

## CASE STUDY

# Building a Pipeline Around Self-Checkout Product Loss Reduction

Spillage, or the loss of inventory by theft, accidents, and mistakes, costs retailers billions of dollars a year in the US alone. As self-checkouts grow in popularity, there is an equally growing need to help increase accurate identification of unscanned items that leave the store.

- DDD helped our client label 25,000 images over a 5-week period
- DDD and our client built a schema to track customer movements, relevant objects, and flag potential misidentification events
- DDD's dataset captured 99%+ of qualifying objects with an estimated F1 score of >0.97

Our client was able to create a Proof of Concept (POC) system to begin building a new product line for this and similar retail use cases. They have been able to successfully build a pipeline around this project.



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## Data Preparation Services for Machine Learning

Machine learning teams and AI startups leverage DDD's 1500+ training data associates to prepare high-quality, structured training datasets at scale to train, test, and improve machine learning algorithms that deliver real-world applications.

What makes us unique? We set up dedicated teams selected with particular backgrounds that are given specialized domain-specific training. These purposefully built teams remain consistent throughout the project, resulting in a lower total cost of operation and higher quality datasets.



Data Collection and Creation



Data Cleaning and Curation



Video and Image Annotation for Computer Vision



Text and Audio Annotation for Natural Language Processing

## Our Social Mission

DDD pioneered the impact sourcing model of offering employment in data preparation services to people from underserved communities. This socially responsible approach to performing work provides these individuals with a path to economic self-sufficiency.