## **VHIVE RECEIVES THE 2023**ENABLING TECHNOLOGY LEADERSHIP AWARD

Identified as best in class in the Israeli software platform for asset digitization industry

### **Best Practices Criteria for World-Class Performance**

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each Award category before determining the final Award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. vHive excels in many of the criteria in the software platform for asset digitization space.

AWARD CRITERIA	
Technology Leverage	Customer Impact
Commitment to Innovation	Price/Performance Value
Commitment to Creativity	Customer Purchase Experience
Stage Gate Efficiency	Customer Ownership Experience
Commercialization Success	Customer Service Experience
Application Diversity	Brand Equity

### **Autonomous Digital Twin Platform**

The asset digitization industry faces various technical, operational, regulatory, compliance, and environmental challenges. With many software-as-a-service providers turning to cloud-based solutions, developers must ensure data privacy and have robust security policies and technical controls. Additionally, with the industry fragmented between data capture services, processing providers, artificial intelligence (AI) analytics, system integrators, and computer-aided design providers, Frost & Sullivan notes that a cohesive solution is vital to unify data and drive efficiencies.

There are various considerations regarding solutions used for on-site asset data capturing. For example, manual methods require placing workers in unsafe environments and may inefficiently require multiple site visits that are wasteful and affect carbon emissions at a time when enterprises are shifting towards a carbon-free economy. Sensors carried by drones remove human operators from potentially dangerous scenarios while maximizing operational efficiency. A software platform that leverages drones by making them autonomous and other sensor solutions can offer flexibility and efficiency for on-site asset capturing for digitization.

Founded in 2016 and headquartered in Herzliya, Israel, vHive is a global digital twin software platform developer for asset digitization. The company provides end-to-end software solutions that leverage drones and other sensors for asset digitization, including inspection, analytics, simulation, planning, and more, generating powerful insights and improving operational efficiencies. Enterprises in utilities, telecommunications, and renewable energy (i.e., solar panels and wind turbines) use vHive's solutions to improve safety, security, and costs. Backed with machine learning, AI, and computer vision technologies,

Frost & Sullivan appreciates the way that vHive provides the most advanced analytics, ensuring complete and reliable asset digitization.

### Rapid Technology Innovation Driven by Client Needs across Industries

vHive recognizes the challenges its clients face by carefully considering the pain points in the verticals it serves. For example, cellular tower data is often unreliable, outdated, and fragmented or siloed in the telecommunications industry, or even within groups in telecom organizations. Additionally, across industry verticals, traditional manual methods of data capture are inefficient, costly, and inaccurate, making it difficult for maintaining assets to utilize them efficiently. As such, the company focuses its technology development efforts on creating innovative solutions that meet customers' needs and market use cases and tailors them to address the various industry's unique requirements.

"With advanced AI, a digital twin platform, and autonomous data capture, the company provides clients with a comprehensive and reliable solution with unified insights, improving decision-making, maximizing productivity, and optimizing asset value."

- Waseem Khan Senior Industry Analyst, Aerospace & Defense In developing its technologies, vHive takes an exploratory approach to move its solutions quickly from early-stage investment in innovation to late-stage prototyping and enterprise grade solution launch. This process includes rapid experimentation and field-testing, gathering stakeholder insights, and iterating on its products to identify market fit. The agile method ensures vHive develops innovative solutions that deliver

efficiencies and profitability to the industry and its clients.

vHive designs industry-leading technology that organizations in the electric utilities, solar panel, telecommunications, wind turbine, and crane industries utilize to digitize assets. The company's clients use its technology for various applications, including asset inspection, analytics, simulation, and survey planning. vHive leverages key technologies to deliver an end-to-end solution that enables the complete digital transformation of enterprises. With advanced AI, a digital twin platform, and autonomous data capture, the company provides clients with a comprehensive and reliable solution with unified insights, improving decision-making, maximizing productivity, and optimizing asset value.

