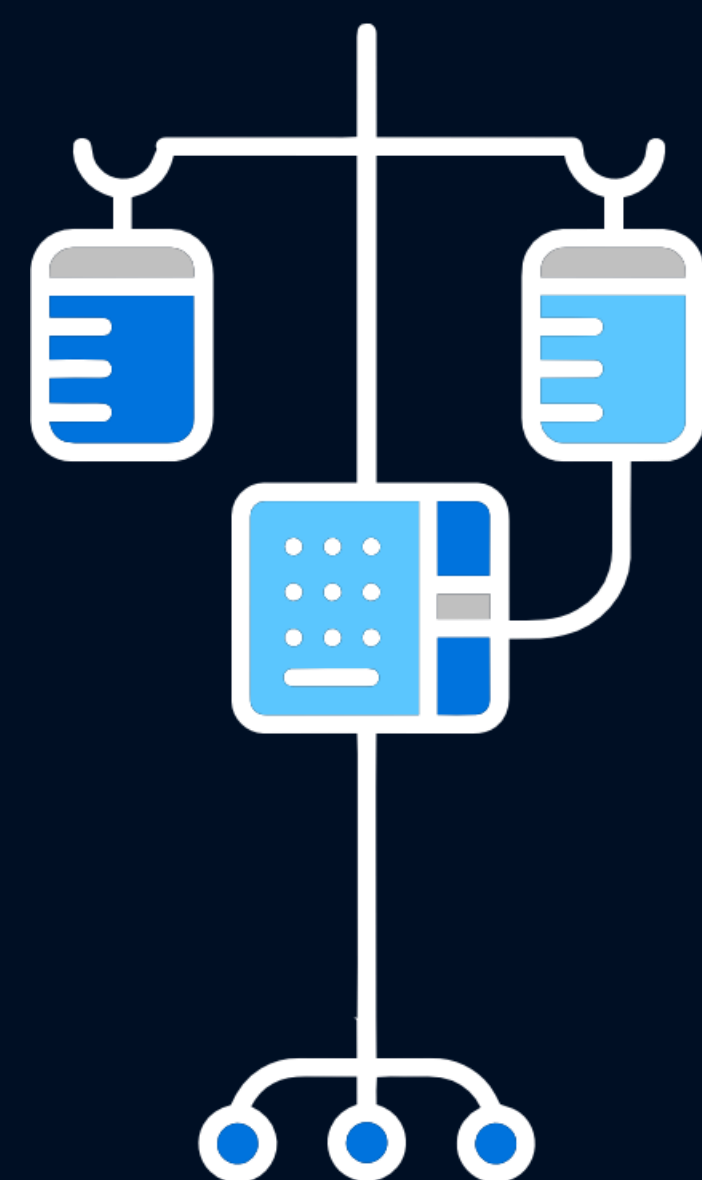
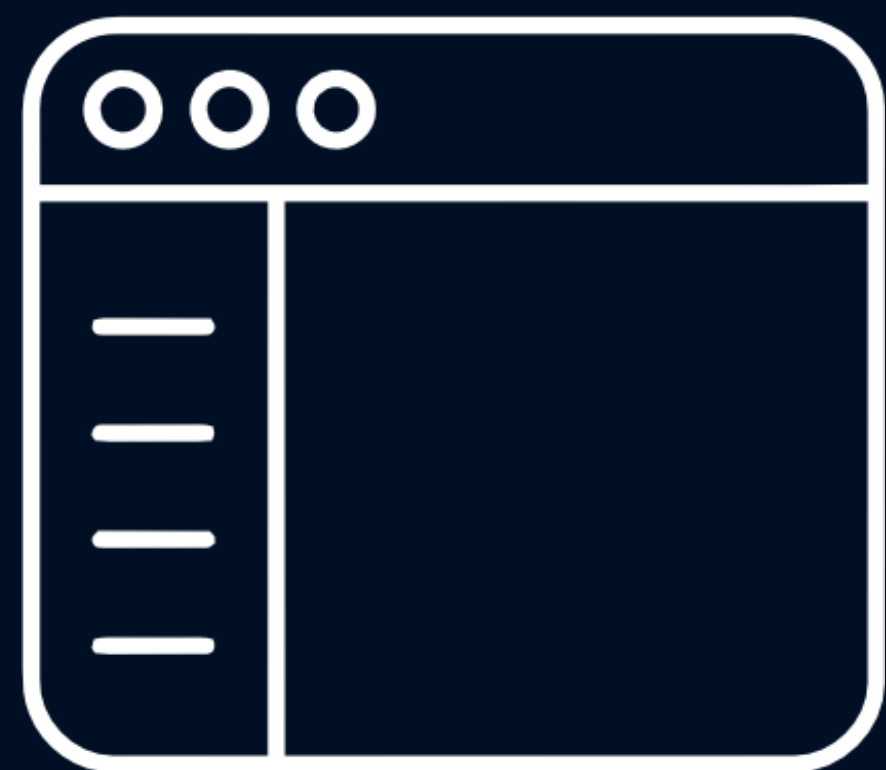


