



*Dataloop Recognized for*

**2021**

**Technology Innovation Leadership**

European Data Management  
and Annotation Platform 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 best practices criteria across two dimensions for each nominated company. Dataloop excels in many of the criteria in the data management and annotation platform space.

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

### *The Importance of Data Management in Building AI Models*

Data is essential to artificial intelligence (AI) model production. Developing a computer vision AI model using deep learning requires visual data that is difficult to track and label correctly. Organized data ensures the model works accurately, and the deep learning approach delivers the best results when trained with organized, labeled data as continuous input. The quality and quantity of data fed into the computer vision AI model will affect the output. Building an accurate model also requires large volumes of data, which can be structured and unstructured, from multiple sources. Unstructured data needs more pre-processing, annotation, and time to be ready to train the AI model. Using unstructured data becomes even more complex in applications that need to be continuously updated with new visual data and validated in real time.

Frost & Sullivan’s own research confirms that most enterprises focus on automation and building AI systems faster, but they fail to execute these systems because of poor data management. Data scientists spend almost 75% to 80% of their time cleaning and organizing data (instead of properly developing the model). Enterprises find it quite challenging to move their model from development to production because of low-quality data. Accurately labeled data is also pivotal to that ensure the AI systems work as intended.

*“Dataloop’s platform combines human and machine intelligence to label and categorize images automatically from a pool of unstructured data and provide feedback to data scientists and developers for data validation. The platform significantly shortens the time for annotation, usually done manually, and offers data scientists comprehensive insights to manage data operations efficiently.”*

**– Mohammed Riyaz Ahmed, Senior Industry Analyst**

Frost & Sullivan finds that enterprises need an advanced data management solution to develop AI systems faster and extract desired results with quality data input during the production phase.

### **Commitment to Innovation**

Dataloop, a Tel Aviv-based startup founded in 2017, has developed a next-generation data management and annotation platform to accelerate computer vision AI model production. Dataloop’s platform combines

human and machine intelligence to label and categorize images automatically from a pool of unstructured data by its training data pipelines and provide feedback to data scientists and developers for data validation, ingestion, and modeling process. The platform significantly shortens the time for annotation (data labeling), usually done manually, and offers data scientists comprehensive insights to manage data operations efficiently.

Eran Shlomo (chief executive officer), Avi Yashar (chief product officer), and Nir Buschi (chief business officer) co-founded Dataloop. Shlomo and Yashar held leading positions at Intel and have more than 10 years of expertise in developing data processing architecture and AI and machine learning systems. Buschi has a strong entrepreneurial background with experience in executing go-to-market strategies for technology startups. Frost & Sullivan recognizes how the founders’ past experiences allow them to properly build Dataloop’s highly advanced data management, pipelines and annotation platform that accelerates custom production pipelines and model production.

### **Commercialization Success and Commitment to Creativity**

Dataloop started operations by automating the data annotation process to label visual data in videos and enhance computer vision AI. The company raised \$5 million of seed funding and, in October 2020, received \$11 million from its Series A funding round. The company offers its data management, pipelines and annotation platform as a software-as-a-service (SaaS) application that does not require customers to invest in other infrastructure. The platform has gained significant traction in a short period as Dataloop acquired clients from various industries, such as LinkedIn (social media), Intel (computer hardware), Standard Cognition (retail), Foresight (automotive), Descartes Labs (geospatial intelligence), and Transenterix (healthcare).

Dataloop’s platform speeds up computer vision AI model production by improving the data quality fed into the model as input. The platform scans unstructured image data, performs automated annotation, and allows data teams to conduct data query simply as per the model production requirement. The platform comprises integrated self-supervised deep learning algorithms with pre-trained data on object tracking to enable automatic annotation before sending the data to human annotators for validation. Automation significantly reduces the workload of human annotators, as they only need to validate the

annotations. Data validation tools embedded in the platform also enable faster communication between data scientists, software developers, and annotators to review and debug issues.

