# Dossier: DISCOVERY MACHINE INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,999,997.78

**Award Date:** 2024-09-04

**Branch:** ARMY

## AI-Generated Intelligence Summary

**Company Overview:**

Discovery Machine, Inc. focuses on developing and deploying advanced artificial intelligence (AI) solutions, particularly expert systems and knowledge automation tools, for critical decision-making in complex environments. Their primary business involves creating AI-powered software platforms that capture, codify, and operationalize human expertise. The company aims to solve the problem of knowledge silos, workforce skills gaps, and the inability to rapidly adapt to evolving threats by enabling organizations to automate complex tasks, accelerate decision-making, and preserve critical knowledge. Discovery Machine's unique value proposition lies in its patented knowledge engineering platform, KADENCE®, which facilitates the creation and deployment of explainable and trustworthy AI systems that seamlessly integrate human knowledge and machine learning algorithms. This enables clients to gain a decisive advantage in areas like defense, aerospace, and national security.

**Technology Focus:**

* KADENCE®:\*\* A patented knowledge engineering platform that enables the rapid creation and deployment of expert systems. KADENCE uses a graphical interface for knowledge acquisition and allows for the integration of AI/ML models. It offers explainable AI (XAI) functionality, promoting trust and transparency in AI decision-making.
* AI-Powered Decision Support Systems:\*\* Discovery Machine develops custom AI applications using KADENCE tailored to specific client needs. These applications are focused on enabling faster, more accurate decision-making in complex domains such as threat assessment, mission planning, and resource allocation. They often involve integrating data from diverse sources to provide a comprehensive operational picture.

**Recent Developments & Traction:**

* SBIR Phase III Contract with US Air Force (reported early 2023):\*\* Granted a Phase III SBIR contract to scale their existing Air Force capabilities using the KADENCE platform. This likely signals significant Air Force adoption and validation of their technology. No specific dollar amount was publicly disclosed.
* Partnership with CACI International (reported early 2023):\*\* Announced a partnership with CACI to enhance their expertise in AI-enabled capabilities. This strategic partnership should allow Discovery Machine access to broader markets, as well as greater resources.

**Leadership & Team:**

* Dr. Robert Arp, CEO:\*\* Extensive experience in AI, knowledge representation, and reasoning. Possesses a PhD in Philosophy and has been involved in the field for several decades.

**Competitive Landscape:**

* SparkCognition:\*\* While SparkCognition has a broader AI portfolio, it competes with Discovery Machine in the areas of knowledge representation and decision support. Discovery Machine differentiates itself through its emphasis on explainable AI and its KADENCE platform, which facilitates a more knowledge-driven approach.

**Sources:**

1. [https://discoverymachine.com/](https://discoverymachine.com/)

2. [https://www.crunchbase.com/organization/discovery-machine](https://www.crunchbase.com/organization/discovery-machine)

3. [https://www.dmbrains.com/wp-content/uploads/2021/03/KADENCE\_WP\_v1\_0.pdf](https://www.dmbrains.com/wp-content/uploads/2021/03/KADENCE\_WP\_v1\_0.pdf)

4. [https://www.caci.com/news/press-releases/caci-and-discovery-machine-partner-enhance-artificial-intelligence-ai-capabilities](https://www.caci.com/news/press-releases/caci-and-discovery-machine-partner-enhance-artificial-intelligence-ai-capabilities)