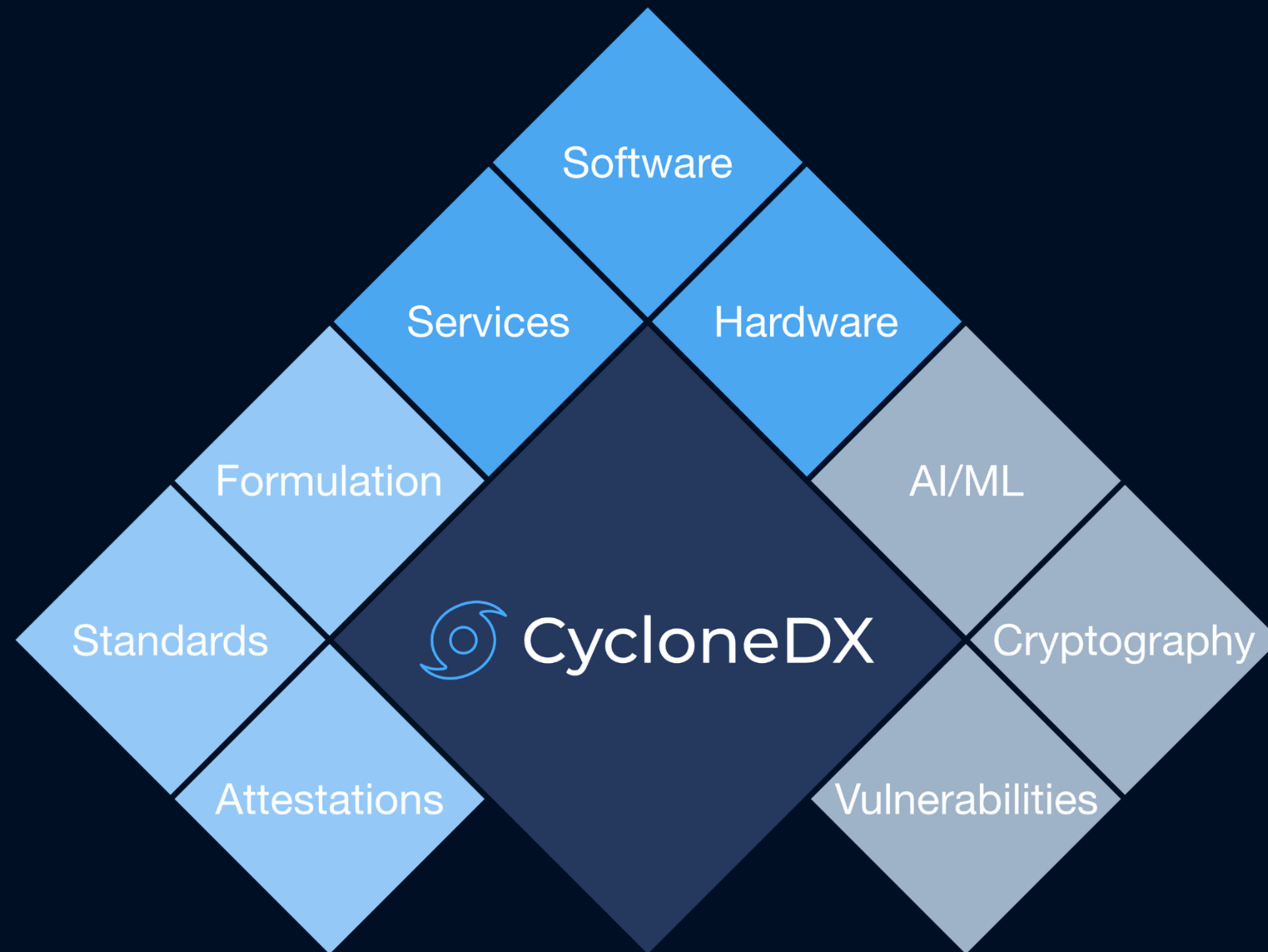
Over 500M components represented monthly

