



*Outsight Recognized for*

**2021**

**Technology Innovation Leadership**

Global Spatial Intelligence Industry

*Excellence in Best Practices*

## 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 criteria across two dimensions for each nominated company. Outsight excels in many of the criteria in the Spatial Intelligence space.

AWARD CRITERIA	
<i>Technology Leverage</i>	<i>Business Impact</i>
Commitment to Innovation	Financial Performance
Commitment to Creativity	Customer Acquisition
Technology Incubation	Operational Efficiency
Commercialization Success	Growth Potential
Application Diversity	Human Capital

### ***Commitment to Innovation and Creativity***

Traditional real-time 3D perception solutions, like those used in autonomous vehicles, drones, and robots, are composed of multiple imaging systems. These systems include light detection and ranging (LiDAR) solutions, radio detection and ranging (radar) solutions, and cameras for registering information visible in the surroundings. Traditionally, the information gathered from these systems is fused together by a centralized computational unit driven by power-hungry artificial intelligence (AI) processors that are

*“Outsight’s software processing technology is set to make 3D LiDAR data accessible to everyone and power both the autonomous machines and the smart infrastructure of the future”*

**- Arjun Mehta, Senior Analyst**

embedded with complex machine learning (ML) algorithms for real-time data processing. However, these classic solutions only capture visible information or raw 3D data while often failing to provide complete situational awareness, thereby impeding an intelligent device’s ability to simultaneously perceive, localize, and comprehend its environment. This approach requires sizable volumes of power to train the

machine learning models, resulting in a large carbon footprint. In addition, this conventional method is expensive to implement, raises latency concerns, and, in some cases, fails to deliver the calibration and synchronization required for accurate object detection and classification.

In contrast to conventional platforms that are dependent on a centralized computation unit, the French startup, *Outsight*, offers a Spatial Intelligence platform that makes real-time 3D perception for smart machines and smart infrastructure more efficient and easier to use by application developers. The platform employs the principle of edge intelligence, using smart sensor modules to process information themselves. *Outsight's* solution, the Augmented LiDAR Box, unites state-of-art pre-processing sensing technology by embedding simultaneous localization and mapping (SLAM), object detection, and tracking software onto a single chip.

*Outsight's* platform can process LiDAR data from any sensor in real-time, providing full situational awareness from a compact stand-alone device. All the features of the Augmented LiDAR Box are performed in real-time, without the need for training datasets or annotation processes, to deliver an actionable stream of information more effectively to the decision-making centralized computation module. This innovative approach also reduces the power consumption and latency constraints posed by conventional ML-based centralized computation approaches.

Frost & Sullivan is impressed that, in contrast to conventional LiDAR sensors that only deliver raw data, *Outsight's* solution employs a novel edge-processing approach to deliver actionable Spatial Intelligence in real-time from any kind of LiDAR sensor. This groundbreaking innovation is protected by 74 patent filings.

### ***Application Diversity and Customer Acquisition***

A revolutionary Spatial Intelligence platform has finally arrived. The solution is destined to power the autonomous machines of the future and making smarter infrastructure, that will enable a smarter and safer world. *Outsight's* 3D perception platform brings together innovative hardware and software systems to empower the applications required for emerging use cases like robotic security and surveillance, precision agriculture, smart manufacturing, and autonomous vehicles.

***Autonomous Vehicles:*** Accurate object classification is a major roadblock hindering the wide-scale adoption of level 4 and level 5 autonomous vehicles. *Outsight's* spatial intelligence platform is capable of gathering intelligence from its surroundings and providing critical information for a vehicle in motion, including whether an object in view is moving or static, if the road is drivable, the meaning of precautionary road signs, and more. The platform supports any kind of LiDAR device from every manufacturer.

***Smarter Public Places:*** *Outsight's* platform can also be deployed in public places, such as airports and malls. The solution provides management teams with real-time information related to people flows, asset maintenance, and security, safety, and compliance issues. The platform provides real-time intelligence by tracking crowded areas, trolley and escalator usage, and distancing between people.

The value of the groundbreaking spatial intelligence platform for specific applications has been further underscored in the post-COVID-19 world. Currently, the platform is deployed at airports across France to ensure that commuters are observing social distancing. Specifically, the Paris Airport Group has chosen to deploy *Outsight's* 3D perception platform at Paris-Charles de Gaulle Airport, one of the busiest airports in the world.

Frost & Sullivan's analysis highlights the success of Oversight's disruptive platform in attracting strategic investment and helping customers power next-gen vehicles and smart cities of the future. In December 2019, Oversight raised \$20 million in a seed funding round led by Demeter Partners, SPDG (the holding company of the Périer-D'leteren family), and BNP Paribas. The company has also acquired strategic investment from Faurecia Ventures and raised more than \$25 million to date.

### *Human Capital and Growth Potential*

Oversight is composed of 55 scientists and engineers based in Paris, San Francisco, and Helsinki. The company's visionary leadership team includes prominent experts from different verticals with proven track records of attracting investors and developing revolutionary products. In June 2020, Oversight appointed Google's Head of AI & IoT Strategic Business Development EMEA as its Chief Business Officer.

Oversight's spatial intelligence platform has gained traction from leading players such as Faurecia, Safran, Stellantis, Airbus, and the ADP Group. Early in 2020, Oversight won the CES Best of Innovation Award while also becoming the youngest company to ever win the Prism Award, an award delivered by the world leaders in photonics and lasers. Frost & Sullivan recognizes that with the proliferation of the Internet of Things (IoT) and increasing demand for smart machines and smart infrastructure, Oversight's revolutionary spatial intelligence platform is poised to attract interest from automotive, robotics, and smart city players from around the world in the near term.

## **Conclusion**

---

The French start-up, Oversight, has developed a revolutionary spatial intelligence platform that can provide full situational awareness for smart devices through an innovative processing approach that can handle data from any LiDAR source. In contrast to conventional 3D perception LiDAR sensors that only deliver raw data, Oversight's state-of-art edge computing module provides a plug-and-play spatial intelligence solution that empowers application developers to easily build and scale their 3D-based solutions.

In addition to its leading spatial intelligence capabilities, Oversight's solution consumes less power, reduces latency issues, and is more economical when compared to other conventional 3D perception solutions that depend on machine learning-based centralized processing power.

Oversight's spatial intelligence platform empowers edge-intelligent machines for industries such as automotive, agriculture, aviation, and security and surveillance with the potential to emerge as a key breakthrough technology that will drive the adoption of autonomous vehicles, advanced robots, and drones while also enabling new smart infrastructure uses cases like people flow monitoring, 3D security, and traffic flow management.

For its strong overall performance, Oversight has been recognized with Frost & Sullivan's 2021 Global Technology Innovation Leadership Award.

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

---

Frost & Sullivan's Technology Innovation Award recognizes the company that has introduced the best underlying technology for achieving remarkable product and customer success while driving future business value.

### Best Practices Award Analysis

For the Technology Innovation 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

#### *Business Impact*

**Financial Performance:** Strong overall financial performance is achieved in terms of revenues, revenue growth, operating margin, and other key financial metrics

**Customer Acquisition:** Customer-facing processes support efficient and consistent new customer acquisition while enhancing customer retention

**Operational Efficiency:** Company staff performs assigned tasks productively, quickly, and to a high-quality standard

**Growth Potential:** Growth is fostered by a strong customer focus that strengthens the brand and reinforces customer loyalty

**Human Capital:** Commitment to quality and to customers characterize the company culture, which in turn enhances employee morale and retention