At the core of vHive's solution is vHive's Autonomous Capture and Auto Discovery™ technology that provides autonomous data capture capabilities via low-cost, off-the-shelf drones. This technology is a key differentiator of the company's solutions, enabling field technicians with basic drone skills to control multiple drones at once to conduct autonomous field and asset surveys and inspections quickly and easily. Data collected from these surveys is uploaded to vHive's secure cloud platform, with various authentication and security policies and technical controls, ensuring enterprises' data privacy and security.

The other half of vHive's solution is its digital twin platform that creates photorealistic three-dimensional copies of assets. Backed by machine learning and computer vision technology, the platform semantically understands the various components of the 3D site and provides insights into the site's state, asset conditions and identifies potential equipment issues. With the ability to create digital twins, enterprises

can benefit from a simulation environment to maximize asset configurations, gaining actionable operational insights to improve their revenue as well as the service they provide to their customers.

### **Building Trust through a Customer-centric Approach**

vHive's solution goes beyond its extensive expertise and best-in-class capabilities, with customer value as a strategic imperative. Through the years, the company has earned a sterling reputation supporting clients' path towards digitizing enterprise assets.

vHive goes to great lengths to ensure seamless product integration. The company's sales executives provide personalized online, and face-to-face demonstrations in the field and in the office for clients to showcase its solutions' value. At this stage, vHive assesses clients' unique needs to design a highly adaptable system. The company's non-disruptive integration process means clients do not need to make extensive changes to its IT systems and can utilize the full potential of vHive's platform quickly and easily.

vHive's dedicated account managers provide ongoing support to address client concerns quickly and ensure high customer satisfaction. The company's efficient and robust support, strong service attitude and commitment, and dedicated team of client success experts support its global customers with rapid response and resolution times. vHive also invests heavily in a user friendly interface that require minimal

"Through strong partnerships and strategic collaborations, vHive fosters key relationships in the ecosystem, generating a supportive network of integrative products. This cohesive ecosystem facilitates a more holistic experience between various industries' solutions, bringing further value to customers."

- Elizabeth Whynott Best Practices Research Analyst training, ensuring easy onboarding of clients and a short time to generated value from the platform. .

Due to the autonomous data capture solution, vHive offers its customers' flexible on-site operations models. For clients that have in-house field technicians to operate drones, the company offers a short field training session , . vHive also provides a turnkey solution for clients that want to outsource data capturing services through the vHive Global Field Operations Network. Partners in this network must have qualified drone operators that meet regulatory requirements, including program management, pilot

certification and training, local compliance, regulation, and waivers, and can use off-the-shelf drones to ensure the safety and security of the client's organization. vHive is compatible with any Field Operations partner. With minimal training and assurance of compliance the operator is ready to start the data capture.

vHive uses client feedback, combined with industry trend monitoring from stakeholders and key ecosystem members, to guide its product roadmap and continuously evolve its solutions to maintain its innovative edge. Furthermore, the company engages in regular meetings, facilitating strategic discussions to gather insight into clients' specific requirements, fostering a strong and trusting client relationship. vHive's seamless and efficient approach and close relationships position it as a preferred vendor.

### **Positioned for Growth**

Since its inception, vHive's sterling reputation and customer-centric framework have led to its coveted preferred partner status. Over the years, it added a range of new clients to its established base. For

example, since 2019, the company partnered with SBA and surveyed more than 3,000 of their global sites. In 2020, vHive also received a investment from its strategic partner and client, Deutsche Telekom. As one of the only providers in the telecommunications industry, the company continues to solidify itself as an industry leader across multiple regions.

Through strong partnerships and strategic collaborations, vHive fosters key relationships in the ecosystem, generating a supportive network of integrative products. This cohesive ecosystem facilitates a more holistic experience between various industries' solutions, bringing further value to customers. For example, the company's application programming interface connects asset management systems like Site Tracker, Siterra, Atrebo, Tarantula, and NEXSYS-ONE, expanding clients' databases to provide a more comprehensive picture of operations and one source of truth.

vHive is committed to delivering impactful and disruptive technologies built on a foundation of trust and reliability. The company's patented autonomous data acquisition, proprietary software, and Auto-Discovery™ technologies differentiate it as an innovative thought leader, strengthening its brand equity.