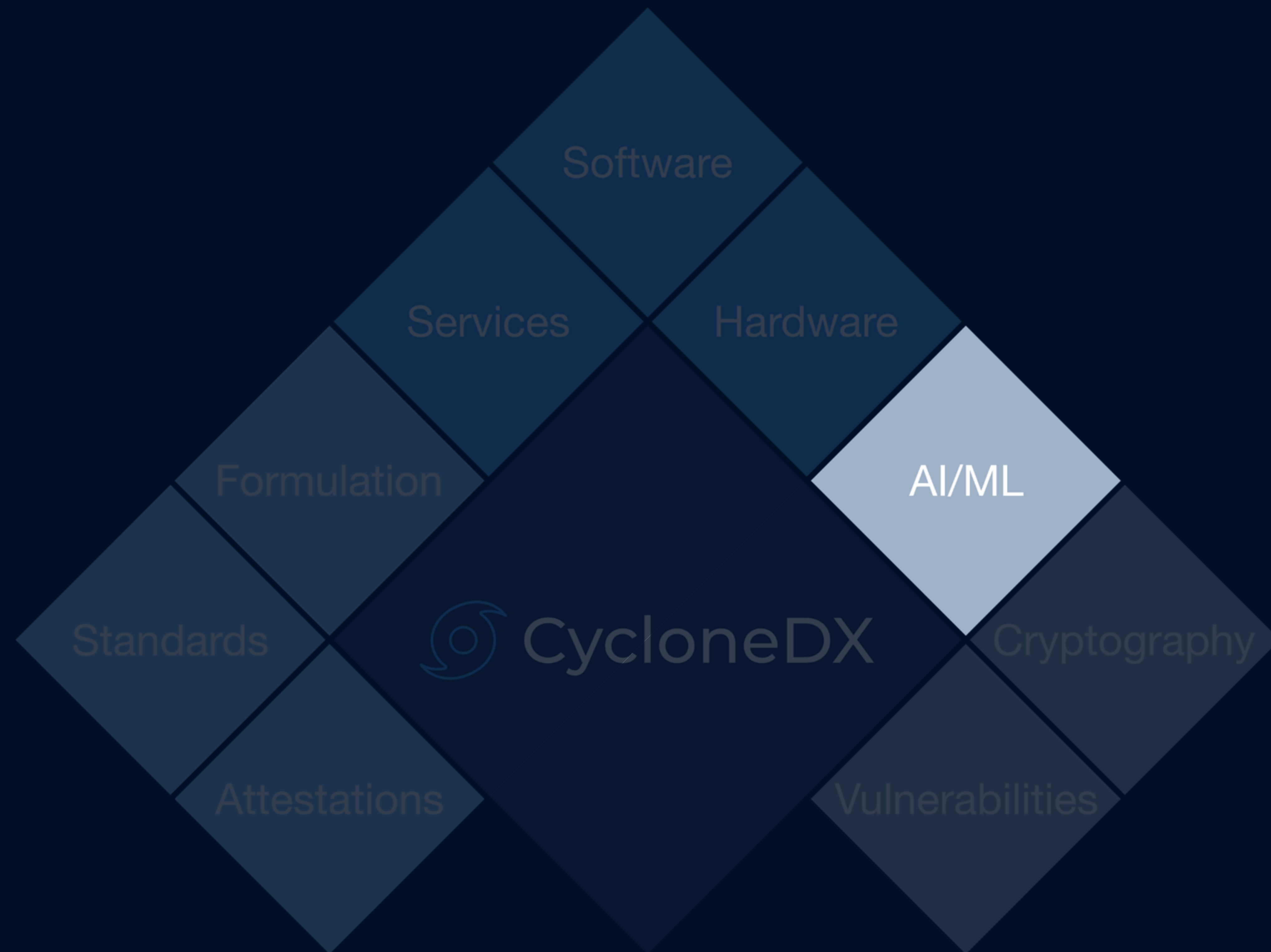
Source: Sonatype
One tool using a single source of vulnerability intelligence
Actual usage much greater