The platform manages structured and unstructured visual data and filters out data for automatic annotation and quality check. Unlike other competing solutions, Frost & Sullivan analysts appreciate how Dataloop's platform can easily unite, clone, and divide available data by creating multiple virtual data versions to quicken data operations. The platform also creates cloud-based automation pipelines that significantly mitigate data processing costs. Dataloop offers data management and annotation through no-code back-end software with easy-to-use options for non-technical users - making its platform clearly superior to competing solutions. The platform's precise, accurate, and pixel-perfect annotations are key to improving data quality and making the labeling process easier to accelerate AI model production.

Frost & Sullivan commends Dataloop for outperforming the competition with its efficient and accurate data management and annotation platform, an innovative solution that small and large-scale enterprises can easily use to deliver the best final AI model.

*"Since its establishment, Dataloop has been on an exponential growth curve that Frost & Sullivan forecasts will only continue as the need to accelerate AI system production increases. Digitization among industries has generated reams of unstructured data, presenting immense growth opportunities for Dataloop to offer an end-to-end solution, from data preparation to automated annotation to validation."*

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### **Application Diversity**

Dataloop's data management and annotation platform serves various industries - such as retail, autonomous vehicles, drones and aerial imagery, agriculture, and robotics.

For example, the US-based retail AI solution provider Standard Cognition developed an autonomous checkout solution that helps retailers automate the checkout process, decrease labor costs, and increase operating

margins. However, the solution requires regular data updates as in-store stocks continuously change and undergo frequent packaging alterations, possibly leading to a mismatch between products and customers. Standard Cognition deployed Dataloop's data management and annotation platform to accurately categorize and label new product data regularly and improve the autonomous checkout solution. The platform automatically annotated new raw data and allowed for real-time validations, transforming the manual data labeling process into a fast, automated auditing task.

In another example, Dataloop helped Foresight improve its autonomous vehicles' driving safety by enhancing obstacle detection. Foresight primarily develops advanced driver-safety assistance for autonomous vehicles that provide real-time data regarding the surrounding environment while driving. Foresight required an extensive AI model to annotate and validate huge volumes of object data, which is quite challenging if done manually. Foresight selected Dataloop's platform and accelerated its annotation by almost 200%, along with real-time data validation. The platform complemented Foresight's solution by automatically tracking and labeling object data and capturing annotations

between different video frames to extract similarities and make object detection easier and labeling faster.

### ***Financial Performance and Growth Potential***

Dataloop has attracted robust initial funding for its innovative data management and annotation platform since its inception in 2017. To date, the company has secured \$16 million in funding, with its latest funding round in October 2020 led by Amity Ventures, F2 Venture Capital, OurCrowd, NextLeap Ventures, and SeedIL Ventures. Dataloop utilizes the funds to expand its team to reach more customers globally and invest in product research and development to improve the platform's output accuracy.

Frost & Sullivan expects Dataloop's revenue to increase significantly in the future following the multifold growth in interest and development of AI models and systems across industries.

Since its establishment, Dataloop has been on an exponential growth curve that Frost & Sullivan forecasts will only continue as the need to accelerate AI system production increases. Digitization among industries has generated reams of unstructured data, presenting immense growth opportunities for Dataloop to offer an end-to-end solution, from data preparation to automated annotation to validation. With its solutions, Dataloop can customize data pipelines and empower companies to produce successful AI models. The demand for advanced analytics forces enterprises to transform their business operations and build AI models rapidly. On average, Dataloop's platform accelerates AI model production from development to production faster than the industry standard.

Frost & Sullivan applauds Dataloop for its revolutionary data management and annotation platform that enables companies to build AI models faster and gain a competitive edge.

## **Conclusion**

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Enterprises increasingly face issues moving AI models from development to production due to unorganized, poor-quality data.

Frost & Sullivan applauds the way that Dataloop offers an advanced data management, pipelines and annotation platform that helps enterprises properly overcome challenges and accelerate computer vision AI model development by accurately labeling data through automated annotation. Dataloop's platform comprises integrated deep learning algorithms with pre-trained data on object tracking to enable automatic annotation and reduce manual labeling to ensure the best output and faster AI model development.

With its strong overall performance, Dataloop earns the 2021 Frost & Sullivan Technology Innovation Leadership Award in the European data management and annotation platform industry.

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

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Frost & Sullivan's Technology Innovation Leadership 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

## 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™.

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### 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



## 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)**