With its strong customer base and dedication to continuous innovation, vHive aims to be the go-to solution for digitizing enterprise assets globally. Frost & Sullivan believes the company is well-positioned to drive the asset digitization space into its next growth phase, capturing market share and sustaining its leadership in the coming years.

### **Unmatched Price/Performance Value**

vHive has mapped out a broad set of use cases that generate an impact for its customers. Delivering a strong return on investment with a comprehensive end-to-end digitization platform. The company has a well-defined set of key performance indicators (KPIS) that demonstrate a clear return on investment (ROI) to its customers, across multiple use cases. Customers who use the vHive platform have been able to demonstrate short term ROI, by digitizing their portfolio, incorporating digitization into their daily workflows, and fine tuning the business and operational decisions.

<sup>&</sup>lt;sup>1</sup> https://www.vhive.ai/wp-content/uploads/2023/03/STAC\_Eye-in-the-sky.pdf

<sup>&</sup>lt;sup>2</sup> https://www.vhive.ai/vhive-secures-4m-in-an-investment-led-by-deutsche-telekom-to-accelerate-expansion-in-the-enterprise-drone-hive-software-market/

### **Conclusion**

Technology integration is a critical success factor for the software platform for asset digitization industry. Yet with many options available, market stakeholders need to leverage the most comprehensive and well targeted technology-based solutions to optimize their market impact.

With its asset capture and digitization platform, vHive delivers an end-to-end solution for organizations in the electric utilities, solar panel, telecommunications, wind turbine, and crane industries. The company leverages key technologies to deliver complete digital transformation of enterprises, enabling asset inspection, analytics, simulation, and survey planning. With advanced artificial intelligence, a digital twin platform, and vHive's Autonomous Capture using Auto Discovery™ software, along with it's Digital Twin data platform, the company provides clients with a comprehensive and reliable solution, unifying insights, improving decision-making, maximizing productivity, and optimizing asset value. Frost & Sullivan analysts conclude that vHive truly stands out from other competitors based on its commitment to innovation, creativity, and ability to launch new solutions with far-reaching impact and application. The company pairs its technology focus with customer-centric values, thus earning a solid reputation in the software platform for asset digitization market.

With its strong overall performance, vHive earns the 2023 Frost & Sullivan's Israeli Enabling Technology Leadership Award in the software platform for asset digitization market.

## What You Need to Know about the Enabling Technology Leadership Recognition

Frost & Sullivan's Enabling Technology Leadership Award recognizes the company that applies its technology in new ways to improve existing products and services and elevate the customer experience.

### **Best Practices Award Analysis**

For the Enabling Technology Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

### **Technology Leverage**

**Commitment to Innovation**: Continuous emerging technology adoption and creation enables new product development and enhances product performance

**Commitment to Creativity**: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

**Stage Gate Efficiency**: Technology adoption enhances the stage gate process for launching new products and solutions

**Commercialization Success**: Company displays a proven track record of taking new technologies to market with a high success rate

**Application Diversity**: Company develops and/or integrates technology that serves multiple applications and multiple environments

### **Customer Impact**

**Price/Performance Value**: Products or services provide the best value for the price compared to similar market offerings

**Customer Purchase Experience**: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

**Customer Ownership Experience**: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

**Customer Service Experience**: Customer service is accessible, fast, stress-free, and high quality

**Brand Equity**: Customers perceive the brand positively and exhibit high brand loyalty

### **About Frost & Sullivan**

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

### The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator $^{\text{TM}}$ .

Learn more.

### **Key Impacts**:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- **Growth Strategies:** Proven Best Practices
- Innovation Culture: Optimized Customer Experience
- ROI & Margin: Implementation Excellence
- Transformational Growth: Industry Leadership

# OPPORTUNITY UNIVERSE Capture full range of growth opportunities and prioritize them based on key criteria OPPORTUNITY EVALUATION Adapt strategy to changing market dynamics and unearth new opportunities OPPORTUNITY EVALUATION Conduct deep, 360-degree analysis of prioritized opportunities ENGINETM GO-TO-MARKET STRATEGY Translate strategic alternatives into a cogent strategy

### The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

### **Analytical Perspectives:**

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)