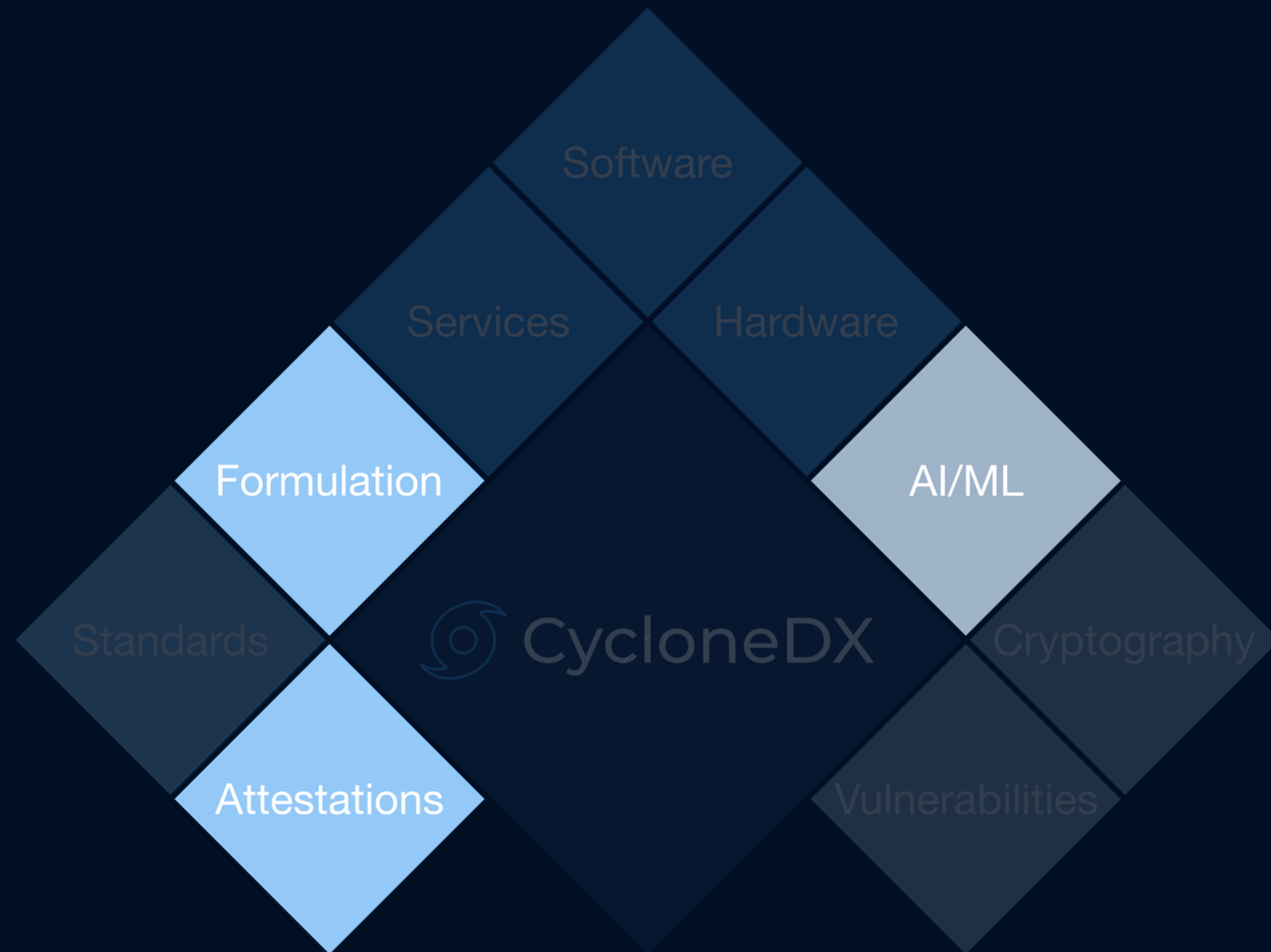












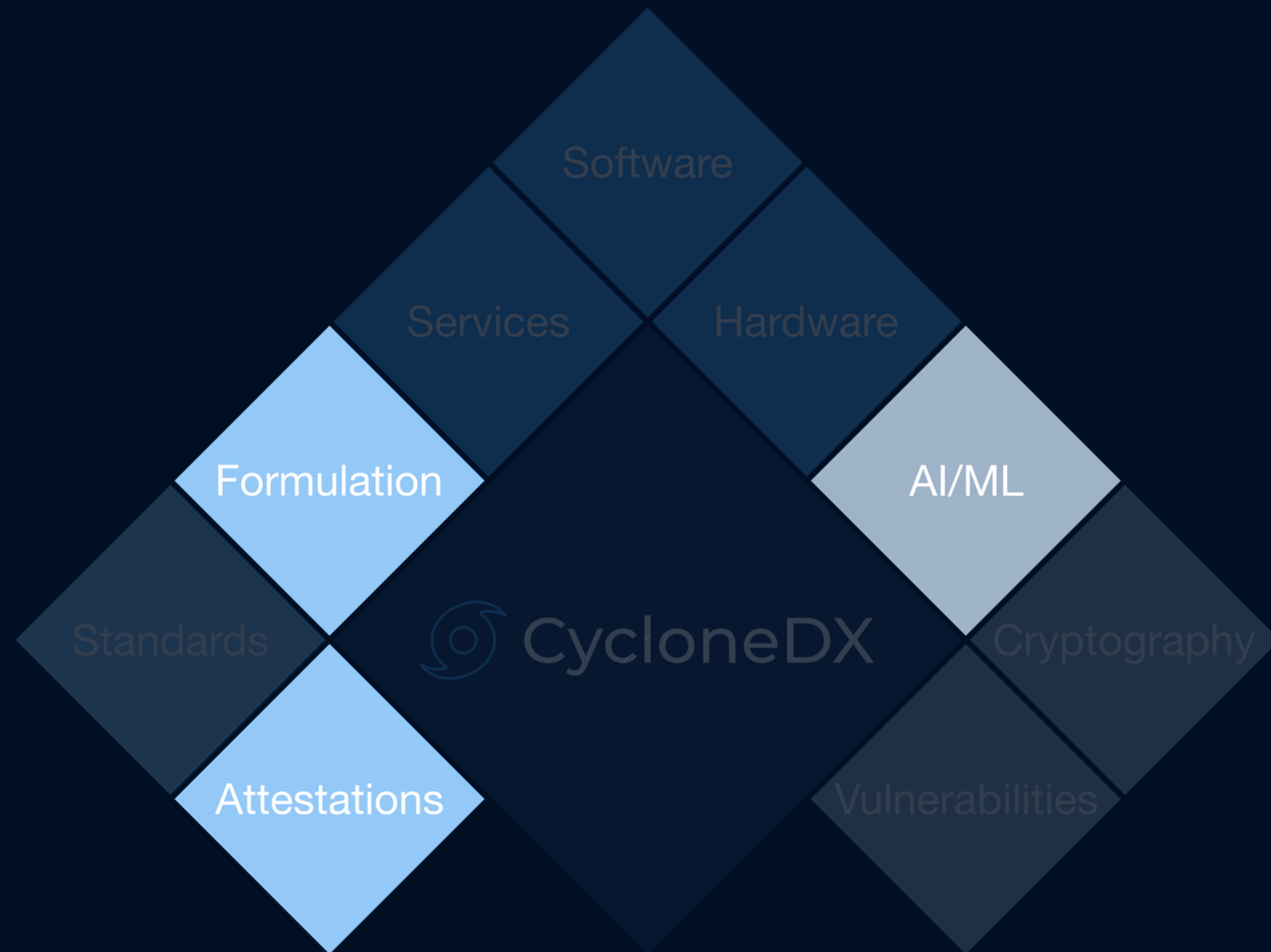
CycloneDX Unified Model Cards

Inherits from the CycloneDX component model

- Provenance: supplier, author, publisher, manufacturer
- Identity: PURL, CPE, SWID, OmniBOR, SWHID, coordinates
- Licenses (open source and commercial) and copyrights
- Pedigree (ancestors, descendants, variants)
- External references (relationships and documentation)
- Release notes

CycloneDX Unified Model Cards

Model Parameters	Approach Type	Task	Architecture Family	
	Model Architecture	Datasets	I/O Formats	
Quantitative Analysis	Performance Metrics	Graphics		
Considerations	Users	Use Cases	Technical Limitations	Perf Tradeoffs
	Ethical	Environmental	Fairness	



Proposed Enhancements for CycloneDX v1.7

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- Blueprints
- OTM → TM-BOM
- Sustainability